



THE RIGHT CHOICE

Worldwide Manufacturer  
& Distributor of High Quality,  
Innovative Replacement Parts

Since 1945

# CATALOG

Edition 24, Volume 1



DIVISIONS



A Division of SUPCO®



A Division of SUPCO®

BRANDS

BULLET®  
PIERCING  
VALVE



A Division of SUPCO®



AUTHORIZED MASTER DISTRIBUTOR



# About Us...

Founded in 1945 in the Bronx, NY by two naval engineers, Sealed Unit Parts Co., Inc (SUPCO) originated as a service company for refrigeration systems. These systems were “sealed”, so that, when service was needed, the repair was done invasively. The desire to overcome this method was the impetus for the development of the patented “Bullet” valve in the 1950’s.

As demand for the “Bullet” valve grew, Supco’s burgeoning manufacturing operation moved to Monmouth County, NJ. SUPCO set its roots deep in Monmouth County, NJ during the decade of the 1960’s. Another important development during that decade was a patent for utilizing “PTC” components as switches for control devices.

During the 1970’s, the utilization of PTC devices as switches led to the development of “The Original” two wire refrigeration and air conditioning hard starts. “Super Boosts” and “3 N 1” hard starts revolutionized the aftermarket’s method for installing hard starts on air conditioning and refrigeration systems.

The 1980’s brought with it an expansion into the test instrument market, with the addition of simple testing devices for critical parameters in refrigeration and cooling systems. The MFD10 capacitor tester and M500 compressor insulation tester laid the foundation for development of test instruments designed to make service professional’s tasks simple, with reliable results.

SUPCO developed the first electronic vacuum gauge in 1990. The VG60 removed the uncertainty of analog technology for the growing need to measure this key system characteristic. During the latter part of the decade, master distributor partnerships for product lines, such as Therm-o-Disc components, bolstered SUPCO’s position as a key supplier to HVAC and Appliance wholesale distributors.

As we entered a new millennium, continued strategic growth resulted in a need to expand existing facilities in NJ, and later, the establishment of manufacturing facilities abroad. Additional product development in hard starts and vacuum gauges was the catalyst for that growth. In 2007, SUPCO acquired Climate Technology Corporation (CTC), adding thermostats to a broadening product line.

Another decade brings continued product line expansion through in-house development, master distributor relationships and acquisition. This strengthens Supco’s position as a leader in the HVAC, Refrigeration and Appliance industries. Proof of that is the acquisition of A-1 Components and Camstat in September of 2013.



# TABLE OF CONTENTS

## HVAC

AC Hard Starts	5
Relays	6
Capacitors	7-10
Contactors	11,12
Surge Protectors	13,14
Motor Protectors	14
Time Delays	15
Furnace Igniters	16-19
Duct Smoke Detectors	20
Duct Heaters	21
Duct Boosters	21
Mini-Split Condensate Pumps	22
Air Pressure Switches	23
Camstat®	24
Sequencers	25
Thermodisc® Thermometers	26-30
Pressure Switches	31
Transformers	32,33
Wall Thermostats & Guards	34-42
Belts	43
Installation & Service	44-46

## REFRIGERATION

Relays,Overloads & Hard Starts	47-51
Capillary Tubing	52-54
Condensate Drain Pans	55,56
Condensate Pumps	57
Defrost Thermostats	58,59
Valves & Fittings	60-65
Valve Tools	66
Driers	67-73
Drain Heaters	74
Motors	75,76
Motor Brackets	77
Commercial Controls	78
Fan Blades	79-80
Compressors	80

## TEST INSTRUMENTS

Vacuum & Pressure Gauges	81-83
Chart Recorders	84-94
Data Loggers	95-106
Indoor Air Quality Instruments	107
HVAC/R Instruments	108-111
Refrigerant Scales	112,113
Multi-Meter & Current Probes	113,114
Temperature & Humidity Testers	115-118
Infrared Thermometers	119
Temperature Alarms & Controls	120-123
Accessories	123

## TOOLS

124-131

## TERMINALS & CONNECTORS

Terminals & Connectors	132-139
Cable Clamps, Grommets, Heat Shrink Tubing, Cable & Duct Ties	140

## CHEMICALS

141-153

## APPLIANCE

Dishwasher	154-157
Dryer Parts	158-165
Range Parts	166-171
Refrigeration	172-183
Washer	184-189

### SEALED UNIT PARTS CO., INC.

PO Box 21, 2230 Landmark Place • Allenwood, NJ 08720 USA  
1-800-333-9125 • [www.supco.com](http://www.supco.com) • [orders@supco.com](mailto:orders@supco.com)

# AC Hard Starts

## THE "TRUE ORIGINAL HARD START"

### ULTRA SERIES

2-wire Mechanical Potential Relay Hard Start

- OEM Approved Technology
- Voltage Sensing
- Instant Re-Start
- Easy 2-wire Installation
- 170-277 VAC
- 330 VAC Start Capacitor
- 2 Year Warranty

PART NO.	APPLICATION	CAPACITOR SIZE	REPLACES Kickstart®
MPR5	1 to 3 hp	189-277µF	TO-5
MPR1	3.5 to 5 hp	270-324 µF	KS-1



### 3 SERIES

3-wire Mechanical Potential Relay Hard Start

- Voltage Sensing
- Instant Re-Start
- 35 Amp Relay Contacts
- 170-277 VAC
- 330 VAC Start Capacitor
- Includes EZ Snap Bracket for Quick Installation

PART NO.	APPLICATION	CAPACITOR SIZE	REPLACES 5-2-1®
3W1	1 – 3 hp	88 – 108 µF	CSRU1
3W2	3.5 – 4.5 hp	189 – 227 µF	CSRU2
3W3	4 – 5 hp	270 – 324 µF	CSRU3



### SPP E CLASS SERIES

Electronic Potential Relay Technology

Economical Potential Relay, with the comfort of a backup safety.

- Electronic Potential Relay
- Backup Electronic Timing Circuit to Protect the Compressor
- Voltage Sensing
- Instant Re-Start
- Easy 2-wire Installation
- Can be used on PSC and CSIR Type Compressors
- 170-277 VAC (except SPP4E, 90-130 VAC)

PART NO.	APPLICATION	CAPACITOR SIZE
SPP4E	1/8-1 hp	88-106 µF
SPP5E	1/3-2 hp	43-52 µF
SPP6E	1/2 – 3 hp	88-106 µF
SPP7E	1 – 4 hp	130-156 µF
SPP8E	1 hp and up	189-227 µF
SPP9E	1 hp and up	233-280 µF
SPP10E	3 hp and up	270-324 µF



### SPP SUPER BOOST SERIES

PTC Technology

The "Original" 2-wire Hard Start.

- Positive Temperature Coefficient Relay Technology (PTC)
- Field Proven Reliability
- Easy 2-wire Installation
- Most Economic
- 90-277 VAC

PART NO.	INCREASE IN TORQUE
SPP	250%
SPP5	300%
SPP6	500%
SPP7S	600%



\*Kickstart® is a registered U.S. trademark of The Rectorseal Corporation.

\*5-2-1® is a registered U.S. trademark of Five-Two-One, Inc.

H  
V  
A  
C

# Relays

## UNIVERSAL POTENTIAL RELAYS

### APR5

#### Adjustable Potential Relay

- Adjustable, Voltage Sensitive Relay
- Set Pick-up Voltage
- Safety Time Out 1.0-1.5 Seconds
- Universal Mounting Bracket

### SUPR

#### Universal Potential Relay

- Time Function Relay
- Start Time: 1.0-1.5 Seconds
- Universal Mounting Bracket

#### APR5 / SUPR Common Specifications

Operating Voltage	110 – 270 VAC, Single Phase
Amperage	30 Amps
Motor Power Rating	up to 5 hp
Operating Position	Non-positional mounting.
Terminals	Screw or push-on.
Dimensions	1.75W x 2.25L x 1.50H



APR5



SUPR



### SEPR60

#### Universal 2 - Wire Potential Relay

- Voltage Sensitive Relay
- Instant Re-start
- Safety Time Delay
- Use With Any Size Suitable Start Capacitor

#### SEPR60 Specifications

Operating Voltage	208 – 277 VAC, Single Phase
Amperage	40 Amps
Motor Power Rating	1 hp - 10 hp
Mounting	Non Positional
Terminals	Qty 3, 1/4" Male Spade



### 90XX SERIES

#### Potential Relays

- Meets All Requirements of OEM Relays
- Universal Break-off Bracket
- 50/60 Cycle
- Contact Rating 35 Amp @ 277 VAC
- Non-positional

PART NO.	CONTINUOUS COIL VOLTAGE		PICK-UP		DROP MAX.
	MIN.	MAX.	MIN.	MAX.	
9063	170	139	153	55	
9064	395	260	275	120	
9065	332	168	182	90	
9066	395	215	225	120	
9067	420	295	315	125	
9068	502	325	345	135	
9069	336	180	195	105	
9070	332	285	305	77	
9071	420	212	232	121	



### 903X SERIES

#### General Purpose Switching Relays

- Double Pole-Double Throw (DPDT)

CONTACT RATINGS	POWER		PILOT	
	208/240V	120V 277V	208/240V	120V 277V
Full Load Amps	12	6	-	-
Resistive Amps*	15	15	3	3
Locked Rotor Amps	60	35	-	-
Horsepower	3/4	3/4	1/10	1/10

\*0.75 Power Factor

PART NO.	COIL VOLTAGE	TERMINAL		CROSS REFERENCE	
		1-2-3	4-5-6	ESSEX®/RBM®	HONEYWELL®
90340	24	power	power	90-340	R8222D1014
90341	120	power	power	90-341	R4222D1013
90342	208/240	power	power	90-342	R4222N1021



## FAN RELAYS

PART NO.	DESCRIPTION	AMPS	COIL VOLTAGE	
			AMPS	VOLTAGE
90290	SPST	4	24V	
90291	SPST	4	120V	
90292	SPST	4	240V	
90293	SPDT	1	24V	
90294	SPDT	1	120V	
90295	SPDT	1	240V	

PART NO.	DESCRIPTION	AMPS	COIL VOLTAGE	
			AMPS	VOLTAGE
90370	SPDT	12	24V	
90372	SPDT	12	120V	
90374	SPDT	12	240V	
90380	NO/NC	13	24V	
90382	NO/NC	13	120V	
90384	NO/NC	13	240V	

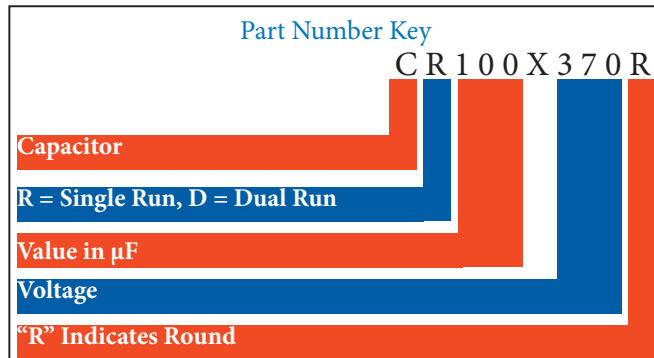


# Motor Run & Motor Start Capacitors

Our Capacitors are Manufactured with the Highest Quality Components.  
They are Manufactured and Tested under our High Standards and Specifications.

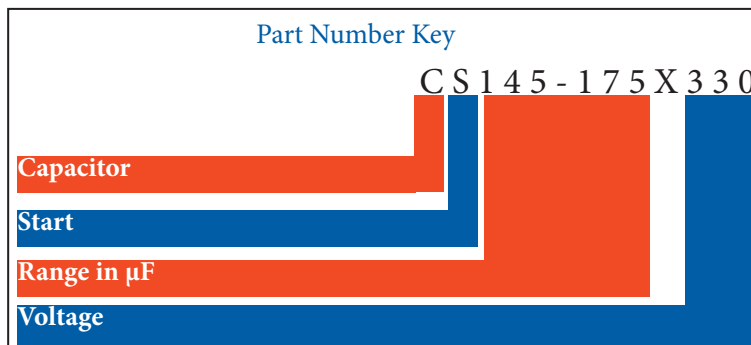
## MOTOR RUN CAPACITORS

- Type II Construction
- Non- PCB Biodegradable Synthetic Oil
- Physical Interrupter for Safety
- Drawn Steel Construction
- Quad Blade Quick Connect to Terminals
- Tolerance: +/- 5%
- Operating Temperature: -13°F to 185°F (-25°C to 85°C)
- Meets EIA 456 Standard
- Meets IEC 252 Standard
- Life Tested to 120% of Rated Voltage at 85°C for 1,000 Continuous Hours
- Cycle Tested at 140% of Rated Voltage at 85°C for 100,000 Cycles
- UL® Recognized
- CSA® Certified
- VDE® Approved



## MOTOR START CAPACITORS

- Type II Construction
- Non- PCB Biodegradable Synthetic Oil
- Moisture & Oil Resistant Molded Phenolic Resin or Plastic Case
- Industry Standard Case Sizes
- Standard Dual Blade Terminals
- Operating Temperature: -40°F to 149°F (-40°C to 65°C)
- Meets CSA RS463-B Standard
- Meets IEC 60252-2 Standard
- UL® Recognized
- CSA® Certified
- VDE® Approved





# Motor Run Capacitors



## Dual Motor Run Capacitors

PART NO.	μF X VOLTAGE	STYLE	DIMENSIONS (INCHES)		
			D	H	W
CD10+10X370R	10+10 μF X 370V	ROUND	2	3 3/8	
CD10+5X440	10+5 μF X 440V	OVAL	2 13/16	2 15/16	1 3/4
CD10+5X440R	10+5 μF X 440V	ROUND	2	3 3/8	
CD15+10X370	15+10 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD15+10X370R	15+10 μF X 370V	ROUND	2	3 3/8	
CD15+10X440	15+10 μF X 440V	OVAL	2 13/16	2 15/16	1 3/4
CD15+3X370	15+3 μF X 440V	OVAL	2 13/16	2 15/16	1 3/4
CD15+3X370R	15+3 μF X 370V	ROUND	2	3 3/8	
CD15+4X370	15+4 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD15+4X370R	15+4 μF X 370V	ROUND	2	3 3/8	
CD15+4X440	15+4 μF X 440V	OVAL	2 13/16	2 15/16	1 3/4
CD15+5X370	15+5 μF X 370V	OVAL	2 13/16	2 9/16	1 3/4
CD15+5X370R	15+5 μF X 370V	ROUND	2	3 3/8	
CD15+5X440	15+5 μF X 440V	OVAL	2 13/16	2 15/16	1 3/4
CD15+5X440R	15+5 μF X 440V	ROUND	2	3 3/8	
CD17.5+4X370	17.5+4 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD17.5+4X370R	17.5+4 μF X 370V	ROUND	2	3 3/8	
CD17.5+5X370	17.5+5 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD17.5+5X370R	17.5+5 μF X 370V	ROUND	2	3 3/8	
CD20+10X370	20+10 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD20+10X370R	20+10 μF X 370V	ROUND	2	3 3/8	
CD20+15X370	20+15 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD20+15X370R	20+15 μF X 370V	ROUND	2	3 3/8	
CD20+15X440	20+15 μF X 440V	OVAL	2 13/16	3 3/8	1 3/4
CD20+15X440R	20+15 μF X 440V	ROUND	1 15/16	4 1/8	
CD20+3X370	20+3 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD20+4X370	20+4 μF X370V	OVAL	2 13/16	2 15/16	1 3/4
CD20+4X370R	20+4 μF X370V	ROUND	2	3 3/8	
CD20+5X370	20+5 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD20+5X370R	20+5 μF X 370V	ROUND	1 15/16	3 9/16	
CD20+5X440	20+5 μF X 440V	OVAL	2 13/16	2 15/16	1 3/4
CD20+5X440R	20+5 μF X 440V	ROUND	1 15/16	3 12/16	
CD20+7.5X370R	20+7.5 μF X 370V	ROUND	1 15/16	3 9/16	
CD25+10X370	25+10 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD25+10X370R	25+10 μF X 370V	ROUND	2	3 3/8	
CD25+10X440	25+10 μF X 440V	OVAL	2 13/16	3 15/16	1 3/4
CD25+10X440R	25+10 μF X 440V	ROUND	2	4 3/16	
CD25+15X370	25+15 μF X 370V	OVAL	2 13/16	4 3/16	1 3/4
CD25+15X440	25+15 μF X 440V	OVAL	2 13/16	4 12/16	1 3/4
CD25+15X440R	25+15 μF X 440V	ROUND	2	4 3/16	
CD25+3X370	25+3 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD25+3X370R	25+3 μF X 370V	ROUND	1 15/16	3 9/16	
CD25+4X370	25+4 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD25+4X370R	25+4 μF X 370V	ROUND	1 15/16	3 9/16	
CD25+5X370	25+5 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD25+5X370R	25+5 μF X 370V	ROUND	1 15/16	3 9/16	
CD25+5X440	25+5 μF X 440V	OVAL	2 13/16	3 15/16	1 3/4
CD25+5X440R	25+5 μF X 440V	ROUND	1 15/16	3 15/16	
CD25+7.5X370	25+7.5 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD25+7.5X370R	25+7.5 μF X 370V	ROUND	2	3 3/8	
CD25+7.5X440	25+7.5 μF X 440V	OVAL	2 13/16	3 15/16	1 3/4
CD25+7.5X440R	25+7.5 μF X 440V	ROUND	1 15/16	4 5/16	
CD25+8X370	25+8 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD27+5.5X370	27+5.5 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CD30+10X370	30+10 μF X 370V	OVAL	2 13/16	4 3/16	1 3/4
CD30+10X370R	30+10 μF X 370V	ROUND	2	4 3/16	
CD30+10X440	30+10 μF X 440V	OVAL	2 13/16	4 12/16	1 3/4
CD30+15X370R	30+15 μF X 370V	ROUND	2	4 3/16	
CD30+3X370	30+3 μF X 370V	OVAL	2 13/16	3 15/16	1 3/4
CD30+3X370R	30+3 μF X 370V	ROUND	1 15/16	3 12/16	
CD30+3X440R	30+3 μF X 440V	ROUND	2	4 3/16	
CD30+4X370	30+4 μF X 370V	OVAL	2 13/16	3 6/16	1 3/4
CD30+4X370R	30+4 μF X 370V	ROUND	2	4 3/16	
CD30+4X440	30+4 μF X 440V	OVAL	2 13/16	4 3/16	1 3/4

PART NO.	μF X VOLTAGE	STYLE	DIMENSIONS (INCHES)		
			D	H	W
CD30+4X440R	30+4 μF X 440V	ROUND	2	4 3/16	
CD30+5X370	30+5 μF X 370V	OVAL	2 13/16	3 15/16	1 3/4
CD30+5X370R	30+5 μF X 370V	ROUND	1 15/16	3 12/16	
CD30+5X440	30+5 μF X 440V	OVAL	2 13/16	4 1/2	1 3/4
CD30+5X440R	30+5 μF X 440V	ROUND	1 15/16	4 5/16	
CD30+7.5X370	30+7.5 μF X 370V	OVAL	2 13/16	3 15/16	1 3/4
CD30+7.5X370R	30+7.5 μF X 370V	ROUND	2	4 3/16	
CD30+7.5X440	30+7.5 μF X 440V	OVAL	2 13/16	4 3/16	1 3/4
CD30+7.5X440R	30+7.5 μF X 440V	ROUND	1 15/16	4 12/16	
CD35+10X370	35+10 μF X 370V	OVAL	2 13/16	3 15/16	1 3/4
CD35+10X370R	35+10 μF X 370V	ROUND	2	4 3/16	
CD35+10X440	35+10 μF X 440V	OVAL	2 13/16	4 3/16	1 3/4
CD35+10X440R	35+10 μF X 440V	ROUND	1 15/16	5 1/8	
CD35+3X370	35+3 μF X 370V	OVAL	2 13/16	3 15/16	1 3/4
CD35+3X370R	35+3 μF X 370V	ROUND	2	4 3/16	
CD35+3X440	35+3 μF X 440V	OVAL	2 13/16	4 3/16	1 3/4
CD35+3X440R	35+3 μF X 440V	ROUND	1 15/16	4 1/8	
CD35+4X370	35+4 μF X 370V	OVAL	2 13/16	4 3/16	1 3/4
CD35+4X370R	35+4 μF X 370V	ROUND	2	4 3/16	
CD35+4X440	35+4 μF X 440V	OVAL	2 13/16	4 3/16	1 3/4
CD35+4X440R	35+4 μF X 440V	ROUND	2	4 12/16	
CD35+5X370	35+5 μF X 370V	OVAL	2 13/16	3 15/16	1 3/4
CD35+5X370R	35+5 μF X 370V	ROUND	1 15/16	4 1/8	
CD35+5X440	35+5 μF X 440V	OVAL	2 13/16	4 12/16	1 3/4
CD35+5X440R	35+5 μF X 440V	ROUND	1 15/16	4 12/16	
CD35+6X440R	35+6 μF X 440V	ROUND	2	4 12/16	
CD35+7.5X370	35+7.5 μF X 370V	OVAL	2 13/16	3 15/16	1 3/4
CD35+7.5X370R	35+7.5 μF X 370V	ROUND	2	4 3/16	
CD35+7.5X440	35+7.5 μF X 440V	OVAL	2 13/16	4 12/16	1 3/4
CD35+7.5X440R	35+7.5 μF X 440V	ROUND	13/16	4 12/16	
CD35+8.5X440	35+8.5 μF X 440V	OVAL	2 13/16	4 12/16	1 3/4
CD40+10X370	40+10 μF X 370V	OVAL	2 13/16	4 3/16	1 3/4
CD40+10X370R	40+10 μF X 370V	ROUND	2	4 12/16	
CD40+10X440	40+10 μF X 440V	OVAL	2 13/16	4 12/16	1 3/4
CD40+10X440R	40+10 μF X 440V	ROUND	1 15/16	5 1/8	
CD40+3X370	40+3 μF X 370V	OVAL	2 13/16	4 3/16	1 3/4
CD40+3X370R	40+3 μF X 370V	ROUND	2	4 3/16	
CD40+3X440	40+3 μF X 440V	OVAL	2 13/16	3 15/16	1 3/4
CD40+3X440R	40+3 μF X 440V	ROUND	1 15/16	4 5/16	
CD40+4X370	40+4 μF X 370V	OVAL	2 13/16	4 3/16	1 3/4
CD40+4X370R	40+4 μF X 370V	ROUND	2	4 3/16	
CD40+4X440R	40+4 μF X 440V	ROUND	2 3/8	4 3/16	
CD40+5X370	40+5 μF X 370V	OVAL	2 13/16	3 15/16	1 3/4
CD40+5X370R	40+5 μF X 370V	ROUND	1 15/16	4 5/16	
CD40+5X440	40+5 μF X 440V	OVAL	2 13/16	4 15/16	1 3/4
CD40+5X440R	40+5 μF X 440V	ROUND	2 3/8	4 1/8	
CD40+6X440R	40+6 μF X 440V	ROUND	2 3/8	4 3/16	
CD40+7.5X370	40+7.5 μF X 370V	OVAL	2 13/16	4 3/16	1 3/4
CD40+7.5X370R	40+7.5 μF X 370V	ROUND	2	4 3/16	
CD40+7.5X440	40+7.5 μF X 440V	OVAL	2 13/16	4 15/16	1 3/4
CD40+7.5X440R	40+7.5 μF X 440V	ROUND	1 15/16	5 1/8	
CD45+10X370	45+10 μF X 370V	OVAL	2 13/16	4 12/16	1 3/4
CD45+10X370R	45+10 μF X 370V	ROUND	2	4 12/16	
CD45+10X440R	45+10 μF X 370V	ROUND	2 3/8	4 3/16	
CD45+15X370	45+15 μF X 370V	OVAL	2 13/16	4 12/16	1 3/4
CD45+3X370	45+3 μF X 370V	OVAL	2 13/16	4 12/16	1 3/4
CD45+3X370R	45+3 μF X 370V	ROUND	2	4 12/16	
CD45+3X440R	45+3 μF X 370V	ROUND	2 3/8	4 3/16	
CD45+4X370R	45+4 μF X 370V	ROUND	2	4 12/16	
CD45+4X440R	45+4 μF X 440V	ROUND	2 3/8	4 3/16	
CD45+5X370	45+5 μF X 370V	OVAL	2 13/16	3 15/16	1 3/4
CD45+5X370R	45+5 μF X 370V	ROUND	1 15/16	4 1/2	
CD45+5X440	45+5 μF X 440V	OVAL	2 13/16	4 15/16	1 3/4
CD45+5X440R	45+5 μF X 440V	ROUND	2 3/8	4 5/16	

H  
V  
A  
C



# Motor Run Capacitors



## Dual Motor Run Capacitors

PART NO.	μF X VOLTAGE	STYLE	DIMENSIONS (INCHES)		
			D	H	W
CD45+6X440R	45+6 μF X 440V	ROUND	2 3/8	4 3/16	
CD45+7.5X370	45+7.5 μF X 370V	OVAL	2 13/16	4 12/16	1 3/4
CD45+7.5X370R	45+7.5 μF X 370V	ROUND	2	4 12/16	
CD45+7.5X440	45+7.5 μF X 440V	OVAL	2 13/16	4 15/16	1 3/4
CD45+7.5X440R	45+7.5 μF X 440V	ROUND	2 3/8	4 5/16	
CD50+10X370R	50+10 μF X 370V	ROUND	2	4 12/16	
CD50+10X440R	50+10 μF X 440V	ROUND	2 3/8	4 12/16	
CD50+12.5X440R	50+12.5 μF X 440V	ROUND	2 3/8	4 12/16	
CD50+3X370R	50+3 μF X 370V	ROUND	2	4 12/16	
CD50+5X370	50+5 μF X 370V	OVAL	2 13/16	4 12/16	1 3/4
CD50+5X370R	50+5 μF X 370V	ROUND	2	4 12/16	
CD50+5X440	50+5 μF X 440V	OVAL	2 13/16	4 15/16	1 3/4
CD50+5X440R	50+5 μF X 440V	ROUND	2 3/8	4 1/2	
CD50+7.5X370	50+7.5 μF X 370V	OVAL	2 13/16	4 12/16	1 3/4
CD50+7.5X370R	50+7.5 μF X 370V	ROUND	2	4 12/16	
CD50+7.5X440	50+7.5 μF X 440V	OVAL	2 13/16	4 12/16	1 3/4
CD50+7.5X440R	50+7.5 μF X 440V	ROUND	2 3/8	4 12/16	
CD55+10X370R	55+10 μF X 370V	ROUND	2 3/8	4 3/16	
CD55+10X440	55+10 μF X 440V	OVAL	2 13/16	4 15/16	1 3/4
CD55+10X440R	55+10 μF X 440V	ROUND	2 3/8	4 12/16	
CD55+5X370	55+5 μF X 370V	OVAL	2 13/16	4 12/16	1 3/4
CD55+5X370R	55+5 μF X 370V	ROUND	2 3/8	4 3/16	
CD55+5X440	55+5 μF X 440V	OVAL	2 3/8	4 12/16	
CD55+5X440R	55+5 μF X 440V	ROUND	2 3/8	4 12/16	
CD55+7.5X370	55+7.5 μF X 370V	OVAL	2 13/16	4 12/16	1 3/4
CD55+7.5X370R	55+7.5 μF X 370V	ROUND	2 3/8	4 3/16	
CD55+7.5X440R	55+7.5 μF X 440V	ROUND	2 3/8	4 12/16	
CD60+10X370	60+10 μF X 370V	OVAL	2 13/16	4 15/16	1 3/4
CD60+10X370R	60+10 μF X 370V	ROUND	2 3/8	4 3/16	
CD60+10X440R	60+10 μF X 440V	ROUND	2 3/8	4 15/16	
CD60+12.5X440R	60+12.5 μF X 440V	ROUND	2 3/8	4 12/16	
CD60+15X440R	60+15 μF X 440V	ROUND	2 3/8	4 15/16	
CD60+3X370R	60+3 μF X 370V	ROUND	2 3/8	4 3/16	
CD60+3X440R	60+3 μF X 440V	ROUND	2 3/8	4 3/16	
CD60+5X370	60+5 μF X 370V	OVAL	3 9/16	4 12/16	2 1/15
CD60+5X370R	60+5 μF X 370V	ROUND	2 3/8	4 3/16	
CD60+5X440	60+5 μF X 440V	OVAL	2 13/16	4 15/16	1 3/4
CD60+5X440R	60+5 μF X 440V	ROUND	2 3/8	4 15/16	
CD60+7.5X370	60+7.5 μF X 370V	OVAL	3 9/16	4 12/16	1 3/4
CD60+7.5X370R	60+7.5 μF X 370V	ROUND	2 3/8	4 3/16	
CD60+7.5X440	60+7.5 μF X 370V	OVAL	3 9/16	4 12/16	2 1/15
CD60+7.5X440R	60+7.5 μF X 440V	ROUND	2 3/8	4 15/16	
CD65+10X440	65+10 μF X 440V	OVAL	3 9/16	4 12/16	2 1/15
CD65+10X440R	65+10 μF X 440V	ROUND	2 3/8	4 12/16	
CD65+5X370	65+5 μF X 370V	OVAL	3 9/16	4 12/16	1 3/4
CD65+5X370R	65+5 μF X 370V	ROUND	2 3/8	4 3/16	
CD65+5X440R	65+5 μF X 440V	ROUND	2 3/8	4 15/16	
CD65+7.5X440	65+7.5 μF X 440V	OVAL	3 9/16	4 12/16	1 3/4
CD70+10X370R	70+10 μF X 370V	ROUND	2 3/8	4 12/16	
CD70+10X440R	70+10 μF X 440V	ROUND	2 3/8	4 12/16	
CD70+5X370R	70+5 μF X 370V	ROUND	2 3/8	4 3/16	
CD70+5X440R	70+5 μF X 440V	ROUND	2 3/8	4 12/16	
CD70+7.5X370R	70+7.5 μF X 370V	ROUND	2 3/8	4 12/16	
CD70+7.5X440R	70+7.5 μF X 440V	ROUND	2 3/8	4 12/16	
CD75+10X370R	75+10 μF X 370V	ROUND	2 3/8	5 2/16	
CD75+10X440R	75+10 μF X 440V	ROUND	2 3/8	5 2/16	
CD75+5X370R	75+3 μF X 370V	ROUND	2 3/8	4 12/16	
CD75+5X440R	75+5 μF X 440V	ROUND	2 3/8	4 12/16	
CD75+7.5X370R	75+7.5 μF X 370V	ROUND	2 3/8	4 12/16	
CD75+7.5X440R	75+7.5 μF X 440V	ROUND	2 3/8	5 2/16	
CD80+10X370R	80+10 μF X 370V	ROUND	2 3/8	5 2/16	
CD80+10X440R	80+10 μF X 440V	ROUND	2 3/8	4 15/16	
CD80+12.5X370R	80+12.5 μF X 370V	ROUND	2 3/8	5 2/16	
CD80+5X370	80+5 μF X 370V	OVAL	3 9/16	4 12/16	1 3/4

PART NO.	μF X VOLTAGE	STYLE	DIMENSIONS (INCHES)		
			D	H	W
CD80+5X370R	80+5 μF X 370V	ROUND	2 3/8	4 15/16	
CD80+5X440	80+5 μF X 440V	OVAL	3 9/16	4 12/16	1 3/4
CD80+5X440R	80+5 μF X 440V	ROUND	2 3/8	4 15/16	
CD80+7.5X370	80+7.5 μF X 370V	OVAL	3 9/16	4 12/16	1 3/4
CD80+7.5X370R	80+7.5 μF X 370V	ROUND	2 3/8	4 15/16	
CD80+7.5X440	80+7.5 μF X 440V	OVAL	3 9/16	4 12/16	1 3/4
CD80+7.5X440R	80+7.5 μF X 440V	ROUND	2 3/8	4 15/16	
CD85+10X370R	85+10 μF X 370V	ROUND	2 3/8	5 2/16	
CD85+10X440R	85+10 μF X 440V	ROUND	2 3/8	5 2/16	
CD85+5X370R	85+5 μF X 370V	ROUND	2 3/8	5 2/16	
CD85+5X440R	85+5 μF X 440V	ROUND	2 3/8	5 2/16	
CD85+7.5X370R	85+7.5 μF X 370V	ROUND	2 3/8	5 2/16	
CD85+7.5X440R	85+7.5 μF X 440V	ROUND	2 3/8	5 2/16	

## Single Motor Run Capacitors

PART NO.	μF X VOLTAGE	STYLE	DIMENSIONS (INCHES)		
			D	H	W
CR100X370	100 μF X 370V	OVAL	3 9/16	5 2/16	2 1/15
CR100X370R	100 μF X 370V	ROUND	2 3/8	4 15/16	
CR10X370	10 μF X 370V	OVAL	2 1/16	2 9/16	1 1/4
CR10X370R	10 μF X 370V	ROUND	2	2 3/16	
CR10X440	10 μF X 440V	OVAL	2 1/16	2 15/16	1 1/4
CR10X440R	10 μF X 440V	ROUND	1 15/16	2 3/16	
CR12.5X370	12.5 μF X 370V	OVAL	2 1/16	2 12/16	1 1/4
CR12.5X370R	12.5 μF X 370V	ROUND	2	2 3/16	
CR12.5X440	12.5 μF X 440V	OVAL	2 1/16	3 3/8	1 1/4
CR12.5X440R	12.5 μF X 440V	ROUND	1 3/4	2 13/16	
CR15X370	15 μF X 370V	OVAL	1 15/16	3 9/16	1 1/4
CR15X370R	15 μF X 370V	ROUND	1 15/16	2 3/16	
CR15X440	15 μF X 440V	OVAL	2 1/16	3 15/16	1 1/4
CR15X440R	15 μF X 440V	ROUND	1 12/16	2 9/16	
CR16X370R	16 μF X 370V	ROUND	1 3/4	2 13/16	
CR17.5X370	17.5 μF X 370V	OVAL	2 13/16	2 9/16	1 3/4
CR17.5X370R	17.5 μF X 370V	ROUND	1 3/4	2 13/16	
CR17.5X440	17.5 μF X 440V	OVAL	2 13/16	2 12/16	1 3/4
CR17.5X440R	17.5 μF X 440V	ROUND	1 3/4	2 13/16	
CR2.5X440	2.5 μF X 440V	OVAL	2	2 3/16	1 1/4
CR20X370	20 μF X 370V	OVAL	2 13/16	2 9/16	1 3/4
CR20X370R	20 μF X 370V	ROUND	1 3/4	2 12/16	
CR20X440	20 μF X 440V	OVAL	2 13/16	2 12/16	1 3/4
CR20X440R	20 μF X 440V	ROUND	1 3/4	3 1/8	
CR25X370	25 μF X 370V	OVAL	2 13/16	2 9/16	1 3/4
CR25X370R	25 μF X 370V	ROUND	1 3/4	2 12/16	
CR25X440	25 μF X 440V	OVAL	2 13/16	3 1/8	1 3/4
CR25X440R	25 μF X 440V	ROUND	1 3/4	3 9/16	
CR25X480	25 μF X 480V	OVAL	2 13/16	3 1/8	1 3/4
CR2X370	2 μF X 370V	OVAL	2 1/16	2 3/16	1 1/4
CR2X370R	2 μF X 370V	ROUND	1 9/16	2 3/16	
CR2X440	2 μF X 440V	OVAL	2 1/16	2 3/16	1 1/4
CR2X440R	2 μF X 440V	ROUND	1 9/16	2 3/16	
CR30X370	30 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CR30X370R	30 μF X 370V	ROUND	1 12/16	3 9/16	
CR30X440	30 μF X 440V	OVAL	2 13/16	3 9/16	1 3/4
CR30X440R	30 μF X 440V	ROUND	1 15/16	3 12/16	
CR35X370	35 μF X 370V	OVAL	2 13/16	2 15/16	1 3/4
CR35X370R	35 μF X 370V	ROUND	1 15/16	3 9/16	
CR35X440	35 μF X 440V	OVAL	2 13/16	3 15/16	1 3/4
CR35X440R	35 μF X 440V	ROUND	1 15/16	3 12/16	
CR3X370	3 μF X 370V	OVAL	2 1/16	2 3/16	1 1/4
CR3X370R	3 μF X 370V	ROUND	1 9/16	2 3/16	
CR3X440	3 μF X 440V	OVAL	2 1/16	2 3/16	1 1/4
CR3X440R	3 μF X 440V	ROUND	1 9/16	2 3/16	
CR40X370	40 μF X 370V	OVAL	2 13/16	3 15/16	1 3/4
CR40X370R	40 μF X 370V	ROUND	1 15/16	3 15/16	

H  
V  
A  
C



# Motor Run & Motor Start Capacitors



## Single Motor Run Capacitors

PART NO.	µF X VOLTAGE	STYLE	DIMENSIONS (INCHES)		
			D	H	W
CR40X440	40 µF X 440V	OVAL	2 13/16	4 5/16	1 3/4
CR40X440R	40 µF X 440V	ROUND	1 15/16	3 15/16	
CR45X370	45 µF X 370V	OVAL	2 13/16	3 9/16	1 3/4
CR45X370R	45 µF X 370V	ROUND	1 15/16	3 15/16	
CR45X440	45 µF X 440V	OVAL	2 13/16	4 1/2	1 3/4
CR45X440R	45 µF X 440V	ROUND	1 15/16	4 5/16	
CR4X370	4 µF X 370V	OVAL	2 1/16	2 3/16	1 1/4
CR4X370R	4 µF X 370V	ROUND	1 9/16	2 3/16	
CR4X440	4 µF X 440V	OVAL	2 1/16	2 3/16	1 1/4
CR4X440R	4 µF X 440V	ROUND	1 9/16	2 3/16	
CR50X370	50 µF X 370V	OVAL	2 13/16	4 5/16	1 3/4
CR50X370R	50 µF X 370V	ROUND	1 15/16	4 5/16	
CR50X440	50 µF X 440V	OVAL	2 13/16	4 15/16	1 3/4
CR50X440R	50 µF X 440V	ROUND	1 15/16	4 12/16	
CR55X370	55 µF X 370V	OVAL	2 13/16	4 1/2	1 3/4
CR55X370R	55 µF X 370V	ROUND	1 15/16	3 15/16	
CR55X440	55 µF X 440V	OVAL	2 13/16	4 15/16	1 3/4
CR55X440R	55 µF X 440V	ROUND	1 15/16	4 15/16	
CR5X370	5 µF X 370V	OVAL	2 1/16	2 3/16	1 1/4
CR5X370R	5 µF X 370V	ROUND	1 9/16	2 3/16	
CR5X440	5 µF X 440V	OVAL	2 1/16	2 3/16	1 1/4
CR5X440R	5 µF X 440V	ROUND	1 15/16	2 3/16	
CR60X370	60 µF X 370V	OVAL	2 13/16	4 15/16	1 3/4
CR60X370R	60 µF X 370V	ROUND	1 15/16	4 12/16	
CR60X440	60 µF X 440V	OVAL	2 13/16	4 15/16	1 3/4
CR60X440R	60 µF X 440V	ROUND	1 15/16	4 15/16	
CR65X370	65 µF X 370V	OVAL	2 13/16	4 12/16	1 3/4
CR65X370R	65 µF X 370V	ROUND	2 3/8	4 3/16	
CR65X440	65 µF X 440V	OVAL	1 15/16	4 12/16	
CR6X370	6 µF X 370V	OVAL	2 1/16	2 3/16	1 1/4
CR6X370R	6 µF X 370V	ROUND	2	2 3/16	
CR6X440	6 µF X 400V	OVAL	2 1/16	2 3/16	1 1/4
CR6X440R	6 µF X 440V	ROUND	2	2 3/16	
CR7.5X370	7.5 µF X 370V	OVAL	2 1/16	2 3/16	1 1/4
CR7.5X370R	7.5 µF X 370V	ROUND	2	2 3/16	
CR7.5X440	7.5 µF X 440V	OVAL	2 1/16	2 9/16	1 1/4
CR7.5X440R	7.5 µF X 440V	ROUND	2	2 3/16	
CR70X370	70 µF X 370V	OVAL	2 13/16	4 15/16	1 3/4
CR70X370R	70 µF X 370V	ROUND	2 3/8	3 15/16	
CR70X440	70 µF X 440V	OVAL	2 13/16	5 2/16	1 3/4
CR70X440R	70 µF X 440V	ROUND	2 3/8	4 15/16	
CR75X440	75 µF X 440V	OVAL	2 13/16	5 2/16	1 3/4
CR80X370	80 µF X 370V	OVAL	2 13/16	5 2/16	1 3/4
CR80X370R	80 µF X 370V	ROUND	2 3/8	4 5/16	
CR80X440	80 µF X 440V	OVAL	2 13/16	5 2/16	1 3/4
CR80X440R	80 µF X 440V	ROUND	2 3/8	4 15/16	
CR90X440R	90 µF X 440V	ROUND	2 3/8	5 2/16	

## Start Capacitors

PART NO.	MOTOR START CAPACITORS	µF X Voltage	DIMENSIONS
			(DIA x H) (INCHES)
CS1000-1200X110		1000-1200 µF X 110-125V	1-13/16 x 3-3/8
CS108-130X110		108-130 µF X 110-125V	1-7/16 x 2-3/4
CS108-130X220		108-130 µF X 220-240V	1-13/16 x 3-3/8
CS108-130X330		108-130 µF X 330V	2-1/16 x 4-3/8
CS124-156X110		124-156 µF X 110-125V	1-7/16 x 2-3/4
CS124-156X165		124-156 µF X 165V	1-7/16 x 2-3/4
CS124-156X220		124-156 µF X 220-240V	1-13/16 x 3-3/8
CS124-156X330		124-156 µF X 330V	2-1/16 x 4-3/8
CS130-156X110		130-156 µF X 110V	1-7/16 x 2-3/4
CS130-156X220		130-156 µF X 220V	1-13/16 x 3-3/8
CS130-156X330		130-156 µF X 330V	1-13/16 x 4-3/8
CS145-175X110		145-175 µF X 110-125V	1-7/16 x 2-3/4
CS145-175X165		145-175 µF X 165V	1-7/16 x 2-3/4
CS145-175X220		145-175 µF X 220-240V	1-13/16 x 4-3/8

## Start Capacitors

PART NO.	MOTOR START CAPACITORS	µF X Voltage	DIMENSIONS
			(DIA x H) (INCHES)
CS145-175X330		145-175 µF X 330V	2-9/16 x 4-3/8
CS161-193X110		161-193 µF X 110-125V	1-7/16 x 2-3/4
CS161-193X165		161-193 µF X 165V	1-7/16 x 2-3/4
CS161-193X220		161-193 µF X 220-240V	1-13/16 x 4-3/8
CS161-193X330		161-193 µF X 330V	2-9/16 x 4-3/8
CS189-227X110		189-227 µF X 110-125V	1-7/16 x 2-3/4
CS189-227X220		189-227 µF X 220-240V	2-1/16 x 4-3/8
CS189-227X330		189-227 µF X 330V	2-9/16 x 4-3/8
CS200-240X110		200-240 µF X 110-125V	1-7/16 x 2-3/4
CS21-25X110		21-25 µF X 110-125V	1-7/16 x 2-3/4
CS21-25X220		21-25 µF X 220-240V	1-7/16 x 2-3/4
CS21-25X330		21-25 µF X 330V	1-7/16 x 2-3/4
CS216-227X220		216-227 µF X 220-240V	2-1/16 x 4-3/8
CS216-259X110		216-259 µF X 110-125V	1-7/16 x 3-3/8
CS216-259X220		216-259 µF X 220-240V	2-1/16 x 4-3/8
CS216-259X330		216-259 µF X 330V	2-9/16 x 4-3/8
CS233-280X110		233-288 µF X 110V	1-7/16 x 3-3/8
CS233-280X220		233-288 µF X 220V	2-1/16 x 4-3/8
CS233-292X110		233-292 µF X 110-125V	1-7/16 x 3-3/8
CS233-292X165		233-292 µF X 165V	1-13/16 x 3-3/8
CS233-292X220		233-292 µF X 220-240V	2-1/16 x 4-3/8
CS25-30X110		25-30 µF X 110-125V	1-7/16 x 2-3/4
CS25-30X220		25-30 µF X 220-240V	1-7/16 x 2-3/4
CS25-30X330		25-30 µF X 330V	1-7/16 x 3-3/8
CS270-324X110		270-324 µF X 110-125V	1-7/16 x 3-3/8
CS270-324X165		270-324 µF X 165V	1-13/16 x 3-3/8
CS270-324X220		270-324 µF X 220-240V	2-1/16 x 4-3/8
CS270-324X330		270-330 µF X 330V	2-9/16 x 4-3/8
CS280-336X220		280-336 µF X 220V	2-1/16 x 4-3/8
CS300-360X110		300-360 µF X 110-125V	1-13/16 x 3-3/8
CS300-360X330		300-360 µF X 330V	2-9/16 x 4-3/8
CS30-36X110		30-36 µF X 110-125V	1-7/16 x 2-3/4
CS30-36X220		30-36 µF X 220-240V	1-7/16 x 2-3/4
CS30-36X330		30-36 µF X 330V	1-13/16 x 3-3/8
CS320-384X220		320-480 µF X 220V	2-1/16 x 4-3/8
CS324-388X110		324-388 µF X 110-125V	1-13/16 x 3-3/8
CS324-388X330		324-388 µF X 330V	2-9/16 x 4-3/8
CS340-408X110		340-408 µF X 110-125V	1-13/16 x 3-3/8
CS36-43X110		36-43 µF X 110-125V	1-7/16 x 2-3/4
CS36-43X220		36-43 µF X 220-240V	1-7/16 x 2-3/4
CS36-43X330		36-43 µF X 330V	1-7/16 x 3-3/8
CS378-440X110		378-440 µF X 110-125V	1-13/16 x 3-3/8
CS400-480X110		400-480 µF X 110-125V	1-13/16 x 3-3/8
CS400-480X220		400-480 µF X 220V	2-1/16 x 4-3/8
CS430-516X110		430-516 µF X 110V	1-13/16 x 3-3/8
CS43-56X110		43-56 µF X 110-125V	1-7/16 x 2-3/4
CS43-56X220		43-56 µF X 220-240V	1-7/16 x 2-3/4
CS43-56X330		43-56 µF X 330V	1-13/16 x 3-3/8
CS460-552X110		460-552 µF X 110-125V	1-13/16 x 3-3/8
CS53-70X330		53-70 µF X 330V	1-13/16 x 3-3/8
CS540-648X110		540-648 µF X 110-125V	1-13/16 x 3-3/8
CS56-72X110		56-72 µF X 110-125V	1-7/16 x 2-3/4
CS56-72X220		56-72 µF X 220-240V	1-7/16 x 3-3/8
CS56-72X330		56-72 µF X 330V	1-13/16 x 3-3/8
CS590-708X110		590-708 µF X 110-125V	1-13/16 x 3-3/8
CS64-77X110		64-77 µF X 110-125V	1-7/16 x 2-3/4
CS64-77X220		64-77 µF X 220-240V	1-7/16 x 2-3/4
CS64-77X330		64-77 µF X 330V	1-13/16 x 3-3/8
CS708-850X110		708-850 µF X 110-125V	1-13/16 x 3-3/8
CS72-88X110		72-88 µF X 110-125V	1-7/16 x 2-3/4
CS72-88X220		72-88 µF X 220-240V	1-7/16 x 2-3/4
CS72-88X330		72-88 µF X 330V	2-1/16 x 3-3/8
CS829-995X110		829-995 µF X 110-125V	1-13/16 x 3-3/8
CS88-108X110		88-108 µF X 110-125V	1-7/16 x 2-3/4
CS88-108X220		88-108 µF X 220-240V	1-13/16 x 3-3/8
CS88-108X330		88-108 µF X 330V	2-1/16 x 3-3/8

H  
V  
A  
C

# Contactors



Compact, Universal Design Allows Replacement of Most Common Brands.

## DEFINITE PURPOSE CONTACTORS

- Silver Cadmium Oxide Contacts
- Ranges: 20-90 FLA
- Poles: 1.5, 2 & 3
- Coil Voltages: 24, 120 & 240 VAC
- Terminations: Box Lug
- Temperature Range: -40°F to 150°F (-40°C to 65°C)
- UL & CSA Approved

1.5 POLE PART NO.	FULL LOAD AMPS	COIL VOLTAGE
DP25241	25	24
DP251201	25	120
DP252401	25	240
DP30241	30	24
DP301201	30	120
DP302401	30	240

2 POLE PART NO.	FULL LOAD AMPS	COIL VOLTAGE
DP20242	20	24
DP201202	20	120
DP202402	20	240
DP25242	25	24
DP251202	25	120
DP252402	25	240
DP30242	30	24
DP301202	30	120
DP302402	30	240
DP40242	40	24
DP401202	40	120
DP402402	40	240

3 POLE PART NO.	FULL LOAD AMPS	COIL VOLTAGE
DP25243	25	24
DP251203	25	120
DP252403	25	240
DP30243	30	24
DP301203	30	120
DP302403	30	240
DP40243	40	24
DP401203	40	120
DP402403	40	240
DP50243	50	24
DP501203	50	120
DP502403	50	240
DP60243	60	24
DP601203	60	120
DP602403	60	240
DP75243	75	24
DP751203	75	120
DP752403	75	240
DP90243	90	24
DP901203	90	120
DP902403	90	240



### Part Number Key

DP30242

Definite Purpose

Full Load Amps

Coil Voltage

# of Poles

## SMC11

### 2 POLE MAGNETIC LINE CONTACTOR

- Non-Positional
- Replaces Mars® 18001 (exact) and Honeywell® R850B1146, Packard® C18001
- Includes 4 Terminals and 4 Screws
- UL File Number E328772

#### Specifications

Contacts	DPST
Coil Voltage	24 VAC
Full Load Amps	30 Amps
Locked Rotor Amps	120
Resistive Load Amps	30
Frequency	50/60 Hz



H  
V  
A  
C

# Contactors

## Cross Reference

PART NO.	GE®	API®	ARROW HART®	CUTLER HAMMER®	DIVERSITECH®	ELMWOOD®	FURNAS®	GE®	GEMLINE®	GLOBAL CUTLER HAMMER®
DP25241	CR453CB3HAA	***	C251NU10	C25CNB125T	***	***	45DG10AJD8A	CR353CB3AH1	***	4140
DP251201	CR453CB3AAA	***	C251NU20	C25CNB125A	***	***	45DG10AFD8A	CR353CB3AA1	***	4141
DP252401	CR453CB3BAA	***	C251NU30	C25CNB125B	***	***	45DG10AGA	CR353CB3AB1	***	4142
DP30241	CR453CC3HAA	***	C301NU10	C25CNB130T	***	***	45EG10AJA	CR353CD3AH1	***	4143
DP301201	CR453CC3AAA	***	C301NU20	C25CNB130A	***	***	45EG10AJA	CR353CD3AA1	***	4144
DP302401	CR453CC3BAA	***	C301NU30	C25CNB130B	***	***	45EG10AGA	CR353CD3AB1	***	4145
DP20242	CR453CA2HAA	***	C202U10	C25BNB220T	***	30BO20	45CG20AJ	CR353CA2AH1	***	4101
DP201202	CR453CA2AAA	***	C202U20	C25BNB220A	***	30BO-20	45CG20AF	CR353CA2AA1	***	4102
DP202402	CR453CA2BAA	***	C202U30	C25BNB220B	***	***	45CG20AG	Same	***	4103
DP25242	CR453CB2HAA	***	C252U10	C25BNB225T	DP25224	30CO-20	45DG20AJ	CR353CB2AH1	***	4104
DP251202	CR453CB2AAA	***	C252U20	C25BNB225A	DP25120	30CO-20	45DG20AF	CR353CB2AA1	***	4105
DP252402	CR453CB2BAA	***	C252U30	C25BNB225B	DP252240	30CO-20	45DG20AG	CR353CB2AB1	***	4106
DP30242	CR453CC2HAA	SA2S3024V	C302U10	C25BNB230T	DP30224	30EO-20	45EG20AJ	CR353AC2AH1	***	4107
DP301202	CR453CC2AAA	SA2S30120V	C302U20	C25BNB230A	DP30120	30EO-20	45EG20AF	CR353AC2AA1	***	4108
DP302402	CR453CC2BAA	SA2S30240V	C302U30	C25BNB230B	DP302240	30EO-20	45EG20AG	CR353AC2AB1	***	4109
DP40242	CR453CE2HBB	SA2M4024V	ACC420U10	C25DNF240T	DP40224	30FO-20	45GG20AJ	CR353AD2BH1	***	4161
DP401202	CR453CE2ABB	SA2M40120V	ACC420U20	C25DNF240A	DP40120	30FO-20	45GG20AF	CR353AD2BA1	***	4162
DP402402	CR453CE2BBB	SA2M4024V	ACC420U30	C25DNF240B	DP402240	30FO-20	45GG20AG	CR353AD2BB1	***	4163
DP25243	CR453AB3HAA	***	ACC220U10	C25DND325T	***	30DO-30	42AF35AJ	CR353AB3AH1	DP2530	4110
DP251203	CR453AB3AAA	***	ACC220U20	C25DND325A	***	30DO-30	42AF35AF	CR353AB3AA1	DP2531	4111
DP252403	CR453AB3BAA	***	ACC220U30	C25DND325B	***	30DO-30	42AF35AG	CR353AB3AB1	DP2532	4112
DP30243	CR453AC3HAA	SA3S3024V	ACC330U10	C25DND330T	DP30324	30EO-30	42BF35AJ	CR353AC3AH1	DP3030	4113
DP301203	CR453AC3AAA	SA3S30120V	ACC330U20	C25DND330A	DP30120	30EO-30	42BF35AF	CR353AC3AA1	DP3031	4114
DP302403	CR453AC3BAA	SA3S30240V	ACC330U30	C25DND330B	DP303240	30EO-30	42BF35AG	CR353AC3AB1	DP3032	4115
DP40243	CR453AD3HBB	SA3M4024V	ACC430U10	C25DNF340T	DP40324	30FO-30	42CF35AJ	CR353AD3BH1	DP4030	4116
DP401203	CR453AD3ABB	SA3M40120V	ACC430U20	C25DNF340A	DP40120	30FO-30	42CF35AF	CR353AD3BA1	DP4031	4117
DP402403	CR453AD3BBB	SA3M40240V	ACC430U30	C25DNF340B	DP403240	30FO-30	42CF35AG	CR353AD3BB1	DP4032	4118
DP50243	CR353FE3BH1	SA3G5024V	ACC530U10	C25FNF350T	DP50324	30GO-30	42DF35AJ	CR353FE3BH1	DP5030	4128
DP501203	CR353FE3BA1	SA3G50120V	ACC530U20	C25FNF350A	DP50120	30GO-30	42DF35AF	CR353FE3BA1	DP5031	4129
DP502403	CR353FE3BB1	SA3G50240V	ACC530U30	C25FNF350B	DP503240	30GO-30	42DF35AG	CR353FE3BB1	DP5032	4130
DP60243	CR353FF3BH1	SA3A6024V	ACC530U10	C25FNF360T	DP60324	30HO-30	42EF35AJ	CR353FF3BH1	DP6030	4131
DP601203	CR353FF3BA1	SA3A60120V	ACC530U20	C25FNF360A	DP60120	30HO-30	42EF35AF	CR353FF3BA1	DP6031	4132
DP602403	CR353FF3BB1	SA3A60240V	ACC530U30	C25FNF360B	DP603240	30HO-30	42EF35AG	CR353FF3BB1	DP6032	4133
DP75243	CR353EG3BH1	***	ACC730U10	C25FNF375T	DP75324	***	42FE35AJ	CR353EG3BH1	***	4134
DP751203	CR353EG3BA1	***	ACC730U20	C25FNF375A	DP75120	***	42FE35AF	CR353EG3BA1	DP7531	4135
DP752403	CR353EG3BB1	***	ACC730U30	C25FNF375B	DP753240	***	42FE35AG	CR353EG3BB1	DP7532	4136
DP90243	CR353EH3BH1	***	***	C25GNF390T	DP90324	***	42GE35AJ	CR353EH3BH1	***	4137
DP901203	CR353EH3BA1	***	ACC930U20	C25GNF390A	DP90120	***	42GE35AF	CR353EH3BA1	DP9031	4138
DP902403	CR353EH3BB1	***	ACC930U30	C25GNF390B	DP903240	***	42GE35AG	CR353EH3BB1	DP9032	4139
PART NO.	HONEYWELL®	HONEYWELL®	JOSLYN CLARK®	MA LINE POWER PRO®	MARS ECONOMY®	PACKARD / FASCO®	PRODUCTS UNLIMITED®	RBM/ESSEX®	SQUARE D®	STEVECO®
DP25241	DP1025A5005	***	A77306654A3	***	***	1S25A	310015001XXXX	***	8910DP21	94385
DP251201	DP1025B5046	***	A77306654A1	***	***	1S25B	310015T01XXXX	***	***	94386
DP252401	DP1025C5045	***	A77306654A2	***	***	1S25C	310015U01XXXX	***	***	94387
DP30241	DP1030A5013	***	A77306653A3	***	13067/13101	1S30A	310015002XXXX	***	8910DP12	94388
DP301201	DP1030B5020	***	A77306653A1	***	13068	1S30B	310015T02XXXX	***	***	94389
DP302401	DP1030C5029	***	A7730665312	***	13069	1S30C	310015U02XXXX	***	***	94390
DP20242	DP2020A5021	***	A77306680A3	***	13071	2S20A	310020Q03XXXX	143-1	DP12V14	90234
DP201202	DP2020B5038	***	A77306680A1	***	13072	2S20B	310020T03XXXX	143-1	DP12V02	90235
DP202402	DP2020C5037	***	A77306680A2	***	13073	2S20C	310020U03XXXX	***	***	90236
DP25242	***	***	A77306660A3	***	13077	***	***	143-6	DP22V14	***
DP251202	***	***	A77306660A1	***	13078	***	***	143-6	DP22V02	***
DP252402	***	***	A77306660A2	***	13079	***	***	143-6	DP22V09	***
DP30242	DP2030A5004	DP2030A1003	A77306657A3	8910DP32V14	14321/13104	C2S30A	310020Q06XXXX	143-7	DP32V14	90244
DP301202	DP2030B5003	DP2030B1002	A77306657A1	***	14322	C2S30B	310020T06XXXX	143-7	DP32V02	90245
DP302402	DP2030C5002	DP2030C1001	A77306657A2	***	14323	C2S30C	310020U06XXXX	143-7	DP32V09	90246
DP40242	DP2040A5003	***	A77309045A3	8910DP42V14	14421	C2S40A	310020018XXXX	154-4	DPA42V14	***
DP401202	DP2040B5002	***	A77309045A1	***	14422	C2S40B	310020T18XXXX	154-4	DPA42V02	***
DP402402	DP2040C5001	***	A77309045A2	***	14423	C2S40C	310020U18XXXX	154-4	DPA42V09	***
DP25243	DP3025A5003	DP3025A1002	A77309040A3	***	13001	3M25A	31003008XXXXAH	154-2	8910DPA23	90160
DP251203	DP3025B5002	DP3025B1001	A77309040A1	***	13002	3M25B	310030T8XXXXAH	154-2	DPA23V02	90161
DP252403	DP3025C5001	DP3025C1000	A77309040A2	***	13003	3M25C	310030U8XXXXAH	154-2	DPA23V09	90162
DP30243	DP3030A5003	DP3030A1002	A77309044A3	8910DPA33V14	14331/13007	C3M30A	31003009XXXXAH	154-3	DPA33V14	90163
DP301203	DP3030B5002	DP3030B1001	A77309044A1	8910DPA33V02	13008	C3M30B	310030T9XXXXAH	154-3	DPA33V02	90164
DP302403	DP3030C5001	DP3030C1000	A77309044A2	8910DPA33V09	13009	C3M30C	310030U9XXXXAH	154-3	DPA33V09	90165
DP40243	DP3040A5002	DP3040A1001	A77309046A3	8910DPA43V14	14431/13013	C3M40A	310030016XXXXAH	154-4	DPA43V14	90170
DP401203	DP3040B5001	DP3040B1000	A77309046A1	8910DPA43V02	13014	C3M40B	310030T10XXXXAH	154-4	DPA43V02	90171
DP402403	DP3040C5000	DP3040C1000	A77309046A2	8910DPA43V09	14433/13015	C3M40C	310030U10XXXXAH	154-4	DPA43V09	90172
DP50243	DP3050A5001	DP3050A1000	A77288514A3	8910DPA53V14	13200	C3L50A	310030016XXXXCG	***	8910M03	92459
DP501203	DP3050B5000	DP3050B1009	A77288514A1	8910DPA53V02	13201	C3L50B	310030T16XXXXCG	***	8910M03	92460
DP502403	DP3050C5009	DP3050C1008	A77288514A2	8910DPA53V09	13202	C3L50C	310030U16XXXXCG	***	8910M03	92461
DP60243	DP3060A5000	DP3060A1009	A77288517A3	8910DPA63V14	13220	C3L60A	310030017XXXXCG	***	8910N03	92463
DP601203	DP3060B5009	DP3060B1008	A77288517A1	8910DPA63V02	13221	C3L60B	310030T17XXXXCG	***	8910N03	92464
DP602403	DP3060C5008	DP3060C1007	A77288517A2	8910DPA63V09	13222	C3L60C	310030U17XXXXCG	***	8910N03	92465
DP75243	DP3075A5008	DP3075A1007	A77288520A3	***	13240	C3L75A	3100Y30Q75XXXXCG	***	***	92467
DP751203	DP3075B5007	DP3075B1006	A77288520A1	***	13241	C3L75B	3100Y30T75XXXXCG	***	8910P03	92468
DP752403	DP3075C5006	DP3075C1005	A77288520A2	***	13242	C3L75C	3100Y30U75XXXXCG	***	***	92469
DP90243	***	DP3090A1006	***	***	13260	C3L90A	3100Y30Q90XXXXCG	***	***	***
DP901203	***	DP3090B1005	***	***	13261	C3L90B	3100Y30T90XXXXCG	***	8910Q03	***
DP902403	***	DP3090C1004	***	***	13262	C3L90C	3100Y30U90XXXXCG	***	***	***

H  
V  
A  
C

# Surge Protectors

## COMPRESSOR PROTECTION PACKAGE CPP SERIES

### A Hard Start Kit

- Starts the Air Conditioning System in Difficult Times
- Protects it From Potentially Damaging Start-up Current
- Reduces Energy Costs

### A Surge Protector

- Protects the Air Conditioning System From Potentially Damaging Power Surges



PART NO.	DESCRIPTION	CONNECTION TYPE	POTENTIAL RELAY TYPE	COMPRESSOR SIZE
CPPMPR1	SCM150 & MPR1	2 - wire	Mechanical	3.5 – 5 hp
CPPMPR5	SCM150 & MPR5	2 - wire	Mechanical	1 – 3 hp
CPP8E	SCM150 & SPP8E	2 - wire	Electronic	1 – 10 hp
CPP3W1	SCM150 & 3W1	3 - wire	Mechanical	1 – 3 hp
CPP3W2	SCM150 & 3W2	3 - wire	Mechanical	3.5 – 4.5 hp
CPP3W3	SCM150 & 3W3	3 - wire	Mechanical	4 – 5 hp

## SCM60 & SCM150 SURGE ARRESTORS

- Easy Installation at Condenser or Panel
- Weatherproof Housing
- Green LED to Indicate Surge Protection is Present
- UL Listed: 1449, 3rd Edition
- Connected Equipment Guarantee

### Specifications

	SCM60	SCM150
Service Voltage	120/240 Volt, Single Phase	120/240 Volt, Single Phase
Maximum Surge Current	60,000 Amps	100,000 Amps
AC Protection Modes	L-L, L-G	L-L, L-G
Voltage Protection	600V L-G	600V L-G
Rating (VPR)	1200V L-G	1200V L-G
Response Time	< 5 ns	< 5 ns
Operating Frequency	0 – 400 Hz.	0 – 400 Hz.
Nominal Charge Current	10,000 Amps	10,000 Amps
Short Circuit Current Rating	10,000 Amps	10,000 Amps
Diagnostics	Green LED lit - Indicates Surge Protection Present	Green LED lit - Indicates Surge Protection Present
Installation Point	Electrical Panel, Electrical Disconnect	Electrical Panel, Electrical Disconnect
Connection Method	Hardwired parallel	Hardwired parallel
Operating Temperature	-40°F to 140°F (-40°C to 60°C)	-40°F to 140°F (-40°C to 60°C)
Wire gauge, length	12 AWG, 18" long	12 AWG, 18" long
Agency Approvals	UL 1449 3rd Edition Listed Type 2 SPD cUL, ANSI/IEEE C62.11	UL, cUL, ANSI/ IEEE C62.11 Listed Type 2 SPD cUL, ANSI/IEEE C62.11
Housing	High Impact Plastic	High Impact Plastic
Housing Size	2 7/8" x 3 3/4" x 2"	2 7/8" x 3 3/4" x 2"
Weight	1 lb.	1 lb.
Warranty	Limited Lifetime	Limited Lifetime



## SYC2P27B

### Low Voltage Circuit Surge Arrestors

- 0-24 VAC or VDC
- 27V Clamping Voltage
- Single Pair, Bi-directional Protection
- One Surge Arrester Per Circuit

### Specifications

Service Voltage	0-24 AC or DC
Clamping Voltage	38 VDC or 27 VAC
Response Time	< 5 ns
Installation	Parallel Hardwire
Housing Size	2" x 2" x 1"
Weight	1 oz.
Warranty	Limited Lifetime
Connected Equipment Guarantee	N/A



H  
V  
A  
C

# Surge Protectors

## SYCTC2403D & SYCTC4803D

### SYCTC2403D & SYCTC4803D

- 240, 480 Volt Three Phase Protection
- 50,000 Amps Protection, Per Phase
- Diagnostic Light for Each Phase
- NEMA 4 Enclosure



\*Note: SYC-TC240-3D can be used in 208/240 Delta applications.

### Specifications

	SYCTC2403D	SYCTC4803D
Service Voltage	240 Volt, 3 Phase Delta	480 Volt, 3 Phase Delta
Maximum Surge Current	50,000 Amps per mode, 150,000 Amps total	50,000 Amps per mode, 150,000 Amps total
AC Protection Modes	L-L, L-G	L-L, L-G
Response Time	< 5 ns	< 5 ns
Operating Frequency	0 – 400 Hz.	0 – 400 Hz.
Diagnostics	Green LED lit - Indicates Surge Protection Present	Green LED lit – Indicates Surge Protection Present
Installation Point	Load side of Breaker	Load side of Breaker
Connection Method	Hardwired parallel	Hardwired parallel
Wire gauge, length	12 AWG, 18" long	12 AWG, 18" long
Agency Approvals	UL, cUL, ANSI/ IEEE C62.11	UL, cUL, ANSI/ IEEE C62.11
Housing	High Impact Plastic	High Impact Plastic
Housing Size	5 3/4 " x 6 1/2 " x 3"	5 3/4 " x 6 1/2 " x 3"
Weight	4 lbs.	4 lbs.
Warranty	10 years	10 years

## APP120

### All Purpose Protector

- Helps Prevent Blown Fuses
- Short Cycle Preparation
- Prevents Operation in Low Voltage Conditions
- Prevents False Starting Attempts
- Easy Installation
- LED to Indicate Proper Operation
- Automatic Restarts

### Specifications

Minimum Starting Volts	90 VAC single phase
Operating Volts	115 VAC single phase
Maximum Switching	1.0 HP @ 115 VAC (12,000 BTU)
<b>General Specifications</b>	
Time Delay	4 minutes ±1 minute
Power consumption	10 mA
Operating Temperature	14°F to 158°F (-10°C to 70°C)
Size	9.055" X 4.72" X 3.15" (230mm X 120mm X 80mm)



# Motor Protectors

## TPMP2

### Three Phase Motor Protector

- Low Cost Three Phase Motor Protection
- Easy Installation
- Compact Design
- Monitors and Protects Against Phase Loss and Imbalance Only
- Operating Temperature -40°F to 167°F (-40°C to 75°C)
- 1/4" Male Spade Terminal Connections

### Specifications

Input Line Voltage	208 - 277 VAC
Control Voltage	18 - 240 VAC
Frequency	50/60 Hz
Imbalance	Fixed 7%
Total Power Consumption	3 VA Maximum
Contact Type	N.O. & N.C. Type C
Resistive	5 AMP 240 VAC/10 AMP 120 VAC
Fire Resistive Plastic	UL-94 VO
Dimensions	2.35" x 2.43" x 1.1" (59.7 x 61.7 x 27.9 mm)
Weight	2 oz. (54 gr)



## TPMPU

### Universal 3-Phase Motor Protector

- Low Cost Universal Three Phase Motor Protection
- Easy Installation
- Minimizes Inventory
- Monitors and Protects Against Phase Loss, Reversal and Imbalance
- Response Time 80 Milliseconds Maximum
- Bright LED For On and Fault Indications

### Specifications

Input Line Voltage	180 - 600 VAC
Control Voltage	18 - 240 VAC
Frequency	50/60 Hz (cut wire for Hz)
Imbalance	Adjustable ±4 to 20%
Total Power Consumption	3 VA Maximum
Contact Ratings	10 AMP SPDT
Resistive	10 AMP 240 VAC, 12 AMP 120 VAC/24 VAC
Inductive	4.5 AMP 230 VAC- Cos. 0 0.6
Fire Resistive Plastic	UL-94 VO
Dimensions	5.35" x 3.68" x 1.26" (136 x 93.5 x 32 mm)
Weight	6.35 oz. (180 gr)



# Time Delays

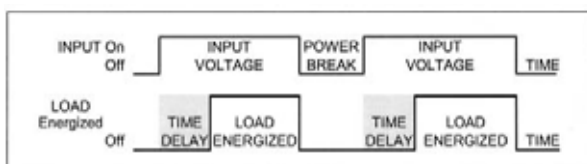
## TD SERIES TIME DELAYS

- Fixed or Adjustable Delay Ranges
- Initiates Timer in 70 Milliseconds
- Broad Input Voltage Range (Pilot Circuit)  
19 to 250 VAC/VDC, 50/60 Hz (TD60)  
19 to 250 VAC ONLY, 50/60 Hz (TD70)
- Maximum Load 1.0 Amp, 10 Amp Inrush
- Varying Models Work With or Without Anticipator Type Thermostats
- Terminal or Wire Connections Available
- Operating Temperature Range 0°F to 160°F (-18°C to 71°C)
- Compact Size 2" x 2" x 0.75" (5.08 x 5.08 x 1.9 cm)
- Non Positional Single Hole Mounting
- All Parameters are Subject to Change as per Special Requirements
- By-pass a Control or Device During Start Up
- Helps to Reduce Power Surges in Multiple Compressor Applications

## TD60 SERIES

### Delay on Make Timers (DOM)

- Upon Application of Power the Time Delay Initiates. On Completion of Selected Delay Period, the Load is Energized. Timer will Reset on Power Interruption or When Thermostat Disconnects.



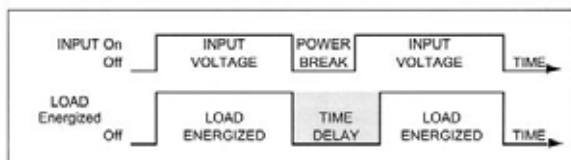
PART NO.	DELAY RANGE		CONNECTIONS	REPLACES
	ADJUSTABLE	FIXED (min)		
TD68**	6 sec to 8 min	n/a	2 1/4" male terminals	Diversitech® AC-800-ADM1 / ICM® 105 / A-1 706 / Mars® 32391
TD69*	6 sec to 8 min	n/a	2 1/4" male terminals	Diversitech® AC-800-ADM1 / ICM 102 / A-1 701 / Mars 32391

\*Cut the jumper to use in 120/240 volts. \*\*The TD68 is not for use with a cooling anticipator.

## TD70 SERIES

### Delay on Break Timers (DOB)

- Upon Application of Power the Load is Energized Immediately. When the Thermostat Opens or on Power Interruption the Load is De-energized and the Time Delay Initiates. The Load will be Energized Again After the Delay has Elapsed.



PART NO.	DELAY RANGE		CONNECTIONS	REPLACES
	ADJUSTABLE	FIXED (min)		
TD72**	6 sec to 5 min	n/a	2 1/4" male terminals	Diversitech® ASC500-ADB1 / ICM® 203 / Mars® 32392 / A-1 EAC-501-ADJ
TD73*	6 sec to 5 min	n/a	2 1/4" male terminals	Diversitech® ASC500-ADB1 / ICM® 203 / Mars® 32392 / A-1 EAC-501-ADJ

\*Cut the jumper to use in 120/240 volts. \*\*The TD72 is not for use with a cooling anticipator.

H  
V  
A  
C

## Direct Replacement Furnace Igniters



### SKIT03033

Replaces Trane® KIT03033

- Steady Current: 4.25 Amps @ 115 VAC
- Max. Current: 5 Amps @ 132 VAC
- Time to Temp (1800°F): < 17 Seconds



### SPLT3400

Replaces Lochinvar® PLT3400

- Steady Current: 4.25 Amps @ 115 VAC
- Max. Current: 5 Amps @ 132 VAC
- Time to Temp (1800°F): < 17 Seconds



### S0230K00000S

Replaces Goodman® 0230K00000S

- Steady Current: 4.25 Amps @ 115 VAC
- Max. Current: 5 Amps @ 132 VAC
- Time to Temp (1800°F): < 17 Seconds

## Flat Silicon Carbide Furnace Igniters

- Time to Temperature (1800°F): < 17 Seconds @ 102 VAC
- Voltage: 120 VAC
- Amperage: 3.5-5 AMPS @132 VAC Maximum
- Cold Resistance: 40-100 OHMS @ 75°F +/- 10°F



### IG4000 UNIVERSAL REPLACEMENT SUPER KIT

5 Brackets & Hardware Replaces:

- 41-402, 71-403, 41-404,
- 41-405, 41-407, 41-408,
- 41-409, 41-410, 41-412,
- 41-414, 41-1090, 41-238,
- 41-242



### IG401

Replaces: 41-401



### IG402K KIT

Replaces: 41-402,  
41-408, 41-410,  
41-411



### IG403K KIT

Replaces: 41-403,  
41-404, 41-407  
41-409



### IG404

Replaces: 41-404



### IG405

Replaces: 41-405



### IG406

Replaces: 41-406



### IG407

Replaces: 41-407



### IG408

Replaces: 41-408



### IG409

Replaces: 41-409

## Flat Silicon Carbide Furnace Igniters



**IG410**

Replaces: 41-410



**IG411**

Replaces: 41-411



**IG412**

Replaces: 41-412



**IG414**

Replaces: 41-414



**IG418**

Replaces: Goodman®  
B14010-18S

## Silicon Nitride Furnace Igniters

Choose from 3 Universal Igniter Kits!

### SSN2000

- Economic Design
- < 17 Second Time to Temperature
- Replaces Over 100 OEM Igniters
- > 50,000 Cycles
- 1 Year Warranty



### SSN3000

- Robust Design
- < 17 Second Time to Temperature
- Replaces Over 150 OEM Igniters
- > 50,000 Cycles
- 2 Year Warranty



### SSN4000

- Miniature Design
- < 10 Second Time to Temperature
- Replaces Over 150 OEM Igniters
- > 200,000 Cycles
- Replaces Honeywell® Glowfly®  
#Q3200U1004
- 3 Year Warranty



### SSN24

- Replaces Honeywell® Q3400A1024
- Compatible with Honeywell® 1st and  
2nd Generation Smart Valve
- Includes Igniter and Flame Rod



## Round Silicon Carbide Furnace Igniters



### SIG100 SERIES

Exact Replacement Round Igniters

- Replaces Exact OEM Round Igniters

PART NO.	PART NO.
SIG100	SIG106
SIG101	SIG107
SIG102	SIG108
SIG104	SIG109



### SIG1100

Universal Igniter Kit

- Replaces Over 170 Igniters
- Includes 3 Brackets



# Igniter Cross Reference

## IG402K Flat Universal Silicon Carbide

Am. Road Equip® 201W	Majestic® 75-92-104	Rheem® 62-22441-01	Trane Company® 340039P01
Armstrong Air® 38322B001	Mars® 75-92-105	62-22868-02	B144676P01
Clare Brothers® C-238	67915	62-22868-82	B340039P01
C-242	67919	62-22868-93	IGN23
Coleman® 1474-051	68013	90436600	IGN34
1474-052	68016	Robertshaw®	Wayne Home Equip.®
DMO Industries® 20834	97915	41-402	62821-001
26789	Metzger®	41-402	62821-002
Dornback Furnace® 271W	201N	41-408	White LB Company®
271W	201W	41-410	120-07549
271W	Mor Flo®	41-411	White Rodgers®
271W	3200618	Starlite®	1408, 1410
271W	Nordyne®	1408, 1410	1056, 1066
271W	105141000	1056, 1066	1402, 1033
271W	10399	632-0770	Superior Fireplace®
271W	Evcon®	632-0880	94851
271W	1474-051	201K, 201L	
271W	1474-052	201R, 201W	
271W	HUPP Industries®	271M, 271N	
271W	9050	271W	

## IG403K Flat Universal Silicon Carbide

Carrier Corp® LH33ZS001A	Norton® 201, 271	Snyder General® 1380654	Weil McLain® 511-330-139
LH33ZS002	Raypak® 600915	1380672	511-330-190
LH33ZS003	600915	1380680	511-330-193
LH33ZS004	Roberts Gordon®	Starlite®	White Rodgers®
Ducane® 20015201	90434300	1403, 1407, 1409	767A-356
Mars® 67916, 67918	41-403	Robertshaw®	767A-357
67920	41-404	Trane Company®	767A-361
41-407	41-407	B138196P01	767A-365
41-409	41-409	B144676P02	767A-370
		IGN26, IGN30	767A-365
			767A-370

## SIG1100 Round Universal Silicon Carbide

Amana® 10735002	L.B. White Co® 120-07549	Robertshaw® 41-238	White Rodgers® 767A-353
Armstrong® 38322B001	Lennox® 33J3701	41-242	767A-354
Clare Bros.® C238	Majestic® 75-92-104	41-403	767A-361
C238-1	75-92-105	41-404	767A-364
Coleman®/Evcon® 14740511	Metzger® 201N	41-405	767A-365
14740512	201W	41-407	767A-366
Detroit®/Brant Radiant® 201D	Mor-Flo® 3200618	41-408	767A-370
201D	Superior	41-803	767A-371
DMO®/Olson®/ ECR Ind.®	Tappan®/ Frigidaire®/ Philco®/ Intertherm®/ Miller®	Surface Igniter® FC007 FC024 FC035	767A-372 Williamson® York® 025-32626-000 473-12509-001 373-09154-700 025-27774-000
26789	20834	FC046	025-29043-000
Dornback® 271W	105141000	FC050	025-29050-000
Ducane® 20015201	RH622286893	FC051	025-27766-000
20015201	632-0770	Trane®	025-30277-000
20015201	632-0880	340039P01	025-32638-002
20015201	902664	B340039P01	025-32625-000
20015201	902694	B12996P01	025-31801-000
20015201	903758	B144676P01	025-31801-000
20015201	902664	B144676P02	373-05342-700
20015201	903758	B138196P01	
20015201	902664	IGN21	
20015201	903758	IGN23	
20015201	902664	IGN26	
20015201	903758	IGN28	
20015201	902664	IGN30	
20015201	903758	IGN34	
20015201	902664	Viessmann®	
20015201	903758	9302-093	
20015201	902664	9302-094	
20015201	903758	Wayne Home Equip.®	
20015201	902664	62821-001	
20015201	903758	62821-002	
20015201	902664	29074	
20015201	903758	511-330-139	
20015201	902664	511-330-193	
20015201	903758	511-330-190	
20015201	902664	White Rodgers®	
20015201	903758	767A-301	
20015201	902664	767A-303	
20015201	903758	767A-306	
20015201	902664	767A-310	
20015201	903758	767A-311	
20015201	902664	41-409	
20015201	903758	41-410	
20015201	902664	41-1090	

## IG4000 Flat Universal Silicon Carbide

Amana® 10735002	John Woods®/ GSW PV.® 86483	Lennox® 33J3701	Superior Fireplace® 94851	York® 025-32626-000	Robertshaw®/ Uniline® 41-238
Arco Air® See ICP	H.B. Smith® 50018	Majestic® 75-92-104	Trane 340039P01	473-12509-001	41-242
Armstrong® 38322B001	Hupp Ind® 9050	75-92-105	B12996P01	025-27774-000	41-402
Clare Bros.® C238	Raypak® 600915	Metzger® 201N	B340039P01	025-29043-000	41-403
C238-1	600915	Mor-Flo® 3200618	B144676P01	025-29050-000	41-404
Coleman®/Evcon® 14740511	Icp®/Heil®/ Arco Air®/ Nordyne®/ Comfortmaker®	Nordyne®/ Tappan® Frigidaire®/ Philco®/ Intertherm®/ Miller®	B138196P01	025-30277-000	41-405
14740512	Tempstar®	IGN21	IGN23	025-32638-002	41-408
Detroit®/ Brant Radiant®	Keeprite® 201D	IGN26	IGN28	025-32625-000	41-409
201D	1009604	IGN30	IGN34	373-05342-700	41-412
DMO®/Olson ECR Ind.®	1096048	IGN34	Viessmann® 9302-093	101M	41-414
26789	1001344	903110	9302-094	201D	41-1090
20834	1380680	105141000	025-094	201K	White Rodgers®
Dornback® 271W	1148245	RH622286893	Wayne Home Equipment®	201L	767A-301
Ducane® 20015201	632-0770	632-0770	62821-001	201M	767A-303
20015201	632-0880	632-0880	62821-002	201P	767A-306
20015201	632-0880	632-0880	62821-002	201R	767A-310
20015201	632-0880	632-0880	62821-002	201S	767A-311
20015201	632-0880	632-0880	62821-002	201T	767A-350
20015201	632-0880	632-0880	62821-002	201U	767A-353
20015201	632-0880	632-0880	62821-002	201V	767A-354
20015201	632-0880	632-0880	62821-002	201W	767A-357
20015201	632-0880	632-0880	62821-002	201X	767A-361
20015201	632-0880	632-0880	62821-002	201Y	767A-364
20015201	632-0880	632-0880	62821-002	201Z	767A-365
20015201	632-0880	632-0880	62821-002	201AA	767A-366
20015201	632-0880	632-0880	62821-002	201AB	767A-370
20015201	632-0880	632-0880	62821-002	201AC	767A-371
20015201	632-0880	632-0880	62821-002	201AD	767A-372
20015201	632-0880	632-0880	62821-002	201AE	
20015201	632-0880	632-0880	62821-002	201AF	
20015201	632-0880	632-0880	62821-002	201AG	
20015201	632-0880	632-0880	62821-002	201AH	
20015201	632-0880	632-0880	62821-002	201AI	
20015201	632-0880	632-0880	62821-002	201AJ	
20015201	632-0880	632-0880	62821-002	201AK	
20015201	632-0880	632-0880	62821-002	201AL	
20015201	632-0880	632-0880	62821-002	201AM	
20015201	632-0880	632-0880	62821-002	201AN	
20015201	632-0880	632-0880	62821-002	201AO	
20015201	632-0880	632-0880	62821-002	201AP	
20015201	632-0880	632-0880	62821-002	201AQ	
20015201	632-0880	632-0880	62821-002	201AR	
20015201	632-0880	632-0880	62821-002	201AS	
20015201	632-0880	632-0880	62821-002	201AT	
20015201	632-0880	632-0880	62821-002	201AU	
20015201	632-0880	632-0880	62821-002	201AV	
20015201	632-0880	632-0880	62821-002	201AW	
20015201	632-0880	632-0880	62821-002	201AX	
20015201	632-0880	632-0880	62821-002	201AY	
20015201	632-0880	632-0880	62821-002	201AZ	
20015201	632-0880	632-0880	62821-002	201BA	
20015201	632-0880	632-0880	62821-002	201BB	
20015201	632-0880	632-0880	62821-002	201BC	
20015201	632-0880	632-0880	62821-002	201BD	
20015201	632-0880	632-0880	62821-002	201BE	
20015201	632-0880	632-0880	62821-002	201BF	
20015201	632-0880	632-0880	62821-002	201BG	
20015201	632-0880	632-0880	62821-002	201BH	
20015201	632-0880	632-0880	62821-002	201BI	
20015201	632-0880	632-0880	62821-002	201BJ	
20015201	632-0880	632-0880	62821-002	201BK	
20015201	632-0880	632-0880	62821-002	201BL	
20015201	632-0880	632-0880	62821-002	201BM	
20015201	632-0880	632-0880	62821-002	201BN	
20015201	632-0880	632-0880	62821-002	201BO	
20015201	632-0880	632-0880	62821-002	201BP	
20015201	632-0880	632-0880	62821-002	201BQ	
20015201	632-0880	632-0880	62821-002	201BR	
20015201	632-0880	632-0880	62821-002	201BS	
20015201	632-0880	632-0880	62821-002	201BT	
20015201	632-0880	632-0880	62821-002	201BU	
20015201	632-0880	632-0880	62821-002	201BV	
20015201	632-0880	632-0880	62821-002	201BW	
20015201	632-0880	632-0880	62821-002	201BX	
20015201	632-0880	632-0880	62821-002	201BY	
20015201	632-0880	632-0880	62821-002	201BZ	
20015201	632-0880	632-0880	62821-002	201CA	
20015201	632-0880	632-0880	62821-002	201CB	
20015201	632-0880	632-0880	62821-002	201CC	
20015201	632-0880	632-0880	62821-002	201CD	
20015201	632-0880	632-0880	62821-002	201CE	
20015201	632-0880	632-0880	62821-002	201CF	
20015201	632-0880	632-0880	62821-002	201CG	
20015201	632-0880	632-0880	62821-002	201CH	
20015201	632-0880	632-0880	62821-002	201CI	
20015201	632-0880	632-0880	62821-002	201CJ	
20015201	632-0880	632-0880	62821-002	201CK	
20015201	632-0880	632-0880	62821-002	201CL	
20015201	632-0880	632-0880	62821-002	201CM	
20015201	632-0880	632-0880	62821-002	201CN	

# Duct Smoke Detection



## DUCT SMOKE DETECTION

InnovairFlex® combines an impressive collection of innovations designed to save you time and money and provide the flexibility you need in the field. An adjustable housing overcomes mounting constraints. Plug-in, tool-free sampling tubes speed installation. The front cover test/reset button simplifies test/maintenance. With these and many more, InnovairFlex is reshaping duct smoke detection.

## HVAC SYSTEMS MONITORING



### D4120

Photoelectric Duct Smoke Detector

- 4-wire
- 100-4,000 ft./min
- -4°F to 158°F (-20° to 70°C)
- 24 VAC/DC or 120 VAC
- 65mA max. at 24 VDC
- 2 Form C Auxiliary



### D4120W

Watertight Photoelectric Duct Smoke Detector

- 4-wire
- 100-4,000 ft./min
- -4°F to 158°F (-20° to 70°C)
- NEMA 4
- 24 VAC/DC or 120 VAC
- 65mA max. at 24 VDC
- 2 Form C Auxiliary



### D4S

Photoelectric Sensor-only Component

- 4-wire
- 100-4,000 ft./min
- -4°F to 158°F (-20° to 70°C)
- 24 VAC/DC or 120 VAC
- 65mA max. at 24 VDC



### D4P120

Power-board-only Component

- 4-wire
- 100-4,000 ft./min
- -4°F to 158°F (-20° to 70°C)
- 24 VAC/DC or 120 VAC
- 65mA max. at 24 VDC
- 2 Form C Auxiliary



### 2D51

Photoelectric No-flow/Low-flow Smoke Detector

- 4-wire
- 0-4,000 ft./min
- -4°F to 158°F (-20° to 70°C)
- 24 VAC/DC or 120 VAC w/ B210LP
- 75mA max.
- 1 Form A & 1 Form C Auxiliary Relay



H  
V  
A  
C

## HVAC ACCESSORIES



### RTS2

Multi-signaling Accessory Without Strobe

- 20-29 VDC
- UL® S2522



### RTS2-AOS

Multi-signaling Accessory With Add-on Strobe

- 20-29 VDC
- UL® S2522



### RTS151

Remote Test Station

- 2.8-32 VDC
- Alarm LED
- UL® S2522



### RA100Z

Remote Annunciator

- 3.1-3.2 VDC
- UL® S2522



### APA151

Remote Annunciator With Piezo Alert

- 16-33 VDC
- UL® S4011



### DST

Sampling Tubes

- DST1: Ducts Up to 1 Ft.
- DST1.5: Ducts 1 to 2 Ft.
- DST3: Ducts 2 to 4 Ft.
- DST5: Ducts 4 to 8 Ft.
- DST10: Ducts 8 to 12 Ft.



### RTS151KEY

Remote Test Station With Key Test/Reset

- UL® S2522



### P2W-P

2-Wire Horn Strobe

- Plug-in Design
- Tamper Resistant Construction
- Selectable 12V or 24V Operation
- Field Selectable Candela Settings
- Rotary Switch for Horn Tone & Volume
- Universal Mounting Plate



### AOS

Add-on Strobe



## Duct Heaters

### DH SERIES DUCT HEATER COIL KITS

- Nichrome Heavy Gauge Construction
- Welded Terminal Bolts for Low Resistance and Longer Life
- Complete Kits Contain Close Wound Coil to Fit Many Applications, Two Male and Two Female Bushings, Terminal Screws, Nuts and Washers to Make a Proper Repair. The DH500 & DH500FC Kits Include the SUPCO STC In Line Series Thermal Cutoffs.

PART NO.	MARS® PART NO.	CLOSE WOUND LENGTH	WATTAGE AT VOLTS	WATTAGE AT VOLTS
DH500*	34601	28"	5000@240	3750@208
DH500-3		23"	5000@480	
DH500FC*		12"	5000@240	3750@208
DH501	34608	22"	3500@240	2600@208
DH502-4		18"	2000@277	
DH506	34630	26 1/2"	4000@240	
DH507		18 1/2"	3000@240	2250@208
DH520	34652	31 1/2"	6600@240	5000@208
DH534	34656	26"	6000@240	4500@208
DH560		28"	5600@240	4200@208

\*Includes 306°F Thermal Cutoff SUPCO p/n STC4300



DH500  
(DH500 Series 3/8" O.D.)



DH500FC  
(5/8" O.D.)



## Duct Boosters

### DB SERIES DUCT BOOSTERS

For Increased Air Flow in Both Hot and Cold Forced Air Systems, the DB Series Duct Boosters Provide the Easy, Economical Solution.

- Easy Installation
- Energy Savings
- Fits in Round, Square or Rectangular Ducts
- Operates Only When You Want It
- 1 Year Warranty
- Motor is Thermally Protected
- Motor Thermal Fuse: 150°F (64°C)
- Maximum Operating Temperature: 140°F (60°C)
- Maximum Airstream Temperature: 135°F (58°C)



Conforms to UL Standard 507



PART NO.	DIMENSIONS	FAN BLADE	VOLTAGE	MOTOR RATINGS	CFM
DB6	6" x 6"	5.25", 1950 rpm	115V 60Hz	.35 A, 30 Watts	250
DB6-220	6" x 6"	5.25", 1950 rpm	220V 50Hz	.25 A, 30 Watts	250
DB8	8" x 8"	7", 1750 rpm	115V 60 Hz	.75 A, 60 Watts	500
DB8-220	8" x 8"	7", 1750 rpm	220V 50 Hz	.45 A, 60 Watts	500
DB10	8" x 10"	8", 1300 rpm	115V 60 Hz	1.5 A, 120 Watts	650
DB12	9" x 12"	10", 1300 rpm	115V60 Hz	1.5 A, 120 Watts	800

# Mini-Split Condensate Pumps



## MINI-SPLIT CONDENSATE PUMPS

- Removes Condensate for Systems up to 42,000 BTUs
- 4 GPH
- 24 Foot Maximum Lift
- Vertical Suction: 6 Foot Maximum
- USA & Canada Agency Affiliations: ETL Listed 4000786/ CSA Certified C22.2 NO. 108/ Conforms to UL STD 778
- Noise Level: <21 dB @ 3.3' Distance
- Thermally Protected
- Alarm Level to Prevent Overflow
- Waterproof Connections Prevent Water Ingress
- Piston Pump Provides Long Life
- Optional Mounting Kit: #GC1KFX2010
- 2- Year Warranty



DE05LUA720



GC1KFX2010

## Flowatch® Design



## FLOWATCH® DESIGN

### Mini-Split Condensate Pump with Plastic Duct & Installation Kit

- Includes Mini FLOWATCH® 2 Pump
- Includes Over 2 1/2 Feet of Plastic Duct
- Includes All Mounting Hardware
- Pre-mounted and Wired in Plastic Duct
- 2- Year Warranty

## SICCOM® Condensate Pump Line Up

2-WIRE	115V	230V	N.O. SAFETY SWITCH	N.O. / N.C. SAFETY SWITCH	PUMP ONLY	PUMP W/ PLASTIC DUCT
DE05LUA520	X		X		X	
DE05LUA720		X	X		X	
DE05LUA660	X		X			X
<b>3-Wire</b>						
DE05LUB100	X			X	X	
DE05LUB110		X		X	X	
DE05LUB120	X			X		X
DE05LUB130		X		X		

H  
V  
A  
C

# Air Pressure Sensing Switches



## UNIVERSAL STYLE NS2000031

Low Cost, High Accuracy and Reliable Universal Air Pressure Switch that Replaces Many Small Footprint Type Switches

- Senses Positive, Negative or Differential Air Pressure
- Set Point Range: 0.01" to 10" w.c.
- Electrical Ratings: 1/10 hp @ 120 to 277 VAC.  
28 VA Pilot Duty @ 24 VAC, 125 VA Pilot Duty 120 VAC
- Contact Arrangement: SPDT
- Operating Temperature: 40°F to 190°F (4.4°C 87.8°C)
- UL & CSA Approved
- 2-Year Warranty



## ADJUSTABLE STYLE RSS SERIES

Ideal for Residential and Light Commercial Furnace, Electronic Air Cleaner and Humidifier Applications.

- Convenient Contractor Kits for After-Market Installation
- Adjustable Set Points
- Factory Set to Activate on Pressure Rise
- Electrical Ratings: 5 Amp Non-inductive 120 to 277 VAC  
1 Amp Pilot Duty (120 va) @ 120 VAC
- Contact Arrangement: SPDT
- Operating Temperature Range: 40°F to 190°F (4.4°C to 87.8°C)
- UL & CSA Approved
- 2-Year Warranty



### Pressure Range

PART No.	RANGE (Inches of Water Column)
RSS495011	0.25" to 1.0"
RSS498013	1.0" to 4.0"



## ADJUSTABLE STYLE AFS222121

General Purpose Switch for HVAC, Direct Digital Control (DDC) and Energy Management Applications

- Senses Positive, Negative or Differential Air Pressure
- Set Point Range: 0.05" to 12.0" w.c.
- Electrical Ratings: 300 VA Pilot Duty @ 115 to 277 VAC,  
15 Amp Non-inductive to 277 VAC, 60 Hz.
- Contact Arrangement: SPDT
- Operating Temperature: -40°F to 180°F (-40°C to 82°C)
- UL & CSA Approved
- 2-Year Warranty



### Air Pressure Switch Cross Reference

SUPCO Part No.	COMPETITOR NAME	COMPETITOR Part No.
RSS495011	Robertshaw®	2374-495
RSS498013	Robertshaw®	2374-498
AFS222121	Robertshaw®	2374-410
	White Rodgers®	770-1
NS2000031	Honeywell®	IS2 Series IS22010051F5052

**S106 SERIES**

Time Delay Relays

- SPST or SPDT
- Delay On/Off Timing



PART NO.	A-1®		TIME DELAY ON	TIME DELAY OFF
	PART NO.	SWITCH ACTION	(seconds)	(seconds)
S1061A4575C	FF582	SPST	30 to 50	60 to 90
S1061A5040C	FF583	SPST	45 to 55	30 to 50
S1061A40100C	FF584	SPST	35 to 45	80 to 110
S1061A5560C	FF585	SPST	50 to 60	45 to 75
S1061B6545C	FF586	SPDT	60 to 70	45 to 75

**F47 & F214 SERIES**

Fan Controls

- Adjustable Temperature Dial



PART NO.	A-1®		WIDTH (inches)	LENGTH (inches)	FAN OFF TEMP.	FAN DIFFERENTIAL
	PART NO.	SWITCH ACTION			(°F)	(°F)
F473TD12025C	FF564	SPST	7/16"	3"	90 to 120	25 to 50
F477TD12025C	FF565	SPST	7/16"	7"	90 to 120	25 to 50
F21412A14025C	FF562	SPST	1-1/16"	3"	60 to 140	25 to 50
F21413A14025C	FF563	SPST	1-1/16"	7"	60 to 140	25 to 50

**L59 SERIES**

Limit Controls

- SPDT Switch
- User Temperature Adjustment



PART NO.	A-1®		FAN OFF TEMP.	FIXED DIFFERENTIAL
	PART NO.	LENGTH (inches)		(°F)
L593BA	FF568	3"	120 to 250	30
L597BA	FF569	7"	120 to 250	30

**FA47TS SERIES**

Fan Controls w/ Time Start

- Built in "Heat Assist" Time Delay
- Adjustable Fan OFF Temperature



PART NO.	A-1®		FAN OFF TEMP. (°F)	FAN DIFFERENTIAL (°F)	TIME DELAY @ 24 VAC (sec.)
	PART NO.	LENGTH (inches)			
FA47TS3110	FF566	3"	80 to 110	60 (Fixed)	25 to 60
FA47TS7110	FF567	7"	80 to 110	60 (Fixed)	25 to 60

**FAL SERIES**

Universal Fan and Limit Controls

- Adjustable Fan OFF Setting
- Adjustable Fan Differential Setting
- Adjustable Limit Temperature



PART NO.	A-1®		FAN OFF TEMP. (°F)	FAN DIFFERENTIAL (°F)	LIMIT TEMP. (°F)	LIMIT DIFFERENTIAL (°F)
	PART NO.	LENGTH (inches)				
FAL3C05TD120A	FF558	3"	90 to 120	25 to 50	150 to 250	30
FAL7C05TD120A	FF559	7"	90 to 120	25 to 50	150 to 250	30
FAL7C20BT120AB	FF594	7"	90 to 120	25 to 50	150 to 250	30

**BC7070 (F7070) BLOWER CONTROL**

- Increase Heating Efficiency by Delaying the ON and OFF Cycle of the Blower Fan
- Control Voltage: 24 VAC
- Relay Contacts: SPST
- Blower On Time: 0-240 Seconds Adjustable
- Blower Off Time: 0-240 Seconds Adjustable



**FALTS SERIES**

Fan and Limit Controls w/ Time Delay

- SPST Switch
- Adjustable Limit Temperature
- Pilot Duty: 40 VA @ 30 VAC & 120 VAC



PART NO.	A-1®		FAN OFF TEMP. (°F)	LIMIT TEMP. (°F)	LIMIT DIFFERENTIAL (°F)
	PART NO.	LENGTH (inches)			
FALTS57C05T120A	FF560	7"	90 to 120	150 to 250	30
FALTS57C65T120A	FF561	7" w/ shield	90 to 120	150 to 250	30
FALTS57C13BT120A	FF591	7" SPDT	90 to 120	150 to 250	30

**CIVA5 (FF534) BROWN OUT DELAY TIMER**

- Short Cycle & Brown Out Protection For Compressors
- Interlock Time: 5 Minutes
- Under Voltage Protection: Adjustable 16-22 VAC
- Reset Time: 30 Milliseconds



**PR SERIES PILOT REIGNITERS**

- Prevents Pilot Flames From Extinguishing



PART NO.	A1 PART NO.	DESCRIPTION
PR24120	FF541	24/120 VAC Hardware Kit , Spark Cable
PR2436W	FF543	24 VAC Hardware Kit, Spark Cable, & PR-24 Module
PR2412036W	FF536	24/120 VAC Hardware Kit, Spark Cable & Module

**AFC01T110204 (FF535) ATTIC FAN CONTROL**

- Adjustable Fan OFF Temperature 60°-110°F
- Firestat Circuit for Safety Shut Off
- SPST



H  
V  
A  
C

# Sequencers

**THERMODISC®**

All Sequencers are OEM Approved for Safety and Reliability

- Direct Replacement for Most Fan & Heat Sequencing Functions
- 24 Volt Input Control
- Contacts Designated M1-M2 of a Multi-timing Sequencer will Turn On First and Turn Off Last, as Required by UL and CSA for Electric Heating Applications
- Five Second on Delay Between all Subsequent Stages, Unless they Function Together



<p><b>Q101, Q109 &amp; Q116</b></p> <p>Q101 OFF 40-110 Sec. ON 1-20 Sec.</p> <p>Q109 OFF 40-110 Sec. ON 20-50 Sec.</p> <p>Q116 OFF 1-45 Sec. ON 1-60 Sec.</p>	<p><b>Q104 &amp; Q110</b></p> <p>Q104 OFF 1-30 Sec. ON 30-90 Sec.</p> <p>Q 110 OFF 30-60 Sec. ON 10-30 Sec.</p>	<p><b>Q102</b></p> <p>OFF 1-30 Sec. ON 30-90 Sec.</p>
<p><b>Q105</b></p> <p>OFF 1-110 Sec. ON 1-110 Sec.</p>	<p><b>Q103 &amp; Q113</b></p> <p>Q103 OFF 40-110 Sec. ON 1-20 Sec.</p> <p>*Q113 OFF 15-65 Sec. ON 30-10 Sec.</p> <p>*Q113 Has 240 Volt Heater</p>	<p><b>Q106</b></p> <p>OFF 1-110 Sec. ON 1-110 Sec.</p>
<p><b>Q108</b></p> <p>OFF 65-115 Sec. ON 1-25 Sec.</p>	<p><b>Q111</b></p> <p>OFF M1-M2 90-160 Sec. ON M1-M2 10-40 Sec.</p> <p>OFF M3-M4 30-60 Sec. ON M3-M4 10-30 Sec.</p>	<p><b>Q107</b></p> <p>OFF 40-110 Sec. ON 1-20 Sec.</p>
<p><b>Q112</b></p> <p>OFF M1-M2 90-150 Sec. ON M1-M2 10-3 Sec.</p> <p>OFF M3-M4 30-60 Sec. ON M3-M4 10-30 Sec.</p> <p>OFF M5-M6 30-60 Sec. ON M5-M6 10-30 Sec.</p>	<p><b>Q114</b></p> <p>OFF 15-25 Sec. ON 15-45 Sec.</p>	<p><b>Q115</b></p> <p>OFF 1-45 Sec. ON 1-60 Sec.</p>

\*Note all sequencers include a 24 volt heater, except the Q113 which has a 240 volt heater.

SUPCO®	GEM®	GLOBAL®	MARS®	WATSCO®	KLIXON®	W/R®	ROBERTSHAW®	INTERSTATE ELECTRIC® I-9	ZETTLER®	OEM
Q101	GS101	24CZ-1	33241	TDR10	6000AONI-98	24A34-1	611-241	IES24A34-1	ZC24A34-1	Goodman® B1290906 Lennox® 12F20 & 58C9701 York® 525-37322-000
Q102	GS102	24CZ-2	33242	TDR15	6000AONI-97	24A34-2	611-242	IES24A34-2	ZC24A34-2	Carrier® 40CF680020
Q103	GS103	24CZ-3	33244	TDR20	6000AONI-87	24A34-3	611-244	IES24A34-3	ZC24A34-3	ICP® / Carrier® HN67QC005 ICP® / Carrier® HQ1056789 Goodman® BT1256504
Q104	GS104	24CZ-4	33245	TDR25	6000E049	24A34-4	611-245	IES24A34-4	ZC24A34-4	York® 525-37325-000 ICP® / Carrier® HN67QC006
Q105	GS105	24CZ-5	33232	TDR30	51172-32	24A34-5	611-232	IES24A34-5	ZC24A34-5	York® 525-37327-000 Coleman® 3120A357
Q106	GS106	24CZ-6	33233	TDR35	51172-33	24A34-6	611-233	IES24A34-6	ZC24A34-6	ICP® / Carrier® HN67QC008 ICP® / Carrier® P284-1313
Q107	GS107	24CZ-14	33848	***	51172-35-1	24A34-14	611-007	IES24A34-14	ZC24A34-14	York® 525-37328-000
Q108	GS108	***	***	***	6000C0-27	***	***	***	***	Goodman® B13707-38 ICP® / Carrier® HN67GJ002
Q109	***	***	***	***	***	***	***	***	***	Janitrol® BT1256500
Q110	***	***	***	***	***	***	***	***	***	Weatherking® 4223115608
Q111	***	***	***	***	***	***	***	***	***	Weatherking® 4223115606
Q112	***	***	***	***	***	***	***	***	***	Weatherking® 4223115607
Q113*	***	***	33265	***	6000E4-40	***	***	***	***	***
Q114	***	***	***	***	***	***	***	***	***	Coleman® 7670-307, 7670-308 7670-130, 7670-913, 7670-101
Q115	***	***	33246	***	6000EOM	24A52-1	***	***	**	Coleman® 3120A3771
Q116	***	***	33243	***	6000AOM	24A51-1	***	***	***	Coleman® 3110-354

H  
V  
A  
C

# Thermostats



## GENERAL PURPOSE LIMITS L & LD SERIES

- Open on Rise
- Close when Temperature Differential is Reached
- 1/4" Quick Disconnect Terminals

### "L" Series , Single Pole - Single Throw

PART NO.	°DIFF.	OPEN (°F)	CLOSE (°F)
L120	10	120	110
L125	10	125	115
L130	15	130	115
L135	15	135	120
L140	20	140	120
L145	20	145	125
L150	20	150	130
L155	20	155	135
L160	20	160	140
L165	20	165	145
L170	20	170	150
L175	20	175	155
L180-20	20	180	160
L180-40	40	180	140

PART NO.	°DIFF.	OPEN (°F)	CLOSE (°F)
L190	40	190	150
L200	40	200	160
L205	40	205	165
L225	40	225	185
L240	40	240	200
L250	40	250	210
L260	40	260	220
L270	40	270	230
L290	40	290	250
L300	40	300	260
L320	40	320	280
L340	40	340	300



Use 60T Electrical Ratings on page

### "LD" Series, Single Pole - Double Pole

PART NO.	DESCRIPTION	OPEN (°F)	CLOSE (°F)	DIFFERENTIAL
LD120	SPDT Thermostats	120	105	15
LD130	SPDT Thermostats	130	115	15
LD135	SPDT Thermostats	135	120	15
LD140	SPDT Thermostats	140	120	20
LD145	SPDT Thermostats	145	125	20
LD155	SPDT Thermostats	155	135	20
LD170	SPDT Thermostats	170	150	20
LD200	SPDT Thermostats	200	160	40
LD225	SPDT Thermostats	225	185	40
LD240	SPDT Thermostats	240	200	40
LD270	SPDT Thermostats	270	230	40



Use 60T Electrical Ratings on page

## ADJUSTABLE AT SERIES

- Series Covers Almost 95% of Heater and Dryer Applications
- Dial Knob
- 40° Adjustable Range
- 1/4" Quick Connect Terminals
- Use 60T Electrical Ratings

### Adjustable Thermostats

PART NO.	STANDARD MOUNT	ADJUSTABLE RANGE (°F)	DIFFERENTIAL
AT012	135	175	20
AT013	175	215	40
AT014	210	250	40
AT015	250	290	40

Open on Temperature Rise

### Adjustable Airflow Thermostats

PART NO.	STANDARD MOUNT	ADJUSTABLE RANGE (°F)	DIFFERENTIAL
AT021	90	130	20
AT022	140	180	20

Close on Temperature Rise



H  
V  
A  
C

# Thermostats

**THERMODISC®**



## FAN CONTROL\* CLOSE ON RISE

PART NO.	DESCRIPTION	CUT		DIFFERENTIAL
		OUT (°F)	IN (°F)	
SHF90	Fan	80	90	10
SHF110	Fan	90	110	20
SHF110DC	Fan - Deep Cup	90	110	20
SHF120	Fan	110	120	10
SHF140	Fan	120	140	20
SHF250	Fan	220	250	30

\*Adapter Flange Plate included with each thermostat.

\*Use 60T Electrical Ratings on page



## LIMIT CONTROL\* OPEN ON RISE

PART NO.	DESCRIPTION	CUT		DIFFERENTIAL
		OUT (°F)	IN (°F)	
SHL120	Limit - Open on Rise	120	110	10
SHL140	Limit - Open on Rise	140	100	40
SHL150	Limit - Open on Rise	150	110	40
SHL160	Limit - Open on Rise	160	120	40
SHL170	Limit - Open on Rise	170	130	40
SHL180	Limit - Open on Rise	180	140	40
SHL190	Limit - Open on Rise	190	150	40
SHL200	Limit - Open on Rise	200	160	40
SHL230	Limit - Open on Rise	230	190	40
SHL250	Limit - Open on Rise	250	210	40

\*Adapter Flange Plate included with each thermostat.

\*Use 60T Electrical Ratings on page



## MANUAL RESET LIMIT CONTROL\* OPEN ON RISE

PART NO.	DESCRIPTION	OPEN	
		(°F)	CLOSE
SHM125	Limit - Open on Rise	125	Manual
SHM130	Limit - Open on Rise	130	Manual
SHM160	Limit - Open on Rise	160	Manual
SHM170	Limit - Open on Rise	170	Manual
SHM180	Limit - Open on Rise	180	Manual

PART NO.	DESCRIPTION	OPEN(°F)	
			CLOSE
SHM200	Limit - Open on Rise	200	Manual
SHM210	Limit - Open on Rise	210	Manual
SHM290	Limit - Open on Rise	290	Manual
SHM350	Limit - Open on Rise	350	Manual

\*Adapter Flange Plate included with each thermostat.

\*Use 60T Electrical Ratings on page



## HVAC FLUSH MOUNT STAGING THERMOSTATS

PART NO.	DESCRIPTION	OPEN		DIFFERENTIAL
		(°F)	(°F)	
FL50	HVAC Staging Thermostat	50	35	15
FL60	HVAC Staging Thermostat	60	45	15

\*Use 60T Electrical Ratings on page



H  
V  
A  
C

# Thermostats

**THERMODISC®**



## GAS FURNACE LIMITS AND PLENUM THERMOSTATS

- Direct OEM Replacements
- Economical
- Use 36T Electrical Ratings

### Plenum Thermostats

PART NO	DESCRIPTION	OPEN °F	CLOSE °F	DIFFERENTIAL °F	CARRIER®, BRYANT®, BDP®, DAY & NIGHT®, PAYNE®	JANITROL®, GOODMAN®, AMANA®, GMC®	LENNOX®, AIR-EASE®, ARMSTRONG®, CONCORD®, MAGIC CHEF®	CORSAIR®, RHEEM®, RUUD®, WEATHER KING®	TRANE®	YORK®, BORG-WARNER®, FRAZIER®, JOHNSON®, LUXAIRE®
SHL501	L170-40 SPST	170°	130°	40°	HH12ZA174A HH12TA176A P331-2203			47-21711-06		025-29041-007
SHL502	L180-30 SPST	180°	150°	30°	HH12ZA178A	B1370001				
SHL503	L190-40 SPST	190°	150°	40°	HH12ZA189 HH12ZB190 HH12ZA193A P331-2205			47-21711-03		025-29041-012
SHL504	L240-40 SPST	240°	200°	40°	HH12ZA240 HH12ZA252A P331-2217					
SHL505	L140-40 SPST	140°	100°	40°	HH12ZB140				SWT1258	
SHL506	L170-40 SPST	170°	130°	40°	HH12ZB170					
SHL507	L140-30 SPST	140°	110°	30°	HH12ZA140		87F16			025-29041-005
SHL508	L150-20 SPST	150°	130°	20°	HH12ZB190 HH12ZA193 HH12ZA189 P331-2005	B1370913			SWT1260	
SHL509	L240-30 SPST	240°	210°	30°	HH12ZB240 HH12ZA240 HH12ZA252 P331-2217	B1370903				
SHL510	L150-20 SPST	150°	130°	20°	HH12ZB150					
SHL511	L160-20 SPST	160°	140°	20°	HH12ZB160					025-29041-004
SHL512	L170-20 SPST	170°	150°	20°	HH12ZB170		26H66			
SHL513	L170-40 SPST	170°	130°	40°			37H73			
SHL514	L180-40 SPST	180°	140°	40°	HH12ZB180		49L03			025-29031-711
SHL515	L200-40 SPST	200°	160°	40°	HH12ZB200 HH12ZA199 HH12ZA201					025-29041-006
SHL516	L210-40 SPST	210°	170°	40°	HH12ZB210				SWT1263	
SHL517	L220-50 SPST	220°	170°	50°	HH12ZB220 HH12ZA219 HH12ZA223 48NHT042 620BE				SWT1273	
SHL518	L250-40 SPST	250°	210°	40°	HH12ZB250 HH12ZA251 P331-2208	B1370012S			SWT1261 SWT1272	
SHL519	L155-30 SPST	155°	125°	30°		B1370006				
SHL520	L100-20 SPST	100°	80°	20°				47-21711-01		025-29041-002
SHL521	L200-20 SPST	200°	180°	20°				47-21711-04		
SHL522	L160-20 SPST	160°	140°	20°		B1370908S		47-21711-07		
SHL523	L130-20 SPST	130°	110°	20°				47-21711-08		
SHL524	L170-20 SPST	170°	150°	20°				47-21711-10		
SHL525	L180-20 SPST	180°	160°	20°				47-21711-11		

H  
V  
A  
C

# Thermostats



## ROLLOUT SWITCHES

- Auto and Manual Reset
- Offered in a Broad Temperature Range to Cover Most Heating Applications

## SMALL FLUSH MOUNT SPST LIMIT THERMOSTATS (FLUSH MOUNT AUTOMATIC ROLLOUT)

PART NO.	TERMINALS	CUT OUT (°F)	CUT IN (°F)	DIFFERENTIAL
SLF130VA	Vertical 1/4"	130	115	15
SLF170VA	Vertical 1/4"	170	130	40
SLF194HB	Horizontal 3/16"	194	154	40
SLF210HA	Horizontal 1/4"	210	170	40
SLF222VA	Vertical 1/4"	222	182	40
SLF230HA	Horizontal 1/4"	230	190	40
SLF250HA	Horizontal 1/4"	250	200	50
SLF330VA	Vertical 1/4"	330	280	50

\*Use 36T Electrical Ratings on page



## AUTOMATIC ROLLOUTS SPST LIMIT THERMOSTATS

PART NO.	TERMINALS	CUT OUT (°F)	CUT IN (°F)	DIFFERENTIAL
SLS120	45° angle 1/4"	120	105	15
SLS140	45° angle 1/4"	140	100	40
SLS150	45° angle 1/4"	150	110	40
SLS160	45° angle 1/4"	160	120	40
SLS170	45° angle 1/4"	170	130	40
SLS180	45° angle 1/4"	180	140	40
SLS200	45° angle 1/4"	200	160	40
SLS265	45° angle 1/4"	265	215	50
SLS275	45° angle 1/4"	275	225	50
SLS285	45° angle 1/4"	285	235	50
SLS295	45° angle 1/4"	295	245	50
SLS300	45° angle 1/4"	300	250	50

\*Use 36T Electrical Ratings on page



## MANUAL ROLLOUTS SPST LIMIT THERMOSTATS

PART NO.	TERMINALS	CUT OUT (°F)	CUT IN (°F)
SRL130	Vertical 1/4"	130	Manual
SRL135	Vertical 1/4"	135	Manual
SRL220	Vertical 1/4"	220	Manual
SRL230	Vertical 1/4"	230	Manual
SRL240	Vertical 1/4"	240	Manual

PART NO.	TERMINALS	CUT OUT (°F)	CUT IN (°F)
SRL250	Vertical 1/4"	250	Manual
SRL260	Vertical 1/4"	260	Manual
SRL300	Vertical 1/4"	300	Manual
SRL350	Vertical 1/4"	350	Manual

\*Use 36T Electrical Ratings on page



## SRL Series X Ref

PART NO.	REPLACES OEM	OEM P/N
SRL130	Rheem®/Ruud Weatherking®	47-22453-01
SRL135	Rheem®/Ruud Weatherking®	47-22453-02
SRL220	Nordyne®	626354
SRL230	Nordyne®	626353
SRL240	Nordyne®	626355
SRL250	Nordyne®	626352

PART NO.	REPLACES OEM	OEM P/N
SRL260	Nordyne®	626350
SRL300	Nordyne®	626343
	Rheem®/Ruud Weatherking®	47-22861-02
SRL350	Goodman®	B13701-54

\*Use 36T Electrical Ratings on page

H  
V  
A  
C

# Thermostats

## SFPC FREEZE PROTECTION CONTROL

- Protects Air Conditioning Evaporator Coil from Freezing
- Opens 35°F/Close 50°F
- Fits 7/8" O.D. Tubing
- Replaces: Trol-A-Temp FPC
- Includes Clip to Fit 7/8" O.D. Tubing

VOLTAGE (VAC)	RESISTIVE (NON-INDUCTIVE, AMPS)
120	10
240	5

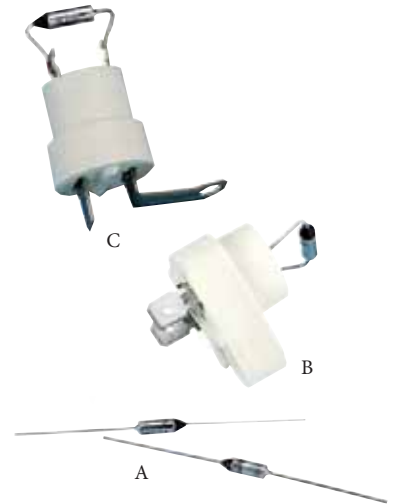


## THERMAL CUT OUTS

PART NO. 15 AMP SERIES 1	PART NO. 25 AMP SERIES 2	OPEN TEMP. °C	OPEN TEMP. °F	STYLE
	STC8170	77	170	A
STC4183		84	183	A
STC4199		93	199	A
STC4228		109	228	A
	STC8242	117	242	A
STC4257	STC8257	125	257	A
STC4283	STC8283	139	283	A
STC4300		149	300	A
STC4333		167	333	A

Series 1 Maximum Wattage 1800W @ 120V/2400W @ 240  
 Series 2 Maximum Wattage 1800W @ 120V/6000W @ 240

PART NO. 15 AMP SERIES 1	PART NO. 25 AMP SERIES 2	OPEN TEMP. °C	OPEN TEMP. °F	STYLE
STC4358		184	363	A
STC4438		226	438	A
STC4468	STC8468	242	468	A
STC5257		125	257	B
	STC85283	139	283	B
STC5300		149	300	B
STC5333		167	333	B
STC5377		192	377	B
STC6257	STC86257	125	257	C
	STC86283	139	283	C
STC6300		149	300	C
STC6333		167	333	C
STC6377	STC86377	192	377	C



PART NO.	TERMINALS	°C	°F	STYLE
STF4170	QC. 1/4"	77	170	36T
STF4183	QC. 1/4"	84	183	36T
STF4230	QC. 1/4"	110	230	36T

PART NO.	TERMINALS	°C	°F	STYLE
STF4249B	QC. 3/16"	121	249	36T
STF4291B	QC. 3/16"	144	291	36T
STF4305B	QC. 3/16"	152	305	36T

Maximum Wattage 1800W @ 120V/2400W @ 240



## TERMINAL ADAPTERS

PART NO.	DESCRIPTION	WHERE USED
T1121	2 to 1 Terminal Adapter	1/4" QC Female to 2 Male 1/4" QC Chair Terminal
T1122	2 to 1 Terminal Adapter	1/4" QC Female to 2 Male 1/4" QC Side by Side Terminal
T1123	Screw to Terminal Adapter	8 - 10 Stud to 1/4" QC Terminal
T1124	Terminal to Screw Adapter	1/4" QC Female to Screw Right Angle Terminal
T1125	2 to 1 Terminal Adapter	1/4" QC Female to 1/4" QC Male Piggyback Terminal



## TYPICAL ELECTRICAL RATINGS

### 36T Electrical Ratings

VOLTS (VAC)	Resistive (Non-Inductive)	Motor Rating (Inductive)		Pilot Duty
		Full Load	Locked Rotor	
120	15A	3A	12A	125 VA
240	10A	1.5A	6A	125 VA

350°F Max Ambient Temperature

### 60T Electrical Ratings

VAC	Resistive (Non-Inductive)	Motor Rating (Inductive)		Pilot Duty
		Full Load	Locked Rotor	
120	25A	14A	72A	125 VA
240	25A	10A	60A	125 VA

350°F Max Ambient Temperature

H  
V  
A  
C

# Pressure Switches

Manual Reset & Automatic Reset High, Low & Condenser Fan Cycling Pressure Switches  
 • Life Cycles @ RLA 100,000 Average • Maximum LRA 36 Amps



## Electrical Specifications

VOLTS	RLA AMPS
12 to 28 VDC/VAC	10 Amps
48 VDC/VAC	5 Amps
110 to 120 VDC/VAC	5.8 Amps
208 to 240 VDC/VAC	2.9 Amps

## Temperatures

Ambient: 20°F to 176°F (-30°C to 80°C)  
 Fluid: 60°F to 250°F (-50°C to 120°C)

## Pressure Ranges

Working: 0 to 650 PSI, Bursting: 5,000 PSI  
 Connection: 1/4" SAE Female Flare With Valve Core Depressor  
 Wire Leads: UL1015 18 AWG/18" Length

PART NO.	OPEN PSI (CUT-OUT)	CLOSE PSI (CUT-IN)	TOLERANCE +/- PSI	MARS®	JOHNSON CONTROLS®	RANCO®	ROBERTSHAW®	R410A APPLICATION
<b>Low Pressure Open On Pressure Drop</b>								
SLP0520	5	20	5	33329	P100AC1C	MPL7001	3101001	
SLP0530	5	30	5	43342	N/A	N/A	3100002/MG201132	
SLP1025	10	25	5	33330	P100AP201C	MPL7011	3100050	
SLP1032	10	32	5	33330	P100AP201C	MPL7011	3100050	X
SLP1535	15	35	5	43371	P100AC2	MPL7002	3100001/MG201026	X
SLP2045	20	45	5	43345	N/A	N/A	3100003/MG201133	
SLP2550	25	50	5	43372	N/A	MPL7012	MG212033	X
SLP2565	25	65	5	33336/43347	N/A	N/A	3101002	
SLP2580	25	80	5	33363/43348	N/A	MPL7003	3101003/3100051	
SLP3560	35	60	5	43349	N/A	MPL7004	3100004/MG201593	
SLP4560	45	60	5	43351	P100AP2C	MPL7005	N/A	
SLP4080	40	80	5	33364/43350	N/A	MPL7014	3101005/3100052	
SLP5090	50	90	5	33339/43374	N/A	N/A	N/A	X
SLP75100	75	100	5	33342/43353	N/A	N/A	N/A	X
SLP90120	90	120	5	43375	N/A	N/A	N/A	X
<b>High Pressure Open On Pressure Rise</b>								
SHP200150	200	150	15	33353	N/A	N/A	N/A	
SHP250150	250	150	15	33354/43322	N/A	N/A	N/A	
SHP250180	250	180	15	N/A	N/A	N/A	N/A	
SHP275195	275	195	15	33310/43324	P100CC9C	MPH7102	3100-112	
SHP300200	300	200	15	33355/43325	N/A	MPH7103	N/A	
SHP325225	325	225	15	43326	N/A	MPH7104	N/A	
SHP325230	325	230	15	33313	N/A	N/A	N/A	
SHP350250	350	250	15	33356/33316/43327	N/A	N/A	MPH71053101201/3100150	
SHP375265	375	265	15	33319/43328	N/A	MPH7106	3100111	
SHP400200	400	200	15	33357/43329	N/A	N/A	3100152	
SHP400280	400	280	15	33322/43330	N/A	N/A	N/A	
SHP400300	400	300	15	33358/33370	P100CA1C/P100CP1C	MPH7107	3101202/3100151/MG21-112	
SHP425300	425	300	15	33325/43332	N/A	N/A	N/A	
SHP425325	425	325	15	43333	P100CA2C/P100CP2C	MPH7108	3100100/3100203/MG211046	
SHP450250	450	250	15	33359/43334	N/A	N/A	N/A	
SHP480380	480	380	15	N/A	N/A	N/A	N/A	
SHP550450	550	450	15	N/A	P100CE11D	N/A	N/A	X
SHP600475	600	475	15	33361/43335	N/A	N/A	N/A	
SHP610420	610	420	15	43366/43376	N/A	N/A	N/A	
SHP665565	665	565	15	N/A	P100CP85D	N/A	N/A	X
<b>Manual High Pressure Open On Pressure Rise</b>								
SMR375	375	Manual	15	43312	P100DC3C	MPH7109	N/A	
SMR410	410	Manual	15	33365/43313	P100DA1C	MPH7110	3101301/3100103	
SMR440	440	Manual	15	33352/43315	N/A	N/A	3100104	
SMR575	575	Manual	15	43368	P100DA86D	N/A	N/A	X
SMR610	610	Manual	15	43369	N/A	N/A	N/A	X
SMR630	630	Manual	15	N/A	P100DA81C/D	N/A	N/A	X
<b>Fan Cycle Close On Pressure Rise</b>								
SFC75120	75	120	15	43301	N/A	MPF7006	N/A	
SFC110170	110	170	15	43302	N/A	MPF7007	N/A	
SFC125265	125	265	15	33340/43303	N/A	N/A	N/A	
SFC210275	210	275	15	33341	N/A	MPF7009	3101101/3100079	
SFC150225	150	225	15	43304	P100AP3C	MPF7008	N/A	
SFC170250	170	250	15	N/A	P100AP4C	N/A	N/A	
SFC200240	200	240	15	N/A	N/A	N/A	3100080	
SFC200365	200	365	15	N/A	N/A	N/A	N/A	X
SFC300400	300	400	15	43307	N/A	MPF7010	N/A	X

H  
V  
A  
C

# Transformers

## UNIVERSAL FAN CENTERS

FC4011 & Universal FC4031

- DPDT Plug-in Style Relay (90340)
- 40 VA Transformer
- Mounts Directly to 4" x 4" Electrical Box
- Color Coded Wiring for Easy Installation
- Universal FC4031 Includes Multi-tap  
Primary Voltages for All Applications,  
Reduces Inventory



PART NO.	VA	PRIMARY VAC	SECONDARY VAC	hp	CONTACTS	REPLACES	REPLACES	REPLACES
						JARD®	MARS®	STEVECO®
FC4011	40	120	24	3/4	DPDT	4011FC	24013	90-113
FC4031	40	120/208/240	24	3/4	DPDT	4031FC	24010	90-130

## T45 UNIVERSAL TRANSFORMER

Accepts Input Voltages of 120, 208 and 240 VAC and Provides Choice of Secondary Voltages of 2.5, 8, 12, 16 and 24 VAC.

- 50/60 Hz.
- Enclosed Frame - Plate, Foot or Knock-out Mount



PART NO.	PRIMARY VAC	SECONDARY VAC	VA	H	W	D	MW
T45	120/208/240	2.5, 8, 12, 16 & 24	48	2 1/16"	3 1/4"	2 3/4"	2 13/16"

**NOTE:** Transformer is furnished with a 4" x 4" mounting plate, wire nuts, 1/2" conduit and 8" leads.

## CONTROL TRANSFORMERS

### Foot Mount Transformers Specifications

PART NO.	PRIMARY V	SECONDARY V	OUTPUT VA	BREAKER/FUSE	MOUNT TYPE
SXT100R	120/208/240/480	24	100	Breaker	Foot
SXT101	120/208/240	2.5/12/24	40	Fuse	Foot
SXT103	277	24	40	No	Foot
SXT104	208/240	24	40	No	Foot
SXT105	120/208/240	24	40	No	Foot
SXT114	120/208/240	24	20	No	Foot
SXT115	120/208/240	24	40	No	Foot
SXT116	120	24	40	No	Foot
SXT160	208/240	24	60	Fuse	Foot
SXT79R	120/208/240/480	24	75	Breaker	Foot

\* Includes Metal Shroud.

### Multi-Mount Transformers Specifications

PART NO.	PRIMARY V	SECONDARY V	OUTPUT VA	BREAKER/FUSE	MOUNT TYPE
SXT106	120/208/240	24	40	No	Multi
SXT111	120/208/240	2.5/12/24	40	Fuse	Multi
SXT112	120	24	40	No	Multi
SXT113	208/240	24	40	No	Multi
SXT148	120/208/240	2.5/12/24	48	No	Multi
SXT150	120/208/240	24	50	Fuse	Multi



SXT104



SXT113

H  
V  
A  
C

# Transformers

## Cross Reference

### Foot Mount

PART NO.	JARD® PART NO.	MARS® PART NO.	UEI® PART NO.	WHITE-RODGERS® PART NO.	HONEYWELL® PART NO.
SXT101	4032F	50355	UET101	N/A	N/A
SXT104	4021F	50353	N/A	90-T40F2	AT40A1139, AT40B1032
SXT105	4031F	50354	UET105	90-T40F3	AT40A1121, AT40A1139, AT40B1214
SXT114	2031F	50351	UET114	N/A	AT20A1123
SXT115	4031F	50354	UET115	90-T40F3	AT40A1121, AT40A1139, AT40B1214
SXT116	4011F	50352	N/A	90-T40F1	AT40A1121, AT40B1206
SXT79R	7541C	50321	UET79R	90-T75C3	AT88A1005, AT88A1021, AT88A1047
SXT100R	10041C	50341	UET100R	N/A	N/A

### Multi-Mount

PART NO.	JARD® PART NO.	MARS® PART NO.	UEI® PART NO.	WHITE-RODGERS® PART NO.	HONEYWELL® PART NO.
SXT106	4031M	50304	N/A	90-T40M3	AT40A1018, AT72D1683, AT72D1691, AT140A1018
SXT111	5032M	50333	UET111	N/A	N/A
SXT113	4021M	50303	UET113	90-T40M2	AT72D1691, AT140A1026
SXT148	5032M	50333	N/A	N/A	N/A
SXT150	5031M	50314	UET150	90-T50M3	AT87A1106, AT87A1007, AT87A1049, AT87A1056, AT150A1007

H  
V  
A  
C

# Wall Thermostats



A Division Of SUPCO®

All models offer our “quiet switching” mechanical switch design and require no additional sub-base for heating, cooling or heating/cooling installation.

## MECHANICAL

### HEATING/COOLING THERMOSTATS

#### 43004 - HORIZONTAL & 43005 - VERTICAL

- For Use with Most 4 or 5 Wire 24 VAC Systems and Single-stage Heat Pumps
- Adjustable Heat Anticipator
- Terminations: RC, RH, W, Y, G, O, B



43004A - Horizontal



43005A - Vertical

## DIGITAL NON-PROGRAMMABLE

### 43054

For Conventional Systems and Single-Stage Heat Pumps with Blue Back Light

#### Features

- Latching Relays For System Compatibility
- Soft Touch Keypad
- Low Battery Indicator
- Blue Backlight
- Easy, Front Load Battery Access
- 2 AA Batteries Included
- °F/°C Selector
- Electronic Digital Accuracy
- Large, Easy-to-Read LCD
- Filter Change Indicator
- No Programming Required
- No Leveling Required
- 3 Year Warranty

#### Specifications

- 20-30 VAC, 50/60 Hz.
- Current Draws 0.1 to 1.5 Amps
- Temperature Set Range: 45°F to 95°F (7°C to 35°C)
- Operating Differential +/- 1°F
- Compressor Protection: 4 Min. Delay on Break
- Bimetal Freeze Protection
- Terminations: RC/O, RH/B, Y, W, G, R

#### Compatible With

- 24 VAC Heat/Cool, Heat Only or Cool Only Systems
- Gas, Electric or Oil Systems
- Millivolt Systems
- 2-wire Hydronic Systems



## DIGITAL PROGRAMMABLE

### 43154

5 Day/2 Day Programming, 4 Periods Per Day, For Conventional Heat/Cool or Single-Stage Heat Pump Systems

#### Features

- Latching Relays For System Compatibility
- Soft Touch Keypad
- Low Battery Indicator
- Blue Backlight
- Easy, Front Load Battery Access
- 2 AA Batteries Included
- °F/°C Selector
- Adjustable Cycle Rate
- Pre-programmed
- Easy “Front Load” Battery Access
- Mechanical Low Temperature Protection
- Filter Monitor
- Up-opening Door
- Two-stage Low Battery Warning with Fail Safe Protection
- 3 Year Warranty

#### Specifications

- 20-30 VAC, 50/60 Hz.
- Current Draws 0.1 to 1.5 Amps
- Temperature Set Range: 45°F to 95°F (7°C to 35°C)
- Operating Differential +/- 1°F
- Compressor Protection: 4 Min. Delay on Break
- Terminations: G, RC, RH, Y/O, WB, Y1

#### Compatible With

- 24 VAC Heat/Cool, Heat Only or Cool Only Systems
- Gas, Electric or Oil Systems
- Millivolt Systems
- 2-wire Hydronic Systems
- Most Single-stage Heat Pumps



# Wall Thermostats



A Division Of SUPCO®



## E3 SERIES UNIVERSAL THERMOSTATS

### 53100

Non-programmable

#### Features

- Easy Install Features
- Color Coded Wire Terminals
- Built-in Level Bulb
- Break Away Guides for Less Common Terminals
- Screwless Terminals
- Blue Backlight
- Permanent Memory
- Filter Monitor
- System Powered with Battery Backup, or Battery Powered (2 AA Batteries Included)
- Freeze Protection
- 3-year Warranty

#### Specifications

- 20-30 VAC
- Current Draws .1 to 1.5 Amps
- Temperature Set and Control Range 45° to 95°F (6° to 35°C)
- Operating Differential +/- 1°
- Compressor Protection: 3.5 min. Delay on Break
- Terminations: Rh, RC/R, Y, G, W, L, O, B, AE/W2, Y2, C, A

#### Compatible With

- 2 Heat/2 Cool Systems
- Gas Standing Pilot and Electric Ignition
- Gas and Oil Fired Boilers
- Electric Heat
- Millivolt
- Hot Water Gravity and Zoned
- Hot Water Motor Valves (3-wire)
- Hot Water Solenoid Valves (2-wire)
- Heat Pumps with Electric/Gas/Oil Auxiliary
- Air/Ground/Hydro Exchanger



### 53200

5/1/1 Day Programmable

#### Features

- Easy Install Features
- Color Coded Wire Terminals
- Built-in Level Bulb
- Break Away Guides for Less Common Terminals
- Screwless Terminals
- 25% Fewer Programming Steps
- Save Away™ Override
- Blue Backlight
- Permanent Memory
- Filter Monitor
- System Powered with Battery Backup, or Battery Powered (2 AA Batteries Included)
- Freeze Protection
- 3-year Warranty

#### Specifications

- 20-30 VAC
- Current Draws .1 to 1.5 Amps
- Temperature Set and Control Range 45° to 95°F (6° to 35°C)
- Operating Differential +/- 1°
- Compressor Protection: 3.5 min. Delay on Break
- Terminations: Rh, RC/R, Y, G, W, L, O, B, AE/W2, Y2, C, A

#### Compatible With

- 2 Heat/2 Cool Systems
- Gas Standing Pilot and Electric Ignition
- Gas and Oil Fired Boilers
- Electric Heat
- Millivolt
- Hot Water Gravity and Zoned
- Hot Water Motor Valves (3-wire)
- Hot Water Solenoid Valves (2-wire)
- Heat Pumps with Electric/Gas/Oil Auxiliary
- Air/Ground/Hydro Exchanger



H  
V  
A  
C

# Wall Thermostats



A Division Of SUPCO®



## 53300

7 Day Programmable

### Features

- Easy Install Features
- Color Coded Wire Terminals
- Built-in Level Bulb
- Break Away Guides for Less Common Terminals
- Screwless Terminals
- 25% Fewer Programming Steps
- Save Away™ Override
- Energy Guide™
- Home Today™ Override
- Keyboard Lock
- Blue Backlight
- Permanent Memory
- Filter Monitor
- System Powered with Battery Backup, or Battery Powered (2 AA Batteries Included)
- Freeze Protection
- 3-year Warranty

### Specifications

- 20-30 VAC
- Current Draws .1 to 1.5 Amps
- Temperature Set and Control Range 45° to 95°F (6° to 35°C)
- Operating Differential +/- 1°
- Compressor Protection: 3.5 min. Delay on Break
- Terminations: Rh, RC/R, Y, G, W, L, O, B, AE/W2, Y2, C, A

### Compatible With

- 2 Heat/2 Cool Systems
- Gas Standing Pilot and Electric Ignition
- Gas and Oil Fired Boilers
- Electric Heat
- Millivolt
- Hot Water Gravity and Zoned
- Hot Water Motor Valves (3-wire)
- Hot Water Solenoid Valves (2-wire)
- Heat Pumps with Electric/Gas/Oil Auxiliary
- Air/Ground/Hydro Exchanger



## Easy to Program & Operate Features

**Home Today Override** keeps comfort level on those odd days when occupants are home during "away" period



**Away/Asleep/At Home** user interface simplifies program periods

**Save Away Override** allows for energy saving settings when occupants are away during "At Home" period

**Energy Guide** gives instant feedback when programming

H  
V  
A  
C

# Wall Thermostats

## PROFESSIONAL SERIES

### 61100N

Non-Programmable

#### Features

- 1.5 Square Inch Display with Bright Blue Backlight
- Hardwire or Battery Powered
- Permanent Memory Retains Settings
- Compressor Short Cycle Protection
- Separate O & B Terminals
- Low Battery Indication
- Front Access Reset Button
- F° / C° Switch
- Gas/Electric Fan Switch
- English/Spanish Packaging and Instruction Card

#### Compatible With

- 1 Heat/1 Cool Systems
- 24 VAC Gas, Oil or Electric Systems
- Millivolt
- Hot Water Gravity & Zoned
- Hot Water Solenoid Valves (2-wire)
- Single Stage Heat Pumps
- Air/Ground/Hydronic Exchanger



#### Specifications

- 3.62" x 4.72" x 1.38"
- 24 Volt AC (18-30 Volt AC), 1 Amp Maximum Load Per Terminal, 3 Amp Total Maximum Load (All Terminals)
- 3.0 Volts DC ( 2 AA Alkaline Batteries Included)
- Control Range 45° to 90°F (7° to 32°C)
- Display Range 40° to 99°F (5° to 37°C)
- Accuracy +/- 1°F (+/- .5°C)
- Storage Temperature 14° to 140°F (-10° to 60°C)
- Operating Humidity 5% to 95% Relative Humidity
- Terminations: Rc, Rh, B, O, Y1, W1, G, C

### 61152P

5/2 Day Programmable

#### Features

- 1.5 Square Inch Display with Bright Blue Backlight
- Hardwire or Battery Powered
- Permanent Memory Retains Settings
- Filter Check Monitor
- Adjustable Temperature Differential
- Adaptive Recovery Mode
- Temporary Program Override
- Programmable Extended Hold Mode
- Front Access Reset Button
- F° / C° Switch
- Gas/Electric Fan Switch
- English/Spanish Packaging and Instruction Card

#### Compatible With

- 1 Heat/1 Cool Systems
- 24 VAC Gas, Oil or Electric Systems
- Millivolt
- Hot Water Gravity & Zoned
- Hot Water Solenoid Valves (2-wire)
- Single Stage Heat Pumps
- Air/Ground/Hydronic Exchanger



#### Specifications

- 3.62" x 4.72" x 1.38"
- 24 Volt AC (18-30 Volt AC), 1 Amp Maximum Load Per Terminal, 3 Amp Total Maximum Load (All Terminals)
- 3.0 Volts DC ( 2 AA Alkaline Batteries Included)
- Control Range 45° to 90°F (7° to 32°C)
- Display Range 40° to 99°F (5° to 37°C)
- Accuracy +/- 1°F (+/- .5°C)
- Storage Temperature 14° to 140°F (-10° to 60°C)
- Operating Humidity 5% to 95% Relative Humidity
- Terminations: Rc, Rh, B, O, Y1, W1, G, C

H  
V  
A  
C

## Wall Thermostats

### 62100N

Non-Programmable

#### Features

- 1.5 Square Inch Display with Bright Blue Backlight
- Hardwire or Battery Powered
- Permanent Memory Retains Settings
- Compressor Short Cycle Protection
- Separate O & B Terminals
- Auxiliary Heat Indicator
- Low Battery Indication
- Front Access Reset Button
- F° / C° Switch
- Gas/Electric Fan Switch
- English/Spanish Packaging and Instruction Card

#### Compatible With

- Up to 2 Heat/1 Cool Conventional or Heat Pump Systems
- 24 VAC Gas, Oil or Electric Systems
- Millivolt
- Hot Water Gravity & Zoned
- Hot Water Solenoid Valves (2-wire)
- Single Stage Heat Pumps
- Air/Ground/Hydronic Exchanger



#### Specifications

- 3.62" x 4.72" x 1.38"
- 24 Volt AC (18-30 Volt AC), 1 Amp Maximum Load Per Terminal, 3 Amp Total Maximum Load (All Terminals)
- 3.0 Volts DC ( 2 AA Alkaline Batteries Included)
- Control Range 45° to 90°F (7° to 32°C)
- Display Range 40° to 99°F (5° to 37°C)
- Accuracy +/- 1°F (+/- .5°C)
- Storage Temperature 14° to 140°F (-10° to 60°C)
- Operating Humidity 5% to 95% Relative Humidity
- Terminations: Rh, Rc, O, B, Y, E/W1, G, C, W2

### 62152P

5/2 Day Programmable

#### Features

- 1.5 Square Inch Display with Bright Blue Backlight
- Hardwire or Battery Powered
- Permanent Memory Retains Settings
- Filter Check Monitor
- Adjustable Temperature Differential
- Adaptive Recovery Mode
- Temporary Program Override
- Auxiliary Heat Status Indicator
- Compressor Short Cycle Protection
- Programmable Extended Hold Mode
- Front Access Reset Button
- F° / C° Switch
- English/Spanish Packaging and Instruction Card

#### Compatible With

- Up to 2 Heat/1 Cool Conventional or Heat Pump Systems
- 24 VAC Gas, Oil or Electric Systems
- Millivolt
- Hot Water Gravity & Zoned
- Hot Water Solenoid Valves (2-wire)
- Air/Ground/Hydronic Exchanger



#### Specifications

- 3.62" x 4.72" x 1.38"
- 24 Volt AC (18-30 Volt AC), 1 Amp Maximum Load Per Terminal, 4 Amp Total Maximum Load (All Terminals)
- 3.0 Volts DC ( 2 "AA" Alkaline Batteries Included)
- Control Range 45° to 90°F (7° to 32°C)
- Display Range 40° to 99°F (5° to 37°C)
- Accuracy +/- 1°F (+/- .5°C)
- Storage Temperature 14° to 140°F (-10° to 60°C)
- Operating Humidity 5% to 95% Relative Humidity
- Terminations: Rc, Rh, B, O, Y1, E/W1, G, C, W2

# Wall Thermostats

## PERFORMANCE SERIES

### 71100N

Non-Programmable

#### Features

- 3 Square Inch Display with Bright Blue Backlight
- Auto or Manual Changeover
- Adjustable Temperature Limits
- Indoor or Outdoor Remote Sensing
- Permanent Memory Retains Settings
- Separate User and Installer Reset Buttons
- User Selectable Service Monitors
- Hardwire or Battery Powered
- Multi-Level Keypad Lockout
- Set Point Adjustment Limits
- Compressor Short Cycle Protection
- English/Spanish Packaging and Instruction Card

#### Compatible With

- 1 Heat/1 Cool Systems
- 24 VAC Gas, Oil or Electric Systems
- Millivolt
- Hot Water Gravity & Zoned
- Hot Water Motor Valves (3-wire)
- Hot Water Solenoid Valves (2-wire)
- Single Stage Heat Pumps
- Air/Ground/Hydronic Exchanger



#### Specifications

- 3.86" x 5.11" x 1.42"
- 24 Volt AC (18-30 Volt AC), 1 Amp Maximum Load Per Terminal, 3 Amp Total Maximum Load (All Terminals)
- 3.0 Volts DC ( 2 AA Alkaline Batteries Included)
- Control Range 45° to 90°F (7° to 32°C)
- Display Range 40° to 99°F (5° to 37°C)
- Accuracy +/- 1°F (+/- .5°C)
- Storage Temperature 14° to 140°F (-10° to 60°C)
- Operating Humidity 5% to 95% Relative Humidity
- Terminations: Rc, Rh, O/B/V3, Y1, W1, G, C, S1, S2

### 71157P

5/2, 7 Day or Non-Programmable

#### Features

- 4 Square Inch Display with Bright Blue Backlight
- Auto or Manual Changeover
- Adjustable Temperature Limits
- Indoor or Outdoor Remote Sensing
- Separate User and Installer Reset Buttons
- Programmable Fan with On or Auto Modes
- Residential or Commercial Mode
- Adaptive Recovery Mode
- Temporary Override Limits
- Hardwire or Battery Powered
- Multi-Level Keypad Lockout
- English/Spanish Packaging and Instruction Card

#### Compatible With

- 1 Heat/1 Cool Systems
- 24 VAC Gas, Oil or Electric Systems
- Millivolt
- Hot Water Gravity & Zoned
- Hot Water Motor Valves (3-wire)
- Hot Water Solenoid Valves (2-wire)
- Single Stage Heat Pumps
- Air/Ground/Hydronic Exchanger

#### Specifications

- 3.86" x 5.11" x 1.42"
- 24 Volt AC (18-30 Volt AC), 1 Amp Maximum Load Per Terminal, 3 Amp Total Maximum Load (All Terminals)
- 3.0 Volts DC ( 2 AA Alkaline Batteries Included)
- Control Range 45° to 90°F (7° to 32°C)
- Display Range 40° to 99°F (5° to 37°C)
- Accuracy +/- 1°F (+/- .5°C)
- Storage Temperature 14° to 140°F (-10° to 60°C)
- Operating Humidity 5% to 95% Relative Humidity
- Terminations: Rc, Rh, O/B/V3, Y1, W1, G, C, S1, S2



H  
V  
A  
C

## Wall Thermostats

### 73200N

Non-Programmable

#### Features

- 3 Square Inch Display with Bright Blue Backlight
- Auto or Manual Changeover
- Adjustable Temperature Limits
- Indoor or Outdoor Remote Sensing
- Permanent Memory Retains Settings
- Separate User and Installer Reset Buttons
- User Selectable Service Monitors
- Adjustable Balance Points
- Auxiliary Heat Fossil Fuel Option
- Hardwire or Battery Powered
- Multi-Level Keypad Lockout
- Set Point Adjustment Limits
- Compressor Short Cycle Protection
- English/Spanish Packaging and Instruction Card

#### Compatible With

- Up to 3 Heat/2 Cool Heat Pump Systems
- Up to 2 Heat/2 Cool Conventional Systems
- 24 VAC Gas, Oil or Electric Systems
- Millivolt
- Hot Water Gravity & Zoned
- Hot Water Motor Valves (3-wire)
- Hot Water Solenoid Valves (2-wire)
- Single Stage Heat Pumps
- Air/Ground/Hydronic Exchanger



#### Specifications

- 3.86" x 5.11" x 1.42"
- 24 Volt AC (18-30 Volt AC), 1 Amp Maximum Load Per Terminal, 5 Amp Total Maximum Load (All Terminals)
- 3.0 Volts DC ( 2 AA Alkaline Batteries Included)
- Control Range 45° to 90°F (7° to 32°C)
- Display Range 40° to 99°F (5° to 37°C)
- Accuracy +/- 1°F (+/- .5°C)
- Storage Temperature 14° to 140°F (-10° to 60°C)
- Operating Humidity 5% to 95% Relative Humidity
- Terminations: G, Rc, Rh, W2, O/B/V3, Y1, Y2, W1/E/W3, C, L, S1, S2

### 73257P

5/2, 7 Day or Non-Programmable

#### Features

- 4 Square Inch Display with Bright Blue Backlight
- Auto or Manual Changeover
- Adjustable Temperature Limits
- Indoor or Outdoor Remote Sensing
- Separate User and Installer Reset Buttons
- Programmable Fan with On or Auto Modes
- Residential or Commercial Mode
- Auxiliary Heat Fossil Fuel Option
- Temporary Override Limits
- Hardwire or Battery Powered
- Multi-Level Keypad Lockout
- English/Spanish Packaging and Instruction Card

#### Compatible With

- Up to 3 Heat/2 Cool Heat Pump Systems
- Up to 2 Heat/2 Cool Conventional Systems
- 24 VAC Gas, Oil or Electric Systems
- Millivolt
- Hot Water Gravity & Zoned
- Hot Water Motor Valves (3-wire)
- Hot Water Solenoid Valves (2-wire)
- Air/Ground/Hydronic Exchanger

#### Specifications

- 3.86" x 5.11" x 1.42"
- 24 Volt AC (18-30 Volt AC), 1 Amp Maximum Load Per Terminal, 5 Amp Total Maximum Load (All Terminals)
- 3.0 Volts DC ( 2 AA Alkaline Batteries Included)
- Control Range 45° to 90°F (7° to 32°C)
- Display Range 40° to 99°F (5° to 37°C)
- Accuracy +/- 1°F (+/- .5°C)
- Storage Temperature 14° to 140°F (-10° to 60°C)
- Operating Humidity 5% to 95% Relative Humidity
- Terminations: G, Rc, Rh, W2, O/B/V3, Y1, Y2, W1/E/W3, C, L, S1, S2



# Wall Thermostats

## ULTIMATE SERIES

### 84210T

5/2, 7 Day or Non-Programmable Touchscreen

#### Features

- 10 Square Inch Touchscreen Display with Bright Blue Backlight
- Residential or Commercial Modes
- Indoor or Outdoor Remote Sensing
- Auto or Manual Changeover
- Adjustable Compressor Protection
- Hardwire or Battery Powered
- Adjustable Temperature Limits
- Separate User and Installer Reset Buttons
- Auxiliary Heat Fossil Fuel Option
- Multi-Level Keypad Lockout
- Economizer Control
- Programmable Fan Mode
- English/Spanish Packaging and Instruction Card

#### Compatible With

- Up to 4 Heat/2 Cool Heat Pump Systems  
Up to 3 Heat/2 Cool Conventional Systems
- 24 VAC Gas, Oil or Electric Systems
- Millivolt
- Hot Water Gravity & Zoned
- Hot Water Solenoid Valves (2-wire)
- Air/Ground/Hydronic Exchanger



#### Specifications

- 4.13" x 6.13" x 1.38"
- 24 Volt AC (18-30 Volt AC), 1 Amp  
Maximum Load Per Terminal, 7 Amp  
Total Maximum Load (All Terminals)
- 3.0 Volts DC ( 2 AA Alkaline Batteries Included)
- Control Range 45° to 90°F (7° to 32°C)
- Display Range 40° to 99°F (5° to 37°C)
- Accuracy +/- 1°F (+/- .5°C)
- Storage Temperature 14° to 140°F (-10° to 60°C)
- Operating Humidity 5% to 95% Relative Humidity
- Terminations: A, G, Rc, Rh, W2/AUX2, W3/O/B, Y1, Y2, W1/E/AUX1, C, L, S1, S2

## ACCESSORIES

### 6390

#### Indoor Remote Sensor

- Simple 2-wire Installation
- For Indoor Use Only
- Mounting Hardware Included
- Accuracy +/- 1°F (+/- .5°C)
- Compatible with CTC™ Thermostats:  
71100N, 732N, 71157P, 73257P,



### 6490

#### Outdoor Remote Sensor

- Simple 2-wire Installation
- For Outdoor Use Only
- Mounting Bracket Included
- Accuracy +/- 1°F (+/- .5°C)
- Compatible with CTC® Thermostats:  
71100N, 732N, 71157P, 73257P,



H  
V  
A  
C

# Thermostat Guards

SUPCO® offers a complete line of metal and plastic thermostat guards for the HVAC industry. Manufactured with the highest quality materials and production standards to ensure rugged dependability and attractive appearance.

## Metal Thermostat Guards

- 18-22 Gauge Steel
- Baked Enamel Finish
- Louvered Cover
- Maximum Protection

## Plastic Thermostat Guards

- Hi-impact Plastic
- Clear
- Opaque

## All Models

- Locking Key
- Mounting Hardware
- Vertical or Horizontal Mounting

PART NO.	DESCRIPTION	INSIDE DIMENSIONS SOLID BASE (H x W x D)	INSIDE DIMENSIONS RING BASE (H x W x D)
<b>Universal</b>			
BTG-UK2	Clear Plastic	8 1/4" x 5 3/8" x 3 1/2"	8 1/8" x 4 5/8" x 3-5/8"
BTG-UO2	Opaque Plastic	8 1/4" x 5 3/8" x 3 1/2"	8 1/8" x 4 5/8" x 3-5/8"
BTG-UM	Metal	8 1/4" x 5 3/8" x 3 1/2"	-
BTG-UWM	Metal	-	6 3/4" x 4 1/2" x 3 9/16"
BTG-UN	Clear Plastic		
<b>Elite</b>			
BTG-EK	Clear Plastic	3 7/8" x 3 1/2" x 2 1/2"	-
<b>Classic</b>			
BTG-K	Clear Plastic	5 1/4" x 4 3/8" x 3"	5 1/4" x 4 5/8" x 3 1/4"
BTG-O	Opaque Plastic	5 1/4" x 4 3/8" x 3"	5 1/4" x 4 5/8" x 3 1/4"
BTG-KWM	Metal	-	5 1/4" x 4 5/8" x 3 1/4"
<b>Regal</b>			
BTG-RK	Clear Plastic	6 3/8" x 3 1/2" x 3"	6 3/8" x 3 1/2" x 3 1/4"
BTG-RWM	Metal	-	6 3/8" x 3 1/2" x 3 1/4"
<b>Sentinal</b>			
BTG-54VL	Metal Hinged	6 1/4" x 4 1/4" x 3 1/8"	-
BTG-54VLW	Metal Hinged	-	6" x 3 3/4" x 3 1/8"
F336	Replacement Key	Fits All Models	



Universal Series



Elite Series



Classic Series



Regal Series



Sentinal Series



BTG-UN

H  
V  
A  
C

# Belts

## MULTI-PLUS DUAL BRAND V-BELTS

Clearly Identifying RMA Classic Part Number and Dimensionally Equivalent FHP Number, the Multi-plus Belt is Designed to Reduce Total V-Belt Investment.

- Consolidate Belts Sizes into a Single Belt Line
- Able to Handle Classic and FHP Drive Applications

### “A” Section

#### Classical V Belts

- 1/2 inch top width
- 11/32 inch thick
- Dual brand A & 4L

### “B” Section

#### Classical V Belts

- 21/32 inch top width
- 13/32 inch thick
- Dual brand B & 5L

### “BX” Section

#### Cogged Multiple V Belts

- 21/32 inch top width
- 13/32 inch thick



BELT SECTION (PITCH)	B (ANGLE)	BB (WIDTH)	HB (HEIGHT)
A	40°	.50 in	.31 in
B, BX	40°	.66 in	.41 in

PART NO.	CROSS to L's	APPROX. OUTSIDE LENGTH	PART NO.	CROSS to L's	APPROX. OUTSIDE LENGTH	PART NO.	CROSS to L's	APPROX. OUTSIDE LENGTH	PART NO.	CROSS to L's	APPROX. OUTSIDE LENGTH	PART NO.	CROSS to L's	APPROX. OUTSIDE LENGTH
A100	4L1020	102	A64	4L660	66	B44	5L470	47	B102		105	BX65		68
A105		107	A65	4L670	67	B45	5L480	48	B104		107	BX66		69
A110		112	A66	4L680	68	B46	5L490	49	B105		108	BX67		70
A112		114	A67	4L690	69	B47	5L500	50	B106		109	BX70		73
A116		118	A68	4L700	70	B48	5L510	51	B107		110	BX71		74
A120		122	A69	4L710	71	B49	5L520	52	B110		113	BX75		78
A124		126	A70	4L720	72	B50	5L530	53	B111		114	BX77		80
A128		130	A71	4L730	73	B51	5L540	54	B112		115	BX78		81
A136		138	A72	4L740	74	B52	5L550	55	B114		117	BX80		83
A144		146	A73	4L750	75	B53	5L560	56	B115		118	BX81		84
A158		160	A74	4L760	76	B54	5L570	57	B116		119	BX82		85
A19	4L210	21	A75	4L770	77	B55	5L580	58	B118		121	BX83		86
A20	4L220	22	A76	4L780	78	B56	5L590	59	B120		123	BX90		93
A21	4L230	23	A77	4L790	79	B57	5L600	60	B124		127	BX93		96
A22	4L240	24	A78	4L800	80	B58	5L610	61	B126		129	BX95		98
A23	4L250	25	A79	4L810	81	B59	5L620	62	B128		131	BX96		99
A24	4L260	26	A80	4L820	82	B60	5L630	63	B130		133	BX97		100
A25	4L270	27	A81	4L830	83	B61	5L640	64	B133		136	BX99		102
A26	4L280	28	A82	4L840	84	B62	5L650	65	B134		137	BX100		103
A27	4L290	29	A83	4L850	85	B63	5L660	66	B135		138	BX103		106
A28	4L300	30	A84	4L860	86	B64	5L670	67	B136		139	BX105		108
A29	4L310	31	A85	4L870	87	B65	5L680	68	B140		143	BX112		115
A30	4L320	32	A86	4L880	88	B66	5L690	69	B144		147	BX116		119
A31	4L330	33	A87	4L890	89	B67	5L700	70	B152		155	BX120		123
A32	4L340	34	A88	4L900	90	B68	5L710	71	B158		161	BX124		127
A33	4L350	35	A89	4L910	91	B69	5L720	72	B162		165	BX128		131
A34	4L360	36	A90	4L920	92	B70	5L730	73	B195		198	BX133		135
A35	4L370	37	A91	4L930	93	B71	5L740	74	B210		213	BX136		139
A36	4L380	38	A92	4L940	94	B72	5L750	75	B225		227	BX144		147
A37	4L390	39	A93	4L950	95	B73	5L760	76	B240		242	BX150		153
A38	4L400	40	A94	4L960	96	B74	5L770	77	B255		257	BX158		161
A39	4L410	41	A95	4L970	97	B75	5L780	78	B270		272	BX162		163
A40	4L420	42	A96	4L980	98	B76	5L790	79	B285		287	BX173		176
A41	4L430	43	A97	4L990	99	B77	5L800	80	B300		302	BX180		183
A42	4L440	44	A98	4L1000	100	B78	5L810	81	B315		317	BX195		198
A43	4L450	45	A99	4L1010	101	B79	5L820	82	B330		332	BX210		213
A44	4L460	46	B23	5L260	26	B80	5L830	83	B360		362	BX225		226.5
A45	4L470	47	B24	5L270	27	B81	5L840	84	BX35		38	BX240		241.5
A46	4L480	48	B25	5L280	28	B82	5L850	85	BX36		39	BX255		256.5
A47	4L490	49	B26	5L290	29	B83	5L860	86	BX37		40	BX270		271.5
A48	4L500	50	B27	5L300	30	B85	5L880	88	BX38		41	BX300		301.5
A49	4L510	51	B28	5L310	31	B86	5L890	89	BX42		45	AX56		58
A50	4L520	52	B29	5L320	32	B87	5L900	90	BX43		46			
A51	4L530	53	B30	5L330	33	B88	5L910	91	BX46		49			
A52	4L540	54	B31	5L340	34	B89	5L920	92	BX48		51			
A53	4L550	55	B32	5L350	35	B90	5L930	93	BX50		53			
A54	4L560	56	B33	5L360	36	B91	5L940	94	BX51		54			
A55	4L570	57	B34	5L370	37	B92	5L950	95	BX53		56			
A56	4L580	58	B35	5L380	38	B93	5L960	96	BX55		58			
A57	4L590	59	B36	5L390	39	B94	5L970	97	BX56		59			
A58	4L600	60	B37	5L400	40	B95	5L980	98	BX57		60			
A59	4L610	61	B38	5L410	41	B96	5L990	99	BX58		61			
A60	4L620	62	B39	5L420	42	B97	5L1000	100	BX59		62			
A61	4L630	63	B40	5L430	43	B98	5L1010	101	BX60		63			
A62	4L640	64	B41	5L440	44	B99	5L1020	102	BX61		64			
A63	4L650	65	B42	5L450	45	B101		104	BX62		65			
			B43	5L460	46				BX63		66			

# Installation and Service Products

## LIL POPPER

Control Board Circuit Breaker

- Temporary Fix for Control Board Fuses
- Stay Up and Running While Servicing Unit
- Includes Quick Setting Thermal Cutout

PART NO.	DESCRIPTION
POP3	3 Amp Breaker
POP5	5 Amp Breaker



## ZIPEZ INSULATION FASTENERS

The Fast, Easy, Permanent, Professional, Revolutionary way to Attach Duct Wrap and Reflective Insulation. ZIPEZ All-Purpose Fasteners' Unique Design Provides Fast and Easy One-Handed Installation.

- Fast & Easy-To-Use - No Special Tools Necessary
- Permanent Holding Power - Use Sheet Metal Screw
- Will Not Lose Holding Power - Even During Extreme Hot or Cold Temperatures
- Plenum-Rated to UL Standard 2043, 2nd Edition
- Increase Productivity
- Professional Appearance



**MADE IN THE USA**



**DUCT BLASTER TESTED**



## ECAP321 HIGH EFFICIENCY PVC FLUE CAP

The Affordable Approach to Flue Pipe Problems Starts at the Top! The ECAP321 PVC Flue Cap Protects Today's High Efficiency Furnaces from Dirt, Moisture and Other Debris.

- Protection for High Efficiency Furnaces
- Universal Flue Cap Fits 1.5", 2" and 3" PVC Pipe
- Reduces Draft Inducer Motor Rust
- Helps to Eliminate Pressure Switch Service Calls
- Resistant to UV Radiation and Oxidative Degradation



## UHS

Universal Humidifier Solenoid Valve Replacement Kits

- Each Kit Includes Solenoid Valve, Mounting Bracket and All Fittings to Remove and Replace the Existing Solenoid Valve
- Easy "Wrench-in" Installation
- Adjustable Water Flow Valve
- Time Saving
- Universal Replacement Reduces Inventory
- Economically Priced Compared to OEM Versions

PART NO.	VOLTAGE
UHS24	24 V
UHS120	120 V



UHS24 REPLACES	UHS120 REPLACES
Aprilaire® 4040	Aprilaire® 4005
General® 990-53	General® 990-52
Honeywell® 320016939-002	
Skuttle® A01-0814-148	

# Installation and Service Products

## EL10

### Easy Leveler Furnace Legs

- Four Sturdy Bolt-adjusted Leg Extensions
- Mounting Hardware Included
- Adjustments Made with Standard Wrench



## FSKEY

### Furnace Switch Key

- Simplifies Repair Preparation
- Easily Inserted and Removed
- Made of Durable Thermoplastic
- Store on Key Ring if Desired



\*200/Jar

## MAGJUMPER®

- 30 VAC/VDC 5 Amps Maximum
- Ideal for Low Voltage Troubleshooting for Recessed Terminals
- Thermostats
- Control Boards
- Sensors
- Switches

Available in 5 Colors

PART NO.	COLOR
MAG1YL	Yellow
MAG1GR	Green
MAG1BL	Blue
MAG1BK	Black
MAG1RD	Red



## NEOPRENE AIR TUBING

- Temperature Range: 0°F to 160°F (-17°C to 71°C)
- Pressure Range: -20 to 20 in. W.C.

PART NO.	DIMENSIONS	LENGTH
SNAT3165	3/16" ID	5 ft.
SNAT316100	3/16" ID	100 ft.
SNAT185	1/8" ID	5 ft.



## SILICONE AIR TUBING

- NSF 51, Soft, Red
- Temperature Range: -100°F to 500°F (-73°C to 260°C)
- 5 Foot Rolls

PART NO.	DIMENSIONS	WORKING PRESSURE	BURST PRESSURE
SSRT185	1/8" ID x 5/16" OD	25 psi	75 psi
SSRT3165	3/16" ID x 5/16" OD	20 psi	60 psi
SSRT145	1/4" ID x 3/8" OD	5 psi	15 psi



## TR10

### Teflon O-Ring Kit

- Package of 12 O-Rings
- 3 of Each Size

OD SIZE	ID SIZE
9/16"	7/16"
3/4"	5/8"
1"	7/8"
1 1/2"	1 3/8"



## GB10

### Fenny's Gasket Book

- Replacements for Gaskets in Expansion and Solenoid Valves and Pumps
- 36 Different Gaskets Replace Most Common Gaskets Used Today
- Garlock Material Replaces All Older Materials



H  
V  
A  
C

## Installation and Service Products

### HVAC STRAP™

#### HVAC MANIFOLD HANGER

Attaches Quickly and Easily to the Manifold Gauge, and its Magnet Allows the Technician to Hang the Gauge Almost Anywhere. Constructed from Heavy-Duty Woven Material, Coated, Metal Magnet.

- Safety (No High Voltage Near Gauges)
- Decreased Work Time (Put Gauges Where You Want Them)
- Non-Damaging to the Unit (Coated so it Won't Scratch or Damage)
- Increased Readability



### MB55

#### MOTOR BRACKET MOUNTING KIT - 3 LEGS

- Designed For Direct Drive Blower Motors Using the Flexible Bracket Mounting Arrangement
- Grommets & Eyelets Included

##### Specifications

Motor Diameter	5", Bolt Circle 9" & 10.18"
Motor Diameter	5.5", Bolt Circle 9" & 10.18"



### MB554

#### MOTOR BRACKET MOUNTING KIT - 4 LEGS

- Flexible Bracket
- Grommets & Sleeves Included

##### Specifications

Motor Diameter	5", Bolt Circle 9" & 10.18"
Motor Diameter	5.5", Bolt Circle 9" & 10.18"



# Refrigeration Relays, Overloads and Hard Starts

## URCO UNIVERSAL SERIES RELAY CAPACITOR OVERLOAD

For Refrigeration Systems With or Without Run Capacitors. Maintain a High Efficiency System or Save an Old System.

- Replaces Relay, Capacitor and Overload
- Works on RSIR, CSIR, PSC & CSR Compressors
- Available in Popular Sizes, Ranging from 1/12 hp to 1/2 hp
- “Push-On” Compressor Terminals and 1/4” Capacitor Terminals
- Designed for Modern High Efficiency Compressors
- Helps Older Compressors to Start and Run Cooler
- Easy Mount Clip for Quick Installation
- Easy to Read Instructions
- Prevents Low Voltage Starting Problems



PART NO.	HP RATING	VOLTS	CONTINUOUS RUNNING AMPS
URCO210	1/3 to 1/2	115	13.3
URCO410	1/4 to 1/3	115	6.8
URCO810	1/12 to 1/5	115	4.05

## URCORC SERIES UNIVERSAL 4 ‘N 1 RELAY CAPACITOR, OVERLOAD AND RUN CAPACITOR

For Refrigeration Systems With or Without Run Capacitors. Maintain a High Efficiency System or Save an Old System.

- Same Features and Benefits of the Universal Series
- Adds a Closely Matched System Run Capacitor



PART NO.	HP RATING	RUN CAPACITOR SIZE $\mu$ FD	VOLTS	CONTINUOUS RUNNING AMPS
URCO210RC	1/3 to 1/2	20	115	13.3
URCO410RC	1/4 to 1/3	15	115	6.8
URCO810RC	1/12 to 1/5	12.5	115	4.05

## URO SERIES UNIVERSAL RELAY OVERLOAD

For Refrigeration Systems With or Without Run Capacitors. Maintain a High Efficiency System or Save an Old System.

- Replaces Relay and Overload
- Works on “RSIR”, “CSIR”, “PSC” & “CSR” Compressors
- Locked Rotor Protection, Eliminates Start Winding Overheating
- Available in Popular Sizes, Ranging from 1/12 hp to 1/2 hp
- “Snap-On” Bracket for Easy Mounting
- Quick and Easy Installation
- Wiring Instructions on the Package
- Instructions on Adding a Start Capacitor And/Or Run Capacitor
- Wire Leads for Those Odd Installations, Wire Nuts Included



PART NO.	HP RATING	VOLTS
URO41	1/4 to 1/3	115
URO81	1/12 to 1/5	115

# Refrigeration Relays, Overloads and Hard Starts

## UPRO SERIES PUSH-ON RELAY

For Refrigeration Systems With or Without Run Capacitors. Maintain a High Efficiency System or Save an Old System.

- Replaces Relay and Overload
- Works on RSIR, CSIR, PSC & CSR Compressors
- Available in Popular Sizes, Ranging from 1/12 hp to 1/2 hp
- “Push-On” Relay Overload
- Quick Connect Push-On Terminals for Run And/Or Start Capacitor
- Wiring Instructions on the Package
- Instructions for Adding a Start Capacitor And/Or Run Capacitor



PART NO.	HP RATING	VOLTS
UPRO21	1/3 to 1/2	115
UPRO41	1/4 to 1/3	115
UPRO81	1/12 to 1/5	115

## URSC SERIES RELAY START CAPACITOR

For Refrigeration Systems With or Without Run Capacitors. Maintain a High Efficiency System or Save an Old System.

- Replaces Current-Type Relays
- Works on RSIR, CSIR, PSC & CSR Compressors
- Provides a Boost for Hard Start and Unbalanced Systems
- No Additional Wires Required

PART NO.	HP RATING	VOLTS
URSC10	1/20 to 1/2	115
URSC20	1/20 to 1/2	220



## RCO SERIES 3 'N 1 RELAY, OVERLOAD AND START CAPACITOR COMBINATION

For Refrigeration Systems Without Run Capacitors.

- Replaces Relay, Overload and Provides a Boost for Hard Start and Unbalanced Systems
- Prevents Low Voltage Starting Problems



PART NO	MOUNTING	START HP RATING	VOLTAGE (VAC)	CONTINUOUS RUNNING AMPS	TRIP IN CURRENT AFTER 6-16 SEC. (AMPS)
RCO210	Quick Connect	1/2	115	13.3	12
RCO410	Quick Connect	1/4 to 1/3	115	6.8	22
RCO810	Quick Connect	1/12 to 1/5	115	4.05	12
RCO220	Quick Connect	1/2	230	7.5	22
RCO420	Quick Connect	1/4 to 1/3	230	4.05	12
RCO620	Quick Connect	1/6 to 1/5	230	1.66	6
RCO820	Quick Connect	1/12 to 1/8	230	1.66	6



# Refrigeration Relays, Overloads and Hard Starts

## RO & PRO SERIES RELAY AND OVERLOAD COMBINATIONS

For Refrigeration Systems Without Run Capacitors.

- RO Series Features “Snap-On” Bracket
- PRO Series Installs on “Pin-Type” Terminal
- Locked Rotor Protection Eliminates Start Winding Overheating
- Can be Used With and Without Start Capacitor



PART NO	MOUNTING	HP RATING	VOLTAGE (VAC)	FULL LOAD AMPS	TRIP IN CURRENT AFTER 6-16 SEC. (AMPS)
R041	Quick Connect	1/4 to 1/3	115	6.8	22
R081	Quick Connect	1/12 to 1/5	115	4.05	12
PRO41	Push On	1/4 to 1/3	115	6.8	22
PRO81	Push On	1/12 to 1/5	115	4.05	12
R042	Quick Connect	1/4 to 1/5	230	4.05	12
R062	Quick Connect	1/6 to 1/5	230	1.66	6
R082	Quick Connect	1/12 to 1/8	230	1.66	6
PRO22	Push-On	1/2 to 2/3	230	7.5	22
PRO42	Push-On	1/4 to 1/3	230	4.05	12
PRO62	Push-On	1/6 to 1/5	230	1.66	6
PRO82	Push-On	1/12 to 1/8	230	1.66	6

## ICG & PO SERIES RELAYS

For Refrigeration Systems Without Run Capacitors.

- ICG Series Features a “Snap-On” Bracket
- PO Series Installs on Compressors with “Pin-Type” Terminals
- Fastest Cool Down Time of Any Solid State Relays
- Can be Used With or Without Start Capacitor

PART NO	MOUNTING	HP RATING	VOLTAGE (VAC)
ICG1	Quick Connect	1/12 to 1/2	115
ICG-220	Quick Connect	1/12 to 1/2	230
P0115	Push-On	1/12 to 1/2	115
P0230	Push-On	1/12 to 1/2	230



## SS410 SUPER START RELAY OVERLOAD COMBINATION

For Refrigeration Systems Without Run Capacitors.

- Equipped with an Electro-Mechanical Relay, Locked Rotor Protector and a 255 µF Start Capacitor
- Increases Torque to its Maximum Capacity

PART NO	MOUNTING	HP RATING	VOLTAGE (VAC)
SS410	Quick Connect	1/4 to 1/3	115



## IC SERIES IC100

For Refrigeration Systems With or Without Run Capacitors.

- 120 Volt PTC Relay Replaces Current Relays and Solid State Relays From 1/20 to 1/3 HP
- Can Be Used in Any Position
- Used on Over 10,000 Models



## IC102

For Refrigeration Systems With or Without Run Capacitors.

- 120 Volt PTC Relay Replaces Current Relays and Solid State Relays From 1/20 to 1/3 HP
- Can Be Used in Any Position
- Used on Over 10,000 Models



# Refrigeration Relays, Overloads and Hard Starts

## OL SERIES DIRECT REPLACEMENT OVERLOADS

- Direct Replacements for Numerous OEM's
- Use OL Series Overloads with IC Series, PO Series and UR115



PART NO.	RELAY	OVERLOAD	HORSEPOWER	VAC	# OF TERMINALS	COMPRESSOR CONNECTIONS	CAPATIBLE	REPLACES
IC100	*	----	1/12 to 1/3	120	2	2	YES	2165943, WR7X194
IC102	*	----	1/2 to 1/3	120	3	2	YES	5303007173, WR7X240
OL1	----	*	1/5 to 1/4	120/240	1	1	----	5303299560, 216100110
OL2	----	*	1/4 to 1/3+	120/240	1	1	----	5303270406, WR8X122
OL3	----	*	1/6 to 1/5	120/240	1	1	----	5303276514
OL4	----	*	1/4 to 1/3	120/240	1	1	----	5303206885, 2154945

\* IC100, IC102 replaces PON

## OLK1786 COMPRESSOR START DEVICE KIT

Relay and Overload Kit can Replace 8201786, also used on Kenmore®, Whirlpool®, KitchenAid® and Roper® Refrigerators, Plus Other Brands Manufactured by Whirlpool®.



## OLK7535 OVERLOAD RELAY KIT SXS

OLK Series Relay & Overload Kit Can Be Used as a Direct Replacement on Several Whirlpool®, Roper®, Estate®, KitchenAid®, Maytag® and Magic Chef® Models.

- Can Be Used With or Without a Run Capacitor
- Energy Saving Plastic Construction
- Domestic Refrigerators and Freezers
- 120 VAC Applications
- Replaces Over 2,300 Models



## OLK7913 OVERLOAD RELAY

- Direct Replacement for 2,400 Whirlpool® Models
- Universal Replacement on Over 10,000 Models, as a Universal Relay Overload Kit
- Can Be Used With or Without a Capacitor
- 120 VAC



# Refrigeration Relays, Overloads and Hard Starts

## OV SERIES

### UNIVERSAL REPLACEMENT MOTOR PROTECTORS

- Built in Temperature Activated Disc Opens and Closes the Motor Overload Protector's Contacts
- Excessive Heat Generated by the Compressor, Motor or Crankcase Heater will Open the Contacts to Help Protect the Equipment from Serious Damage or Burnout
- UL and CSA Approved



## OVKIT

### OVERLOAD KIT

- Contains One of Each Overload (10 Total)

PART NO.	LOCKED ROTOR AMPS												GEM® NO.	MARS® NO.	
			1/20	1/1	1/10	1/8	1/6	1/5	1/4	1/3	1/2	3/4			
OV32	12.0	13.5	•	•										MP359	35004
OV34	14.0	15.5		•	•	•	•	•						MP358	35007
OV36	16.0	18.0			•	•	•	•						MP357	35009
OV38	18.5	22.0			•	•	•	•	•					MP354	35010
OV40	22.5	26.5					•	•	•					MP360	35011
OV42	27.0	31.0					•	•	•					MP355	35012
OV44	31.5	35.5								•	•			MP361	35017
OV46	36.0	40.0								•	•	•		MP352	35018
OV48	40.5	44.5								•	•	•		MP351	35019
OV50	45.0	49.0									•	•		MP362	35020

PART NO.	LOCKED ROTOR AMPS													GEM® NO.	MARS® NO.	
			1/10	1/8	1/6	1/5	1/4	1/4+	1/3	1/3+	1/2	1/2+	3/4			1
OV32	12.0	13.5	•	•	•	•	•	•	•						MP359	35004
OV34	14.0	15.5	•	•	•	•	•	•	•						MP358	35007
OV36	16.0	18.0				•	•	•	•	•					MP357	35009
OV38	18.5	22.0				•	•	•	•	•	•				MP354	35010
OV40	22.5	26.5						•	•	•	•	•	•		MP360	35011
OV42	27.0	31.0						•	•	•	•	•	•		MP355	35012
OV44	31.5	35.5										•	•	•	MP361	35017
OV46	36.0	40.0										•	•	•	MP352	35018
OV48	40.5	44.5										•	•	•	MP351	35019
OV50	45.0	49.0											•		MP362	35020

This application guide is offered as a guide only when no other information is available. The application will vary with compressor manufacturer's systems and condenser applications (static, fan, and water cooled, etc.) Other factors include refrigerant, motor type, and efficiency.

# Capillary Tubing

## BC SERIES BULLET® RESTRICTO CAPILLARY TUBING

Fits ANY Domestic and Commercial Refrigerator, Freezer or Application. Air Conditioner from 1/8 hp to 5 hp.

- Precision Bore, Plus or Minus .001"
- Specification: ASTM B360
- Terminations: RC, RH, W, Y, G, O, B



### Standard Service Packs

OLD PART NO.	NEW PART NO.	LENGTH (FT.)	DESCRIPTION
	BC26X16	16	.026 ID X .071 OD
BC5	BC28X10	10	.028 ID X .071 OD
BC1	BC31X10	10	.031 ID X .081 OD
	BC36X12	12	.036 ID X .086 OD
BC2	BC40X12	12	.040 ID X .093 OD
	BC42X12	12	.042 ID X .093 OD
	BC44X12	12	.044 ID X .093 OD
	BC46X12	12	.046 ID X .093 OD
	BC49X11	11	.049 ID X .093 OD
	BC50X11	11	.050 ID X .093 OD
BC3	BC52X12	12	.052 ID X .093 OD
	BC54X11	11	.054 ID X .106 OD
	BC55X11	11	.055 ID X .112 OD
	BC59X10	10	.059 ID X .112 OD
BC4	BC64X12	12	.064 ID X .125 OD
	BC70X12	12	.070 ID X .125 OD
	BC75X9	9	.075 ID X .125 OD
	BC80X10	10	.080 ID X .145 OD
	BC85X9	9	.085 ID X .145 OD
	BC90X7	7	.090 ID X .145 OD

### 100 Foot Bulk Packs

OLD PART NO.	NEW PART NO.	LENGTH (FT.)	DESCRIPTION
	BC26X100	100	.026 ID X .071 OD
BC5-100	BC28X100	100	.028 ID X .071 OD
BC1-100	BC31X100	100	.031 ID X .081 OD
	BC36X100	100	.036 ID X .086 OD
BC2-100	BC40X100	100	.040 ID X .093 OD
	BC42X100	100	.042 ID X .093 OD
	BC44X100	100	.044 ID X .093 OD
	BC46X100	100	.046 ID X .093 OD
	BC49X100	100	.049 ID X .093 OD
	BC50X100	100	.050 ID X .093 OD
BC3-100	BC52X100	100	.052 ID X .093 OD
	BC54X100	100	.054 ID X .106 OD
	BC55X100	100	.055 ID X .112 OD
	BC59X100	100	.059 ID X .112 OD
BC4-100	BC64X100	100	.064 ID X .125 OD
	BC70X100	100	.070 ID X .125 OD
	BC75X100	100	.075 ID X .125 OD
	BC80X100	100	.080 ID X .145 OD
	BC85X100	100	.085 ID X .145 OD
	BC90X100	100	.090 ID X .145 OD

### Part Number Key

**BC46X12**

Bullet Capillary Tubing

Inner Diameter (in.)

Length (ft.)

REFRIGERATION

# Capillary Tubing

Conversion Chart ( 0.024 I.D. inches to 0.80 I.D. inches )

Part No.	BC5		BC1		BC2		BC3		BC4		BC7		BC8		BC9					
	BC26	BC28	BC31	BC36	BC40	BC42	BC44	BC46	BC49	BC50	BC52	BC54	BC55	BC59	BC64	BC70	BC75	BC80	BC85	BC90
Tube I.D.	0.026	0.028	0.031	0.036	0.040	0.042	0.044	0.046	0.049	0.050	0.052	0.054	0.055	0.059	0.064	0.070	0.075	0.080	0.085	0.090
0.024	1.430	2.160	3.890																	
0.025	1.120	1.640	3.040																	
0.026	1.000	1.520	2.580																	
0.027	0.810	1.200	2.070																	
0.028	0.660	1.000	1.710	3.950																
0.029	0.560	0.840	1.440	3.300																
0.030	0.460	0.68	1.180	2.680																
0.031	0.390	0.595	1.000	2.260																
0.032	0.325	0.500	0.850	1.930	3.610															
0.033		0.435	0.680	1.642	3.520															
0.034		0.340	0.615	1.388	2.588															
0.035		0.300	0.525	1.185	2.210	2.930	3.934													
0.036		0.250	0.378	1.000	1.840	2.416	3.250	4.240												
0.037				0.856	1.569	2.072	2.761	3.530												
0.038				0.738	1.335	1.742	2.329	2.974												
0.039				0.645	1.164	1.526	2.014	2.570	3.835											
0.040				0.551	1.000	1.306	1.741	2.242	3.275	3.749										
0.041				0.479	0.866	1.149	1.509	1.927	2.816	3.240										
0.042				0.416	0.760	1.000	1.302	1.681	2.417	2.740	3.535									
0.043				0.362	0.665	0.870	1.153	1.472	2.109	2.388	3.047									
0.044				0.311	0.583	0.768	1.000	1.277	1.820	2.063	2.606	3.470								
0.045				0.270	0.507	0.669	0.878	1.121	1.612	1.827	2.293	3.025								
0.046				0.236	0.446	0.595	0.783	1.000	1.410	1.600	2.021	2.640	2.985							
0.047				0.378	0.531	0.700	0.889	1.250	1.415	1.760	2.313	2.624	4.157							
0.048				0.345	0.468	0.617	0.788	1.114	1.254	1.566	2.040	2.305	3.653							
0.049				0.298	0.415	0.551	0.709	1.000	1.123	1.390	1.811	2.026	3.115							
0.050				0.257	0.375	0.484	0.625	0.891	1.000	1.156	1.613	1.809	2.843							
0.051					0.322	0.431	0.550	0.795	0.892	1.107	1.425	1.598	2.453							
0.052					0.287	0.385	0.495	0.720	0.807	1.000	1.280	1.435	2.215	3.907						
0.053						0.317	0.405	0.625	0.709	0.881	1.135	1.229	1.935	3.261						
0.054						0.290	0.379	0.570	0.620	0.779	1.000	1.086	1.703	2.950						
0.055						0.254	0.335	0.500	0.559	0.699	0.900	1.000	1.517	2.586						
0.056								0.443	0.500	0.634	0.806	0.924	1.379	2.330						
0.057								0.393	0.445	0.564	0.720	0.809	1.236	2.084						
0.058								0.343	0.395	0.499	0.650	0.729	1.103	1.867						
0.059								0.350	0.350	0.446	0.580	0.647	1.000	1.675	2.862					
0.060								0.290	0.308	0.394	0.513	0.573	0.893	1.463	2.475					
0.061									0.270	0.347	0.450	0.514	0.802	1.310	2.210					
0.062										0.310	0.411	0.465	0.723	1.189	2.000	3.201				
0.063											0.373	0.423	0.659	1.093	1.817	2.872				
0.064												0.336	0.383	0.604	1.000	1.646	2.575			
0.065													0.353	0.560	0.910	1.522	2.389			
0.066													0.326	0.519	0.864	1.412	2.198			
0.067														0.468	0.779	1.270	1.994			
0.068														0.424	0.713	1.166	1.809			
0.069														0.388	0.660	1.086	1.687			
0.070														0.351	0.603	1.000	1.544	2.303	2.400	3.190
0.071															0.547	0.918	1.397	2.071	2.240	2.960
0.072															0.503	0.849	1.287	1.910	2.100	2.775
0.073															0.464	0.789	1.189	1.766	1.970	2.600
0.074															0.419	0.737	1.104	1.624	1.850	2.450
0.075															0.381	0.692	1.000	1.470	1.750	2.318
0.076															0.344	0.592	0.912	1.335	1.650	2.140
0.077															0.316	0.548	0.838	1.235	1.550	1.980
0.078															0.293	0.510	0.775	1.151	1.460	1.840
0.079															0.476	0.721	1.069	1.389	1.720	
0.080															0.448	0.680	1.000	1.320	1.610	

For best results use conversion factors in the shaded areas.

# Capillary Tubing

**Conversion Chart Continued ( 0.81 to 0.100 inches )**

Part No.	BC5		BC1		BC2				BC3					BC4						
	BC26	BC28	BC31	BC36	BC40	BC42	BC44	BC46	BC49	BC50	BC52	BC54	BC55	BC59	BC64	BC70	BC75	BC80	BC85	BC90
<b>Tube I.D.</b>	0.026	0.028	0.031	0.036	0.040	0.042	0.044	0.046	0.049	0.050	0.052	0.054	0.055	0.059	0.064	0.070	0.075	0.080	0.085	0.090
0.081																	0.632	0.943	1.240	1.545
0.082																	0.596	0.885	1.170	1.484
0.083																	0.564	0.840	1.109	1.420
0.084																	0.536	0.795	1.052	1.370
0.085																	0.510	0.760	1.000	1.320
0.086																	0.482	0.715	0.945	1.234
0.087																	0.457	0.676	0.895	1.172
0.088																	0.434	0.655	0.850	1.110
0.089																	0.414	0.618	0.810	1.054
0.090																	0.395	0.585	0.775	1.000
0.091																	0.372	0.554	0.730	0.944
0.092																	0.351	0.526	0.690	0.892
0.093																	0.333	0.504	0.655	0.845
0.094																	0.316	0.480	0.620	0.804
0.095																		0.460	0.590	0.760
0.096																		0.435	0.565	0.731
0.097																		0.415	0.540	0.696
0.098																		0.395	0.510	0.659
0.099																		0.369	0.498	0.640
0.100																		0.362	0.477	0.616

For best results use conversion factors in the shaded areas.

**Metric Conversion Chart ( 0.600 MM to 2.50 MM )**

Part No.	BC5		BC1		BC2				BC3					BC4															
	BC26	BC28	BC31	BC36	BC40	BC42	BC44	BC46	BC49	BC50	BC52	BC54	BC55	BC59	BC64	BC70	BC75	BC80	BC85	BC90									
<b>Tube I.D.</b>	0.026	0.028	0.031	0.036	0.040	0.042	0.044	0.046	0.049	0.050	0.052	0.054	0.055	0.059	0.064	0.070	0.075	0.080	0.085	0.090									
0.600 mm	1.450	2.200	3.990																										
0.610 mm	1.425	2.155	3.840																										
0.635 mm	1.120	1.640	3.040																										
0.660 mm	1.000	1.520	2.580																										
0.700 mm	0.680	1.082	1.860																										
0.780 mm	0.410	0.623	1.046	2.630																									
0.800 mm	0.364	0.545	0.951	2.110																									
0.900 mm		0.276	0.487	1.085	2.100	2.653	3.540																						
0.910 mm		0.265	0.455	1.029	2.000	2.600	3.337	4.261																					
1.000 mm				0.593	1.076	1.408	1.753	2.239	3.597																				
1.060 mm				0.435	0.815	1.036	1.410	1.801	2.497	2.840	3.651																		
1.100 mm				0.332	0.620	0.817	1.101	1.405	2.005	2.273	2.893	3.831																	
1.200 mm					0.359	0.496	0.675	0.862	1.215	1.372	1.707	2.239	2.538	4.019															
1.240 mm					0.304	0.421	0.560	0.715	1.018	1.145	1.420	1.840	2.062	3.199															
1.270 mm					0.257	0.375	0.484	0.618	0.891	1.000	1.156	1.613	1.809	2.843															
1.300 mm						0.300	0.419	0.535	0.765	0.875	1.086	1.398	1.567	2.404	4.299														
1.370 mm							0.300	0.383	0.580	0.625	0.785	1.005	1.094	1.716	2.955														
1.400 mm									0.495	0.546	0.689	0.889	0.990	1.499	2.551														
1.500 mm									0.330	0.343	0.439	0.570	0.638	0.990	1.662	2.836													
1.600 mm										0.282	0.375	0.424	0.660	1.094	1.820	2.875													
1.630 mm													0.374	0.593	0.985	1.623	2.568												
1.700 mm														0.288	0.472	0.785	1.279	2.005											
1.800 mm															0.554	0.928	1.415	2.105	2.251	3.000									
1.900 mm																0.387	0.700	1.019	1.529	1.770	2.350								
2.000 mm																	0.485	0.734	1.090	1.400	1.750								
2.100 mm																			0.574	0.855	1.120	1.435							
2.160 mm																				0.508	0.755	0.987	1.296						
2.200 mm																					0.466	0.690	0.915	1.198					
2.300 mm																						0.382	0.585	0.760	0.986				
2.400 mm																							0.309	0.470	0.605	0.784			
2.500 mm																									0.385	0.505	0.649		
2.540 mm																									0.362	0.477	0.616		

All metric sizes are in millimeters, all replacement sizes are in inches.

Rev.04192013

For best results use conversion factors in the shaded areas.

# Condensate Drain Pans



## COMMERCIAL CONDENSATE EVAPORATOR PANS

For Condensate Applications where no Drain is Available. Choose from these Popular, Large Capacity Sized Pans. SUPCO® Commercial Refrigeration Condensate Evaporator Pans are Made from Top Quality Materials for Durable, Long Life.

- CP804-HD 20 Gauge Stainless Steel. All Others use 22 Gauge.
- Corrosion Resistant Stainless Steel Construction
- Positive Evaporation
- High Limit Safety and Float Switch Operation
- Available in 120 Volts, 208 Volts and 240 Volts
- 50/60 Hz
- Warranty - One Year from Date of Installation
- Space Saving
- Used in Supermarket Refrigeration Systems and Elevators
- These Pans are used for Water Dissipation ONLY! Do Not Operate Dry
- Clean the Pan and Check the Float Every 30 Days for Optimum Performance and Operation

### Specifications

PART NO.	CAPACITY	VOLTS	WATTS	AMPS	DIMENSIONS L x W x H	DISSIPATION RATE	
						PER DAY	REPLACES
CP801	1 3/4 qt	120	400	3.3	10" x 7" x 2 1/2"	3 Gallon	DM04T1S
CP802	2 1/2 qt	120	800	6.6	13" x 7" x 2 1/2"	6 Gallon	DM08S1S
CP802-240	2 1/2 qt	240	800	3.3	13" x 7" x 2 1/2"	6 Gallon	
CP804	4 1/2 qt	120	1000	8.34	13" x 7" x 4"	10 Gallon	DM10MS1
CP804-240	4 1/2 qt	240	1000	4.17	13" x 7" x 4"	6 Gallon	
CP804HD	7 1/2 qt	120	1000	8.34	13" x 10" x 4"	6 Gallon	DM10W1D
CP804HD-240	7 1/2 qt	240	1000	4.17	13" x 10" x 4"	6 Gallon	
CP807	7 1/2 qt	120	1000	8.34	13" x 10" x 4"	10 Gallon	DM10W1S
CP807-240	7 1/2 qt	240	1000	4.8	13" x 10" x 4"	10 Gallon	DM10W3
CP815	15 qt	120	1440	12	21" x 13" x 4"	12 Gallon	DM15WW1D
CP815-240	15 qt	240	1500	6.28	21" x 13" x 4"	12 Gallon	DM15WW3
CP816	7 qt	120	500	4.17	13" x 10" x 4"	4.5 Gallon	DM05W1D
CP817	7 qt	208	1000	4.81	13" x 10" x 4"	8 Gallon	DM10W2D
CP818	7 qt	208	1000	4.81	13" x 10" x 4"	8 Gallon	DM10W2S
CP819	7 qt	120	1500	12.5	13" x 10" x 4"	12 Gallon	DM15W1D
CP820	7 qt	208	1500	7.21	13" x 10" x 4"	12 Gallon	DM15W2D
CP821	15 qt	208	1500	7.21	21" x 13" x 4"	12 Gallon	DM15WW2D

### Replacement Parts

PART NO.	FLOAT PART NO.	HEATER PART NO.	MICROSWITCH PART NO.	THERMOSTAT PART NO.
CP801	CPFLOAT	CPH801	CPS800	CPT800
CP802	CPFLOAT	CPH802	CPS800	CPT800
CP802-240	CPFLOAT	CPH802-240	CPS800	CPT800
CP804	CPFLOAT4	CPH8047	CPS800	CPT800
CP804-240	CPFLOAT4	CPH804-240	CPS800	CPT800
CP804HD	CPFLOAT4	CPH804HD	CPS800	CPT800
CP804HD-240	CPFLOAT4	CPH804HD-240	CPS800	CPT800
CP807	CPFLOAT4	CPH8047	CPS800	CPT800
CP807-240	CPFLOAT4	CPH807-240	CPS800	CPT800
CP815	CPFLOAT4	CPH815	CPS800	CPT800
CP815-240	CPFLOAT4	CPH815-240	CPS800	CPT800
CP816	CPFLOAT4	CPH816	CPS800	CPT800
CP817	CPFLOAT4	CPH817	CPS800	CPT800
CP818	CPFLOAT4	CPH818	CPS800	CPT800
CP819	CPFLOAT4	CPH819	CPS800	CPT800
CP820	CPFLOAT4	CPH820	CPS800	CPT800
CP821	CPFLOAT4	CPH821	CPS800	CPT800



REFRIGERATION

# Condensate Drain Pans



REFRIGERATION

## 70 CONDENSATE DRAIN

Authorized, Cost Effective Replacement Drain for Most Commercial Refrigerators and Freezers.

- PTC Control Supplies Only Required Heat to Evaporate Water
- Thermostat and Float NOT Required
- Self Regulating
- Uniform Heating
- NSF, UL and CSA (where noted) Approved
- Die Cast Aluminum Eliminates Corrosion
- Removable Cord Set for Easy Cleaning
- Fast Evaporation Rate (6 oz./hour)
- Low Profile (3") to Fit Tight Spaces

PART NO.	CAPACITY	VOLTS	WATTS	AMPS	EVAPORATE	
					RATE	SIZE
70	50 oz	115	300	2.61	4.5 oz/hr	12 1/4" x 4 3/4" x 3"
70-220	50 oz	220	300	1.36	6 oz/hr	12 1/4" x 4 3/4" x 3"
70CSA*	50 oz	115	190	1.65	6 oz/hr	12 1/4" x 4 3/4" x 3"
70CSA220*	50 oz	220	190	.86	6 oz/hr	12 1/4" x 4 3/4" x 3"

\*CSA indicates CSA approval. \*\* All are 50/60 HZ



## 30-OS, 31 & 75 CONDENSATE DRAINS

- Standard Cast Aluminum Condensate Drains Complete with Long Life Heating Element and Mounting Legs
- Designed for Continuous Use

PART NO.	CAPACITY	VOLTS	WATTS	AMPS	EVAPORATE	
					RATE	SIZE
30-OS*	38 oz	120	160	1.33	8 oz/hr	10" x 4" x 2 7/8"
30-220-OS*	38 oz	220	160	.73	8 oz/hr	10" x 4" x 2 7/8"
31	50 oz	120	160	1.33	6 oz/hr	10" x 4 1/2" x 3 3/8"
31-220	50 oz	220	160	.73	6 oz/hr	10" x 4 1/2" x 3 3/8"
75	75 oz	120	320	2.67	14 oz/hr	10" x 9" x 2 3/4"
75-220	75 oz	220	320	1.45	14 oz/hr	10" x 9" x 2 3/4"

\* Indicates NSF listing \*\* All are 50/60 HZ



### Wall Mount Brackets

PART NO.	CONDENSATE DRAIN NO.
30WM	30-OS Series, 75 Series
31WM	31 Series, 70 Series

# Condensate Pumps

High Quality and Dependable Pump that is Designed to Remove Condensate Water from AC Systems, Heating Systems, Ice Machines, Drinking Fountains and Coolers.

## CP1A SERIES

- 22 Feet of Standard Lift @ 10 GPH
- Independent N.C. Safety Switch & Motor Shuts Down AC System to Prevent Condensate Overflow
- Three 1/4" Quick Connect Terminals are Provided for Easy Connection
- Independent N.O. Audible Alarm Switch Rated @ 80dB
- Specially Designed Leak Free Motor & Safety Float
- 3/8" Rubber Ball Check Valve
- Vibration Absorbing Feet
- Metal Side Mount Tabs, 11-1/2" on Center Between Tabs
- 3 Inlet Holes
- Includes 6' Power Cord



## Specifications

	CP1A	CP1A-230V
hp	1/10hp	1/10hp
Voltage	120 VAC	230 VAC
Watts	80W	75W
Amps	1.45A	0.72A
Hertz	60Hz	60Hz
Motor Overload Protector	Yes	Yes
Whole Pump Height (In.)	7 1/4"	7 1/4"
Whole Pump Length (In.)	11 1/4"	11 1/4"
Whole Pump Width (In.)	5"	5"
Tank Size	1/2 Gal.	1/2 Gal.
Discharge	3/8" Barb	3/8" Barb
Tank Material	ABS	ABS
Impeller Material	Glassfiber filled PP	Glassfiber filled PP
Float Material	Polypropylene	Polypropylene
Shaft Material	S.S.304	S.S.304
Max. Temp. (°F)	110	110
Alarm	80 dB	80 dB
Auto Off with Dry Contacts	Yes	Yes
Float Activated	Yes	Yes

## Sequence of Operation

1. Pump Motor is Activated When More Than 2 1/4" of Water Collects in Tank
2. Pump Motor is Off when Less Than 1 1/4" of Water Collects in Tank
3. Pump Alarm on Safety Switch Opens When More Than 2 3/4" of Water Collects in Tank
4. Each Pump Cycle Drives 1/4 Gallon of Water Out of the Tank

## Flow Rate Capacity

Lift Feet	1	5	10	15	20	22	24
GPH	99	87	69	48	20	10	0

## JV1 JONES VALVE CONDENSATE DRAIN BLOW OUT VALVE

- Attaches to a CO2 or Nitrogen Tank
- Durable, Schedule 40 PVC Material
- Condensate Line Size: 3/4"
- Hose Connection Size: 1/4" Male Flare (with Schrader)
- U.S. Patent No. 8,375,977
- 1 Year Warranty
- 6 Pack Counter Display



Be prepared for imminent changes to ICC International Mechanical Code

307.2.5 cleanouts. Condensate drains shall be provided with a means to allow cleaning of the drain and clearing of blockages without having to cut or disassemble the piping.

## Defrost Thermostats

### SL SERIES

Exact Replacement, Commercial Refrigeration Thermostats

#### SL5708

- Surface Mount
- 2-wire Heater Limit
- SPST
- Resistive Amps: 25
- Volts AC: 120/240

PART NO.	OPEN (°F)	CLOSE (°F)	MOUNT	REPLACES
SL5708	75	40	Surface	Bohn®, Larkin®, Chandler®, Climate Control® 5708L & 4752C



#### SL5709

- Surface Mount
- 3-wire Fan and Defrost Terminator 55°F-35°F Range
- SPDT
- Resistive Amps: 25
- Volts AC: 120/240

PART NO.	OPEN (°F)	CLOSE (°F)	MOUNT	REPLACES
SL5709	55	35	Surface	Bohn®, Larkin®, Chandler®, Climate Control® 5709L & 4751C



#### SL79002

- Tube Mount (5/8")
- 3-wire Defrost Control
- SPDT
- Resistive Amps: 25
- Volts AC: 120/240

PART NO.	OPEN (°F)	CLOSE (°F)	MOUNT	REPLACES
SL79002	55	35	Tube	Russell® 103079002



#### SL79005

- Surface Mount
- 3-wire Defrost Control
- SPDT
- Resistive Amps: 25
- Volts AC: 120/240

PART NO.	OPEN (°F)	CLOSE (°F)	MOUNT	REPLACES
SL79005	65	30	Surface	Russell® 103079005



#### SL25581

- Tube Mount
- 2 Wire
- Open: 45°F (7.4°C)  
Close: 18°F (-7.8°C)
- Can Be Used on Whirlpool®, Admiral®, Amana®, Crosley®, Estate®, Jenn-Aire®, Kenmore®, Kitchen-Aide®, Magic Chef®, Maytag® and Roper®



### ML SERIES

- Metal Case with Waterproof Epoxy Potting
- Heavy Duty Rating 10 Amps @ 120 Volts / 5 Amps @ 240 Volts
- Residential and Commercial Applications
- Switching is SPST
- Up To 1200 Watts

PART NO.	OPEN °F	CLOSE °F	DIFF. °F	MARS®	UNILINE®
24" LEADS	°F	°F	°F		
ML37	37	47	10	...	...
ML45	45	25	20	33008	31-00117001
ML50	50	30	20	33009	31-00217003
ML55	55	35	20	33010	31-00317005
ML60	60	40	20	33011	31-00417007
ML70	70	50	20	33012	31-00517009
ML80	80	30	50	33020	31-00617011
ML90	90	35	55	33021	31-00717013



# Defrost Thermostats

## SLT SERIES

- Metal Case with Waterproof Epoxy Potting
- Heavy Duty Rating 10 Amps @ 120 Volts / 5 Amps @ 240 Volts
- Residential and Commercial Applications
- Switching is SPST
- Rated Up To 1200 Watts
- Tube Mounting Clip Attached to Thermostat



PART NO.	OPEN °F	CLOSE °F	DIFF. °F
SLT45	22	45	23
SLT50	10	50	40
SLT55	25	55	30
SLT60	30	60	30

## MOUNTING CLIPS

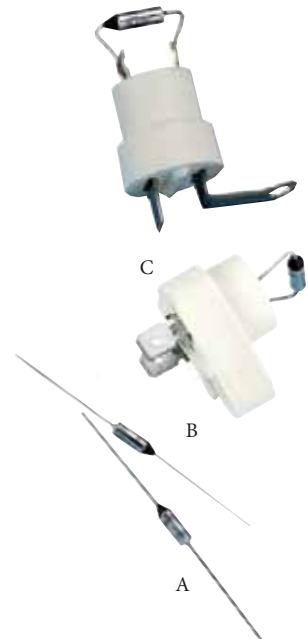
PART NO.	STYLE
SL243	Surface / Flush Mounting Clip
SL245	Push In Mounting Clip
SL247	5/16" or 3/8" Around Tube Clip
SL249	Side Push on Tube Clip



## THERMAL CUT OFFS

PART NO.	PART NO.	OPEN	OPEN	STYLE	PART NO.	PART NO.	OPEN	OPEN	STYLE
15 AMP	25 AMP	TEMP.	TEMP.		15 AMP	25 Amp	TEMP.	TEMP.	
SERIES 1	SERIES 2	°C	°F		SERIES 1	SERIES 2	°C	°F	
	STC8170	77	170	A	STC4358		184	363	A
STC4183		84	183	A	STC4438		226	438	A
STC4199		93	199	A	STC4468	STC8468	242	468	A
STC4228		109	228	A	STC5257		125	257	B
	STC8242	117	242	A		STC85283	139	283	B
STC4257	STC8257	125	257	A	STC5300		149	300	B
STC4283	STC8283	139	283	A	STC5333		167	333	B
STC4300		149	300	A	STC5377		192	377	B
STC4333		167	333	A	STC6257	STC86257	125	257	C
						STC86283	139	283	C
					STC6300		149	300	C
					STC6333		167	333	C
					STC6377	STC86377	192	377	C

Series 1 Maximum Wattage 1800W @ 120V/2400W @ 240  
 Series 2 Maximum Wattage 1800W @ 120V/6000W @ 240



PART NO.	TERMINALS	°C	°F	STYLE
STF4170	QC. 1/4"	77	170	36T
STF4183	QC. 1/4"	84	183	36T
STF4230	QC. 1/4"	110	230	36T

Maximum Wattage 1800W @ 120V/2400W @ 240

PART NO.	TERMINALS	°C	°F	STYLE
STF4249B	QC. 3/16"	121	249	36T
STF4291B	QC. 3/16"	144	291	36T
STF4305B	QC. 3/16"	152	305	36T



## 36T Electrical Ratings

VOLTS (VAC)	Resistive (Non-Inductive)	Motor Rating (Inductive)		Pilot Duty
		Full Load	Locked Rotor	
120	15A	3A	12A	125 VA
240	10A	1.5A	6A	125 VA

350°F Max Ambient Temperature

## Valves & Fittings

### BPV SERIES BULLET<sup>®</sup> PIERCING VALVES

The ONLY Valve with a Permanent Type, Patented Gasket Application!

- Patented Valve Gasket Application Provides 50 Times More Sealing Area than Competitive "O" Ring Types
- A Sealing Force of Over 180 Inch lbs., Torque Tested with 500 lbs., Pressure Tested at 250°F
- Precision Piercing Needle is Engineered for Concentricity and Hardness to Insure Perfect Seating Every Time
- Nonpositional Mounting - No Adapter Valve Required
- Requires Only a 2" Clearance Area for Installation and Operation
- Hex Key Wrench Included - No Additional Tools Required
- Corrosion Resistant Plated

PART NO.	O.D. TUBING SIZE	PACKAGING
BPV31*	1/4", 5/16", 3/8"	12/Box
BPV31D*	1/4", 5/16", 3/8"	48/Box
BPV21*	1/2", 5/8"	8/Box
BPV36	3/16"	12/Box
BPV14	1/4"	12/Box
BPV56	5/16"	12/Box
BPV38	3/8"	12/Box
BPV12	1/2"	8/Box
BPV58	5/8"	8/Box
BPV34	3/4"	1/Box
BPV78	7/8"	1/Box

\*NOTE: BPV31 and BPV21 are furnished with adapter sleeves for indicated multiple use applications.



### A1 & A2 ADJUSTABLE LINE TAP VALVES

Signature Series of Clamp-On Line Tap Valves Provide Easy Access to System Refrigerant Without Having to Evacuate System.

- Patent Depressor Valve Action
- Mounts in Any Position
- Retracting Needle for Maximum Flow
- Designed for Permanent Use on System
- Hex Wrench and Adapter Sleeves Included

PART NO.	TUBE SIZE OD (IN.)
A1	1/4, 5/16, 3/8
A2	1/2, 5/8



### CA1 ACCESS CONTROL VALVE

Controls the Flow of All 1/4" SAE Male Flare Depressor Type Valves.

- Purging Port for Air Removal and Safety
- Steel Construction
- Use with Standard Charging Hose



## Valves & Fittings

### STV2LL

#### SELF-TAPPING WATER VALVE

- Self Piercing on Copper Tubing or 0.035" Wall Hard PVC
- Fits 3/8" O.D. Through 1 3/8" O.D. Tubing or Pipe
- Can be Installed on Pipe with Existing Hole
- Stainless Steel Piercing Needle
- Low Lead
- Complies with the SDWA Section 1417 (d)
- Molded Gasket has a Two Stage Seal on Both Tubing and Valve
- Threaded Bottom Bracket for Easy Installation
- Includes all Fittings for Copper and Plastic Tubing
- Maximum Water Temperature 180°F/82°C



PART NO.	FLOW RATE	OUTLET	PIERCING NEEDLE	APPLICATION	COMMENTS
STV2LL	1 GPM	1/4" Comp.	1/8" Dia. (Hollow)	Ice Maker Kits	Reversible lower bracket, Low Lead

### STV2DLL

#### CONVENTIONAL "DRILL" TYPE VALVE

- Must Pre-Drill 1/4" Hole in Pipe or Tubing
- Increased Water Flow from Standard Water Valve
- Fits Up to 1 3/8" O.D. Copper Tubing
- Fits 1/2" or 3/4" Galvanized Iron Water Pipe
- Flow Rate: 1 GPM
- Maximum Water Temperature 180°F/82°C
- Includes All Fittings for 1/4" O.D. Copper and Plastic Tubing
- Low Lead
- Complies with the SDWA Section 1417 (d)



### FTV12

#### SELF-TAPPING VALVES

- For Humidifiers, Oil Lines and Steam Systems
- Maximum Operating Pressure 500 PSI

PART NO.	BRANCH TAP FITTING	APPLICATION
FTV12	3/8" SAE Flare	1/2" Steel or Brass Pipe Approx. 7/8" O.D.

Not intended for gas applications.



## Valves & Fittings

### LINE SERVICE VALVES

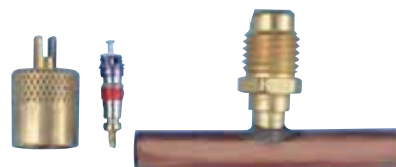
PART NO.	DESCRIPTION	PIPE THREAD
SF1010	1/8" copper tubing, wrench cap and core	—
SF2525	1/4" copper tubing, wrench cap and core	—
SF3600	1/8" ID hole, 3/16", 1/4", 5/16" steps, 1/8" MPT below hex wrench cap and core	—
SF3602	1/4" copper tubing, 3/16" & 1/8" copper bushings, wrench cap and core	1/8" m.



PART NO.	DESCRIPTION	PIPE THREAD
SF3603	3/16" copper tubing, wrench cap and core	1/8" m.
SF3604	1/4" copper tubing, wrench cap and core	1/8" m.
SF3605	5/16" copper tubing, wrench cap and core	—
SF3606	3/8" copper tubing, wrench cap and core	—
SF3608	1/8" copper tubing, wrench cap and core	1/8" m.

### SF5421 TEE FITTING SERVICE VALVE

Copper Tee with the Body Brazed on. Furnished Complete with Core and Wrench Cap. The 1/4" I.D. x 5/16" O.D. Will Service 1/4", 5/16", and 3/8" Tubing.



### SF5000 SERIES SADDLE VALVE COPPER TO COPPER

Completely Self Tapping. Steel Pin with Core Penetrates Line and is Locked Into Valve Body in One Operation, Simply by Tightening the Cap.

PART NO.	TUBING
SF5512	1/2" O.D.
SF5514	1/4" O.D.
SF5516	5/16" O.D.
SF5518	1 1/8" O.D.

PART NO.	TUBING
SF5534	3/4" O.D.
SF5538	3/8" O.D.
SF5558	5/8" O.D.
SF5578	7/8" O.D.



### REPLACEMENT GASKET

PART NO.	DESCRIPTION
SF5501	25 per pack



### SF3338 ACCESS VALVE

- Replaces A-1 F6290 (AV3-346)
- Standard 1/4" SAE Male Flare Connection
- Built in Valve Core and Brass Caps
- 3/16" OD or 1/4" & 3/8" Solder
- 100 Pack



### AVU24 ACCESS VALVE

- 1/8" MPT x 1/4" SAE



## Valves & Fittings

### SF8400 SERIES ECONOMY SERVICE VALVES

- Braze Only
- Includes SF1515 Core

PART NO.	I.D. HOLE	O.D.
SF8400	1/8"	3/16", 1/4", 5/16" Step
SF8408	1/8" Tube,	3/16", 1/4", 5/16" Step
SF8403	3/16" Tube,	1/4" Step
SF8404	1/4" Tube	
SF8405	5/16" Tube	
SF8406	3/8" Tube	

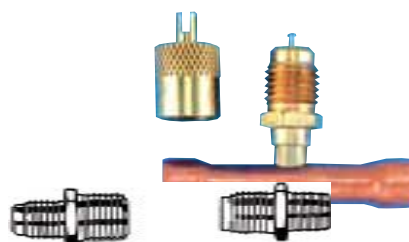


### SF8000 SERIES UNIVERSAL LINE VALVES

Available in Various Sizes. Copper Tee with the Body Brazed on. Two Styles - a Flared or Straight End Copper Piece. (See Chart Below for Exact Size)

PART NO.	LENGTH	I.D.	O.D.
SF8418	1 7/8"	1 1/8"	1 1/4"
SF8434	1 5/16"	3/4"	13/16"
SF8478	1 9/16"	7/8"	1"

PART NO.	LENGTH	I.D.	O.D.
SF8412	1 3/4"	1/2"	9/16"
SF8414	2 9/32"	1/4"	5/16"
SF8416	2"	5/16"	3/8"
SF8438	2"	3/8"	1/2"
SF8458	2"	5/8"	1 1/16"



### SF1818 AND SF1414 BRASS BODIES

- Both Bodies Complete with Neoprene Seal, Core and Cap
- Each is a Quarter Male Flare Above the Hex



SF1818 (1/8" NPT-DRYSEAL)      SF1414 (1/4" MPT-DRYSEAL)



### VALVE REPLACEMENT PARTS

PART NO.	DESCRIPTION
SF2235	Heavy Duty Hex Brass Cap with Dual Neoprene or Metal Seal
SF2245	Heavy Duty Round Brass Cap with Neoprene Seal
SF2250	Heavy Duty Round Brass Cap with Handy Core Wrench Top and Neoprene Seal
SF4450	Valve Core with Neoprene Seal Compatible with Most Refrigerants (Replaces SF1515)
SF5161	5/16" OD Neoprene Hose Gasket for Charging Hoses



### ADAPTERS/COUPLERS

Quick Valve Depressors Complete with Leakproof Neoprene Seal and Depressor Tips. Use to make Connection between Equipment with Unlike Threads. Made of CDA 360 Brass. Available in Straight and 90° Configuration.

PART NO.	DESCRIPTION
SF2010	1/4" female flare swivel x 1/4" male flare access, 90° configuration. Depressor tip and seal, no valve core.
SF2012	1/4" female flare swivel x 1/2" Acme male, depressor tip and seal
SF2020	1/4" female flare hex x 1/2" Acme male
SF2028	1/4" male flare x 1/2" Acme female swivel, depressor tip seal



### SF2035 HOSE GAS RETAINING COUPLER

- 1/4" Female Flare Retainer Sure-Seal x 1/4" Male Flare

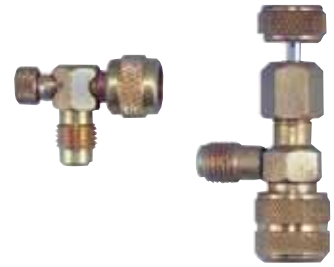


## Valves & Fittings

### SF2060 & SF5050 THUMBSCREW CORE DEPRESSORS

For Use on a 1/4" Male Flare to Allow the Core to be Opened to the Degree of Flow Desired. Solid Brass Construction. Compact Design Makes it Ideal in Close Quarters.

PART NO.	DESCRIPTION
SF2060	For 1/4" Male Flares
SF5050	For 1/4" Male Flares. Made Small for Use in Close Quarters



### SF2070 HOSE GAS RETAINER AND CORE DEPRESSOR TOOL

This Tool is Attached to a Charging Hose, then it is Coupled to an Access Fitting. Thumb Screw the Depressor Tip Down to Depress the Core and Allow Gas to Flow Through the Hose. Thumb Screw Back to Allow the Core to Shut Off. The Depressor Tip Rod will Back Seat in a Teflon Gasket to Retain the Gas in the Hose. There will be no Loss of the Gas in the Hose When you Disconnect from the Access Fitting. Replaces Gasket SF1090.



### SF2090 HOSE GAS RETAINING COUPLER

- 90° 1/4" Female Flare Retainer x 1/4" Male Flare



### SF2595 & SF2597 GAUGE ADAPTER

**SF2595** A 1 1/4" Piece of 1/4" Copper Tubing, Double Flared on One End with a 1/4" Female Flare Nut and a Depressor Tip. The End of the Copper Tube Opposite the Female Flare has been Swagged to Allow 1/4" Copper Tube to Enter for Brazing.

**SF2597** A 1 1/4" Piece of 1/4" Copper Tubing, Double Flared on One End with a 1/4" Female Flare and a Depressor Tip. The Other End has a 1/4" Male Flare that has been Brazed on. A Core May be Inserted in the 1/4" Male Flare, but it is not Provided.



### SF5014 GAUGE ADAPTER

- 1/4" Male Flare to 3/16" Fittings. Contains Depressor Pin.



### SF8725 CONNECTOR

The SF8725 has a Gasket in the 1/4" Hex Nut. The Valve Body is Stationary. When Threads of Existing System Fittings are Stripped and a New Core won't go in, use this. It has a Core and no Depressor Tip.



### TEE CONNECTORS

PART NO.	DESCRIPTION
SF9601	1/4" M. Flare x 1/4" Flare Nut with Depressor Tip x 1/4" M. Flare on the Branch with One Valve Core
SF9602	1/4" M. Flare with Valve Core x 1/4" M. Flare x 1/4" F. Flare Nut with Depressor Tip on the Branch
SF9603	All Brass Connector Tee. 1/4" M. Flare with Valve Core and Cap x 1/4" M. Flare x 1/4" F. Flare Nut with Depressor Tip on the Branch



## Valves & Fittings

### SF9600 SERIES 1/4" FLARE FORGED ACCESS TEES

- Forged Brass Tee
- All 1/4" Flares are Threaded for Valve Cores



PART NO.	SIZE	MPT END I.D.
SF9614	1/4" m. flare x 1/4" MPT x 1/4" m. flare access on branch, one cap	5/16" for brazing a copper tube and one valve core
SF9616	1/4" m. flare x 1/8" MPT x 1/4" m. flare access on branch, one cap and	1/4" for brazing a copper tube valve core
SF9620	1/4" m. flare x 1/4" m. flare x 1/8" MPT on branch, one cap and valve core	1/4" for brazing a copper tube

### SF9644 CONNECTOR

2 1/4" Male Flares, One with Core and Cap, in a "U" Shape. At the Side is a 1/4" Female Depressor Tip and Opposite that is an Additional 1/4" Male Flare.



### GASKET "O" RINGS

PART NO.	ID SIZE	DESCRIPTION
SF0099	5/32"	Used for SF5050 Valve
SF0101	1/4"	-
SF0111	5/16"	Black Rubber (Used for SF3900)

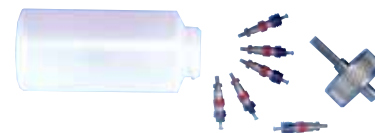
PART NO.	ID SIZE	DESCRIPTION
SF1060	3/16"	Used in Brass Caps
SF1090	5/16"	Black Rubber (Used for SF2070)
SF5501	1/4"	White Teflon (Used for SF5500 Series)



## Valve Tools

### SF3800 CHASER

- Two Tools, a Core Wrench and Thread Chaser, Complete with a Core Carrying Case and Six Cores
- Length With Core Wrench Lid 3 1/2"



### SF3813 VALVE CORE REMOVER/CONTAINER

- Heavy-Duty, All Brass
- Includes 3 Valve Cores
- Length is 3"



### CORE REMOVAL TOOLS

PART NO.	DESCRIPTION
SF3900	Designed for Removing and Replacing a "Schrader" Type Core, Without Losing the Charge. All Brass Construction.
SF3910	Same as Above with an Additional Side Port (1/4" Male Flare) with Core.

Not Compatible with R-410A



### CORE REMOVAL TOOLS (WITH BALL VALVE)

PART NO.	DESCRIPTION
SF3920	Removes a Valve Core from a 1/4" Male Flare Access Fitting Without Loss of Refrigerant. Because it has a Ball Valve Inside Rather than a Stem-type Valve, the Tool Can be Closed with Just a Quarter Turn.
SF3930	Same as Above with an Additional Port
SF5555	CRT Repair Kit (O-Rings)

Not Compatible with R-410A



## Valve Tools

### SF3970 INTERNAL TEMPERATURE READING TOOL

This Two-Piece Tool Provides a Better Way of Obtaining a Temperature Reading Inside the System.

- Measures -58°F to 302°F
- Allows You to Insert the Digital Thermometer through an Access Fitting, Adjust for Superheat while you're Inside.
- Complete with Core Extractor Tool and Digital Thermometer
- Instructions Included
- Replaces SF3940 and SF3960
- Not Compatible with R-410A



### SF4311 "FASTAP" TUBE PIERCING PLIERS

Fast Refrigerant Recovery with Pliers that Clamp on and Pierce Tube.

- Pliers Work on Copper Tubing Sizes Ranging from 1/4" to 7/8" OD
- Simple to Use and Light Weight
- Piercing Tip is Self-Sharpening, but Easily Replaceable



SF4314  
Tube Piercing  
Pliers Replacement Tip



## Driers

### SUD8358 - MAGNA-CLEAN®

- 100% XH-9 Beaded Desiccant, Compatible with All Refrigerants and Oils
- Hermetically Sealed, Directional Flow Drier with Access Valve
- 100% Spun Copper Shell and End Tubes, Pre-Scored Ends for Easy Break Off
- 100 Micron Filter Sieve
- Reduces Clogged Capillary Tubes. Reduces Wear and Tear on Component Parts
- Use on Capillary or Expansion Valve Systems
- Maximum Working Pressure 500 PSI



#### Specifications

INLET	OUTLET	LENGTH	DIAMETER	TONNAGE R134A	TONNAGE R22	R134A DROPS OF WATER REMOVED	R22 DROPS OF WATER REMOVED
1/4" OD 1/4" Flare	1/4" OD or Cap	8 3/4"	1"	3/4	1 68 @ 125°F	74 @ 75°F 64 @ 125°F	68 @ 75°F

### SUD8288

The SUD8288 is a Solid Core Cleanout Drier with UV Dye and a Magnetic Filter.

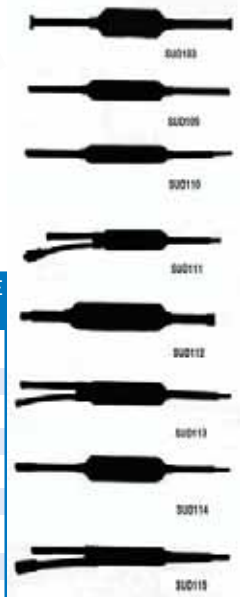
- Can Replace Electrolux® 5303918288 and All Other Copper Driers
- Adds UV Dye and Processes through a Magnetic Filter to Remove Microscopic Metal Particles from the System



### SUD SERIES COPPER DRIERS

High Quality, High Capacity Original Equipment Components for use on Domestic and Commercial Refrigerators, Freezers and Air Conditioners.

- 100% XH-9 Beaded Molecular Sieve
- Hermetically Sealed
- Copper Shells and End Tubes
- High Capacity
- Easy Break Off Grooved Ends
- Maximum Working Pressure 500 PSI



PART NO.	DESCRIPTION	INLET	OUTLET	LENGTH	RECOMMENDED TONNAGE	
					R-134A	R-22
SUD103	1" Plugged Ends	1/4" O.D.	1/4" O.D.	8"	1/3	1/2
SUD109	3/4" Non-Directional	1/4" O.D.	1/4" O.D.	7 1/2"	1/3	1/2
SUD110	3/4" Fused Ends	1/4" O.D.	1/4" O.D.	8 7/8"	1/3	1/2
SUD111	1" Charging Drier	1/4" O.D. 1/4" Flare	1/4" O.D. or Cap	9 5/8"	3/4	1
SUD112	1" Step Down Drier	5/16" O.D.	5/16" O.D. or Cap	10 3/4"	1	2
SUD113	1" Double Inlet	(2)1/4" O. D.	1/4" O.D.	8 3/4"	3/4	1
SUD114	1" Fused Ends	1/4" I.D. 1/4" O.D.	1/4" O.D. or Cap	8 3/4"	3/4	1
SUD115	3/4" Charging Drier	1/4" I.D. 1/4" O. D. 1/4" Flare	1/4" O.D. or Cap	9 5/8"	1/3	1/2
SUD116	1" Non-Directional	3/16", 1/4", 5/16" I.D.	5/16" I.D. or Cap	8 3/4"	3/4	1

# Driers

## S200 SERIES COPPER STRAINERS

Specifically Designed for Reopened Systems. Each Strainer Contains an Oversized Screen Area for Filtering Large Quantities of burnt out Foreign Matter from System.

- 500 PSI Maximum
- 200 Mesh Monel Screen

PART NO.	INLET	OUTLET	O.A. LENGTH	O.D.	FEED
S210	1/4"	.098 CAP	2 3/4"	3/4"	1
S211	1/4"	.125 CAP	2 3/4"	3/4"	1
S212	1/4"	1/4"	2 3/4"	3/4"	1
S213	5/16"	5/16"	2 3/4"	3/4"	1
S214	3/8"	Double Feed Cap .125	4 1/2"	5/8"	2
S215	3/8"	Triple Feed Cap .125	4 1/2"	5/8"	3
S216	3/8"	3/8"	4 1/2"	5/8"	1
S218	3/8"	.125 CAP	4 1/2"	5/8"	1
S219	3/8"	.146 CAP	5"	7/8"	4
S220	3/8"	.112 CAP	4 1/2"	7/8"	6



### Solder Connection Driers

PART NO.	DESCRIPTION	INLET	OUTLET	DROPS OF WATER REMOVED				RECOMMENDED TONNAGE	
				75°	125°	75°	125°	R-12	R-22
MD5	1" Drier (No Tubes)	1/4"	CAP	37.5	34	34	32	1/3	1/2
MD6	1" Drier (No Tubes)	3/8"	CAP	37.5	34	34	32	1/3	1/2
MD7	1" Drier (No Tubes)	1/4"	1/4"	37.5	34	34	32	1/3	1/2

## CSLD SERIES/COMPACT SUCTION LINE DRIERS

- Dual Access Valves
- High Acid Removal
- Solid Copper Fittings (Available in Solder Only)
- Corrosion Resistant Epoxy Powder Paint Finish

### Specifications

Maximum Working Pressure (MWP): 500 PSIG  
Filtration: 40 Microns

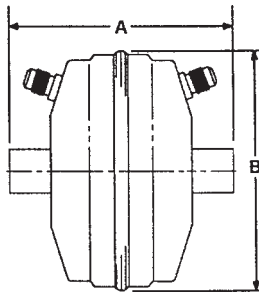
**Part Number Key** **CSLD14S5**

Series: **C**

Unit Size Cubic Inches: **S**

S = ODF Connection

Connection Size (in 1/8): **5**



PART NO.	CONNECTIONS SIZE & TYPE	DIMENSION IN INCHES A B	FLOW CAPACITY IN TONS REFRIGERANT (1) (FOR KW MULTIPLY TONS BY 3.5 (2))																								
			R-12					R-134a					R-22					R-407C					R-410A				
			EVAPORATOR TEMPERATURE (F)										PRESSURE DROP (PSI)														
			40	20	0	-20	40	20	0	-20	40	20	0	-20	-40	40	20	0	-20	-40	40	20	0	-20	-40		
CSLD14S4	1/2 ODF	4 7/32 4 9/16	2	1.5	1	0.5	2	1.5	1	0.5	3	2	1.5	1	0.5	3	2	1.5	1	0.5	3	2	1.5	1	0.5		
CSLD14S6	3/4 ODF	4 3/8 4 9/16	3	2.1	1.3	0.8	3.1	2.1	1.3	0.7	4.9	3.2	2.2	1.4	0.7	5.5	3.7	2.7	1.7	0.9	3.3	2.2	1.5	0.9	0.5		
CSLD14S7	7/8 ODF	4 9/16 4 9/16	3.2	2.2	1.5	0.8	3.3	2.2	1.4	0.7	5.2	3.4	2.3	1.5	0.8	5.8	3.9	2.8	1.9	1.1	3.6	2.3	1.6	1	0.5		
CSLD14S9	1 1/8 ODF	4 27/32 4 9/16	4.4	3.1	1.9	1.1	4.5	3	1.8	1	7	4.6	3.1	2	1	7.8	5.3	3.7	2.5	1.3	4.8	3.2	2.1	1.3	0.7		

PART NO.	CONNECTIONS SIZE & TYPE	FLOW CAPACITY IN TONS REFRIGERANT (FOR KW, MULTIPLY TONS BY 3.5)									
		R-502					R-404A/507				
		EVAPORATOR TEMPERATURE (F)									
		40	20	0	-20	-40	40	20	0	-20	-40
CSLD14S4	1/2 ODF	3	2	1.5	1	0.5	3	2	1.5	1	0.5
CSLD14S6	3/4 ODF	3.7	2.3	1.5	0.9	0.5	3.6	2.3	1.5	0.9	0.5
CSLD14S7	7/8 ODF	4	2.4	1.6	1	0.5	3.9	2.4	1.6	1	0.5

(1) All Ratings in Accordance with ARI Standard 730-86  
(2) For 2 PSI P, Multiply Values by 1.4  
Example: 1.0 Tons x 3.5 = 3.5 kw

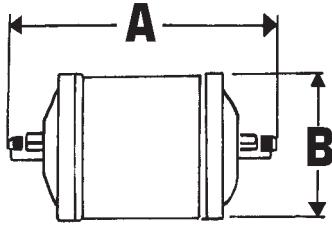
# Driers

## LLD SERIES LIQUID LINE DRIERS

- Solid Copper Fittings
- Shock Resistant Steel Construction
- High Acid and Moisture Removal
- Corrosion Resistant Epoxy Powder Paint Finish

### Specifications

Desiccant Blend: Activated Alumina with Molecular Sieve  
 Filtration: 40 Microns  
 Maximum Working Pressure (MWP): Sizes 03-016 Cubic Inches = 680 PSIG  
 Sizes 30-75 Cubic Inches = 500 PSIG



**Part Number Key**

LLD083S

Series

Unit Size Cubic Inches

Connection Size ( in 1/8)

S = ODF Connection (Omit for SAE)

PART NO.	Connection SIZE & TYPE	Dimensions in Inches A      B		FLOW CAPACITY TONS @ 1 PSI    P (1)(4) (FOR KW, MULTIPLY TONS BY 3.5)							WATER CAPACITY / DROPS OF WATER													
				R-404A							R-12		R-134a		R-22		R-407C		R-410A		R-404/507		R-502	
				R-12	R-134a	R-22	R-410AC	R-407C	/507	R-502	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F		
LLD032	1/4 SAE	4 5/16	1 5/8	1.6	1.9	2.1	2.1	2	1.4	1.3	64	46	44	37	34	31	31	21	27	17	47	37	43	34
LLD032S	1/4 ODF	3 3/4	1 5/8	1.9	2.3	2.5	2.5	2.4	1.7	1.6														
LLD052	1/4 SAE	4 7/8	2 1/2	1.6	2	2.2	2.2	2.1	1.4	1.4														
LLD052S	1/4 ODF	4 11/32	2 1/2	2.4	2.9	3.1	3.1	3.1	2.1	2	130	81	68	50	58	38	47	26	44	23	73	48	73	49
LLD053	3/8 SAE	5 3/16	2 1/2	3	3.7	4	4	4	3.9	2.7	2.6													
LLD053S	3/8 ODF	4 17/32	2 1/2	3.7	4.5	4.9	4.9	4.8	3.3	3.2														
LLD082	1/4 SAE	5 13/16	2 1/2	1.6	2	2.2	2.2	2.1	1.4	1.4														
LLD082S	1/4 ODF	5 1/4	2 1/2	2.5	3.1	3.4	3.4	3.3	2.2	2.2														
LLD083	3/8 SAE	6 3/32	2 1/2	3.5	4.3	4.7	4.7	4.6	3.1	3	188	117	101	76	87	57	68	39	63	34	109	73	105	71
LLD083S	3/8 ODF	5 7/16	2 1/2	3.4	4.2	4.6	4.6	4.5	3	3														
LLD084	1/2 SAE	6 11/32	2 1/2	5.5	6.7	7.3	7.3	7.1	4.9	4.7														
LLD084S	1/2 ODF	5 1/2	2 1/2	5.7	7	7.6	7.6	7.4	5.1	4.9														
LLD162	1/4 SAE	6 19/32	2 1/2	1.6	2	2.2	2.2	2.1	1.4	1.4														
LLD163	3/8 SAE	6 7/8	2 1/2	3.6	4.4	4.8	4.8	4.7	3.2	3.1														
LLD163S	3/8 ODF	6 7/32	2 1/2	4	4.9	5.3	5.3	5.2	3.6	3.5														
LLD164	1/2 SAE	7 1/8	2 1/2	6.8	8.3	9	9	8.8	6	5.8	295	204	169	140	151	117	134	86	115	67	180	143	193	145
LLD164S	1/2 ODF	6 9/32	2 1/2	7.1	8.6	9.3	9.3	9.1	6.2	6.1														
LLD165	5/8 SAE	7 1/2	2 1/2	9.7	11.8	12.8	12.8	12.5	8.6	8.3														
LLD165S	5/8 ODF	6 17/32	2 1/2	10.7	13.1	14.2	14.2	13.9	9.5	9.2														
LLD303	3/8 SAE	9 9/16	3	3.9	4.7	5.1		5	3.4	3.3														
LLD303S	3/8 ODF	8 29/32	3																					
LLD304	1/2 SAE	9 13/16	3	7.1	8.6	9.3		9.1	6.2	6.1														
LLD304S	1/2 ODF	8 15/16	3	7.2	8.8	9.5		9.4	6.4	6.2														
LLD305	5/8 SAE	10 3/16	3	11.3	13.8	15		14.7	10	9.7	615	444	359	278	314	218	309	212			385	272	427	335
LLD306S	3/4 ODF	9 5/8	3	13	15.8	17.1		16.8	11.5	11.1														
LLD307S	7/8 ODF	9 13/16	3	14.3	17.4	18.9		18.5	12.6	12.3														
LLD309S	1 1/8 ODF	9 13/16	3	20.4	24.9	27		26.5	18	17.5														

(1) All Ratings in Accordance with ARI Standard 710-86.  
 86°F Liquid Refrigerant Temperature  
 5°F Saturated Vapor Temperature  
 3.1 lbs./min./ton for R-134A  
 2.9 lbs./min./ton for R-22 and R-407C  
 4.0 lbs./min./ton for R-404A/507 and R-12  
 4.4 lbs./min./ton for R/502  
 2.7 lbs./min./ton for R-410A

(2) Water Capacities are Based on:  
 Equilibrium Point Dryness (EPD) of:  
 50 Parts per Million for R-134A, R404-A/507,  
 R-410A and R-407C  
 60 Parts Per Million for R-22  
 30 Parts Per Million for R-502  
 15 Parts Per Million for R-12

(3) 20 Drops of Water = 1 gram = 1 cc  
 (4) For 2 PSI D P, Multiply Values by 1.4

# Driers

## LLD Liquid Refrigerant Holding Capacity - Ounces

UNIT SIZE	R-12		R-134a		R-22		R407C		R-410A		R-404A/507		R-502	
	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
03	2.4	2.2	2.2	2	2.2	2	2.1	1.9	2	1.7	1.9	1.7	2.2	2
05	5.9	6	5.5	5.5	5.4	5.4	5.2	5	4.8	4.5	4.7	4.5	5.5	5.4
08	8	7.4	7.4	6.7	7.3	6.6	7	6.2	6.5	5.5	6.4	5.5	7.5	6.6
16	14.5	12.5	13.4	11.4	13.2	11.2	12.6	10.4	11.7	9.4	11.6	9.3	13.5	11.2
30	21.8	19.9	20.1	18.1	19.8	17.8	18.9	16.6			17.4	14.7	20.2	17.7
41	29.3	26.8	26.9	24.4	26.6	23.9	25.4	22.3			23.3	19.7	27.2	23.8
75	52.8	48.3	48.6	43.9	48	43.1	45.8	40.2			42.1	35.6	49.1	43

R-410A The LLD Filter Drier is UL Listed for 680PSIG Maximum Working Pressure for All Sizes Through 16 Cubic Inches.

## LLD Liquid Line Filter Driers

FILTER DRYER	AIR CONDITIONING							
	REFRIGERATION, LOW TEMP. & COMMERCIAL INSTALLATIONS			FIELD REPLACEMENT & FIELD INSTALLATIONS		OEM SELF CONTAINED EQUIPMENT		
	R-12/134a	R-22/407C/410A	R-404A/507A	R-12/134a	R-22/407C/410A	R-12/134a	R-22/407C	
032,032S	1/4	1/4	1/4	1/2	3/4	3/4	1	1
052,052S	1/3	1/3	1/3	3/4	1	1	1 1/2	1 1/2
053,053S	1 1/2	2	2	3				
082,082S	1/2	1/2	1/2	3/4	1 1/2	1	2	2
083,083S	1	1	1	2	3	3	4	4
084,084S	1.5	2	1	3	5	4	7	7
162,162S	1	1 1/2	3/4	1	2	2	2 1/2	2 1/2
163,163S	2	4	2	4	6	5	7 1/2	7 1/2
164,164S	2	4	2	4	6	5	7 1/2	7 1/2
165,165S	3	5	2 1/2	5	7 1/2	7 1/2	10	10
303S	3	3	2	3	4 1/2	4	5	5
304,304S	3	5	3	5	7 1/2	7 1/2	9	9
305,305S	5	7 1/2	5	8	10	10	14	14
306S	7 1/2	7 1/2	5	7 1/2	12 1/2	15	20	20
307S	7 1/2	7 1/2	5	7 1/2	12 1/2	15	20	20
309S	7 1/2	10	7 1/2	10	12 1/2	15	20	20



LLD032



LLD083



LLD306S

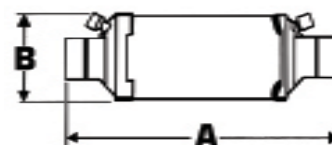
# Driers

## SSLD SERIES/SUCTION LINE FILTER DRIERS

- Dual Access Valves
- Solid Copper Fittings
- Corrosion Resistant Epoxy Powder Paint Finish

### Specifications

Filtration: 40 Microns  
 Maximum Working Pressure (MWP): 500 PSIG



### Part Number Key SSLD167S

Series

Unit Size Cubic Inches

Connection Size (in 1/8)

S = ODF Connection (omit for SAE)

### Flow Capacities in Refrigerant Tons at Selected Evaporator Temperatures

PART NO.	CONNECTION SIZE & TYPE	DIMENSION IN INCHES A B		+40°F +20°F 0°F -20°F				+40°F +20°F 0°F -20°F				+40°F +20°F 0°F -20°F					
				R-134a				R-22				R410A					
				2	1.5	1	0.5	3	2	1.5	1	0.5	3	2	1.5	1	0.5
SSLD83	3/8 SAE	6 3/32	2 1/2	0.6	0.4	0.2	0.1	0.9	0.6	0.4	0.3	0.1	1.1	0.8	0.5	0.4	0.1
SSLD83S	3/8 ODF	5 7/16	2 1/2	0.8	0.5	0.3	0.2	1.3	0.8	0.6	0.4	0.2	1.6	1	0.8	0.5	0.3
SSLD84	1/2 SAE	6 11/32	2 1/2	1.4	0.9	0.6	0.3	2.2	1.4	1	0.6	0.3	2.7	1.8	1.3	0.8	0.4
SSLD84S	1/2 ODF	5 1/2	2 1/2	1.7	1.2	0.7	0.4	2.7	1.8	1.2	0.8	0.4	3.4	2.3	1.6	1.1	0.5
SSLD85	5/8 SAE	6 3/16	2 1/2	2.2	1.5	0.9	0.5	3.4	2.2	1.5	1	0.5	4.2	2.8	2	1.3	0.7
SSLD85S	5/8 ODF	5 3/4	2 1/2	2.4	1.6	1	0.5	3.8	2.5	1.7	1.1	0.6	4.7	3.2	2.3	1.5	0.8
SSLD164	1/2 SAE	7 1/8	2 1/2	1.5	1	0.6	0.3	2.3	1.5	1	0.7	0.4	2.9	1.9	1.3	0.9	0.5
SSLD165S	5/8 ODF	6 9/16	2 1/2	2.2	1.5	0.9	0.5	3.4	2.2	1.5	1	0.5	4.2	2.8	2	1.3	0.7
SSLD166	3/4 SAE	6 31/32	2 1/2	2.6	1.8	1.1	0.6	4.1	2.7	1.8	1.2	0.6					
SSLD166S	3/4 ODF	6 31/32	2 1/2	2.6	1.8	1.1	0.6	4.1	2.7	1.8	1.2	0.6	5.1	3.4	2.4	1.6	0.8
SSLD167S	7/8 ODF	7 1/8	2 1/2	2.7	1.8	1.1	0.6	4.6	2.8	1.9	1.1	0.6					
SSLD305	5/8 SAE	10 3/16	3	3	2	1.2	0.6	4.7	3.1	2.1	1.3	0.7	5.8	3.9	2.8	1.7	0.9
SSLD305S	5/8 ODF	9 7/32	3	2.8	1.8	1.1	0.6	4.3	2.8	1.9	1.2	0.6	5.3	3.6	2.5	1.6	0.8
SSLD306S	3/4 ODF	9 5/8	3	3.4	2.3	1.4	0.7	5.4	3.5	2.4	1.5	0.8	6.7	4.5	3.2	2	1.1
SSLD307S	7/8 SAE	9 25/32	3	3.8	2.5	1.6	0.8	5.9	3.9	2.6	1.7	0.9	7.3	5	3.5	2.3	1.2
SSLD417S													9.4	6.2	4.5	2.8	1.5
SSLD419S	1 1/8 ODF	9 15/16	3 1/2	5.4	3.6	2.2	1.2	8.5	5.5	3.8	2.4	1.3	10.6	7	5.1	3.2	1.8

### Flow Capacity Chart

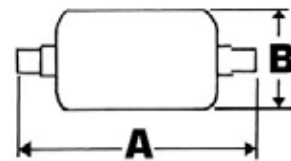
PART NO.	CONNECTION SIZE & TYPE	DIMENSION IN INCHES A B		+40°F +20°F 0°F -20°F				+40°F +20°F 0°F -20°F					
				R407C				R-502/R404A/R507					
				3	2	1.5	1	0.5	3	2	1.5	1	0.5
SSLD83	3/8 SAE	6 3/32	2 1/2	1	0.6	0.4	0.3	0.1	0.7	0.5	0.3	0.2	0.1
SSLD83S	3/8 ODF	5 7/16	2 1/2	1.4	0.9	0.6	0.4	0.2	1	0.7	0.5	0.3	0.1
SSLD84	1/2 SAE	6 11/32	2 1/2	2.3	1.5	1.1	0.6	0.3	1.8	1.1	0.8	0.5	0.3
SSLD84S	1/2 ODF	5 1/2	2 1/2	2.9	1.9	1.3	0.8	0.4	2.2	1.4	1	0.6	0.3
SSLD85	5/8 SAE	6 3/16	2 1/2	3.6	2.3	1.6	1	0.5	2.8	1.8	1.2	0.8	0.4
SSLD85S	5/8 ODF	5 3/4	2 1/2	4.1	2.7	1.8	1.2	0.6	3.1	2	1.3	0.8	0.4
SSLD164	1/2 SAE	7 1/8	2 1/2	2.5	1.6	1.1	0.7	0.4	1.9	1.2	0.8	0.5	0.3
SSLD165S	5/8 ODF	6 9/16	2 1/2	3.6	2.3	1.6	1	0.5	2.8	1.8	1.2	0.8	0.4
SSLD166	3/4 SAE	6 31/32	2 1/2						3.4	2.2	1.5	0.9	0.5
SSLD166S	3/4 ODF	6 31/32	2 1/2	4.4	2.9	1.9	1.3	0.6	3.4	2.2	1.5	0.9	0.5
SSLD167S	7/8 ODF	7 1/8	2 1/2						4.3	2.6	1.7	1	0.6
SSLD305	5/8 SAE	10 3/16	3	5	3.3	2.2	1.4	0.7	3.8	2.5	1.7	1	0.5
SSLD305S	5/8 ODF	9 7/32	3	4.6	3	2	1.3	0.6	3.6	2.3	1.5	1	0.5
SSLD307S	7/8 SAE	9 25/32	3	6.3	4.1	2.7	1.8	0.9	4.9	3.1	2.1	1.3	0.7
SSLD419S	1 1/8 ODF	9 15/16	3 1/2	9.1	5.9	4	2.5	1.3	6.9	4.5	3	1.9	1

All Ratings in Accordance with ARI Standard 710-86

# Driers

## HP SERIES/LIQUID LINE BI-DIRECTIONAL HEAT PUMP DRIERS

- 16 Cubic Inch Drier in a 2 1/2" Diameter Shell
- Internal Check Valves Allow Flow and Filtration in Either Direction
- High Moisture and Acid Removal
- Corrosion Resistant Epoxy Powder Paint Finish
- Copeland Approved for POE Oils



### Part Number Key

**HP165S**

Series

Unit Size Cubic Inches (in 1/8)

Connection Size (omit for SAE)

S = ODF Connection

### Specifications

Desiccant Blend: 75% Molecular Sieve and 25% Activated Alumina (Bead)  
 Filtration: 40 Microns  
 Maximum Working Pressure (MWP): Sizes 05-16, 600 PSIG

### HP Capacity Tables

PART No.	CONNECTION SIZE & TYPE	DIMENSIONS		FLOW CAPACITY TONS @ 1 PSI Δ P(1)(4) (FOR kW, MULTIPLY TONS BY 3.5)			WATER CAPACITY TONS (2) DROPS OF WATER (3)							
		A	B	R-22	R-410A	R-407C	R-22		R-407C		R-410A			
				75°F	125°F	75°F	75°F	125°F	75°F	125°F	75°F	125°F		
HP083	3/8 SAE	5.94	2.63	4.5	4.5	4.4								
HP083S	3/8 ODF	5.31	2.63	5.1	5.1	5								
HP084	1/2 SAE	6.19	2.63	6.4	6.4	6.3	159	144	106	79	85	75		
HP84S	1/2 ODF	5.38	2.63	6.7	6.7	6.6								
HP163	3/8 SAE	6.75	3.15	4.6	4.6	4.5								
HP163S	3/8 ODF	6.13	3.15	5.2	5.2	5.1								
HP164	1/2 SAE	7.00	3.15	7.7	7.7	7.6	323	294	237	179	178	160		
HP164S	1/2 ODF	6.13	3.15	8.1	8.1	7.9								
HP165	5/8 SAE	7.44	3.15	8.3	8.3	8.1								
HP165S	5/8 ODF	6.44	3.15	8.7	8.7	8.5								

### HP Capacity Tables

UNIT SIZE	FLOW CAPACITY - TONS @ 1 PSI		LIQUID REFRIGERANT HOLDING CAPACITY - Oz.						WATER HOLDING CAPACITY DROPS					
	R-22/R-410A		R-22		R-407		R-410A		R-22		R-407C		R-410A	
	R-22/R-410A	R-407C	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F	75°F	125°F
163S	5.2	5.1												
164	6.6	6.5												
164S	7.4	7.3	10.1	9.1	9.6	8.5	9	7.6	161	141	125	87	91	55
165	8	7.8												
165S	8.3	8.1												

(1) All ratings in accordance with ARI Standard 710-86.  
 86°F liquid refrigerant temperature.  
 5°F saturated vapor temperature  
 3.1 lbs./min./ton for R-134a  
 2.9 lbs./min./ton for R-22 and R-407C  
 4.0 lbs. min./ton for R-404A/507 and R-12  
 4.4 lbs./min./ton for R-502  
 2.7 lbs./min./ton for R-410A

(2) Water Capacities are based on: Equilibrium Point Dryness (EPD) of:  
 50 parts per million for R-134a, R404-A/507, R-410A and R-407C  
 60 parts per million for R-22  
 15 parts per million for R-12  
 30 parts per million for R-502  
 (3) 20 drops of water = 1 gram = 1 cc  
 (4) For 2 PSI D P, Multiply values by 1.4

# Driers

## HP Series / Liquid Line Bi-Directional Heat Pump Driers

UNIT SIZE	REFRIGERATION, LOW TEMP. & COMMERCIAL INSTALLATIONS			FIELD REPLACEMENT & FIELD INSTALLATIONS		AIR CONDITIONING OEM: SELF CONTAINED EQUIPMENT	
	R-12/134A	R-22/407C/410A	R-404A/134A	R-12/134A	R-22/407C/410A	R-12/13A	R-22/407C
	083, 083S	1	1	1	2	3	3
084, 084S	1.5	2	1	3	5	4	7
162, 162S	1	1.5	3/4	1	2	2	2 1/2
163, 163S	2	4	2	4	6	5	7 1/2
164, 164S	2	4	2	4	6	5	7 1/2
165, 165S	3	5	2 1/2	5	7 1/2	7 1/2	10

## SSG SERIES MOISTURE INDICATORS

- Fully Hermetic Design
- 3% Relative Humidity Indication Compared to 10% Paper Indicators
- Single Indicator for All Common Refrigerants
- Accurate Color Calibration at Low PPM Levels and Higher Temperatures
- Tri Color Coded
  - Blue = Dry Optimal Operation Conditions
  - Purple = Low Levels of Moisture Indicated
  - Pink = High Levels of Moisture Detected
- Wide Angle Viewing High Visibility Window for Ease of Monitoring
- All Brass Corrosion Resistant Body
- Solid Copper Fittings



### Specifications

3% Relative Humidity Sensitivity
Maximum Working Pressure (MWP): 680 PSIG

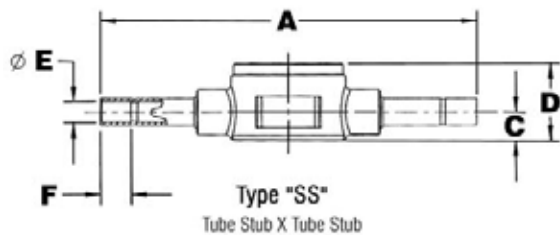
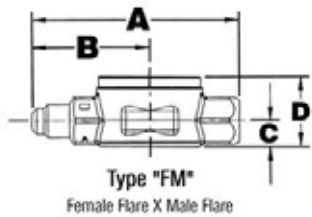
**Part Number Key SSGSS3**

SSG

SS

S3

PART NO.	CONNECTION SIZE & TYPE	A	B	C	D	E	F
SSGFM2	1/4 SAE	2.75 ± .03	1.19 ± .03	.34 ± .06	.937 ± .06		
SSGFM3	3/8 SAE	3.00 ± .03	1.31 ± .03	.47 ± .06	1.187 ± .06		
SSGFM4	1/2 SAE	3.22 ± .03	1.41 ± .03	.47 ± .06	1.187 ± .06		
SSGSS2	1/4 ODF	4.62 ± .10		.34 ± .06	.937 ± .06	.254 ± .002	.375
SSGSS3	3/8 ODF	4.62 ± .10		.34 ± .06	.937 ± .06	.379 ± .002	.402
SSGSS4	1/2 ODF	4.87 ± .10		.47 ± .06	1.187 ± .06	.504 ± .003	.500
SSGSS5	5/8 ODF	4.87 ± .10		.47 ± .06	1.187 ± .06	.629 ± .003	.625
SSGSS7	7/8 ODF	6.31 ± .10		.61 ± .06	1.500 ± .06	.879 ± .003	.750



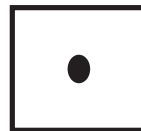
## Driers

### ALLIN LIQUID EYE® SIGHT GLASSES

The Allin Liquid Eye® has a Unique “See-Thru” Feature that is more Readable than Other Sight Glasses. The Dot on the Tube is Magnified when the Tube is full of Refrigerant to give a Quick, Easy Indication.

- Solid Brass Body
- Shock Resistant Glass
- Available in Flare or Solder
- Color Bar Designed for HFC Refrigerants

PART NO.	FLARE (IN.)	MALE/FEMALE LENGTH (IN.)	A-1® PART NO.
SG114	1/4 x 1/4	3-1/16	F5904
SG115	3/8 x 3/8	3-1/4	F5905
SG206	1/2 x 1/2	3-11/16	F5916
SG207	5/8 x 5/8	4	F5917
PART NO.	FLARE (IN.)	MALE/MALE LENGTH (IN.)	A-1® PART NO.
SG110	1/4 x 1/4	3-1/8	F5900
SG111	3/8 x 3/8	3-3/8	F5901
SG204	1/2 x 1/2	3-15/16	F5914
SG205	5/8 x 5/8	4-1/8	F5915
PART NO.	SWEAT (IN.)	SOLDER/TYPE LENGTH (IN.)	A-1® PART NO.
SG118	1/4 x 1/4	7-1/4	F5908
SG119	3/8 x 3/8	7-3/4	F5909
SG208	1/2 x 1/2	7-3/4	F5918
SG209	5/8 x 5/8	7-3/4	F5919



Empty



Full

*Allin Liquid Eye®*

MADE IN THE  
USA

### ALLIN LIQUID EYE® MOISTURE REACTORS

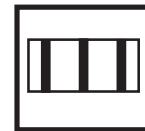
The Allin Liquid Eye® Moisture Reactor is Easy to Read in Minimal Light. It Provides a Quick Indication of Refrigerant in the Tube, as well as the Pressure of the Moisture. When Moisture is Present, the Color Bars on the Band within the Tube Change Color.

- Solid Brass Body
- Shock Resistant Glass
- Available in Flare or Solder
- Color Bar Designed for HFC Refrigerants

PART NO.	FLARE (IN.)	MALE/FEMALE LENGTH (IN.)	A-1® PART NO.
SG114R	1/4 x 1/4	3-1/16	F5924
SG115R	3/8 x 3/8	3-1/4	F5925
SG206R	1/2 x 1/2	3-11/16	F5936
SG207R	5/8 x 5/8	4	F5937
PART NO.	FLARE (IN.)	MALE/MALE LENGTH (IN.)	A-1® PART NO.
SG110R	1/4 x 1/4	3-1/8	F5920
SG111R	3/8 x 3/8	3-3/8	F5921
SG204R	1/2 x 1/2	3-15/16	F5934
SG205R	5/8 x 5/8	4-1/8	F5935
PART NO.	SWEAT (IN.)	SOLDER/TYPE LENGTH (IN.)	A-1® PART NO.
SG118R	1/4 x 1/4	7-1/4	F5928
SG119R	3/8 x 3/8	7-3/4	F5929
SG208R	1/2 x 1/2	7-3/4	F5938
SG209R	5/8 x 5/8	7-3/4	F5939



No Moisture



Moisture

*Allin Liquid Eye®*

MADE IN THE  
USA

R  
E  
F  
R  
I  
G  
E  
R  
A  
T  
I  
O  
N

## Drain Heaters

All SUPCO Drain and Door Heaters are Designed for Continuous Use to Protect Drains Against Ice Build Up which Leads to Clogging. All of these Heaters Cannot be Cut, Spliced, Extended or Altered in Any Way.

### SH200 SERIES FLEXIBLE BRAIDED ALUMINUM DRAIN HEATERS

- Aluminum Construction
- Variety of Lengths and Wattages Available
- Available in 220 Volts, Special Order

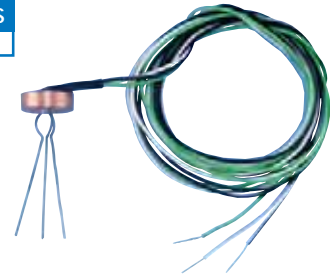
PART NO.	VOLTS	WATTS	SIZE (in)	LEADS (in)
SH201	115	15	18	23
SH202	115	45	29	23
SH203	115	55	44	23
SH204	115	75	48	23
SH206	115	80	70	23
SH207	115	110	86	23



### SH250 UNIVERSAL DRAIN HEATER

- Used With Existing Heater or Where No Heater Exists
- Available in 220 Volts, Special Order
- Designed for "Series Wiring Connection" Only

PART NO.	VOLTS	WATTS	SIZE	LEADS
SH250	120	3		



### SH500 SERIES DRAIN HEATERS

- Durable Metal Braid
- Available in 220 Volts, Special Order
- Heater Tip 7/16" Diameter
- Silicone Construction
- Designed for Waterproof Low Wattage Heat

PART NO.	VOLTS	WATTS	SIZE (in)	LEADS (in)
SH500	120	11	9	18
SH502	120	15	13	18
SH503	240	15	13	18
SH504	120	25	21	18
SH505	240	25	21	18



### SH220 SERIES ALUMINUM FOIL HEATERS

- Pressure Sensitive Adhesive Backing For Easy Installation
- Six Assorted Shapes and Wattages
- Available in 220 Volts, Special Order

PART NO.	VOLTS	WATTS	SIZE (in)	LEADS (in)
SH221	115	6	10 x 1	18
SH222	115	10	24 x 1 1/4	18
SH224	115	65	27 1/2 x 5 1/2	18
SH225	115	15	10 1/2 x 10 1/2	18
SH226	115	40	10 1/2 x 10 1/2	18



### SH280 SERIES DOOR HEATERS MULLION & DEW POINT

- Prevents Moisture on Glass Display Doors
- Eliminates Frost Build Up on Doors & Cabinet Fronts

PART NO.	VOLTS	WATTS	SIZE (ft)
SH281	120	3	36 1/2
SH282	120	3	18
SH283	220	3	36
SH284	220	3	18



# Motors

## UNIT BEARING WATT MOTORS

For Commercial and Domestic Refrigeration Equipment, Room and Hood Ventilators, Room Heaters, Evaporative Coolers and Various Other Equipment.

- Cast Aluminum Housing Up to 16 Watts
- Cast Iron Housing for 35 to 50 Watts
- Single Speed, 1550 RPM
- Single Rotation
- Rotation is Determined by Viewing Opposite Shaft End (OSE)
- 50/60 Hz
- Totally Enclosed
- Overload Protected
- Permanent Lubrication
- Sleeve Bearings
- Universal Mounting
- Threaded Mounting Holes
- Hardware Included
- UL® Approved

### Aluminum Unit Bearing

PART NO.	WATTS	VOLTS	AMPS	ROTATION	SHAFT DIAM. (IN.)	SHAFT LENGTH (IN.)
SM5109	2	120	0.28	CWOSE	1/4 Threaded	1/2
SM5211	4	120	0.36	CWOSE	1/4 Threaded	1/2
SM5212	4	120	0.32	CCWOSE	1/4 Threaded	1/2
SM5221	4	230	0.16	CWOSE	1/4 Threaded	1/2
SM5222	4	230	0.16	CCWOSE	1/4 Threaded	1/2
SM5311	6	120	0.52	CWOSE	1/4 Threaded	1/2
SM5312	6	120	0.43	CCWOSE	1/4 Threaded	1/2
SM5411	9	120	0.60	CWOSE	1/4 Threaded	1/2
SM5412	9	120	0.64	CCWOSE	1/4 Threaded	1/2
SM5421	9	230	0.32	CWOSE	1/4 Threaded	1/2
SM5422	9	230	0.32	CCWOSE	1/4 Threaded	1/2
SM5811	16	115	0.92	CWOSE	1/4 Threaded	1/2
SM5812	16	115	0.92	CCWOSE	1/4 Threaded	1/2
SM5821	16	230	0.48	CWOSE	1/4 Threaded	1/2
SM5822	16	230	0.48	CCWOSE	1/4 Threaded	1/2

### Cast Iron Unit Bearing

PART NO.	WATTS	VOLTS	AMPS	ROTATION	SHAFT DIAM. (IN.)	SHAFT LENGTH (IN.)
SM351	35	120	1.4	CWOSE	1/4 Threaded	1/2
SM352	35	120	1.4	CCWOSE	1/4 Threaded	1/2
SM353	35	230	0.7	CWOSE	1/4 Threaded	1/2
SM354	35	230	0.7	CCWOSE	1/4 Threaded	1/2
SM501	50	120	1.7	CWOSE	3/8 Smooth Flatted	1/2
SM502	50	120	1.7	CCWOSE	3/8 Smooth Flatted	1/2
SM503	50	230	0.85	CWOSE	3/8 Smooth Flatted	1/2
SM504	50	230	0.85	CCWOSE	3/8 Smooth Flatted	1/2



**SUPCO Unit Bearing Motors are Manufactured with the Highest Quality Components. They are Manufactured and Tested to Meet Our High Standards and Specifications.**

# Motors

## SM600 SERIES EXACT REPLACEMENT & UTILITY MOTOR KITS

- Versatile Replacement for All "C" Frame and 3 1/2" Round Style Motors
- Impedance Protected
- SM670, SM672 and SM673 Include Fan Blades FB402 and FB550
- SM675 is Thermal Protected
- SM675 Includes Fan Blade FB550 Only
- Motor Kits Include Complete Hardware and Mounting Kits

PART NO.	TYPE	VOLTS AC	RPM	CURRENT (AMPS)	SHAFT DIMENSIONS (IN.)	STACK SIZE (IN.)	ROTATION (REVERSIBLE)
SM670	Sleeve	120	3000	0.55	3/16 x 1 1/4	5/8	CW/CCW
SM671	Sleeve	120	3000	0.55	3/16 x 1 1/4	5/8	CW/CCW
SM672	Sleeve	240	3000	0.32	3/16 x 1 1/4	5/8	CW/CCW
SM673	Sleeve	120	3000/1550	.55/.32	3/16 x 1 1/4	5/8	CW/CCW
SM675	Sleeve	120/240	3000	1.0/5.0	3/16 x 2 3/8	1	CW/CCW



## SM6700B MOTOR KIT ASSEMBLY

- Replaces Acme Miami® 700
- OEM Replacement for Bohn®, Heatcraft®, Uppco®, Singer®, GE® 33 Series
- Kit Includes Reversible Motor, Three Fan Blades, Hardware Kit and Instructions

**SM6700B**  
Replacement Fan Blades  
3/16" Hub



### Specifications

VOLTS	HERTZ	AMPS	RPM	SHAFT SIZE (IN.)	STACK SIZE (IN.)	BEARING TYPE
120	60	.55	3000	3/16 x 1 1/4	5/8	Sleeve

FB402	4", CW, 5 Wing
FB455 (Bohn® 5101B)	5 9/16", CCW, 5 Wing
FB550	5 1/2", CCW, 4 Wing

## SM999 UNIVERSAL EVAPORATOR FAN MOTOR KIT - 120 VAC

- Replaces Over 450 Different Evaporator Type Motors
- Prefastened Multi Fit, Break Off Mounting Bracket
- Break Off 2" Motor Shaft with Breakaways at 1/2" and 1 1/2"
- Includes All Mounting Accessories and Hardware
- Reversible Rotation
- Single Speed
- Shaft Diameter 1/8"



## SM998 UNIVERSAL EVAPORATOR FAN MOTOR KIT - 220 VAC

- Includes the Same Features, Benefits, Applications and Specifications as the SM999, Except it Operates on 220 VAC 50/60 Hz.
- Direct Replacement for the Mars® 90998

PART NO.	DESCRIPTION
SM999	120 VAC, 3000 RPM, 1/200 hp, .31 Amp Impedance Protected
SM998	220 VAC, 3000 RPM, 1/200 hp, .31 Amp Impedance Protected

## SM140-40A BLOWER FAN ASSEMBLY

- Direct Replacement Kit for Nutone® Bath Fans
- Replaces Nutone® Motor P/N K5895 and Kit P/N K5894
- Kit Includes Single Speed Motor, 3 3/4" x 2" Blower Wheel and Mounting Bracket
- Motor Includes 6" Wire Leads with Molded Plug



PART NO.	SPEED	RPM	VOLTS	AMPS	ROTATION	NUTONE®
SM140-40A	1	2400	115	0.9	CCWSE	K5894 Motor Kit K5895 Motor Only

## Motor Brackets

### MB55

#### MOTOR BRACKET MOUNTING KIT - 3 LEGS

- Designed For Direct Drive Blower Motors Using the Flexible Bracket Mounting Arrangement
- Grommets & Eyelets Included

##### Specifications

Motor Diameter	5", Bolt Circle 9" & 10.18"
Motor Diameter	5.5", Bolt Circle 9" & 10.18"



### MB554

#### MOTOR BRACKET MOUNTING KIT - 4 LEGS

- Flexible Bracket
- Grommets & Sleeves Included

##### Specifications

Motor Diameter	5", Bolt Circle 9" & 10.18"
Motor Diameter	5.5", Bolt Circle 9" & 10.18"



# Commercial Controls

## ST100 SERIES

### General Purpose Timer Switches

- Economical
- Electromechanical Switching
- Non-corrosive NEMA 1 Case
- Single Pole or Double Pole
- Switch Rating: 40A, Resistive



PART NO.	VOLTS	SWITCH	PARAGON®	INTERMATIC®	PRECISION®
			CROSS REFERENCE	CROSS REFERENCE	CROSS REFERENCE
ST101	120	SPST	4001-00	T101	CD101
ST102	240	SPST	4002-71	T102	CD102
ST103	120	DPST	4003-00	T103	CD103
ST104	240	DPST	4004-71	T104	CD104

#### Accessory

STPIN	Dial Pins	2 Pins Per Pack
-------	-----------	-----------------

## S8000 SERIES

### Commercial Defrost Controls

- Heavy-duty Synchronous Motor
- Adjustable Defrost Frequency up to 6 Times Per Day
- Adjustable Cycle Duration from 4 to 110 Minutes
- Heavy-duty Steel Case

#### Specifications

Operating Voltages	120 or 208/240 VAC, 60 Hz
Amperage	40-Amp Non-inductive @ 120, 208 or 240 VAC
Maximum hp	2 hp @ 120, 208 or 240 VAC
Pilot Duty	690 VA @ 120, 208 or 240 VAC
Operating Temperature Range	-35°F to 175°F
Overall Case Dimensions	7.697" H x 4.4" W x 3.8" D
Shipping Weight	S8040 Series 3.5 lbs. & S8141 Series 3.75 lbs.

PART NO.	VOLTAGE	SWITCHING		TIME INITIATED TIME TERMINATED	TIME INITIATED TEMPERATURE OR PRESSURE TERMINATED	PARAGON® MODEL NO.
		NO NORMALLY OPEN	NC NORMALLY CLOSED			
S804100	120/60 Hz	1 NO / 2 NC		YES	NO	8041-00
S804120	240/60 Hz	1 NO / 2 NC		YES	NO	8041-20
S804500	120/60 Hz	1 NO / 1 NC		YES	NO	8045-00
S804520	240/60 Hz	1 NO / 1 NC		YES	NO	8045-20
S814100	120/60 Hz	1 NO / 2 NC		NO	YES	8141-00
S814120	240/60 Hz	1 NO / 2 NC		NO	YES	8141-20
S814500	120/60 Hz	1 NO / 1 NC		NO	YES	8145-00
S814520	240/60 Hz	1 NO / 1 NC		NO	YES	8145-20
S814521	240/50 Hz	1 NO / 1 NC		NO	YES	8145-21



#### Accessory

X3596	Dial Pins	5 Pins Per Pack
-------	-----------	-----------------

## M814520 EXACT FIT COMMERCIAL DEFROST MECHANISM

Exact Drop-in Replacement Mechanism for Paragon® 8145-20 and SUPCO® S814520



Sold in Convenient 6-Pack Counter Display!

## Fan Blades

### EXACT REPLACEMENT PLASTIC IMPELLERS

- Broan & Nutone Exact Replacement Impellers

PART NO.	REPLACES MFG. NO.	BLADE O.D.	HOLE I.D.
SB001	Nutone® 68920	4 5/8"	.181F
FB460	Broan® 9910379H	4 9/16"	.218



### PLASTIC BLOWER WHEELS

PART NO.	SHAFT	ROTATION	BOTTOM DIAMETER	DEPTH	TOP DIAMETER	OEM PART NO.
FB250	1/8"	CW	2 1/2"	1"	2 11/16"	
FB590	1/4"	CW	5 3/4"	2"	6 1/8"	Nutone® 59000A



### PLASTIC VENT HOOD FAN BLADES

- Ducted & Non Ducted Vent Hoods

PART NO.	SHAFT	DIAMETER	NO. BLADES	ROTATION	PITCH	Volume
FB660	7/32"	6 5/8"	5	CW	25°	High
FB665	7/32"	6 5/8"	5	CW	12°	Standard

Use with SM500 series or SM700 series that have 7/32" w/ flat shaft.  
Replaces Nutone 68929300 and many Broan blades.



### PLASTIC FAN BLADES - GENERAL PURPOSE

- Celcon Plastic Construction
- Light Weight Design Reduces Bearing Wear & Vibrations
- 2 1/2" to 7" Diameter Sizes Available (1/2" increments)
- Integral Hub Available in 1/8", 3/16", 1/4" & 5/16" Sizes
- Color Coded Rotation White = CW Gray = CCW
- Eliminates Bent or Misaligned Blades
- Low Air Noise

PART NO.	SHAFT	DIAMETER	NO. OF BLADES	ROTATION
FB350	3/16"	3 1/2"	4	CW
FB401	1/8"	4"	5	CW
FB402	3/16"	4"	5	CW
FB403	1/8"	4"	5	CCW
FB404	3/16"	4"	5	CCW
FB501	3/16"	5"	5	CW
FB504	3/16"	5"	5	CCW
FB550	3/16"	5 1/2"	4	CCW

PART NO.	SHAFT	DIAMETER	NO. OF BLADES	ROTATION
FB601	3/16"	6"	6	CW
FB604	3/16"	6"	4	CCW
FB650	3/16"	6 1/2"	5	CW
FB651	1/4"	6 1/2"	5	CW
FB702	5/16"	7"	5	CW
FB703	1/4"	7"	5	CCW



### ALUMINUM FAN BLADES - GENERAL PURPOSE

- 22 Gauge Aluminum Alloy Construction
- Light Weight Design Reduces Bearing Wear & Vibration
- 4" to 6 1/2" Diameter Sizes Available (1/2" increments)
- Slotted Set Screw Hub Sizes 3/16", 7/32" & 1/4"
- Clockwise or Counter Clockwise Rotations

PART NO.	SHAFT	DIAMETER	NO. OF BLADES	ROTATION	PITCH
FB152	3/16"	4"	10	CCW	35
FB157	1/4"	4 1/2"	10	CW	40
FB159	1/4"	4 1/2"	10	CCW	40

PART NO.	SHAFT	DIAMETER	NO. OF BLADES	ROTATION	PITCH
FB180	1/4"	6"	4	CW	20
FB182	7/32"	6"	4	CCW	20
FB190	7/32"	6 1/2"	4	CCW	20



## Fan Blades

### PLASTIC FAN BLADES - DIRECT REPLACEMENT AND HUB TYPE

- Available in Hub or Shaft Mount 1/8", 3/16"
- Clockwise & Counter Clockwise Rotations



PART					
NO.	SHAFT	DIAMETER	BLADES	ROTATION	REPLACEMENT FOR
FB353	HUB	4"	4	CCW	Whpl/Cldspt® 513543
FB450	1/8"	4 1/2"	5	CCW	GE® WR60X114
FB455	3/16"	5 9/16"	5	CCW	Bohn® 5101B

### ALUMINUM CONDENSER FAN BLADES

- Aluminum Construction
- 6" to 10" Diameter
- Clockwise & Counter Clockwise Rotations
- 5 Blades

PART		NO. OF			
NO.	DIAMETER	BLADES	ROTATION	PITCH	
FB101	6"	5	CW	30°	
FB103	7"	5	CCW	20°	
FB104	7"	5	CW	20°	
FB105	8"	5	CCW	20°	
FB106	8"	5	CW	20°	
FB107	8 3/4"	5	CW	20°	
FB108	10"	5	CCW	29°	
FB109	10"	5	CW	22°	



## Compressors

### SPC660L, SPC836L, SPC990L COMPRESSORS

Refrigeration Compressors Include Electrical Accessories, Grommets and Sleeves.

- Compact 4" x 6" Footprint
- 60 Hz.
- 110V/120V
- Low Back Pressure
- Relay Start Capacitor Run (PTC)
- Relay Start Capacitor Run (RSCR)

PART				
NO.	HP	BTU	AMPS	WATTS
SPC660L	1/5	660	1.2	126
SPC836L	1/4	990	2.5	181
SPC990L	1/4	836	2.2	196



SPC600L



SPC836L



SPC990L

# Vacuum & Pressure Gauges

## VG640D & VG640 VACUUM SENTRY

Choose Between Single Port or NEW DUAL Port

- Multi-Point Sensor Technology
- BEST Resolution (0.5 Micron)
- Easy-to-Clean LIFETIME Sensor Never Needs Replacing
- Large, Backlit Display
- High & Low, Audible and Visual Threshold Alarms
- Built-in Hanger
- 1/4" Male Flare Connection
- 2 Year Warranty

### Specifications

Sensor Type	Thermistor
Connector Type	Standard 1/4 Inch Male Flare Fitting
Vacuum Range	0-19,000 Micron (0-2,600 Pascal)
Resolution	Measurement Range      Resolution
	0-140                              0.5 Microns
	140-400                         1 Microns
	400-800                         2 Microns
	800-2000                       5 Microns
	2000-6000                     20 Microns
	6000-9000                     100 Microns
	9000-16000                  200 Microns
	16000-19000                1000 Microns
Units	Microns, milliBar, Pascal, Torr, milliTorr
Accuracy	+/-10% or +/-10 Micron, whichever is larger (50 to 2000 Microns) at 75°F
Update Rate	0.5 sec.
Alarm	Audible and Visual Alarm for High and Low Vacuum
Remote Alarm (R100)	Up to 400 ft Remote Audible, Visual and Vibrating Alarm for High and Low Vacuum
Alarm Volume	87 dB for Both Unit and Remote
Op.Temp. Range	0°F to 150°F (-17°C to 65°C)
Overpressure	800 PSI max (55 Bar)
Power Source	3 AA Batteries
Battery Life	600 Hours Continuous Usage, with Battery Indicator
Auto Shutoff	8 Hours when Alarms are Active When Alarms are Disabled:
	• 10 Minutes when Vacuum Reading is above 19,000 Microns
	• 1 Hour when Vacuum Reading is below 19,000 Microns
Weight	6 oz
Dimensions	5.5" H x 2.75" W x 1.5" D



VG640D



VG640

### Accessories

VGC	Vacuum Gauge Coupler
10475	120 Volt AC Adapter
10740	Vinyl Case

### R100

#### Remote Alarm Receiver

- Audible, Visual and Vibrating Alarm
- Integrated Belt Clip



### VGC

#### Vacuum Gauge Coupler



### Specifications

Distance	Up to 400 ft.*
Alarm	Audible
Alarm Volume	87 dB
Operating Temperature Range	-20°F to 160°F (-28°C to 70°C)
Power Source	9 V Battery
Battery Life	45 Hours Continuous Usage, with Low Battery Audible Indicator.
Weight	3 oz
Dimensions	5.0" H x 2.5" W x 1.0" D

\* Distance is measured when the remote receiver is within a direct line of sight of the VG640/VG640T/VG640D. Obstructions between the remote and the VG640/VG640T/VG640D can reduce this distance.



Scan for VG640 video

### VG640T Kit Includes:

- VG640
- R100
- VGC, Vacuum Gauge Coupler
- Soft Case



# Vacuum & Pressure Gauges



## VG64 & VG64S

### Digital Vacuum Gauge

- Ultra Fine Resolution
- Reads Vacuum in 7 International Units
- Display Updates Every 1/2 Second
- Convenient Built in Hanger
- Cleaning Port Provides Quick Cleaning and Drying of Sensor
- Low Battery Indicator
- VG64S has Single Port Connection (includes fitting)

### Specifications

Sensor Type	Thermistor	
Connector Type	Standard 1/4" Male Flare Fitting	
Vacuum Range	0-12,000 Microns (0-1,600 Pascals)	
Scale	Microns, PSI, InHg, milliBars, Pascals, Torr, milliTorr	
Resolution	Measurement Range	Resolution
	0-200	1 Microns
	201-500	5 Microns
	501-1,000	10 Microns
	1,001-2,000	50 Microns
	2,001-5,000	250 Microns
Operating Temperature Range	35°F to 125°F (2°C to 52°C)	
	Overpressure	500 PSI Max (20 Bar)
Accuracy	+/- 10% (100-1000 Micron)	
Power Source	9 V Battery (not included)	
Auto Shutoff	Yes	
Dimensions	5 1/2" x 3" x 1 1/4"	



VG64S Fitting VG64S

## VG60

### ELECTRONIC VACUUM GAUGE

10 Segment Color Coded LED Readout Provides Fast Response of Vacuum Measurements

- Pocket Size - Only 5 1/2" x 1 3/4" x 1 1/2"
- Cleanable Sensor
- Single Switch Operation
- Low Battery Indication
- Color Coded LED Display

### Specifications

Sensor Type	Thermistor
Connector Type	Standard 1/4" Male Flare Fitting
Vacuum Range	50-5,000 Microns
Scale	Microns, 10 LED Segments Atmosphere to 50 Microns
Overpressure	500 PSI Max (20 Bar)
Power Source	9 V Battery (not included)
Auto Shutoff	No
Dimensions	5 1/2" x 1 3/4" x 1 1/2"
Weight	6.8 oz.
Operating Temperature Range	35°F to 125°F (2°C to 52°C)



## VG61

### ELECTRONIC VACUUM GAUGE

Enjoy the Same Features as the VG60 in a Durable Hard Case. Sensor Cord Extends to 5 Feet

- Cleanable Sensor
- Single Switch Operation
- Low Battery Indication
- Color Coded LED Display

### Specifications

Sensor Type	Thermistor
Connector Type	Standard 1/4" Male Flare Fitting
Vacuum Range	50-5,000 Microns
Scale	Microns, 10 LED Segments Atmosphere to 50 Microns
Operating Temperature Range	35°F to 125°F (2°C to 52°C)
Overpressure	500 PSI Max (20 Bar)
Power Source	9 V Battery (not included)
Auto Shutoff	No
Dimensions	9 1/2" x 6 3/4" x 2 3/4"
Weight	1.8 lbs.



# Vacuum & Pressure Gauges



## VG65 PROFESSIONAL SERIES DIGITAL VACUUM GAUGE

Same Great Specifications as the VG64 in a Rugged Service Case

- Extendable Service Card

### Specifications

Sensor Type	Thermistor	
Connector Type	Standard 1/4" Male Flare Fitting	
Vacuum Range	0-12,000 Microns (0-1,600 Pascals)	
Scale	Microns, PSI, InHg, milliBars, Pascals, Torr, milliTorr	
Resolution	Measurement Range	Resolution
	0-200	1 Microns
	201-500	5 Microns
	501-1,000	10 Microns
	1,001-2,000	50 Microns
	2,001-5,000	250 Microns
5,001-8,000	500 Microns	
Overpressure	500 PSI Max (20 Bar)	
Accuracy	+/- 10% (100-1000 Microns)	
Power Source	9 V Battery (not included)	
Auto Shutoff	Yes	
Dimensions	5 1/2" x 3" x 1 1/4"	
Weight	1 lb. 11 oz.	



## VG66 PROFESSIONAL SERIES ANALOG VACUUM GAUGE

- 5 Inch Analog Display
- Cleanable Vacuum Sensor
- Low Battery Indicator
- Expandable Sensor Cord (Up to 6 ft.)
- Sensor Cord Extendable Using Standard Telephone Cord
- Rugged Service Case

### Specifications

Sensor Type	Thermistor
Connector Type	Standard 1/4" Male Flare Fitting
Vacuum Range	10-5,000 Micron
Scale	Microns, Torr
Overpressure	500 PSI Max (20 Bar)
Power Source	9 V Battery (not included)
Auto Shutoff	N/A
Dimensions	9 1/4" x 7 1/2" x 2 3/4"
Weight	2 lbs. 6 oz.



## DPG25V/DPG100/DPG1000 DIGITAL PRESSURE GAUGES

The DPG Series Features Multiple Units, Selectable Zero Reference and Automatic Power Off to Conserve Battery Power. The DPG100/DPG1000 Can be Used with Any Media Compatible with 17-4PH Stainless Steel.

- High Accuracy
- Measurement Units PSI, Bar, kg/cm<sup>2</sup>, ATM
- Easy to Use
- Stainless Steel Sensor
- No Welds or "O" Rings
- 1/8 NPT Female Connection
- Long Battery Life
- 1 Hour Auto Off



DPG SERIES COMMON SPECIFICATIONS	
Stability (1 year)	±0.25% FS (typ)
Overrange Protection	2X Rated Pressure
Burst Pressure	5X or 20,000 psi whichever is less.
Pressure Cycles	> 100 Million
Operating Temperature Range	32°F to 130°F (0°C to 55°C)
Storage Temperature Range	-40°F to 150°F (-40°C to 65°C)
Compensated Temperature Range	32°F to 130°F (0°C to 55°C)
Temperature Compensation Zero	< ± 1.5% of FS
Temperature Compensation Span	< ± 1.5% of FS
Pressure Sensor Connection	1/8 NPT Female
Update Rate	3 Samples per Second (typ)
Power	9 Volt Alkaline Battery
Automatic Power Off	1 Hour
Battery Life	100 Hours Continuous Operation (typ)

	DPG25V	DPG100	DPG1000
Pressure Range	-14.7 to 25 PSI	-14 to 100 PSI	-14 to 1000 PSI
Measurement Units	InHg, PSI,	PSI, BAR, Kg/cm <sup>2</sup> , ATM	PSI, BAR, Kg/cm <sup>2</sup> , ATM
Resolution PSI	0.1	0.1	1.0
InHg	0.01	*	*
BAR	*	0.01	0.1
Kg/cm	*	0.01	0.1
Atm	*	0.01	0.1
Accuracy	< ± 0.5% (includes Non-linearity, Hysteresis and Non-repeatability)		

# Chart Recorders



## CRTH2 TEMPERATURE/HUMIDITY/ DEW POINT RECORDER

Selectable Chart Speeds from 1 1/2 hours to 31 days.

- Measures Temperature, Humidity and Dew Point
- Advanced, Reliable Micro-controller Design
- Built-in “Last Setting” Memory
- Two (2) line LCD Display
- Easy-to-use Membrane Keypad
- All Functions User Selectable from Front Panel
- °F/°C Selectable
- Remote Combination Temperature/Humidity Probe with 6 Foot Cable
- Field Calibration of Probe
- Combination of 24 Speed and Temperature Ranges
- 6” Circular Chart
- Chart Number Displayed when Time & Temperature Ranges Selected
- Single Turn or Continuous Chart Rotation
- Two (2) Independent Pens
- Alarm with Delay for Over and Under Temperature & Humidity
- Audible and Visual Alarm Indication
- Remote Alarm or Telephone Dialer Connection (Optional Auto-dialer - ADTA)
- Standard 120 VAC Operation
- Optional 12 VDC Operation for Auto or Marine
- 48 Hour Battery Back-up
- Low Battery Warning on Display
- Durable Polycarbonate Case with Full-view Cover
- Free Standing or Wall Mount
- Snap-on Extra Support Legs
- Fold Away Carrying Handle



### Specifications

Temp Range/Accuracy	-40°F to 130°F +/- 2°F (-40°C to 55°C +/- 1°C)
RH Range/ Accuracy	0 to 90% (non condensing) at 32°F to 130°F +/- 2% (0°C to 55°C) ambient
Dew Point Range	32°F to 130°F (0° to 55°C)
Chart Diameter	6 inches
Chart Rotation Mode	Continuous or Single turn
Chart Rotation Speed	1.5, 3, 6, 12 & 24 hrs, 7 & 31 days
Chart Speed Accuracy	± 1%
Charts	60 assorted included
Display	LCD 16 characters x 2 lines
Temperature Alarm Range	-20°F to 120°F (-30°C to 50°C)
Relative Humidity Alarm Range	0 to 100%
Alarm Delay	NO DELAY, 10 mins., 30 mins., 1 hr. or 2 hrs.
Remote Alarm Connection	NO, 48 VAC/DC, 0.1 A resistive load
Ambient Operating Temperature	32°F to 120°F (0°C to 49°C)
Primary Power	120 VAC, 50/60 Hz (220 VAC, 50/60 Hz optional)
Alternate Power	12 V vehicle operation (need optional adapter)
Battery backup	8 AA alkaline batteries (not included)
Battery Life	48 hrs. continuous
Dimensions	9 1/4" x 7 1/4" x 2 3/4"
Weight	4 lbs. 15 oz.

### Accessories

PART NO.	DESCRIPTION
KTH	Temperature/ Humidity Probe
CABLE10H	Extension cable for KTH (2 max)
CRPENR	Red Recorder Pen
CRPENB	Blue Recorder Pen
CRT	120 VAC Power Adapter
CRT220	220 VAC Power Adapter
CRTH2	120V 50/60 Hz
CRTH2-220	220V 50/60 Hz
ADTA	Auto-Phone Dialer

### Recorder Charts

TEMPERATURE RANGE 1	HUMIDITY RANGE 2	12 HR	24 HR	7 DAY	31 DAY
-20°F to 120°F	0-100% Humidity	E20120F12	E20120F24	E20120F7	E20120F31
-20°F to 50°F	0-100% Humidity	E2050F12	E2050F24	E2050F7	E2050F31
40°F to 110°F	0-100% Humidity	E40110F12	E40110F24	E40110F7	E40110F31
-30°C to 50°C	0-100% Humidity	E3050C12	E3050C24	E3050C7	E3050C31
-30°C to 10°C	0-100% Humidity	E3010C12	E3010C24	E3010C7	E3010C31
5°C to 45°C	0-100% Humidity	E545C12	E545C24	E545C7	E545C31

# Chart Recorders

## SR SERIES STRIP CHART RECORDERS

The SR Series Strip Chart Recorders Provide Long Length Recordings with Maximum Detail.

- LCD Alphanumeric Display
- Adjustable Chart Speed (1/4 inch per hour to 2 inches per minute)
- Recording Length: 2 hours to 40 Days
- Over/Under Alarm with 100ma N.O. Relay and Audible Alarm
- Delay/No Delay Alarm
- Battery Backup
- 220V Operation (optional)
- RS-232C Port
- Use Inches or mm Charts
- Field Calibrated with User Adjustments
- Free Standing or Wall Mount
- Chart Length 20' (2 Included)

### SR Series Common Specifications

Display	Alphanumeric LCD 16 Characters 2 Line	
Chart	Strip Chart (20' x 4 3/4")	
Chart Speeds	1/4 inch/hour	1/2 cm/hour
	1 inch/hour	2 cm/hour
	2 inches/hour	4 cm/hour
	4 inches/hour	8 cm/hour
	8 inches/hour	16 cm/hour
	1/4 inch/minute	1/2 cm/minute
	1/2 inch/minute	1 cm/minute
	1 inch/minute	2 cm/minute
	2 inches/minute	4 cm/minute
Chart Speed		
Accuracy	+/- 1%	
Alarm Delay		
Range	No Delay, 10 min., 30 min., 1 hr., 90 min., or 2 hr.	
Remote Alarm		
Connection	N.O. 48 VAC/DC, 0.1 Amp Dry Contacts	

Operating Ambient	32°F to 125°F
Temperature Range	(0° to 50°C)
Storage Temperature	0°F to 125°F (-18°C to 50°C)
Primary Power	120 VAC, 50/60 Hz Adapter (220-240 VAC, 50 Hz. Optional)
Backup Power	8 AA Alkaline Batteries (not supplied)
Alternative Power	12 Volt Vehicle Operation with Optional Adapter
Power Consumption	3.5 Watts Max.
Mounting	Vertical or Horizontal, Free Standing or Wall Mounted
Dimensions	9.25" x 7.25" x 2" (235mm x 184mm x 51mm)
Weight	2.5 lb. (1.3 kg)

## SRB - TEMPERATURE RECORDER

- Temperature Ranges: -40°F to 150°F (-40°C to 60°C)
- Remote Readings From up to 100 ft. (CABLE 10T Optional)
- Programmable Speed and Temperature Ranges

### Specifications

Range	-40°F to 150°F (-40°C to 60°C)
Chart Ranges	-40°F to 60°F -40°C to 60°C 50°F to 150°F -30°C to 20°C 0°F to 100°F 0°C to 50°C
Accuracy	+/-2°F +/-1°C
Probe	TP15 Temperature probe with 15' cable (cable extension is available)
Alarm Range	-40°F to 150°F (-40°C to 60°C)



### Accessories

ADTA	Automatic Dialer
CABLE10T	10' Cable
CRPEN	Black Pen
CRPENB	Blue Pen
CRPENR	Red Pen
CRT	Power Adapter
CRT220	Power Adapter
CRT220UK	Power Adapter
SCR11	Strip Chart (American Scale) (20')
SCR12	Strip Chart (Metric Scale) (20')
TP15	15' Wire with 4" Stainless Steel Sensor
12070-001	Pen Arm Short

# Chart Recorders

## SRTH - TEMPERATURE/HUMIDITY RECORDER

- Temperature Ranges: -40°F to 150°F (-40°C to 60°C)
- Humidity Range: 5 to 90% RH
- Programmable Speed and Temperature Ranges

### Specifications

Range	-40°F to 150°F (-40°C to 60°C) 5 to 90% RH
Chart Ranges	-40°F to 60°F
	-40°C to 60°C
	50°F to 150°F
	-30°C to 20°C
	0°F to 100°F
Accuracy	0°C to 50°C
	+/-2°F
	+/-1°C (5 to 90% RH)
Probe	KTH Temperature
	Humidity with 6' cable
	90% RH (Non-condensing)
Alarm Range	-40°F to 150°F
	(-40°C to 60°C)
	5 to 90% RH



### Accessories

ADTA	Automatic Dialer
CABLE10H	Extension Cable for KTH
CABLE15	15' Cable for Sensor Probes
CABLE25	25' Cable for Sensor Probes
CABLE6	6' Cable for Sensor Probes
CRPEN	Black Pen
CRPENB	Blue Pen
CRPENR	Red Pen
CRT	Power Adapter
CRT220	Power Adapter
CRT220UK	Power Adapter
KTH	Temperature Humidity Probe
SCR11	Strip Chart (American Scale) (20')
SCR12	Strip Chart (Metric Scale) (20')

## SRJ - J-TYPE THERMOCOUPLE TEMPERATURE RECORDER

- Temperature Ranges: -40°F to 1000°F (-40°C to 500°C)
- Remote Readings from up to 2,000 ft. (Use TCW25, TCW50, TCW75, TCW100)
- Programmable Speed and Temperature Ranges

### Specifications

Range	-40°F to 1000°F (-40°C to 500°C)
Chart Ranges	-40°F to 60°F
	-40°C to 60°C
	0°F to 250°F
	-30°C to 20°C
	50°F to 150°F
	0°C to 50°C
	0°F to 100°F
	0°C to 100°C
	0°F to 500°F
	0°C to 500°C
Accuracy	0°F to 1000°F
	+/-2°F
	+/-1°C
Probe	6' High Temperature Thermocouple Probe
Alarm Range	-40°F to 1000°F
	(-40°C to 500°C)



### Accessories

ADTA	Automatic Dialer
CRPEN	Black Pen
CRPENB	Blue Pen
CRPENR	Red Pen
CRT	Power Adapter
CRT220	Power Adapter
CRT220UK	Power Adapter
HTP5	6' High Temperature Thermocouple Wire
HTP5100	100' High Temperature Thermocouple Wire
HTP515	15' High Temperature Thermocouple Wire
HTP525	25' High Temperature Thermocouple Wire
HTP550	50' High Temperature Thermocouple Wire
SCR11	Strip Chart (American Scale) (20')
SCR12	Strip Chart (Metric Scale) (20')
TCW100	Type J Thermocouple Wire - 100' Wire Only
TCW25	Type J Thermocouple Wire - 25' Wire Only
TCW50	Type J Thermocouple Wire - 50' Wire Only
TCW75	Type J Thermocouple Wire - 75' Wire Only
12070-001	Pen Arm Short

## Chart Recorders

### SR4-20 4 TO 20mA AND DC VOLTAGE RECORDER

- Current Range: 0 to 20mA, 4 to 20mA
- Voltage Range: 0 to 5 VDC, 0 to 100 mV
- Programmable Speed and Current and Voltage Ranges

#### Specifications

Range	0-5.0 Volts DC 0-20ma DC 4-20ma DC
Chart Ranges	0 to 5.00 Volts (+/-0.01 Volt) 0 to 100 mV (+/-1 mV) 0 to 20mA (+/-0.1mA) 4 to 20 mA (+/-0.1mA)
Accuracy	0 to 5.00 Volts (+/-0.01 Volt) 0 to 100mV (+/-1mV) 0 to 20mA (+/-0.1mA) 4 to 20mA (+/-0.1mA)
Alarm Range	0 to 20ma (DC) 0 to 5 Volts (DC) 0 to 100mV (DC)



#### Accessories

ADTA	Automatic Dialer
CRPEN	Black Pen
CRPENB	Blue Pen
CRPENR	Red Pen
CRT	Power Adapter
CRT220	Power Adapter
CRT220UK	Power Adapter
SCR11	Strip Chart (American Scale) (20')
SCR12	Strip Chart (Metric Scale) (20')
12070-001	Pen Arm Short

# Chart Recorders



## CIRCULAR CHART RECORDERS

The CR87 Six Inch Chart Recorder Series sets the Standard for Reliable and Rugged Reporting.

- Micro-controller Design
- Large LED Display
- Front Panel Controls
- Single or Continuous Chart Rotation
- Choose from 120V or 220V Models (see chart)
- Battery Backup
- 12 Volt Operation. Allows Use in Vehicular or Marine Operations
- Comes with 2 Cartridge Pens & 60 6" dia. assorted charts
- Convenient Folding Handle
- Fold-out Support Stand
- Free Standing or Wall Mount



## CR87B TEMPERATURE RECORDER

- Temperature Range: -40°F to 120°F (-40°C to 50°C)
- Remote Readings from Up to 100 ft. (optional sensor wire p/n CABLE10T)
- Programmable Speed and Temperature Ranges
- 12 Recorders in 1



MODEL NO.	TEMP. READING IN	OPERATING VOLTAGE
CR87B	Fahrenheit	110-120V, 50/60 Hz
CR87BC	Celsius	110-120V, 50/60 Hz
CR87B220C	Celsius	220-240V, 50/60 Hz

### CR87B Series Recording Charts

TEMP. RANGE	6 HRS.	24 HRS.	7 DAYS	31 DAYS
-40°F to 30°F	CR87-4	CR87-1	CR87-7	CR87-19
-20°F to 50°F	CR87-5	CR87-2	CR87-8	CR87-20
50°F to 120°F	CR87-6	CR87-3	CR87-9	CR87-21
-40°C to 0°C	CR87-13	CR87-10	CR87-16	CR87-22
-30°C to 10°C	CR87-14	CR87-11	CR87-17	CR87-23
10°C to 50°C	CR87-15	CR87-12	CR87-18	CR87-24

### Accessories

PART NO.	DESCRIPTION
TP15	15' wire with 4" stainless steel sensor
CABLE10T	10' Cable 100 ft. Max
11234	Pen Arm
CRPEN	Replacement Pen Black

### Specifications

Ambient Operating Temperature Range	32°F to 140°F (0°C to 60°C)
Ambient Operating Relative Humidity	96% Maximum
CR87B Chart Speed Selectable	6 Hours, 24 Hours, 7 Days, 31 Days
Chart Rotation Mode	Single Turn or Continuous
Chart Speed Accuracy	+/-1%
Chart Diameter	6 inches
Display	3 Digit LED 0.5"
Primary Power Supply	120 VAC, 50/60 Hz. (220-240 VAC, 50/60 Hz. Optional CR87B-220)
Battery Backup	12 Volt Vehicle Operation With Optional Adapter (8) AA Alkaline Batteries (not supplied)
Battery Life	48 Hours Continuous Use
Recording Pen	Ink Type
Case Size	9 1/4" x 7 1/4" x 2 3/4"
Weight	4 lbs., 7 oz.
Temp. Scale Selectable (°F)	-40°F to 30°F, -20°F to 50°F, 50°F to 120°F
Temp. Scale Selectable (°C)	-40°C to 0°C, -30°C to 10°C, 10°C to 50°C
Temp. Accuracy	+/-1°C or +/-2°F
Temp. Sensor	15' Long Sensor Wire with 4" Stainless Steel Submersible Temp. Probe

# Chart Recorders

## CR87J TEMPERATURE RECORDER

- Type J Thermocouple
- Temperature Range: -40°F to 120°F (-40°C to 50°C)
- Remote Readings
- Programmable Speed and Temperature Ranges
- Snap-on Support Legs
- Remote Readings from Up to 200 ft. (see accessory table)



MODEL NO.	TEMP. READING IN	OPERATING VOLTAGE
CR87J	Fahrenheit	110-120V, 50/60 Hz
CR87JC	Celsius	110-120V, 50/60 Hz
CR87J220C	Celsius	220-240V, 50/60 Hz

### Type J Thermocouple Wires

PART NO.	DESCRIPTION
TCW25	25' Wire Only
TCW50	50' Wire Only
TCW75	75' Wire Only
TCW100	100' Wire Only

### CR87J Series Recording Charts

TEMP. RANGE	6 HRS.	24 HRS.	7 DAYS
-40°F to 30°F	CR87-4	CR87-1	CR87-7
-20°F to 50°F	CR87-5	CR87-2	CR87-8
50°F to 120°F	CR87-6	CR87-3	CR87-9
-40°C to 0°C	CR87-13	CR87-10	CR87-16
-30°C to 10°C	CR87-14	CR87-11	CR87-17
10°C to 50°C	CR87-15	CR87-12	CR87-18

### Accessories

PART NO.	DESCRIPTION
CR15B	15' wire with 4" stainless steel temperature sensor
11234	Pen Arm
CRPEN	Replacement Pen Black

### Specifications

Ambient Operating Temperature Range	32°F to 140°F (0°C to 60°C)
Ambient Operating Relative Humidity	96% Maximum
Chart	6 Hours, 24 Hours, 7 Days, 31 Days
Speed Selectable	7 Days, 31 Days
Chart Rotation Mode	Single Turn or Continuous
Chart Speed Accuracy	+/-1%
Chart Diameter	6 inches
Display	3 Digit LED 0.5"
Primary Power Supply	120 VAC, 50/60 Hz. (220-240 VAC, 50/60 Hz. 12 Volt Vehicle Operation With Optional Adapter)
Battery Backup	(8) AA Alkaline Batteries (not supplied)
Battery Life	48 Hours Continuous Use
Recording Pen	Ink Type
Case Size	9 1/4" x 7 1/4" x 2 3/4"
Weight	4 lbs., 7 oz.
Temp. Scale Selectable (°F)	-40°F to 30°F, -20°F to 50°F, 50°F to 120°F
Temp. Scale Selectable (°C)	-40°C to 0°C, -30°C to 10°C, 10°C to 50°C
Temp. Accuracy	+/-1°C or +/-2°F
Temp. Sensor	15' Long Sensor Wire with 4" Stainless Steel Submersible Temp. Probe

## CR87HT HIGH TEMPERATURE RECORDER

- Temperature Range: 0°F to 1000°F (0°C to 500°C)
- Remote Readings from Up to 2000 ft.
- Programmable Speed and Temperature Ranges
- Snap-on Support Legs



MODEL NO.	TEMP. READING	OPERATING VOLTAGE
CR87HT	Fahrenheit	110-120V, 50/60 Hz.
CR87HT22C	Celsius	220-240V, 50/60 Hz.
CR87HT20	Fahrenheit	220-240V, 50/60 Hz.
CR87HTC	Celsius	110-120V, 50.60 Hz.

### CR87HT Series Recording Charts

TEMP. RANGE	6 HRS.	24 HRS.	7 DAYS	31 DAYS
0°F to 250°F	CR1000-4	CR1000-1	CR1000-7	CR1000-19
0°F to 500°F	CR1000-5	CR1000-2	CR1000-8	CR1000-20
500° to 1000°F	CR1000-6	CR1000-3		
0°C to 120°C	CR1000-13	CR1000-10	CR1000-16	CR1000-22
0°C to 250°C	CR1000-14	CR1000-11	CR1000-17	CR1000-23
250° to 500°C	CR1000-15	CR1000-12	CR1000-18	CR1000-24

### Accessories

PART NO.	DESCRIPTION
HTP5	6' high temperature thermocouple wire
HTP515	15' high temperature thermocouple wire
HTP525	25' high temperature thermocouple wire
HTP550	50' high temperature thermocouple wire
HTP5100	100' high temperature thermocouple wire
11234	Pen Arm
CRPEN	Replacement Pen Black

### Specifications

Ambient Operating Temperature Range	32°F to 140°F (0°C to 60°C)
Ambient Operating Relative Humidity	96% Maximum
Chart	6 Hours, 24 Hours, 7 Days, 31 Days
Speed Selectable	7 Days, 31 Days
Chart Rotation Mode	Single Turn or Continuous
Chart Speed Accuracy	+/-1%
Chart Diameter	6 inches
Display	3 Digit LED 0.5"
Primary Power Supply	120 VAC, 50/60 Hz. (220-240 VAC, 50/60 Hz. 12 Volt Vehicle Operation With Optional Adapter)
Battery Backup	(8) AA Alkaline Batteries (not supplied)
Battery Life	48 Hours Continuous Use
Recording Pen	Ink Type
Case Size	9 1/4" x 7 1/4" x 2 3/4"
Weight	4 lbs., 7 oz.
Temp. Scale Selectable (°F)	0°F to 250°F, 0°F to 500°F, 500°F to 1000°F
Temp. Scale Selectable (°C)	0°C to 120°C, 0°C to 250°C, 250°C to 500°C
Temp. Accuracy	+/-1°C or +/-2°F
Temp. Sensor	6' Long High Temperature Type 'J' Thermocouple Wire Probe. Can Not Be Used in Liquid or Semi-Solid.

# Chart Recorders

## CR87P/CR87PB PRESSURE RECORDER

- Pressure Range 0 to 500 psi (0 to 35 BAR)
- Stainless Steel 17-4 Pressure Sensor with Port 1/4" NPT
- 2500 PSI Burst Pressure
- Rated for Any Gas or Fluid Compatible with 17-4 Stainless Steel
- Programmable Speed and Pressure Ranges
- Snap-on Support Legs



MODEL NO.	TEMP READING IN	OPERATING VOLTAGE
CR87P	PSI	110-120V, 50/60Hz.
CR87P220	PSI	220-240V, 50/60Hz.
CR87PB	BAR	110-120V, 50/60 Hz.
CR87PB220	BAR	220-240V, 50/60 Hz.

### CR87PB Series Recording Charts

PRESSURE RANGE	24 HRS.	7 DAYS
0 - 35 BAR	24H35BAR	7D35BAR
0 - 10 BAR	24H10BAR	7D10BAR
0 - 3.5 BAR		7D3.5BAR

### Specifications

Ambient Operating Temperature Range	32°F to 140°F (0°C to 60°C)
Ambient Operating Relative Humidity	96% Maximum
Chart Speed Selectable	6 Hours, 24 Hours, 7 Days, 31 Days
Chart Rotation Mode	Single Turn or Continuous
Chart Speed Accuracy	+/- 1%
Chart Diameter	6 inches
Display	3 Digit LED 0.5"
Primary Power Supply	120 VAC, 50/60 Hz. (220-240 VAC, 50/60 Hz. 12 Volt Vehicle Operation With Optional Adapter)
Battery Backup	(8) AA Alkaline Batteries (not supplied)
Battery Life	48 Hours Continuous Use
Recording Pen	Ink Type
Case Size	9 1/4" x 7 1/4" x 2 3/4"
Weight	4 lbs., 7 oz.
Pressure Range	0 to 500 psi, 0 to 150 psi
PSI Model	0 to 50 psi
Pressure Range	0 to 35 BAR, 0 to 10 BAR
BAR Model	0 to 3.5 BAR
Pressure Accuracy	+/- 1% F.S.
Temp. Sensor	+/- 1% F.S.

### Accessories

PART NO.	DESCRIPTION
CR87PA	Replacement pressure sensor and adapter
11234	Pen Arm
CRPEN	Replacement Pen Black

### CR87P Series Recording Charts

RANGE	6 HRS.	24 HRS.	7DAYS	31DAYS
0 - 500 PSI	6H500PSI	24H500PSI	7D500PSI	31D500PSI
0 - 150 PSI	6H150PSI	24H150PSI	7D150PSI	31D150PSI
0 - 50 PSI	6H50PSI	24H50PSI	7D50PSI	31D50PSI

## CR87E EVENT RECORDER

- Comes Complete with Probes for Voltage, Sound and Light
- Displays Length of Event, Time Between Events or Total Events
- Programmable Speed and Event Information
- Snap-on Support Legs

PART NO.	OPERATING VOLTAGE
CR87E	110-120 VAC, 50/60 Hz
CR87E220	220-240 VAC, 50/60 Hz

### CR87E Series Recording Charts

6 HRS.	24 HRS.
EVENT-6H	EVENT-24H
7 DAYS	31 DAYS
EVENT-7D	EVENT-31D

### Event Sensors for CR87E

PART NO.	DESCRIPTION
KEV	Replacement voltage sensor with adapter
KEL	Replacement light sensor with adapter
KES	Replacement sound sensor with adapter
11234	Pen Arm
CRPEN	Replacement Pen Black



### Specifications

Ambient Operating Temperature Range	32°F to 140°F (0°C to 60°C)
Ambient Operating Relative Humidity	96% Maximum
Chart Speed Selectable	6 Hours, 24 Hours, 7 Days, 31 Days
Chart Rotation Mode	Single Turn or Continuous
Chart Speed Accuracy	+/- 1%
Chart Diameter	6 inches
Display	3 Digit LED 0.5"
Primary Power Supply	120 VAC, 50/60 Hz. (220-240 VAC, 50/60 Hz. 12 Volt Vehicle Operation With Optional Adapter)
Battery Backup	(8) AA Alkaline Batteries (not supplied)
Battery Life	48 Hours Continuous Use
Recording Pen	Ink Type
Case Size	9 1/4" x 7 1/4" x 2 3/4"
Weight	4 lbs., 7 oz.
KEV Range	24 VAC to 270 VAC (50/60 Hz) 24 VDC to 180 VDC
KEL Range	Illumination Threshold Range 18 LUX to 1900 LUX +/- 20
KES Range	Sound Threshold Range 40 dB to 114 dB @ 1Khz +/- 20%
<b>EVENT PROBES</b>	
KEV	AC/DC Voltage Detecting with Two Wire Clip Leads
KEL	A Sensitive Photocell
KES	A Sensitive Audio Transducer

# Chart Recorders

## CUSTOM SERIES TEMPERATURE RECORDER

The Custom Series Temperature Recorders have the Same General Features as the CR87 Series, with the Ability to Customize your Temperature Measurement Range. The Custom Unit has an Internal Temperature Sensor and can be Placed Directly in the Environment that it will Monitor.

- Internal Bi-metal Sensor
- Custom Temperature and Speed Selection
- 9V Battery Operation (not included)
- AC Adapter
- Snap-on Support Legs



Note: Standard 6" diameter recording charts are available for Fahrenheit and Celsius recorders, and are packaged in quantities of 60 per box.

MODEL NO. WITH DISPLAY	TEMP RANGE	RECORD TIME
SD120F7	-20°F to 120°F	7 Days
SD120F24	-20°F to 120°F	24 Hrs
SD100F7	0°F to 100°F	7 Days
SD50C7	-30°C to 50°C	7 Days

### Custom Series Recording Charts

SD MODELS TEMP RANGE	7 DAYS	24 HOURS
-20°F to 120°F	S20120F7	S20120F24
0°F to 100°F	S0100F7	S0100F24
45°F to 90°F	S4590F7	S4590F24
-30°C to 50°C	S3050C7	S3050C24
0°C to 45°C	S045C7	S045C24

### Specifications

Chart Speed	+/-1.5%
Accuracy	
Chart Diameter	6"
Case Size	9 1/4" x 7" x 2 3/4"
Weight	5 lbs.
Battery Life	One year
Temperature Accuracy	+/-2°F
Temperature Sensor	Bi-metal

## Common Recorder Accessories

### Type J Thermocouple Wire with Sensor for CR87J

PART NO.	DESCRIPTION
CR15B	15' wire with 4" stainless steel sensor (included)
CR25B	25' wire with 4" stainless steel sensor
CR50B	50' wire with 4" stainless steel sensor

PART NO.	DESCRIPTION
CR75B	75' wire with 4" stainless steel sensor
CR100B	100' wire with 4" stainless steel sensor



### Power Adapters

(FOR CR87B, CR87E, CR87P, CR87HT, CR86, CRTH2 & CRTT2)		
PART NO.	INPUT	OUTPUT
CRT (USA)	120 VAC	12 VDC
CRT220 (Europe)	220 VAC	12 VDC
CRT220UK (England)	220 VAC	12 VDC

(FOR CUSTOM SERIES)		
PART NO.	INPUT	OUTPUT
DPGT (USA)	120 VAC	9 VDC
DPGT220US (USA)	220 VAC	9 VDC
DPGT220UK (England)	220 VAC	9 VDC
DPGT220EU (Europe)	220 VAC	9 VDC



### Extension Cable for Event Sensors (KEV, KEL, KES) and CR87PA Pressure Sensor

PART NO.	DESCRIPTION
CABLE6	6' cable
CABLE15	15' cable
CABLE25	25' cable



### Nonsubmersible Type Air Sensor for CRTH2 & CRTT2

PART NO.	DESCRIPTION
THP5(CRTH2)	15' with plug-in jack
TTP5(CRTT2)	15' with plug-in jack



### Replacement Pens

PART NO.	DESCRIPTION
CRPEN	Black pen
CRPENR	Red pen
CRPENB	Blue pen



### For All Recorders

PART NO.	DESCRIPTION
12035	Battery Holder



# Chart Recorders

## CR4 UNIVERSAL RECORDER

The CR4 six (6) inch Universal Chart Recorder Offers the Ultimate in Flexibility. Choose One of 5 Sensors for Your Application, Connect it to the CR4 Universal Recorder, Make Desired Speed Selection and Start Recording. When Your Application Calls for a Different Sensor, just Change Probes for the Same Recorder.

- Automatic Probe Recognition
- Front Panel Touch Pad
- Real Time Data View
- Battery Backup
- Field Replaceable Probes
- Field Calibration of Probes
- Independent Channel Alarms

### 5 Interchangeable Probes

- KTH Temperature and Humidity Probe
- KTT Dual Temperature Probes
- KTP Temperature and Pressure Probes
- KPP Dual Pressure Probes
- KTE Temperature/Event Probes



### CR4 Specifications

Chart Diameter	6 inches
Chart Rotation Mode	Continuous or Single turn
Memory	
Chart Rotation Speed	1.5, 3, 6, 12 & 24 hrs, 7 & 31 days
Chart Speed Accuracy	±1%
Charts	60 assorted included
Display	LCD (2 line)
Temperature Alarm Range	-20°F to 120°F (-30°C to 50°C)
Relative Humidity Alarm Range	5 to 90% RH (Non-Condensing)
Pressure Alarm Range	0 to 500 PSI ( 0 to 35 Bar)
Alarm Delay	NO DELAY, 10 mins., 30 mins., 1 hr. or 2 hrs.
Remote Alarm Connection	NO, 48 VAC/DC, 0.1 A resistive load
Operating Temperature	32°F to 120°F (0°C to 49°C)
Primary Power	120 VAC, 50/60 Hz (220 VAC, 50/60 Hz optional)
Alternate Power	12 V vehicle operation (need optional adapter)
Battery backup	8 AA alkaline batteries
Battery Life	48 hrs. continuous

### CR4 Accessories

PART NO.	DESCRIPTION
CRPENR	Red Recorder Pen
CRPENB	Blue Recorder Pen
CRT	120 VAC Power Adapter
CRT220	220 VAC Power Adapter
12070-001	Pen Arm Short
12071-001	Pen Arm Long

### CR4 Probe Accessories

PART NO.	DESCRIPTION	KTH	KTT	KTP	KPP	KTE
CABLE10H	Extension cable for KTH (2 max)	*				
CABLE6	6 ft. cable for sensor probes	*	*	*	*	
CABLE15	15 ft. cable for sensor probes	*	*	*	*	
CABLE25	25 ft. cable for sensor probes	*	*	*	*	
TP15	Temperature sensor with 15 ft. wire	*	*			

# Chart Recorders

## UNIVERSAL RECORDER PROBES

### KTH - TEMPERATURE/HUMIDITY PROBE

Allows for Precision Measurement of Temperature, Humidity and Dew Point, (Non-Condensing). Probe Can Be Extended up to 25 Feet, Use p/n CABLE10H (2 max).



PROBE TYPE	PART NO.	TEMP RANGE/ ACCURACY	VOLTAGE RANGE	RH RANGE/ ACCURACY	PRESS RANGE/ ACCURACY	DEW POINT RANGE
Temp/RH	KTH	-40°F to 130°F +/- 2°F (-40° to 55°C +/- 1°C)	—	5 to 90% RH at 32° to 130°F +/- 5% (0° to 55°C) ambient	—	32° to 130°F (0° to 55°C)

KTH RANGE 1	KTH RANGE 2	12 HR	24 HR	7 DAY	31 DAY
-20°F to 120°F	0-100% HUMIDITY	E20120F12	E20120F24	E20120F7	E20120F31
-20°F to 50°F	0-100% HUMIDITY			E2050F7	E2050F31
40°F to 110°F	0-100% HUMIDITY	E40110F12	E40110F24	E40110F7	E40110F31
-30°C to 50°C	0-100% HUMIDITY	E3050C12	E3050C24	E3050C7	E3050C31
-30°C to 10°C	0-100% HUMIDITY	E3010C12	E3010C24	E3010C7	E3010C31
5°C to 45°C	0-100% HUMIDITY	E545C12	E545C24	E545C7	E545C31

### KTT - DUAL TEMPERATURE PROBES

Complete with Two Precision Temperature Probes. Allows for Two Independent Temperature Measurements. Includes Adapter and Connecting Cable. Perfect for Refrigerators, Freezers, Indoor/Outdoor Recording, etc. Temperature Probe Can be Extended 20 Feet, Use p/n CABLE10T (2 max/probe).



PROBE TYPE	PART NO.	TEMP RANGE/ ACCURACY	VOLTAGE RANGE	RH RANGE/ ACCURACY	PRESS RANGE/ ACCURACY	DEW POINT RANGE
Temp/RH	KTT	-40°F to 130°F +/- 2°F (-40° to 55°C +/- 1°C)	—	—	—	—

KTT RANGE 1	KTT RANGE 2	12 HR	24 HR	7 DAY	31 DAY
-20°F to 120°F	-20°F to 50°F	CRTT2-2	CRTT2-1	CRTT2-3	CRTT2-21
-20°F to 50°F	40°F to 110°F	CRTT2-5	CRTT2-4	CRTT2-6	CRTT2-19
40°F to 110°F	-20°F to 120°F	CRTT2-8	CRTT2-7	CRTT2-9	
-30°C to 50°C	5°C to 45°C	CRTT2-11	CRTT2-10	CRTT2-12	
5°C to 45°C	-30°C to 10°C			CRTT2-15	CRTT2-24
-30°C to 10°C	-30°C to 50°C		CRTT2-16	CRTT2-18	CRTT2-23

### KPP - DUAL PRESSURE PROBES

Complete with Two Pressure Probes. Measures and Records Two Pressures Simultaneously. Includes Connecting Cable and Adapter.



PROBE TYPE	PART NO.	PRESS RANGE/ ACCURACY
Temp/RH	KPP	0-500 psi (0-35 BAR) +/- 1% FS

KPP RANGE 1	KPP RANGE 2	12 HR	24 HR	7 DAY
0-50 PSI	0-150 PSI		CRPP2-7	
0-150 PSI	0-500 PSI	CRPP2-3	CRPP2-9	
0-10 BAR	0-35 BAR			CRPP2-18

## Chart Recorders

### KTP - TEMPERATURE/PRESSURE PROBES

Complete with Independent Precision Pressure and Temperature Probes. Measures and Records Temperature and Pressure Simultaneously. Ideal for Solving Intermittent Problems. Includes a Connecting Cable and Adapter. Perfect for Refrigerators, Freezers, Indoor/Outdoor Recording, etc. Temperature Probe Can Be Extended 20 Feet, Use p/n CABLE10T ( 2 max/probe).



PROBE TYPE	PART NO.	TEMP RANGE/ ACCURACY	PRESS RANGE/ ACCURACY
Temp/RH	KTP	-40°F to 130°F ±2°F (-40° to 55°C ±1°C)	0-500 psi (0-35 BAR) +/-1%FS

KTP RANGE 1	KTP RANGE 2	12 HR	24 HR	7 DAY
-20°F to 120°F	0-150 PSI		C RTP2-11	C RTP2-38
-20°F to 120°F	0-500 PSI	C RTP2-3	C RTP2-12	C RTP2-39
-20°F to 50°F	0-50 PSI		C RTP2-13	
-20°F to 50°F	0-500 PSI		C RTP2-15	
-30°C to 50°C	0-3.5 BAR	C RTP2-19		
-30°C to 50°C	0-10 BAR			C RTP2-47
-30°C to 50°C	0-35 BAR		C RTP2-30	
5°C to 45°C	0-3.5 BAR	C RTP2-25		
5°C to 45°C	0-10 BAR	C RTP2-26		C RTP2-53

### KTE - TEMPERATURE/EVENT PROBES

Complete with Precision Temperature Probe, Event Probe, a Connecting Cable and Adapter. Allows the Service Engineer to Analyze Various Equipment Running Cycles.



PROBE TYPE	PART NO.	TEMP RANGE/ ACCURACY	VOLTAGE RANGE
Temp/RH	KTE	-40°F to 130°F ±2°F (-40° to 55°C ±1°C)	24 VAC-270VAC (24VDC-180VDC)

KTE RANGE 1	KTE RANGE 2	24 HR	7 DAY
-20°F to 120°F	ON/OFF		V20120F7D
-30°C to 50°C	ON/OFF	V3050C24	V3050C7

### DR SERIES

The DR Disposable Temperature Recorder is an Inexpensive, One Time Use Temperature Recorder - Indispensable for HVAC/R Uses. It Gives an Accurate Strip Chart Recording of a Wide Ambient Temperature Range. It can be Easily Changed on the Job!

- Pull TAB to Start
- Detachable Three Part Water Resistant Job Information Form
- Unique Serial Number on Chart and Recorder for Positive Identification
- HACCP Documentation
- NIS Traceable Calibration
- ABS Plastic Enclosure

PART NO.	
DR10	10 Days
DR40	40 Days

#### Specifications

Temperature Range	-20°F to 100°F (-28°C to 38°C)
Temperature Accuracy	+/-2°F (+/-1°C) or Better
Day Spans	DR10 10 Day (°F & °C) DR40 40 Day (°F & °C)
Chart Resolution	10 Day 2.50" Per Day 1.5 volt AA Battery 1 Year from date of Purchase
Calibration	NIST Traceable
Tamper-Proof	Pre-sealed at the Factory
Security Seal	
Case Quantity	40 Instruments
Enclosure	ABS Plastic
Weight/Dimensions	10.5 oz (297.7 gm) 6.50" L x 3.50" W x 2.56"H 16.51 cm x 6.50 cm x 8.89 cm



# Data Loggers

## DATA VIEW DATA LOGGERS

- Text Display: Logging Summary, Sample Rate, Memory Used and Memory Left
- Graph Display: Shows Memory Trends Graphically, with Scrolling Feature
- Visual Over and Under Alarm Indicators for Temperature and Humidity
- USB Connection (Cable Included)



DVTH

### Common Logger Specifications

Calibration	User Single Point Offset Calibration is Available Through Software. Calibration can be Password Protected
Operating Temperature	15°F to 150°F (-10°C to 65°C)
Storage Temperature	-5°F to 160°F (-20°C to 70°C)
Time Accuracy	+/- 100ppm @ 75°F
Temperature Accuracy	+/- 1°F (0.5°C)
Temperature Resolution	0.01°F or 0.01°C
Dimensions	4" x 3.05" x 1.5" (10.2cm x 7.7cm x 3.8cm)
Weight	7 oz. (200 g)
Power Source	Three AA Batteries
Battery Life	2 Years Average Use



DVTH4

### Common Software Specifications

PC Interface	USB port. USB Cable is Included
Sampling Interval	User Selectable from 1 Second to 9 Hours, in 1 Second Increments
Data Security	Unique Factory Set Logger ID. Recording Session Counter. Password Protected Calibration
Operating System Compatibility	Windows® XP, Vista, 7 and 8 Compatible with 32 and 64 bit systems. Not Compatible with Windows® NT or 95
Minimum System Requirements	5MB of Free Disk Space, 800 x 600 Screen Resolution, 1 Free USB Port
Recording Start	On Button Press, Immediate After Setup, or at a User Specified Date and Time
Recording Mode	Stop on Memory Full, or Continuous Recording with Memory Rollover
Real Time Status	Visual Indication Through the LED. Software Real Time Status
User Calibration	Password Protected Calibration for Each Channel
User Information	Up to 30 Characters
Logger Channels	User Selectable. Disabling Channels Increases the Storage Capacity of the Other Channels
Units	US and Metric
Data Format	Exportable to Text or Excel Files



DVCV

## DVTH

### TEMPERATURE HUMIDITY LOGGER WITH DISPLAY

Record and INSTANTLY Display Trends for Temperature, Humidity and Dew Point with the DVTH. Monitor Real Time Measurements for Instant Environmental Conditions. When You're Ready, Download Over 40,000 Data Points to Your PC for Further Analysis. Data Logging has Never Been this Visual!

### Specifications

Sample Point Capacity	43,344 Points for Temperature Only. 21,672 Points for Temperature, Humidity and Dew Point
Relative Humidity Range	0% to 90% RH, Non-condensing
Relative Humidity Accuracy	+/- 2% RH, from 10% to 90% RH
Relative Humidity Resolution	0.01%RH



## Data Loggers

### DVT4

#### FOUR CHANNEL TEMPERATURE DATA LOGGER WITH DISPLAY

INSTANTLY Record and View Up To 4 Temperatures Using 1 Internal and 3 External Sensors. The Large, Clear Display Shows All Channels Simultaneously, as well as the Temperature Difference Between Channels. Up to 87,000 Data Points are Available for Download to Your PC for Further Analysis.

#### Specifications

Sample Storage Capacity	21,760 Points for 4 Temperatures. 29,013 Points for 3 Temperatures. 43,520 Points for 2 Temperatures. 87,040 Points for Single Temperature
Internal Probe Temperature Range	15°F to 150°F (-10°C to 65°C)
External Probe Temperature Range	-40°F to 160°F (-40°C to 70°C)



#### Accessories

PART NO.	DESCRIPTION
14265	Replacement Sensor
21423	Replacement Probe Accessory

### DVCV

#### DATA VIEW DATA LOGGER - CURRENT & VOLTAGE

- Displays Real Time Current, Voltage and Watts
- Displays Logging Summary, Sample Rate, Memory Used and Memory Left
- Sample Point Capacity: 43,344 Points for Voltage or Current Only 21,672 Points When Both Current and Voltage are Logged
- Three AA Batteries Included

#### Specifications

Operating Temperature Range	15°F to 150°F (-10°C to 65°C)
Current Range	1A to 300A AC
Current Accuracy	+/- 1A
Current Resolution	0.2A
Voltage Range	1V to 600V AC
Voltage Accuracy	+/- 0.4V
Voltage Resolution	0.2V





# Data Loggers

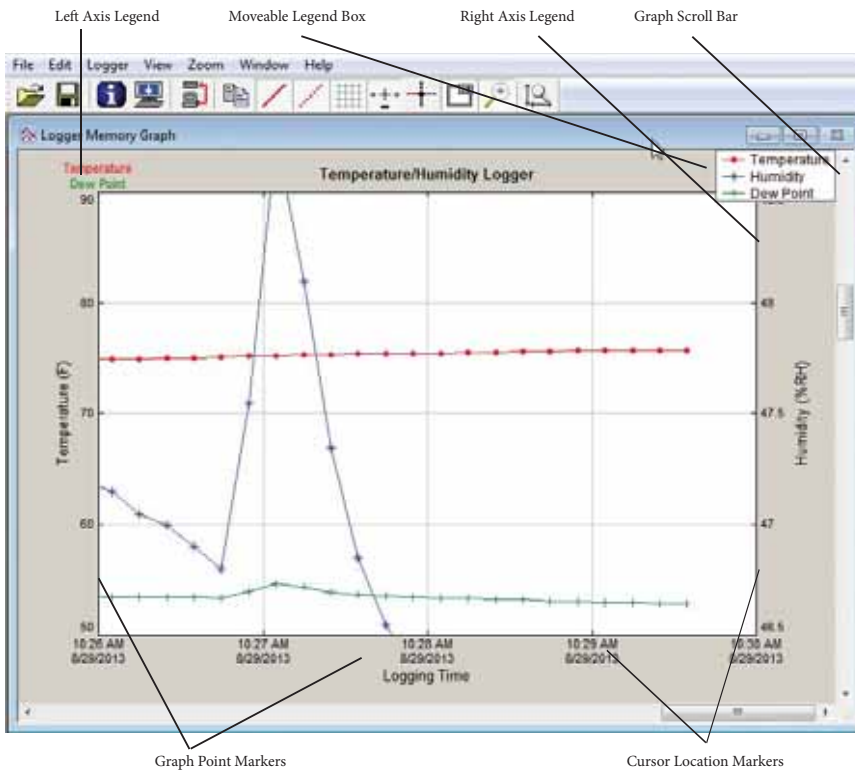
## SL500 SERIES DATA LOGGERS WITH LCD REAL TIME DISPLAY

The SL500 Series of Temperature and Temperature/Humidity Data Loggers are Simple to Use, Versatile Test Instruments Which Can Be Used in a Multitude of Applications.

- LCD Real Time Display of Temperature (°F or °C), Relative Humidity (SL500TH Only), Time, Date, Alarm Status, Logging Status and Battery Life
- Windows® Software Included
- Sample Rate from 1 Second to 9 Hours
- User Selectable Stop on Memory Full or Memory Rollover for Continuous Logging
- Delayed Start or Push Button Logging Control
- Read Data on Logger Display
- Displays Alarm Icon for High/Low Alarm Status
- Non-volatile EEPROM Memory Retains Data Even if Battery Fails
- USB Interface for Fast Data Transfer (3' Cable Included)
- Compact, Light-weight, Simple to Use
- 1 Year Warranty
- Optional NIST (National Institute of Standards & Technology) Calibration Available

### Working the Data Graph

Clicking Anywhere Within the Graph Window Activates the Graph Toolbar Buttons and the Graph Window Features



SL500T



SL500TH



SL500XT



SL500TC

MODEL NO.	DESCRIPTION
SL500T	Temperature Data Logger
SL500TH	Temperature & Humidity Data Logger
SL500XT	External Probe Temperature Data Logger
SL500TC	Thermocouple Temperature Data Logger

# Data Loggers

## SL500 Series Software Features

- Selectable Language (English/French/Spanish)
- Software Compatibility: Windows® XP/Vista/7/8
- Minimum System Requirements: 800 x 600 Resolution, 1 Free USB Port
- Complete Data Summary to Read Statistics and Alarm Information in a Simplified Format
- Tabular view of Data including Detailed Dates, Times and Values of Recorded Data
- Graph Function Displays Data in Graphical Format
- Cursor Displays Exact Data of Any Point in the Graphical Display
- Magnify Data with Powerful Zoom and Auto Scale Functions
- Auto Scale Function Fits Data to Screen or Allows User to Manually Enter their Own Values
- Export Data in Excel or Text Format
- Print Graph or Text Data with Print Preview and Set Up Options
- Set Up and Launch Data Loggers with Immediate or Delayed Start, Preferred Sample Rate, Alarm Set Up and Custom ID up to 30 Characters
- Password Protected Calibration Function. A Calibration Window is Included in the Software to Simplify the Calibration Procedure
- Convenient Status Displays ID of Logger, Battery Life, Memory Used, Sample Rate, Duration, Alarm Condition and Logging Status
- Menu Bar Provides One Click Access to Most Software Functions

Data Listing Window

Samp	Temp (F)	Hum (%RH)	Dew Point (F)	Date
40	75.90	44.45	52.71	8/29/2013
41	75.90	44.45	52.71	8/29/2013
42	75.90	44.35	52.65	8/29/2013
43	75.90	44.15	52.53	8/29/2013
44	75.90	44.15	52.53	8/29/2013
45	75.95	44.25	52.63	8/29/2013
46	75.95	44.10	52.54	8/29/2013
47	75.95	44.05	52.51	8/29/2013
48	76.00	44.20	52.65	8/29/2013
49	76.00	44.10	52.59	8/29/2013
50	76.00	43.90	52.46	8/29/2013
51	76.00	43.80	52.40	8/29/2013
52	76.00	43.65	52.31	8/29/2013
53	76.00	43.55	52.25	8/29/2013
54	76.10	43.50	52.31	8/29/2013
55	76.10	43.40	52.24	8/29/2013
56	76.10	43.30	52.18	8/29/2013
57	76.10	43.15	52.09	8/29/2013
58	76.15	44.90	53.21	8/29/2013
59	76.15	44.65	53.06	8/29/2013
60	76.15	44.00	52.66	8/29/2013
61	76.25	43.50	52.44	8/29/2013
62	76.30	43.15	52.27	8/29/2013
63	76.30	42.95	52.14	8/29/2013

# Data Loggers

## SL500T/SL500XT/SL500TH Specifications

Sample Point Capacity	43,344 Temperature Points for the SL500T and SL500XT. 21,672 each Temperature and Humidity Points for the SL500TH
Display	Current Reading Time, Logging Status, Alarm Status, Recorded Sample History, Battery Level. SL500TH Alternates the Display Between Temperature and Humidity Every Two Seconds
Alarms	Visual Over and Under Alarm Indicator for Temperature and/or Humidity
Calibration	User Single Point Offset Calibration is Available Through Software. Calibration can be Password Protected
Operating Temperature	-5°F to 160°F (-20°C to 70°C)
External Probe Temperature Measurement Range (SL500XT)	-40°F to 176°F (-40°C to 80°C)
External Probe Length (SL500XT)	6' (1.8m)
Storage Temperature Range	-20°F to 175°F (-30°C to 80°C)
Time Accuracy	+/- 100ppm @ 75°F (24°C)
Temperature Accuracy	+/-0.9°F (0.5°C) for the Range 0°F to 120°F (-17°C to 50°C)
Temperature Resolution (PC Software)	0.05°F (0.03°C)
Relative Humidity Accuracy (SL500TH)	+/-2% RH for the Range of 10% RH to 90% RH
Relative Humidity Resolution (SL500TH)	0.05% RH
Dimensions	2.15" x 2.25" x 0.55" (5.5cm x 5.57cm x 1.4cm)
Power Source	3V CR2032 Lithium (Included)
Battery Life	3 Years Average Use



## SL500TC Specifications

Sample Point Capacity	32,638 Temperature Points
Includes:	Type K Insulated Beaded Wire Thermocouple 40" (1m)
Other Supported Thermocouples:	J, E, B, T, S, R, B, C
Display	Current Reading and Time, Logging Status, Alarm Status, Recorded Sample History, Battery Level, Thermocouple Type. Displays Temperature up to 1999°F or 1999°C
Alarms	Visual Over and Under Temperature Alarms
Display Temperature Resolution	0.2°F (0.1°C) up to 199.9°F or °C. 1°F or 1°C Above 200°F or 200°C
Logged Temperature Resolution	0.2°F (0.1°C)
Thermocouple Impedance	50 Ohms Maximum for Specified Accuracy
Cold Junction Temperature Accuracy	+/-0.5°F (0.3°C)
Calibration	User Single Point Offset Calibration is Available Through Software. Calibration can be Password Protected
Operating Temperature	0°F to 131°F (-18°C to 55°C)
Storage Temperature	-20°F to 175°F (-30°C to 80°C)
Time Accuracy	+/-100ppm @ 75°F (24°C)
Dimensions	2.15" x 2.25" x 1.2" (5.5cm x 5.7cm x 3.0cm)
Power Source	3 AAA Batteries (Alkaline or Lithium Recommended), Included
Battery Life	2 Years Average Use

### SL500TC Temperature Range

THERMOCOUPLE	ACCURACY SL500TC	TEMPERATURE RANGE
K	+/- 1.3°F (0.7°C)	-418 to 2372°F (-250 to 1300°C)
J	+/- 1.0°F (0.6°C)	-274 to 1832°F (-170 to 1000°C)
E	+/- 0.8°F (0.4°C)	-328 to 1508°F (-200 to 820°C)
N	+/- 1.5°F (0.8°C)	-328 to 2372°F (-200 to 1300°C)
T	+/- 1.3°F (0.7°C)	-328 to 752°F (-200 to 400°C)
S	+/- 5.0°F (2.8°C)	-58 to 3200°F (-50 to 1760°C)
R	+/- 5.0°F (2.8°C)	-58 to 3200°F (-50 to 1760°C)
B	+/- 6.0°F (3.3°C)	68 to 3308°F (20 to 1820°C)
C	+/- 3.0°F (1.7°C)	32 to 4208°F (0 to 2320°C)

The accuracy stated is for the SL500TC only. Inaccurate readings increase based on the thermocouple wire grade being used. The logger supported range is for stored temperature.



# Data Loggers



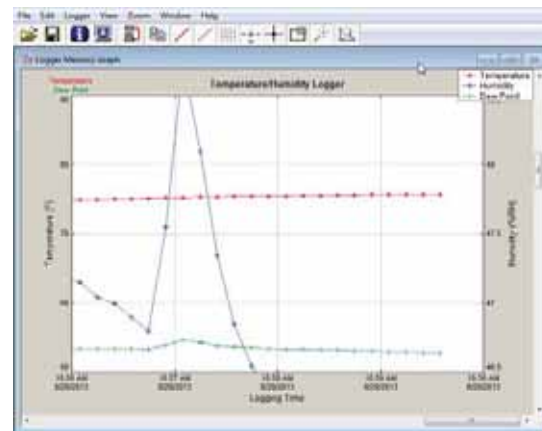
## SL SERIES MINIATURE DATA LOGGERS

Choose from Temperature, Humidity and Dew Point, or Temperature only Data Logging in a Miniature, Self-contained Device. The SL Series Data Loggers Provide Concise Measurements for Critical Environmental Conditions.

- Windows® XP, Vista and above Compatible Software (included). Not Compatible with Windows® 95/98 or NT
- PC, Delayed Start or Push Button Recording Control
- Temperature and Humidity Alarm with Visual Indication on Demand
- User Selectable Stop on Memory Full or Memory Rollover for Continuous Recording
- Real Time Monitoring
- View Graph and Text Simultaneously
- Can Calibrate Through Software
- Displays Temperature in °F or °C
- USB Interface Standard (Cable Included)



SL300T



### SL Series Miniature Logger Common Specifications

Sample Rate	1 Second to 18 Hours
Alarms	High and Low Temperature and Humidity Alarms with Visual Indication on Demand
Temperature Accuracy	+/-1°F (+/-0.5°C)
Time Accuracy	+/-100ppm @ 75°F
Dimensions	3" x 1.6" x 0.6" (7.6cm x 4.0cm x 1.5cm)
Weight	1.0 oz. (28g)
Power Source	3 V (CR2032) Lithium Battery (Included)
Battery Life	6 Years Average Use

## SL300TH

Measures Temperature, Humidity and Dew Point Simultaneously.

- Temperature and Humidity Alarm with Visual Indication on Demand

### SL300TH Specifications

Sample Point	43,344 for Temperature only. 21,672 for Temperature, Humidity and Dew Point
Capacity	for Temperature, Humidity and Dew Point
Temperature Range	-40°F to 160°F (-40°C to 70°C)
Temperature Resolution	0.01°F or 0.01°C
Relative Humidity Range	0% to 90% RH, Non-condensing
Relative Humidity Accuracy	+/-2% RH from 10% to 90% RH
Relative Humidity Resolution	0.01% RH
Calibration	Single Point Offset Calibration Available Through Software For both Temperature and Humidity. Can be Password Protected



## SL300T

Measures Temperature Only.

- Temperature Alarm with Visual Indication on Demand

### SL300T Specifications

Sample Point	43,344 Temperature Samples
Capacity	for Temperature
Temperature Range	-40°F to 185°F (-40°C to 85°C)
Calibration	Single Point Offset Calibration Available Through Software for Temperature. Can be Password Protected





# Data Loggers

## LOGIT SERIES

Select the Right Logger for your Application...

- Stores Over 10,000 Measurement Points
- 1 Second to 18 Hour Sample Rate; 1 Second Increments
- Custom User Identification (30 Characters)
- Real Time Data Monitoring
- Over/Under Alarm Threshold Settings
- Visual Alarm Indication
- User Selectable Recording Start
- Tamper Proof
- 20 Month Battery Life (at 1 Minute Sample Rate)
- Data Rollover Option
- Unique Logger ID
- One PC Software Operates with all Loggers (LLSU not included)
- Graphic or Text Data
- Zoom Capability
- 1 Year Warranty

## LT2 TEMPERATURE LOGGER (INTERNAL & EXTERNAL)

- One Internal and One External Temperature Measurement, Simultaneously

### Accessory

PART NO.	DESCRIPTION
14265-001	15' Remote Temperature Sensor

### Specifications

Sample Point Capacity	21,500 points (single channel), 10,750 points and differential (dual channel)
Sampling Rate	1 Second to 18 Hours
Alarms	Over and Under Alarms for Each Probe
Temperature Range (Internal Sensor)	32° to 140°F (0°C to 60°C) with Alkaline Battery -40°F to 150°F (-40°C to 65°C) with Lithium Battery
Temperature Range (External Sensor)	-40°F to 150°F (-40°C to 65°C)
Accuracy Resolution	+/-1.0°F (0.5°C), 0.1°F (0.05°C)
Time Accuracy	+/-100ppm @ 75°F
Operating Range	0% to 90% RH,
Humidity	Non-condensing
Storage Temperature	-40°F to 170°F (-40°C to 77°C)
Calibration	Single Point Offset Calibration Available Through Software
Dimensions	3" x 2.5" x 1.1" (7.6cm x 6.4cm x 2.8cm)
Weight	2.5 oz (71g)
Power Source	9V Alkaline or Lithium Battery (not included)
Battery Life	18 Months using Alkaline, 36 Months using Lithium



## LTT DUAL TEMPERATURE LOGGER

- 2 Independent External Temperature Measurements & Temperature Differential
- 2 DLTP6 Sensors (Included)

### Accessory

PART NO.	DESCRIPTION
DLTP6	4" Stainless Steel 6' Temperature Sensor

### Specifications

Sample Point Capacity	21,500 points (1 Probe), 10,750 points and differential (2 Probes)
Sampling Rate	1 Second to 18 Hours
Alarms	Over and Under Alarms for Each Probe
Temperature Range (External Sensor)	-50°F to 300°F (-46°C to 150°C) (2) DLTP6
Accuracy Resolution	+/-2°F (1°C) 0.1°F (0.05°C)
Time Accuracy	+/-100ppm @ 75°F
Operating Range Humidity	0% to 90% RH, Non-condensing
Temperature Using Alkaline	32°F to 140°F (0°C to 60°C)
Temperature Using Lithium	-40°F to 150°F (-40°C to 65°C)
Storage Temperature	-40°F to 170°F (-40°C to 77°C)
Calibration	Single Point Offset Calibration Available Through Software
Dimensions	3" x 2.5" x 1.1" (7.6cm x 6.4cm x 2.8cm)
Weight	2.5 oz (71g)
Power Source	9V Alkaline or Lithium Battery (not included)
Battery Life	20 Months using Alkaline, 40 Months using Lithium



# Data Loggers



## LTC THERMOCOUPLE TEMPERATURE LOGGER

- One Internal and One External (J, K, E, T, R, S Thermocouples) Temperature Measurement. Type K Included.

### Specifications

Sample Point Capacity	10,750 Points for External and Internal Temperature
Sampling Rate	1 Second to 18 Hours
Alarms	Over and Under Alarms for Each Probe
Temperature Range (Internal Sensor)	32° to 140°F (0°C to 60°C) with Alkaline Battery -40°F to 150°F (-40°C to 65°C) with Lithium Battery
Temperature Range (External Sensor)	Depends on Thermocouple
Accuracy Resolution	Depends on Thermocouple
Time Accuracy	+/-100ppm @ 75°F
Storage Temperature	-40°F to 170°F (-40°C to 77°C)
Calibration	Single Point Offset Calibration Available Through Software
Dimensions	3" x 2.5" x 1.1" (7.6cm x 6.4cm x 2.8cm)
Weight	2.5 oz (71g)
Power Source	9V Alkaline or Lithium Battery (not included)
Battery Life	20 Months using Alkaline, 40 Months using Lithium

### Accessory

PART NO.	DESCRIPTION
TPFDA	K-Type Thermocouple with 4' FDA Approved Insulation



## LTH TEMPERATURE & HUMIDITY LOGGER

- Integral Temperature, Humidity and Dew Point Measurements

### Specifications

Sample Point Capacity	21,500 points for Temperature Only. 10,750 Points for Temperature, Humidity and Dew Point
Sampling Rate	1 Second to 18 Hours
Alarms	Over and Under Alarms for Each Probe
Temperature Range (Internal Sensor)	32° to 140°F (0°C to 60°C) with Alkaline Battery -40°F to 150°F (-40°C to 65°C) with Lithium Battery
Accuracy Resolution	+/-2°F (1°C), 0.1°F (0.05°C)
Time Accuracy	+/-100ppm @ 75°F
Relative Humidity Range	0% to 90%, RH, Non-Condensing
Relative Humidity Accuracy	+/-2% Full Scale, From 5% to 90% RH For Temperatures Between 32°F to 140°F (0°C to 60°C)
Relative Humidity Resolution	0.1% RH
Storage Temperature	-40°F to 170°F (-40°C to 77°C)
Calibration	Single Point Offset Calibration Available Through Software
Dimensions	3" x 2.5" x 1.1" (7.6cm x 6.4cm x 2.8cm)
Weight	2.5 oz (71g)
Power Source	9V Alkaline or Lithium Battery (not included)
Battery Life	20 Months using Alkaline, 40 Months using Lithium





## Data Loggers

### LPT/LPT1000 PRESSURE & TEMPERATURE LOGGER

- External Pressure and Temperature Measurements

#### Specifications

Sample Point Capacity	10,750 Points for Pressure & Temperature. 21,500 Points for Pressure OR Temperature
Sampling Rate	1 Second to 18 Hours
Alarms	Over and Under Alarms for Pressure & Temperature
Temperature Range (External Sensor)	-40°F to 150°F (-40°C to 65°C)
Accuracy Resolution	+/-1°F (0.5°C) 0.1°F (0.05°C)
Time Accuracy	+/-100ppm @ 75°F
Pressure Range	0-500 psi (LPT), 0-1000 psi (LPT1000)
Pressure Sensor	-4°F to 185°F
Temperature Range	(-20°C to 85°C)
Compensated Temperature Range	32°F to 130°F (0°C to 55°C)
Pressure Accuracy	+/-3 psi
Pressure Resolution	0.15 psi
Pressure Connection	1/4" MPT Pressure Sensor Connection
Temperature Using Alkaline	32°F to 130°F (0°C to 54°C)
Temperature Using Lithium	-40°F to 170°F (-40°C to 77°C)
Operating Range Humidity	0 to 90% RH Non-condensing
Storage Temperature	-40°F to 170°F (-40°C to 77°C)
Calibration	Single Point Offset Calibration Available Through Software. Pressure is Factory Calibrated
Dimensions	3" x 2.5" x 1.1" (7.6cm x 6.4cm x 2.8cm)
Weight	2.5 oz (71g)
Power Source	9V Alkaline or Lithium Battery (not included)

#### Accessory

PART NO.	DESCRIPTION
14265-001	15' Remote Temperature Sensor



### LCV CURRENT & VOLTAGE LOGGER

- External Current Probe and Voltage Measurements
- AC Only, Single Phase

#### Specifications

Sample Point Capacity	10,750 Points for Current & Voltage. 21,500 Points for Current OR Voltage
Sampling Rate	1 Second to 18 Hours
Alarms	Over and Under Alarms for Pressure & Temperature
Time Accuracy	+/-100ppm @ 75°F
Input Current Range	0-300 Amps
Current Accuracy	+/-5%
Current Resolution	0.1 Amp AC
Voltage Range	0-500 Volts AC
Voltage Accuracy	+/- VAC
Voltage Resolution	0.1 VAC
Temperature Using Alkaline	32°F to 130°F (0°C to 54°C)
Temperature Using Lithium	-40°F to 150°F (-40°C to 65°C)
Operating Range Humidity	0 to 90% RH, Non-condensing
Storage Temperature	-40°F to 170°F (-40°C to 77°C)
Calibration	Single Point Offset Calibration Available Through Software. Current and Voltage are Factory Calibrated
Dimensions	3" x 2.5" x 1.1" (7.6cm x 6.4cm x 2.8cm)
Weight	2.5 oz (71g)
Power Source	9V Alkaline or Lithium Battery (not included)

#### Accessory

PART NO.	DESCRIPTION
12867	300A Current Probe



# Data Loggers



## L420 4-20 MA LOGGER

- Connection for 4-20 ma Loop Measurements

### Specifications

Sample Point Capacity	21,500 Points
Sampling Rate	1 Second to 18 Hours
Alarms	Over and Under Alarm
Time Accuracy	+/-100ppm @ 75°F
Input Current Range	0-40 ma
Current Accuracy	+/-0.05 ma
Current Resolution	0.01 ma
Temperature Using Alkaline	32°F to 140°F (0°C to 60°C)
Temperature Using Lithium	-40°F to 150°F (-40°C to 65°C)
Operating Range Humidity	0 to 90% RH, Non-condensing
Storage Temperature	-40°F to 170°F (-40°C to 77°C)
Calibration	Single Point Offset Calibration Available Through Software. Current and Voltage are Factory Calibrated
Dimensions	3" x 2.5" x 1.1" (7.6cm x 6.4cm x 2.8cm)
Weight	2.5 oz (71g)
Power Source	9V Alkaline or Lithium Battery (not included)



## LLSU LOGIT PC SOFTWARE AND INTERFACE FOR USB CONNECTION

- PC Software on CD ROM
- LINT Interface
- Cable From Logger to Interface (12283-001)
- Cable From Interface to USB (19449)

### Common Features

- Compatible with Windows® 95 through Windows® 8
- Graphic and Text Data
- 3 Memory Modes: Stop on Full, Record Continuously, or Memory Rollover
- Real Time Monitoring
- Password Protected Calibration
- Data Exportable to Text or Excel
- Minimum System Requirements: 8MB RAM, 2MB Disc Space, 800 x 600 Resolution, COM Port or USB Port



## Data Loggers

### LOGiT Optional Accessories

PART NO.	DESCRIPTION	LT2	LTH	LTC	LTT	LPT	LCV	L420
USBS	USB to Serial Interface	*	*		*	*	*	*
LLS	LOGiT PC Software & Interface	*	*	*	*	*	*	*
LLSU	LOGiT PC Software & Interface	*	*	*	*	*	*	*
SW25	25' Temperature Sensor Extension Wire	*				*		
SW50	50' Temperature Sensor Extension Wire	*				*		
SW75	75' Temperature Sensor Extension Wire	*				*		
SW100	100' Temperature Sensor Extension Wire	*				*		
CABLE10T	10' Sensor Extension Wire					*		
CABLE10H	10' Sensor Extension Wire (Max 3)				*			

### SUPER VISION SERIES 5 IN 1 TEMPERATURE & HUMIDITY PRINTER LOGGER



The VLT Loggers are Feature Packed, Strip Recorder/Alarm Devices. Models with 1 to 4 Channels to Monitor Temperature, Humidity or Switches with Programmability for Each. The Large Digital Display, PC Interface without Additional Software, 4 Models of Printing and Remote Alarm Dialer Contacts Give these Devices Features Found on Products Costing Much More.

- Monitoring, Logging, Alarms and Printing in Real Time
- Up to 4 Input Channels for Temperature, Humidity and Switches
- Reading Intervals from 1 to 120 Minutes, 1 Min. Increments
- Over and Under Alarms Plus Delay Setting for Each Channel
- Operating and Setting by Means of 6 Function Keys
- Printed Help and Instruction Messages on Request During Unit Setup
- 1 Channel Printing in Auto Scale Graph Mode, Including Alarms
- 1 to 4 Channel Printing Full Reports in 3 Text Modes, Including Alarms
- Online Display/Minimum or Maximum on Request
- Exporting Real Time Data Through RS-232 PC Port. No Software Needed
- °F or °C, Date Format: dd/mm/yy or mm/dd/yy
- Battery Backup
- Low Battery, Chart End and Probe Error Indicators and Alarm Buzzer
- Remote Alarm Output Via Relay Contacts of 0.5A, 120V
- Remote Probes 33' (10 Meters) Cable Length, Extendable up to 100'
- Data and Settings Retained after Power Failure
- Base Unit Operating Humidity: 0 to 95% RH, Non-condensing



## Data Loggers

PART NO.	INPUT	MEASURING OPTIONS	INCLUDED PROBES 33'	SAMPLE CAPACITY
VLT412	12 VAC/DC	Any combination of	1 "VLT PROBE"	16,200 points
VLT4115	120 VAC	temperature and	(for temperature)	of temperature
VLT4230	220 VAC	switches up to 4	1 "VLS CABLE"	and switches
		channels	(on/off indication)	(4 probes)
VLTH12	12 VAC/DC	Temp., humidity and	1 "VLTH PROBE"	16,200 points
VLTH115	120 VAC	switch or 2 channels	(temp./humidity)	temperature,
VLTH230	220 VAC	of temp. and humidity	1 "VLS CABLE"	and humidity
			(on/off indication)	(4 channel)



### Super Vision Series Specifications

Base Unit	32°F to 140°F (0°C to 60°C)
Operating Temperature Range	with Alkaline Battery 0°F to 150°F (-18°C to 65°C)
Operating Humidity	with Lithium Battery 0 to 95% RH
Storage Temperature	Non-condensing -40°F to 150°F (-40°C to 65°C)
Battery Backup	9 Volt
Clock Battery	3.6 Volt Lithium
Dimensions	8.2" x 5.3" x 2.7" (208.6mm x 135mm x 69mm)
Weight	2.6 lbs. (1.8 kg)



PROBE MODEL	WORKING RANGE	RESOLUTION	ACCURACY	REPEATABILITY	RESPONSE
VLT PROBE	-40°/130°C	0.1°C	±0, 3°C	±0.1°C	5-30
Temperature	-40°/266°F	0.2°F	±0.6°F	±0.2°F	Sec.
VLTH PROBE	-40°/85°C	0.1°C	±0, 5°C	±0.1°C	5-30
Temperature	-40°/185°F	0.1°F	±1, 0°F	±0.2°F	Sec.
and Humidity	10.0/89.9% RH	0.1% RH	±2% RH	±0.1% RH	6-10
	0.1-9.9/90-100%	0.1% RH	±4% RH	±0.5% RH	Sec.
VLS CABLE	Recognized dry contacts - for On/Off indication switch				1 Sec.



### Accessories

VLPAPER	2" Thermal chart roll 131'
VLWPCASE	Water proof case + lock
VLSK	Remote alarm silencer
CABLE10H	Sensor extension 10'
CABLE33H	Sensor extension 33'
VPR	Power reducer 24 to 12V
ADTA	Auto phone dialer
VLCEL	Cellular adaptor to internet



# Indoor Air Quality Instruments

## IAQ SERIES

IAQ Series Measures Carbon Dioxide, Temperature and Humidity with Dew Point and Wet Bulb. Ideal for a Quality Diagnosis, they can be used in Identifying Sick Building Syndrome due to High Levels of CO2. Choose From a Hand Held Meter or Wall Mounted/Desktop Monitor. Both Come Equipped with a Triple LCD Display and Programmable Alarms.

- Non-Dispersive Infrared (NDIR) Sensor
- Visible/Audible (80db) CO2 Alarm
- Min./Max., Average Recall
- Alarm Output Relay
- Long Time Drift Compensation
- TWA (Time-Weighted Average) 8 Hours
- STEL (Short-Term-Exposure Limit) 15 Minutes

### Specifications

CO2	IAQ55	IAQ50
Range	0-2000ppm 2001-9999 (out of scale)	
Resolution	1ppm	
Accuracy	$\pm 75\text{ppm} \pm 5\% \text{rdg}$ (0-2000 ppm)	$\pm 50\text{ppm} \pm 5\% \text{rdg}$ (0-2000 ppm)
	Not specified for out of scale	Not specified for out of scale
Pressure Dependence	+ 1.6% reading per kPa deviation from normal pressure, 100kPa	
<b>TEMPERATURE</b>		
Range	14 to 140°F (-10.0 to 60.0°C)	
Resolution	0.1°F (0.1°C)	
Accuracy	+ - 0.9°F ( $\pm 0.6^\circ\text{C}$ )	
<b>HUMIDITY</b>		
Range	0.0 to 99% Non-Condensing	
Resolution	0.1%	
Accuracy	+ -3% (10 to 90%) + -5% (others)	
<b>GENERAL</b>		
Warm Up	30 seconds	
Operating	32°F to 122°F (0 to 50°C) 0-95% RH Non-Condensing	
Storage	4°F to 140°F (-20 to 60°C) 0-99% RH Non-Condensing	
Power	4 AA batteries (Included)	12V adapter (Included)
Battery Life	N/A	24 hours (Alkaline)

## IAQ50 WALL MOUNTED INDOOR AIR QUALITY MONITOR

- Desktop or Wall Mounting
- Alarm Output Relay
- 12V Power Adapter (Included)



## IAQ55 HANDHELD INDOOR AIR QUALITY MONITOR

- Portable
- Backlight LCD Display Function
- Auto Shut-Off



## CO1000 CARBON MONOXIDE METER

- Backlit LCD
- Automatic Calibration
- Max Hold and Data Hold
- Auto Power Off
- Audible Alarm
- From 35ppm to 200ppm, the Beeper Sounds Periodically
- Above 200ppm, the Beeper Sounds Continuously

### Specifications

Measurement Range	0 to 1000 PPM
Measurement Resolution	1 PPM
Accuracy	5% or $\pm 10$ PPM (0-100 PPM) $10\% \pm 10$ PPM ( $> 100$ PPM)
Warm Up Period	< 2 Seconds
Operating Temperature	32°F to 122°F (0°C to 50°C)
Storage Temperature	-22°F to 140°F (-30° to 60°C)
Operating Humidity	0-99% Relative Humidity (non-condensing)
Battery	9V (included)
Auto Power Off	After 15 minutes of inactivity
Sensor Type	Stabilized electrochemical Gas-specific (CO)
Typical Sensor Life	3 years



## HVAC/R Instruments

### MFD10 DIGITAL CAPACITOR TESTER

- New, Rugged Case
- Rubber Grips for Easy Handling
- Range 0.001  $\mu$ F to 9999  $\mu$ F
- Accuracy +/- 5%
- Auto-Ranging
- One Button Operation
- Magnetic Leads
- Includes Alligator Clips
- 12" Test Leads
- Sliding Door to Easily Store Test Leads & Clips
- Includes Soft Carrying Case
- Dimensions: 2 5/8" x 1 3/8" x 4 1/4"
- Operates on 3 AAA Batteries (not included)



**Accessories**

PART NO.	DESCRIPTION
MDFUSE	Replacement Fuse
22792	Soft Carrying Case

### M500 INSULATION TESTER/ ELECTRONIC MEGOHMMETER

- Measure Insulation Values up to 1000 Megohms @ 500VAC
- Range: 20 to 1000 Megohms
- Zone Scale to Indicate Insulation Condition
- Hand Held
- Test Leads Store in Case
- Operates on 2 C Batteries (Not Included)
- Impact Resistant
- Soft Carrying Case Included

**Accessory**

PART NO.	DESCRIPTION
MCASE	Soft Case



### M501 INSULATION TESTER/ ELECTRONIC MEGOHMMETER

- Enjoy the Same Great Features of the M500 in a Sturdy Service Case



### M1000D DIGITAL MEGOHMMETER

The Versatile M1000D Provides the User Selectable Test Voltage Ranges of 250V/500V/1000V to Test Insulation Resistance and Can Also be Used to Measure AC Voltage up to 750AC.

- User Selectable Resistance and Voltage Ranges
- Large Backlit LCD (3.25" x 2.00")
- Data Hold Button
- Auto Power Off After 15 Minutes
- Low Battery Indicator
- 1 Year Warranty



# HVAC/R Instruments

## DDM55 DUAL DIGITAL MANOMETER

- Dual Input
- Range: -55.0 to +55.0 Inches Water Column
- Resolution to 0.01"
- Provides Differential Measurements
- 11 Units of Measure
- Data Hold
- LCD Display w/ Backlight
- Auto Power Off
- 9V Battery Included
- Soft Carrying Case Included

### General Specifications

Display	Dual LCD
Accuracy	+/-0.3% FSO
Repeatability	+/-0.2% (Max. +/-0.5% FSO)
Linearity/Hysteresis	+/-0.29% FSO
Maximum Pressure	10 psi
Response Time	0.5 Seconds Typical
Low Battery Indicator	Yes
Over Range Indicator	Err. 1
Under Range Indicator	Err.2
Operating Conditions	32°F to 122°F (0 to 50°C)
Storage Conditions	14°F to 140°F (-1 to 60°C)
Power Supply	1 x 9V Battery (Included) or External 9V DC



### Specifications

FUNCTION	RANGE	RESOLUTION	FUNCTION	RANGE	RESOLUTION
InH2O	+/-55.40	0.01	ozin2	32.00	0.01
psi	+/-2.000	0.001	FtH2O	4.612	0.001
Mbar	+/-137.8		cmH2O	140.6	0.1
kPa	+/-137.9		Kgcm2	0.140	0.001
inHg	+/-0.407	0.001	Bar	0.137	0.001
mmHg	+/-103.4				

### Accessories (Included)

Soft Pouch  
Flexible Tubing  
1/8" MPT x 1/8" Barb Access Fitting

## DAVM+ DIGITAL AIR FLOW/VOLUME METER

- Measures Feet Per Minute (FPM) and Cubic Feet Per Minute (CFM)
- Easy CFM Set-Up Flow Chart with Grill Free Area Chart (Included)
- Measures Temperature and Humidity
- °F/°C Selectable
- Standard K-Type Thermocouple Connector
- Measures Light Levels (LUX)
- Multi-Channel Display
- Data Hold
- One-Hand Operation
- Carrying Case (SCASE) Included



### Measurement Specifications

MEASUREMENT	RANGE	RESOLUTION	ACCURACY
Air Velocity	ft/min	80 to 5,910 ft/min	1 ft/min
	m/s	0.4 to 30.0 m/s	0.1 m/s
	km/h	1.4 to 108.0 km/h	0.1 km/h
	MPH	0.9 to 67.0 mile/h	0.1 MPH
	knots	0.8 to 58.3 knots	0.1 knots
Temperature (thermistor)	° F	32° to 122 °F	0.1 °F
	° C	0° to 50 °C	0.1 °C
Air Flow	CFM	1,908,400 CFM	0.001 to 100
	(cube feet/min)	CFM	
	CMM		54,000 CMM
Humidity	% RH	10 to 95 % RH	0.1 % RH
		10 to 95% RH ± 4% RH	< 70% RH : ≥ 70% RH : : ± (4%rdg + 1.2%RH)
Light	Lux	0 to 2,200 Lux	1 Lux
		1,800 to 20,000 Lux	10 Lux
		0 to 20,000 Lux 0 to 2,000 Fc	± 5% rdg ± 8 dgt
Temperature (Type K)	-148 to 2,372 °F		±(1% rdg + 2°F)
	-100 to 1,300 °C		±(1% rdg + 1°C)
*auto range	Ft-cd	0 to 204.0 Fc	1 Ft-cd
		170 to 2,000 Fc	1 Ft-cd

### Specifications

Measurement	Anemometer, Humidity, Temperature, Light, Air flow (CFM/CMM).
Operating Humidity	80% RH Max
Operating Temperature	32° to 122°F (0 to 50°C)
Over Input Display	Indication of " - - - "
Power Supply	9V battery (not included)
Power Consumption	Approx. 6.2 mA DC
Weight	5.6 oz (160g)
Dimension	6.14" x 2.36" x 1.29" 156 x 60 x 33 mm

### Optional Accessory

TPFDA FDA Approved Thermocouple Probe

MEASUREMENT	AREA SET
CFM	0.01 to 322.92 Feet Square
CMM	0.001 to 30.000 Meter Square

## HVAC/R Instruments

### TPC8000

#### TEMPERATURE PRESSURE CLAMP

The Intelligent Pressure Clamp is 3 Tools in One! Great for SUPERHEAT or SUBCOOL Temperatures, it Quickly and Accurately Measures Temperature (pipe), Temperature and Relative Pressure and has a PT Chart.

- Set Up and Change Refrigerant in Seconds
- PT Chart has 64 Refrigerants
- Durable Moisture Resistant Keypad
- LED BackLight
- Automatic Shut Off
- Spring-Loaded Clamp Design. Easily Attaches to Tubing from 3/8" to 1 1/8"
- Battery Operated (200 hr. run time, batteries included)



#### Specifications

Temperature Range	-20°F to 212°F (-28°C to 100°C)
Accuracy	+/- 2% (typ.)
Resolution	0.1°F/°C
Operating Temperature	32° F to 120° (0°C to 48.8°C)
Auto Shut Off	15 Minutes
Dimensions	4 1/2" x 2 3/8" x 1 1/2" (114.3 mm x 60.325 mm x 38.1 mm)
Weight	5 oz. (141.7 g.)

#### Refrigerants

R11, R12, R13, R14, R21, R22, R23, R32, R41, R113, R114, R115, R116, R123, R124, R125, R134, R134A, R141B, R142B, R143, R143A, R152A, R161, R176, R218, R290, R401A, R401B, R401C, R402A, R402B, R403A, R403B, R404A, R405A, R406A, R407A, R407B, R407C, R407D, R408A, R409A, R409B, R410A, R410B, R411A, R411B, R412A, R413A, R414A, R414B, R415A, R415B, R416A, R417A, R418A, R419A, R420A, R421A, R421B, R422A, R422B, R422C, R422D, R423A, R424A, R425A, R426A, R427A, R428A, R429A, R430A, R431A, R432A, R433A, R434A, R435A, R436A, R436B, R437A, R438A, R500, R501, R502, R503, R504, R507, R507A, R508A, R508B, R509A, R510A, R600, R600A, R601, R601A, R717, R744
--

### EM5

#### ENVIRONMENTAL METER

Combining the Measurements of 5 Critical Environmental Parameters, the EM5 Provides the User with Complete Information for Real Time Environmental Conditions; SOUND, AIR VELOCITY (AND VOLUME), TEMPERATURE, HUMIDITY AND LIGHT.

- Measures Air Velocity (fpm) and Air Volume (cfm)
- Measures Sound in dB
- Measures Temperature and Humidity
- Measures Light (Lux)
- Standard and Metric Units
- Backlit LCD Display
- Min/Max/Avg/DIF Modes
- Data Hold
- Auto-Ranging
- Auto Power Off
- Low Battery Indicator
- One-Hand Operation
- Air Measurement Set Up and Register
- CFM Pocket Chart Included
- Carrying Case Included
- Instrument Tripod Included
- One Year Warranty

#### Measurement Specifications

RANGE	RESOLUTION	ACCURACY
<b>Temperature</b>		
14°F to 140°F (-10°C to 60°C)	0.1°F (0.1°C)	+/- 2.7°F (+/- 1.5°C)
<b>Relative Humidity</b>		
20% RH to 80% RH	0.1% RH	+/- 3% RH @ 75 °F
< 20% RH and > 80% RH	0.1% RH	+/- 5% RH @ 75 °F
<b>Sound Level</b>		
30 dB to 130 dB	0.1 dB	+/- 1.5 dB
<b>Light Level</b>		
0 to 2000 Lux	1 Lux	+/- 5% of Rdg plus 10
2001 LUX to 20,000 Lux	10 Lux	+/- 5% of Rdg plus 10
20,001 LUX to 50,000 Lux	100 Lux	+/- 5% of Rdg plus 10
<b>Air Flow</b>		
1.6 ft/s to 65.7 ft/s	0.1 ft/s	+/- 3% of Rdg plus 10
0.5 m/s to 20 m/s	0.1 m/s	+/- 3% of Rdg plus 10
0.9 knots to 38.9 knots	0.1 knots	+/- 3% of Rdg plus 10
1.8 km/h to 72 km/h	0.1 km/h	+/- 3% of Rdg plus 10
<b>Air Volume</b>		
0 to 999,900 CFM	0.1 to 100 CFM	+/- 3% of Rdg plus 10
0 to 999,900 CMM	0.1 to 1000 CMM	+/- 3% of Rdg plus 10

#### Specifications

Display	4 1/2 Digit Backlit LCD
Response Time	2/Second (app.)
Operating Temperature	14°F to 140°F (-10°C to 60°C)
Storage Temperature	14°F to 122°F (-10°C to 50°C)
Power Requirements	9V Battery (Included)
Weight	15.5 oz. (430 g.)
Dimensions	11" x 3.5" x 2" (280 mm x 89 mm x 50mm)



## HVAC/R Instruments

### EM SERIES ENVIRONMETERS

Measure Critical HVAC/R Parameters to Maximize Productivity and Performance. Choose the Environmeter(s) for the Best Solution.

#### EM20 THERMO-ANEMOMETER

Diagnose and Solve Air Flow Problems

- Measures fpm, m/s, mph, km/h, kts, Beaufort Scale
- Measures °F/°C
- Velocity Range: 80 fpm to 4000 fpm
- Temperature Range: 14°F to 122°F
- Min/Max
- Data Hold
- Backlit LCD
- Auto Power Off
- Hard Carrying Case Included

##### Specifications

Velocity Range:	80 fpm to 4000 fpm, 0.4 m/s to 20 m/s
Temperature Range:	14°F to 122°F (-10°C to 50°C)
Velocity Resolution:	1 fpm (0.1 m/s)
Temperature Resolution:	0.1°F (0.1°C)
Battery:	1.5V AAA x 3 (included)
Dimensions:	6.2" X 2.4" X 1.2" (157mm X 60mm X 30mm)
Weight:	6.3 oz. (180g)



#### EM30 TACHOMETER

Analyze and Solve Motor Rotation Problems

- Measures rpm & rps
- Range: 100 rpm to 30,000 rpm
- Min/Max
- Data Hold
- Backlit LCD
- Auto Power Off
- Hard Carrying Case Included

##### Specifications

Range:	100 rpm to 30000 rpm / 1.7 rps to 500 rps
Resolution:	0.1 rpm for 100 rpm to 999.9 rpm 1 rpm for 1000 rpm to 30000 rpm 0.1 rps for 1.7rps to 100rps 1 rps for 100 rps to 500 rps
Accuracy:	±0.1% reading for 100.0 rpm to 9,999 rpm ±0.02% reading for 10,000 rpm to 30,000 rpm
Auto power off:	2 min. (app.)
Battery:	1.5V AAA x 3 (included)
Dimensions:	4.7" X 2.4" X 1.2" (121mm X 60mm X 30mm)
Weight:	6.3 oz (180g)



#### EM80 SOUND LEVEL METER

Analyze and Solve Excessive Sound Level Problems

- Range: 30 dB to 120 dB
- Auto or Manual Range
- Analog Bar Indicator
- Field Calibratable
- Auto Power Off
- Backlit LCD
- Hard Carrying Case Included

##### Specifications

Frequency range:	31.5Hz to 8KHz
Measuring range:	30dB to 120dB
Frequency weighting:	A
Resolution:	0.1 dB
Accuracy:	1.5 dB (under 94 dB)
Four ranges:	60dB / 80dB / 100dB / 120 dB
Time response:	Analog bar: 0.25 sec / Digital: 0.75 sec
Operating temperature:	-32°F to 104°F (0°C to 40°C)
Operating humidity:	10% to 80% RH
Battery:	1.5V AAA x 3 (included)
Dimensions:	6.1" X 2.4" X 1.2" (156mm X 60mm X 32 mm)
Weight:	5.2 oz (180g)



## Refrigerant Scales

### PCS220 PROGRAMMABLE REFRIGERANT CHARGING SCALE



Using the Latest Technology, the PCS220 Makes Charging a System Fast and Reliable. Just Set the Desired Amount of Refrigerant to Charge the System and the Built-In Solenoid Delivers the Precise Weight, then Sounds the Alarm Signaling the Completed Job.

- Compatible with ALL Refrigerants
- Range: 0 to 220 lbs (0 to 100 kg)
- Solenoid Activated for Real-Time Charging
- User Programmable
- Audible Alarm
- Built-In Memory for All Settings
- Large LCD Display w/ Backlight
- Auto Power Off (15 Mins)
- Field Calibration Available
- Hard Carrying Case Included
- 1 Year Warranty



#### Specifications

Capacity	220 lbs (100 kg)
Accuracy	0.5% of Reading
Best Resolution	0.005 lbs/ 0.1 oz/ 2 g
Auto Shut Off	15 min
Operating Temperature	50°F to 122°F (10°C to 50°C)
Weight	6.03 lbs (2.74 kg)
Dimensions	9.1 in x 9.1in x 2.4 in (23 cm x 23 cm x 6 cm)
Power Source	5 X AA (included)
Battery Life	60 hrs

#### Applications

- HVAC and Refrigeration Service
- Precise Measurement of Refrigerant Containers
- Automated Charging of Refrigerant Systems

### RCS220 REFRIGERANT CHARGING SCALE



For Fast and Accurate Measurements.

- Compatible with ALL Refrigerants
- Range: 0 to 220 lbs (0 to 100 kg)
- Built-In Memory
- Measures Weight in lbs, ozs and kgs
- Large LCD Display w/ Backlight
- Auto Power Off (15 Mins)
- Field Calibration Available
- Hard Carrying Case Included
- 1 Year Warranty



#### Specifications

Capacity	220 lbs (100 kg)
Accuracy	0.5% of Reading
Best Resolution	0.01 lbs
Auto Shut Off	15 min
Operating Temperature	50°F to 122°F (10°C to 50°C)
Weight	6.03 lbs (2.74 kg)
Dimensions	9.1 in x 9.1in x 2.4 in (23 cm x 23 cm x 6 cm)
Power Source	5 X AA (included)
Battery Life	60 hrs

### DHS55 DIGITAL HANDHELD SCALE

This Compact Handheld Scale Provides Quick Measurements for your Refrigeration Applications.

- 55 lbs Max Scale
- 2% Accuracy
- One Button Operation
- Lbs/Kgs Switchable
- 9V Battery

#### Specialty Instrument Selection Guide

- Measurement/Function-Weight
- Range: 0 to 55 lbs.



## Refrigerant Scales

### HLD200

#### REFRIGERANT LEAK DETECTOR

By Pinpointing a System Leak Quickly, the HLD200 Takes the Time and Frustration Out of Leak Detection.

- Detects All Halogen Refrigerants and Blends
- Auto Zero When Powered On
- High Efficiency Pump for Fast Response
- Audible Tick
- Seven Segment LED Indicators
- 12" Gooseneck
- Replaceable Sensor Tip
- Protective Sheath Included
- Hard Carrying Case Included
- Extra Sensor Tip (p/n HLDTIP) Included
- 1 Year Warranty

Sensor Type	Negative Corona
Sensitivity	0.1 oz/ yr
Sensitivity Levels	5
Audio Indicator	Variable Tick
Visual Indicator	Flashing LED
Warm Up Time	6 sec
Response Time	< 1 sec
Duty Cycle	Continuous
Probe Length	12"
Operating Temp	32° to 125°F
Power Source	2 X AA (included)
Battery Life	30 hrs



## Multi-Meter & Current Probe

### CVPRO46

#### CHARGEPRO PORTABLE SYSTEM ANALYZER

Integrated Device Composed of a Base Unit and a Handheld Unit.

- Recover Refrigerant
- Make Vacuum
- Check for Possible Leaks
- Charge with Accuracy
- Hardware and Accessories Included
- Hard Carrying Case Included



### RPT61

#### PRESSURE TEMPERATURE CHART MASTER

For Instant Information, the PT Chart Master Eliminates the Need for Traditional Pressure/Temperature Charts. Accurate and Easy to Use, the RPT61 Provides Pressure and Temperature Correlation for 66 Different Refrigerants.

- Choose Pressure in PSI, BAR or Mpa
- Choose Temperature in °F or °C
- 66 Refrigerant Tables
- Large LCD
- Auto Off (After 5 Minutes)
- Pocket Size
- Battery Included Power: 3V (CR2032)
- Soft Carrying Case Included
- 1 Year Warranty

#### Specifications

PRESSURE UNITS	RANGE
PSI	5.1 to 462.5
BAR	0.35 to 31.88
MPa	0.035 to 3.188
TEMPERATURE UNITS	
Fahrenheit	-40°F to 155°F
Celsius	-40°C to 68°C



## Multi-Meter & Current Probe

### DM10T ECONOMY DIGITAL MULTIMETER WITH TEMPERATURE

- 1000 Volts DC
- Continuity
- 2MΩ Resistance
- 10 Amps DC
- 750 Volts AC
- Temperature



#### Specifications

Volts AC	750
Volts AC Best Resolution	1 V
Volts DC	1000
Volts DC Best Resolution	0.1 mV
Amps AC	10
Amps AC Best Resolution	0.1mA
Base Accuracy (DC Volts)	± 0.5%
Resistance max. (Ohms)	2 M
Continuity	Yes
Temperature	-4 °F to 2,498° F (-20° C to 1370 °C)

Temperature Accuracy	± 3°F (1.5°C)
Display (Counts)	2,000
Operating Temperature	32° F to 74° F (0°C to 23°C)
Relative Humidity	0% to 75% RH
Fuse Protection	mA: 0.2A/ 250V
Power	9 V Battery (included)
Size	5.5"L x 3"W x 1.5"D (140mm x 76mm x 36mm)
Weight	8 oz (227 g)
Warranty	1 Year

#### Optional Accessories

- TLA Test Leads**
- 1000V AC or DC Max
  - 10 Amps Max
  - Includes Screw-On Alligator Clips

- TPFDA**  
FDA Approved  
Temperature Probe

- SCCP**  
Deluxe Soft Case

### CPH100 HVAC CURRENT PROBE

- 400 Amps AC
- Temperature
- Resistance
- DC μAmps
- Frequency
- Capacitance
- Continuity
- Includes Test Leads
- Auto Shut Off
- AC/DC Volts
- 1 Year Warranty



#### Specifications

Volts AC	600
Volts AC Best Resolution	0.1mV
Volts DC	600
Volts DC Best Resolution	0.1mV
Amps AC	400A
Amps AC Best Resolution	0.1A
Frequency (Hz)	150.0kHz
Frequency Best Resolution	0.001Hz
Base Accuracy (DC Volts)	± (1.5% + 3 dgts)
(AC Amps)	± (2.0% + 3 dgts)
Resistance max. (Ohms)	40M
Continuity	Yes
Capacitance	100.0μF
Best Resolution	0.01nF

Temperature	-50°F to 2372°F -5°C to 1300°C
Temperature Accuracy	± 3%
Display (Counts)	4,000
Data Hold	Yes
Sleep Mode	Auto Shut Off
Operating Temperature	14°F to 122°F (-10°C to 50°C)
Storage Temperature	-22°F to 140°F (-30°C to 60°C)
Relative Humidity	0% to 90% RH
Power	2 1.5V AAA Batteries (included)
Size	7.9"L X 2.0"W X 1.4"D (200mm X 50mm X 35mm)
Weight	7.1oz (200g)
Warranty	1 Year

#### Optional Accessories

- TLA Test Leads**
- 1000V AC or DC Max
  - 10 Amps Max
  - Includes Screw-On Alligator Clips

- TPFDA**  
FDA Approved  
Temperature Probe

- SCCP**  
Deluxe Soft Case

### VDL1000 VOLTAGE DETECTOR W/ LIGHT

Detects Voltage in Cables, Cords, Circuit Breakers, Lighting Fixtures, Switches, Outlets and Wires.

- Detects 90 to 1000 VAC
- Beeps and Flashes RED when Voltage is Detected
- Integrated LED Light
- 2 AAA Batteries Included



# Temperature & Humidity Testers

## DSP1000 DIGITAL PSYCHROMETER

The DSP1000 Provides Fast, Accurate Measurements for Analysis of Critical Environmental Conditions.

- Fast Response Time
- High Accuracy
- Temperature
- Humidity
- Dewpoint Temperature
- Wet Bulb Temperature
- Max Hold
- Data Hold Function
- Micro Processor-based Design
- Dual Display Temperature & Humidity
- Auto Power Off (Disable Sleep Mode)
- Backlight
- 1 Year Warranty



### Specifications

Humidity Range	0-100% RH (Non-Condensing)
Temperature	-22°F to 212°F (-30°C to 100°C)
Dewpoint Temperature	-22°F to 212°F (-30°C to 100°C)
Wet Bulb Temperature	32°F to 176°F (0°C to 80°C)
Humidity	±2% RH (20% RH to 80% RH)
Accuracy	±2.5% RH (all other ranges)
Temperature	±0.9°F/±0.5°C (at 77°F/25°C)
Accuracy	±1.5°F/±0.8°C (all other ranges)
Resolution	0.01% RH, 0.01°F/0.01°C
Response Time	10 seconds

Battery Type	9V Battery NEDA 1604, IEC 6F22 (included)
Operation Temperature	32°F to 104°F (0°C to 40°C) (<80%RH)
Storage Temperature	14°F to 140°F (-10°C to 60°C) (<70%RH)
Size (H X W X D)	8.86" X 1.77" X 1.34" (225mm X 45mm X 34mm)
Weight	7.05oz (200g)

## THP2 THERMO-HYGROMETER PEN

- Measures Temperature & Humidity, Simultaneously
- Dual Display
- Temperature in °F or °C
- Pocket Clip
- Battery Included



### Specifications

	TEMPERATURE	HUMIDITY (% RH)
Range	-4°F to 122°F (-20°C to 50°C)	10% to 90%
Resolution	0.1°F	1%
Accuracy	+/-2°F (+/-4°C)	+/-5% (for 40% to 80%)

## PT100 DIGITAL POCKET SURFACE THERMOMETER



- Ultra Sensitive Air and Surface Reading Probe
- Provides Fast Response - Within Seconds
- Temperature "HOLD" Switch - Keeps Readings Fixed
- Power: 9V Alkaline
- Size: 1.5" x 6.75" x 0.8"
- Weight: 7.2 oz.
- 1 Year Warranty

### Specifications

TEMPERATURE	
Range	PT100/PT100C -40°F to 199.9°F (-40°C to 93.28°C) PT100H/PT100HC -40°F to 250°F (-40°C to 120°C)
Resolution	0.1°F (-40°F to 199.9°F) 1.0°F (-40°F to 250°F)
Accuracy	0.2 Surface, 1.0 Air

PART NO.	DESCRIPTION
PT100	Fahrenheit Model
PT100C	Celsius Model

PART NO.	DESCRIPTION
PT100H	High Temp. Fahrenheit
PT100HC	High Temp. Celsius



# Temperature & Humidity Testers

## EM10 TEMPERATURE & HUMIDITY METER

Diagnose and Solve HVAC System Problems

- Measures Temperature, Humidity & Dew Point
- Temperature Range: 14°F to 122°F
- Humidity Range: 0% to 99.9% RH
- Min/Max/Avg
- Data Hold
- Backlit LCD
- Auto Power Off
- Hard Carrying Case Included



### Specifications

Temperature range :	14°F to 122°F (-10°C to 50°C)
Humidity range:	0% to 99.9% RH
Temperature Resolution:	0.1°F (0.1°C)
Humidity Resolution:	0.1% RH
Temperature Accuracy:	± 1.8°F (± 1.0°C)
Humidity Accuracy:	3% RH (5 to 95% RH)
Battery:	1.5V AAA x 3 (included)
Dimensions:	4.8" X 2.4" X 1.2" (121mm X 60mm X 30mm)
Weight:	6.2 oz (180g)

## EM60 DUAL DIFFERENTIAL THERMOMETER

Make Fast Inlet/Outlet Temperature Comparisons

- Dual Thermocouple (J, K) Inputs
- Temperature Range (K): -328°F to 2,372°F
- Measures T1, T2 & T1-T2
- High & Low Alarms
- Data Storage
- Min/Max/Avg for T1 & T2
- Backlit LCD
- Auto Power Off
- Hard Carrying Case Included
- Includes two (2) K-Type Thermocouples



### Specifications

Range:	K-Thermocouple: -328°F to 2372°F (-200°C to 1300°C) J- Thermocouple: -328°F to 2192°F (-200°C to 1200°C)
Resolution:	0.1°F ; (0.1°C)
Best Accuracy:	
K-Thermocouple:	± 0.2% of Reading ± 2°F (± 0.1% of Reading ± 1.4°F)
J- Thermocouple:	± 0.2% of Reading ± 2°F (± 0.1% of Reading ± 1.4°F)
Battery:	1.5V AAA x 3 (included)
Dimensions:	4.8" X 2.4" X 1.2" (121mm X 60mm X 30 mm)
Weight:	6.2 oz (180g)

## EM90 DUAL THERMOMETER (INFRARED & THERMOCOUPLE)

Choose the Most Convenient Method for the Application

- IR Range: -58°F to 518°F
- Thermocouple Range (K): -328°F to 2,372°F
- Min/Max/Avg
- Data Hold
- Backlit LCD
- Auto Power Off
- Hard Carrying Case Included
- Includes One (1) K-Type Thermocouple

### Specifications

Temperature Range:	
- Infrared:	-58°F to 572°F (-50°C to 300°C)
- K-Thermocouple:	-328°F to 2372°F (-200°C to 1300°C)
Resolution:	0.1°F (0.1°C)
Best Accuracy:	
Infrared:	± 1.5% of reading ± 4°F F (± 1.5% of Reading ± 2°C)
K-Thermocouple:	± 0.1% of Reading ± 1.4°F (± 0.2% of Reading ± 1°C)
Emissivity:	0.95
Optical Ratio:	2:1
Laser power:	less than 1 mw
Battery:	1.5V AAA x 3 (included)
Dimensions:	4.8" X 2.4" X 1.2" (121mm X 60mm X 30mm)
Weight:	6.2 oz (180g)



## Temperature & Humidity Testers

### ST09

#### DIGITAL POCKET THERMOMETER

- Range: -40°F to 392°F (-40°C to 200°C)
- Accuracy: +/-2°F (+/-1°C) Full Scale
- Min/Max
- °F/°C Switch
- Updates Every Second
- Data Hold
- Battery Included
- Waterproof
- Auto Off
- Stainless Steel Stem
- Stem Length: 2-1/2"



### ST10

#### DIGITAL POCKET THERMOMETER

- Range: -50°F to 392°F (-45°C to 200°C)
- Accuracy: +/-2°F (+/-1°C) Full Scale
- °F/°C Switch
- Updates Every Second
- Battery Included (Supco # STBAT) Spare Included
- Auto Off
- Stainless Steel Stem
- Stem Length: 4-23/32"



### ST01

#### DIAL POCKET THERMOMETER

- Range: -40°F to 160°F (-40°C to 71°C)
- Dial Size: 1"
- °F Scale Only
- Recalibration Adjust
- Stem Length: 5"



### ST02

#### DIAL POCKET THERMOMETER

- Range: 0°F to 220°F (-18°C to 104°C)
- Dial Size: 1"
- °F Scale Only
- Recalibration Adjust
- Stem Length: 5"



### ST08

#### DIAL POCKET THERMOMETER

- Range: -40°F to 160°F (-40°C to 71°C)
- Dial Size: 1-3/4"
- °F and °C Scales
- Recalibration Adjust
- Stem Length: 5"



### ST03

#### APPLIANCE POCKET THERMOMETER

- Range: -20°F to 80°F (-30°C to 27°C)
- Mounting: Hangs or Stands
- °F and °C Scales
- Unbreakable Lens
- For Refrigerators and Freezers



### ST04

#### APPLIANCE POCKET THERMOMETER

- Range: 100°F to 600°F (-38°C to 315°C)
- Mounting: Hands or Stands
- °F and °C Scales
- Unbreakable Lens
- For Ovens



### ST06

#### APPLIANCE POCKET THERMOMETER

- Range: -40°F to 80°F (-40°C to 27°C)
- Mounting: Hangs Horizontally
- °F and °C Scales
- Unbreakable Lens
- For Refrigerators and Freezers



## Temperature & Humidity Testers

TEST INSTRUMENTS

### REMOTE DIAL VAPOR TENSION THERMOMETERS

- Stainless Steel Housing
- Analog Dual Scale Dial °F or °C
- 48" Capillary
- Back Connection Mounting Points
- Temperature Range -40°F to 60°F (-40° to 16°C)



S6020HL



S6025HL

PART NO.	DIAL SIZE	FLANGE
S6020BB	2"	Back
S6020FB	2"	Front
S6025FB	2.5"	Front
S6020HL	2"	Front
S6025HL	2.5"	Front



S6025FB



S6020BB



S6020FB

### SSDF20 SOLAR POWERED LCD THERMOMETER

- Stainless Steel Housing
- °F or °C Selectable
- Easy to Read LCD Display
- Temperature Update Every 10 Seconds

#### Specifications

Mounting	Surface front flange / Back connection
Range	-60°F to 160°F (-51°C to 71°C)
Accuracy	+/- 2°F
Dial Size	2"
LCD Display Size	3/8"
Sensor Length	60"
Update Time	10 seconds
On/Off Switch	Yes



### THC120 INDOOR DIGITAL THERMO-HYGROMETER WITH CLOCK

- Table Top or Wall Mount
- Measure Temperature & Humidity Simultaneously
- Real Time Clock
- Large Triple Display
- Batteries Included (AAA)
- Min/Max Temperature and Humidity Memory Function
- 1 Year Warranty

#### Specifications

	TEMPERATURE	HUMIDITY (%RH)
Range	32°F to 120°F 0°C to 50°C	10% to 90%
Resolution	0.1°F	1%
Accuracy	+/-1.8°F or 1.0°C	+/-5%



### ST1236-31 SURE TEMP THERMOMETER

The Sure Temp Thermometer is the Least Expensive Device Manufactured Today to Show Exact Temperature in a Case, Reach-In, or Walk-In Cooler.

- Simulates Internal Temperature of a Refrigerated or Frozen Product
- Meets Food Service Criteria
- Includes Bracket and Screw for Easy Mounting
- Operating Temperature -40°F to 180°F



### TPFDA K-TYPE THERMOCOUPLE PROBE

- Subminiature Connector with 4' Bead Tip Probe
- FDA Approved Insulation
- Temperature Range -40°F to 550°F, -40°C to 288°C



TPFDA

# Infrared Thermometers

## LIT11TC INFRARED THERMOMETER

- 11:1 Optical Ratio
- Laser Pointer
- High & Low Temperature Range
- Backlight
- Carrying Case Included
- K-Type Thermocouple (probe included)

### Specifications

Optical Ratio	11:1
Temperature Range	-76°F to 932°F (-60°C to 500°C)
Best Resolution	.1°F (.1°C)
Accuracy	+/-2°F (+/-1°C)
Emissivity	0.95 Adjustable
Automatic Shut Off	Yes
Power Supply	2 AAA Batteries (Included)
Weight	6.3 oz. (179g)
Dimensions	6.9" x 1.5" x 2.8" (175mm x 39mm x 71mm)



## LIT6P INFRARED THERMOMETER WITH PROBE SENSOR

- 2 Measurement Modes: Infrared & Probe Sensor
- 6:1 Optical Ratio
- Single Dot Laser Targeting
- °F/°C Selectable
- Data Hold
- Low Battery Indication
- Carrying Case Included

### Probe Sensor Specifications

Temperature Range	-58°F to 518°F (-20°C to 270°C)
Resolution	0.2°F for -58°F to 392°F (0.1°C for -50°C to 200°C) 2°F for 392°F to 518°F (1°C for 200°C to 270°C)
Accuracy	1.5% of Reading for -58°F to -4°F (-50°C to -20°C) 1% of Reading for -4°F to 392°F (-20°C to 200°C) 2% of Reading for 392°F to 518°F (200°C to 270°C)
Over Range Indication	"OL" or "-OL"
Auto Power Off	After 30 Seconds
Battery	1.5V x 3 (AAA)
Dimensions	7.1" x 1.9" x 1.7" (182mm x 49mm x 43mm)
Weight	4.2oz. (120g)



### Infrared Specifications

Temperature Range	-4°F to 518°F (-20°C to 270°C)
Resolution	0.1°F (0.1°C)
Accuracy	+/-9°F for -4°F to 32°F (+/-5°C for -20°C to 0°C) +/- 1.5% of Readings for 32°F to 518°F (0°C to 270°C)
Emissivity	0.97

## PIT6L MINI INFRARED THERMOMETER WITH AMBIENT TEMP.

- 6:1 Optical Ratio
- Single Dot Laser Targeting
- Ambient Temperature (Tamb) Measurement
- °F/°C Selectable
- Data Hold
- Back Light
- Low Battery Indication

### Specifications

Temperature Range	-4°F to 518°F (-20°C to 270°C)
Accuracy	+/-9°F for -4°F to 32°F (+/-5°C for -20°C to 0°C) +/-1.5% of Reading +/-6°F for 32°F to 518°F (+/-1.5% of Reading +/-3.0°C for 0°C to 270°C)
Tamb Range	32°F to 122°F (0°C to 50°C)
Resolution	1°F (1°C)
Emissivity	0.95
Over Range Indication	"OL" or "-OL"
Auto Power Off	After 20 Seconds
Battery	1.5V x 3 (AAA)
Dimensions	3.9" x 2.3" x 0.9" (98mm x 58mm x 22mm)
Weight	2.5oz. (72g)



## PIT1 INFRARED THERMOMETER

- 1:1 Optical Ratio
- Pocket Size
- Min/Max Measurements

### Specifications

Optical Ratio	1:1	Emissivity	0.95 Adjustable
Temperature Range	-27°F to 428°F (-33°C to 220°C)	Automatic Shut Off	Yes
Best Resolution	.1°F (.1°C)	Power Supply	CR2032 (Included)
Accuracy	+/-2% of Reading or +/-4°F (2°C)	Weight	1.3 oz. (32g)
		Dimensions	.7" x 1.5" x 2.7" (18mm x 37mm x 68mm)



# Temperature Alarms & Controls



## TA SERIES COMPLETE LINE OF TEMPERATURE ALARMS

Protect All Your Temperature Sensitive Areas.

- Adjustable Alarm Temperature Ranges
- Audible dB and Visual Alarm
- Switch for “No Delay” or “1 Hour Delay”
- Built-In Terminals for Remote Alarm or Telephone Dialer Connection (Except TA7)

### TA44 SINGLE SET POINT TEMPERATURE ALARM WITH DIGITAL DISPLAY AND REMOTE WIRELESS ALARM

Multiple Transmitters and Receivers Can Be Used to Monitor Temperature at Several Locations.

- Over and Under Temperature Modes
- Large LCD Digital Display
- FCC Compliant Class B Digital Device, Pursuant to Part 15 of the FCC Rules
- 90 dB Audible Alarm

TA44 INCLUDES	
TA44T	Transmitter
R10	Receiver



#### TA44 Accessories

R10	Remote Receiver
20540	Temperature Sensor
SW25	25' Extension Wire
SW50	50' Extension Wire
SW75	75' Extension Wire
SW100	100' Extension Wire
ADTA	Phone Dialer

#### TA44 Specifications

Alarm Adjustment Range	-40°F to 160°F (-40°C to 71°C)
Temperature Accuracy	+/- 2°F (+/- 1°C)
Operating Temperature Range	-10°F to 130°F (-23°C to 54°C)
Dimensions	4.9" X 3.1" X 1.5" (12.4cm x 7.9cm x 3.8cm)
Temperature Units	°F or °C, user selectable
Power	12V adapter 120 VAC with 6' cable
Remote Connections	Screw type, 120 VAC, 5 AMPS
Remote Wireless Alarm	Up to 500' (150m) line of sight remote wireless operation

#### R10 Specifications

Operating Temperature Range	-20°F to 160°F (-28°C to 70°C)
Audible Alarm	110 dB
Dimensions	5" X 2.5" X 1.25" (12.7cm x 6.35cm x 3.175cm)
Power	12V adapter 120 VAC with 6' cable
Remote Wireless Alarm	Up to 500' (150m) line of sight remote wireless operation

### TA33 TEMPERATURE ALARM WITH DISPLAY & BATTERY BACKUP

The Battery Backup Allows Continuous Monitoring Even During Power Outages.

- Adjustable Range From -40°F to 160°F (-40°C to 71°C)
- Backlit Display
- 90 dB Audible Alarm

#### Specifications

Alarm Adjustment Range	-40°F to 160°F (-40° to 71°C)
Temperature Accuracy	+/- 2°F (+/- 1°C)
Alarm Channels	1
Probe	Precision Thermistor with 6 ft. cable (# 21301)
Sensor Type	Thermistor
Maximum Probe Extension	200 ft.
Unit Operating Temperature Range	-10°F to 130°F (-23°C to 54°C)
Remote Alarm Connections	Screw type, 120VAC, 10 Amps.
Power	12 V Adapter 120 VAC with 6 ft. cable included (220V available). 24 Hrs 9V Battery backup.
Case	Hi-impact thermoplastic
Mounting	Flat Surface, external holes provided
Dimensions	4.8" x 3.2" x 1.4" (12.2cm x 8.1cm x 3.6cm)
Warranty	1 year



#### TA33 Accessories

21301	Probe
21387	10' Probe Extension
21392	50' Probe Extension
ADTA	Phone Dialer

# Temperature Alarms & Controls



## TA22 SINGLE SET POINT TEMPERATURE ALARM WITH DIGITAL DISPLAY

Easy to Read Display Shows Current Temperature, Alarm Status, Over/Under Mode Indicator, Alarm Set Point and Temperature (°F or °C)

- Adjustable Range From -40°F to 160°F (-40°C to 71°C)
- Back Lit Display
- 90 dB Audible Alarm

PART NO.	DESCRIPTION
TA22	120 VAC
TA22-220EU	220 VAC Europe

### Specifications

Alarm Channels	1
Alarm Adjustment	-40°F to 160°F
Range	(-40°C to 71°C)
Probe	Encapsulated Sensor with 6 ft. cord (# 20540)
Sensor Type	Thermistor
Maximum Probe Extension	200 ft.
Temperature Accuracy	+/-2°F (+/-1°C)
Remote Alarm Connections	Screw Type, 120 VAC 5 Amp max (dry contacts)
Power	115 VAC (220V optional)
Case	Hi-impact thermoplastic
Mounting	Surface, external holes provided
Dimensions	3" x 5" x 1 1/2" (76.2mm x 127mm x 38.1mm)
Weight	13 oz.
Warranty	1 year



## TA2 SINGLE SET POINT TEMPERATURE ALARM

A Reliable, Inexpensive Alarm for Refrigerators and Freezers. Just Flip a Switch to Activate on a Rise or Fall in Temperature.

- Adjustable Range From -10°F to 80°F (-25°C to 30°C)
- 90 dB Audible Alarm

PART NO.	DESCRIPTION
TA2	120 VAC Fahrenheit Model
TA2C	120 VAC Celsius Model
TA2-220	220 VAC Fahrenheit Model
TA2-220C	220 VAC Celsius Model

### Specifications

Alarm Channels	1
Alarm Adjustment	-10°F to 80°F
Range	(-25°C to 30°C)
Probe	Encapsulated Sensor with 6 ft. cord (# 20540)
Sensor Type	Thermistor
Maximum Probe Extension	200 ft.
Remote Alarm Connections	Screw Type, 120 VAC 5 Amp max (dry contacts)
Power	115 VAC (220V optional)
Case	Hi-impact thermoplastic
Mounting	Surface, external holes provided
Dimensions	3" x 4 7/8" x 1 5/8" (76.2mm x 101.6mm x 25.4mm)
Weight	13 oz.
Warranty	1 year



## TA6 DUAL SET POINT TEMPERATURE ALARM

Alarms on a Rise and Fall in Temperature.

- Adjustable Range From -10°F to 80°F (-25°C to 30°C)
- 90 dB Audible Alarm

PART NO.	DESCRIPTION
TA6	120 VAC Fahrenheit Model
TA6C	120 VAC Celsius Model
TA6-220	220 VAC Fahrenheit Model
TA6-220C	220 VAC Celsius Model

### Specifications

Alarm Channels	1
Alarm Adjustment	-10°F to 80°F
Range	(-25°C to 30°C)
Probe	Encapsulated Sensor with 15 ft. cord (# 20540)
Sensor Type	Thermistor
Maximum Probe Extension	200 ft.
Remote Alarm Connections	Screw Type, 120 VAC 5 Amp max (dry contacts)
Power	115 VAC (220V optional)
Case	Hi-impact thermoplastic
Mounting	Surface, adhesive pads/key hole slot
Dimensions	3" x 4 7/8" x 1 5/8" (76.2mm x 101.6mm x 25.4mm)
Weight	13 oz.
Warranty	1 year



# Temperature Alarms & Controls



TEST INSTRUMENTS

## TA7 BATTERY OPERATED TEMPERATURE ALARM

- For Sensitive Temperature Applications in Remote Areas
- Alarms on Rise in Temperature Only
- Adjustable Range From -10°F to 80°F (-25°C to 30°C)
- Battery Operated (9V)

PART NO.	DESCRIPTION
TA7	Fahrenheit Model
TA7C	Celsius Model

### Specifications

Alarm Channels	1
Alarm Adjustment Range	-10°F to 80°F (-25°C to 30°C)
Probe	Encapsulated Sensor with 6 ft. cord (# TAPROBE)
Sensor Type	Thermistor
Maximum Probe Extension	100 ft.
Remote Alarm Connections	None
Power	9 VAC alkaline battery (not included)
Case	Hi-impact thermoplastic
Mounting	Surface, external holes provided
Dimensions	5 3/4" x 1 1/2" x 1" (127mm x 38.1mm x 25.4mm)
Weight	5 oz.
Warranty	1 year



## TAP4 FOUR (4) PROBE TEMPERATURE ALARM

Set Alarms for 4 Separate Temperature Applications. Provides a Quick Alert for a Multitude of Temperature Problems.

- Adjustable Range From -40°F to 100°F (-40°C to 38°C)
- 90 dB Audible Alarm

PART NO.	DESCRIPTION
TAP4	-40°F to 60°F, 0°F to 100°F, 120V
TAP4-220	-40°F to 60°F, 0°F to 100°F, 220V
TAP4C	-18°C to 38°C, -40°C to 16°C, 120V
TAP4C-220	-18°C to 38°C, -40°C to 16°C, 220V

### Specifications

Alarm Channels	4
Alarm Adjustment Range	-40°F to 60°F, 0°F to 100°F (-18°C to 38°C, -40°C to 16°C)
Probe	Encapsulated Sensor with 15 ft. cord (4 included)
Sensor Type	Thermistor
Maximum Probe Extension	300 ft.
Remote Alarm Connections	Terminal stop screw, connection 120 VAC, 5 Amp max (dry contacts)
Power	120 VAC or 220 VAC power adapter supplied
Battery Backup	9V alkaline (not included)
Case	NEMA 3 type
Dimensions	6" x 7 1/2" x 3" (152.4mm x 190.5mm x 127mm)
Weight	1.9 lbs. (0.86 kg)
Warranty	1 year



## ADTA AUTO DIALER FOR TEMPERATURE ALARMS

Operates with All SUPCO® Temperature Alarms, except TA7.

- Call Up to 4 Telephone Numbers
- 16 Second Message
- Non-Volatile Memory for Numbers and Voice Messages
- Internal 9V Back up Battery (not included)
- LCD Display
- 120V Power Adapter (included)





# Temperature Alarms & Controls

## THA2 TEMPERATURE HUMIDITY ALARM WITH LOGGING CAPABILITY

- Measures and Logs Temperature, Humidity, Dew Point
- Audible and Visual Alarms
- Digital Display
- Log Up to 170 Days of Data
- Relay Contacts for Remote Alarm or Auto Dialer (ADTA)
- PC Software Included
- Serial Port Connection (for USB Connection Use Optional USBS Adapter)
- Remote Sensor Up to 300 ft.



### Specifications

Sensor Probe	
Operating Temperature Range	-40°F to 140°F (-40°C to 60°C)
Operating Humidity Range	0 to 90% RH, non condensing
Temperature Accuracy	+/- 2°F (+/- 1°C)
Temperature Resolution	0.1°F or °C
Humidity Accuracy	+/-2% RH
Humidity Resolution	0.1% RH
Calibration	User calibration for Temperature and Humidity
Dimensions	3.8 inches length with a diameter of 1.1 inches
Weight	0.9 oz.
Cable Length	300 ft. maximum
Base Unit	
Operating Temperature Range	32°F to 130°F (0°C to 54°C)
Storage Temperature	0°F to 130°F (-18°C to 54°C)
Operating Humidity	0% RH to 90% RH, non condensing*
Power Source	12V to 24 VAC/VDC, 0.78W alarm active
Battery Backup	9V alkaline battery for 35 hours operation during power outage
Clock Battery	CR2032, 10 years typical
Relay	N.O and N.C dry contact 5A 250V, resistive load
Dimensions	5.5" x 4.5" x 1.6"
Weight (without battery backup)	8.6 oz.
Alarm Specifications	
Temperature Alarm	High and Low Temperature and Humidity alarms. Condensation alarm
Alarm Delay	User selectable, up to 2 hours
Alarm Indication	Audio, Visual and a relay for remote alarm and phone dialer
Logging Specifications	
Sample Rate	1 second to 30 minutes
Data History Storage	2 hours to 170 days, depending on the sample rate
Memory Capacity	8150 samples for Temperature, Humidity and Dew Point

\* The sensor probe is not designed for continuous exposure to high humidity or caustic and or corrosive chemicals such as, but not limited to, concrete or chlorine.

## Accessories

### Temperature Alarm Specifications

PART NO.	DESCRIPTION	TA22	TA2	TA6	TA7	TAP4
SW25	25' Extension Wire	*	*	*	*	*
SW50	50' Extension Wire	*	*	*	*	*
SW75	75' Extension Wire	*	*	*	*	*
SW100	100' Extension Wire	*	*	*	*	*
11093	Replacement Sensor Old Style (red tip)	*	*			

PART NO.	DESCRIPTION	TA22	TA2	TA6	TA7	TAP4
TA7PROBE	Probe w/ 4' extension wire				*	
14265	Replacement Sensor					*
USBS	USB to Serial Interface			*		
ADTA	Auto Dialer	*	*	*		*
14263	120 V Power Adapter (Supplied)	*	*	*		*
20540	Replacement Sensor 6' new style metal tip (after serial #)			*		
		405-099				
		412-029				



SW50



11093



TA7PROBE



14265



14263



20540

TEST INSTRUMENTS

## Tools

Scan for ATP1 video



### ATP1 ATTIC PRO<sup>®</sup> UTILITY LIFT

- Adjustable from 14" to 24"
- 20 ft. Cable Length
- Integrated Locking Hook
- Lifts Up To 250 lbs.
- Sturdy Steel Construction
- Equipment Strap Included
- Carrying Case Included



### FIM20 FLEXIBLE INSPECTION MIRROR

- 20" Mirror
- Flexible to 75° Angle
- Polycarbonate Material
- Integrated Flashlight
- Ergonomic Handle
- Carrying Pouch Included
- 6 Per Display Case



### TELESCOPING MIRRORS

- Double Ball Joint Head Adjustment
- Extendable/Retractable Design
- Carrying Pouch Included
- Glass Mirrors

PART NO.	DESCRIPTION	EXTENDED LENGT
IM1	1.25" Round Glass Mirror, Pocket Clip	27"
IM2	1" x 2" Oval Glass Mirror, Pocket Clip	28"
IM3	2.25" Round Glass Mirror, Vinyl Grip Handle	14.5"
IM4	2.25" Round Magnifying Glass Mirror, Vinyl Grip Handle	14.5"
IM5	2.25" x 3.25" Rectangular Glass Mirror, Vinyl Grip Handle	15.5"
IMK3	Combination Tool, Pocket Clip Includes: Match Clip, Magnet, 2" Round Mirror & PVC Pouch	27"



### UFC1 FIN COMB

- Cleans and Straightens Fins for Better Operating Efficiency



### FPT10, FPT13 & FPT15 FIN JACK

- Straightens and Separates Bent Fins Quickly and Easily. One Tool Can Be Used For Up To 3 Sizes Of Fins

PART NO.	DESCRIPTION	COLOR
FPT10	9 & 10 Fins per inch	Black
FPT13	11, 12 & 13 Fins per inch	Orange
FPT15	14, 15 & 16 Fins per inch	Red



### FCR6/FCRH6 HANDY RING FIN COMB SET

- Six of the Most Popular Fin Combs Covering Twelve Different Size Fins on a Convenient Ring. Includes FC0810, FC0915, FC1113, FC1214, FC1617 and FC1820
- FCH6 Includes All Above, But "FCH" Instead of "FC"



T  
O  
O  
L  
S

## Tools

### FIN COMBS

- Straighten and Clean Evaporator and Condenser Fins

#### Standard

FINS PER		
PART NO.	INCH	COLOR
FC0810	8 and 10	Orange
FC0915	9 and 15	Yellow
FC1113	11 and 13	Blue
FC1214	12 and 14	Green
FC1617	16 and 17	Lime
FC1820	18 and 20	Red
FC2224	22 and 24	Purple

#### High Efficiency

PART NO.	FINS PER INCH	COLOR
FCH0810	8 and 10	Orange
FCH0915	9 and 15	Yellow
FCH1113	11 and 13	Blue
FCH1214	12 and 14	Green
FCH1617	16 and 17	Lime
FCH1820	18 and 20	Red
FCH2224	22 and 24	Purple



### FL6N1

#### 6 IN 1 FLASHLIGHT

- 6 Distinct Functions
- 18 Powerful Ultra Bright White LEDs
- Red Laser Pointer
- 6 Pack Counter Display
- 18 Bright White LEDs Emergency Flasher
- 6 Powerful UV LEDs Reveal the Invisible
- Directional Compass

18 Bright White LEDs 216,000 MCD



18 Bright White LEDs in Flash Mode



6 UV LEDs Reveal the Invisible



6 Green LEDs Help Maintain Night Vision



Laser Travels Over 450 Yards



Directional Compass



### PL6

#### STICK LIGHT

- 6 Super Bright LEDs
- Long Life
- Pocket Clip
- Sold in 12-pack Counter Display



### FLT3M

#### TELESCOPING LED FLASHLIGHT

- Multi-Function LED Flashlight
- 3 Super Bright LEDs with Handy On/Off Button
- Powerful Magnet on Grip Handle & Light Tip
- Flexible Shaft for Hard to Reach Places
- Extendable to 21" (53cm)
- 1.5" (3.81cm) Round Inspection Mirror Attachment
- Pocket Clip for Secure Storage
- Batteries: 4-LR44 Included & Installed in Light Tip



## Tools

### UVL200 UV LEAK DETECTION LIGHT & GLASSES

- 9 LED Bulbs for High Intensity
- Impact Resistant Glasses



### FP18 FILTER PULLER

Makes Getting to Hard-To-Reach Filters Easy!

- 18" Extension
- Magnetic Tip
- Ergonomic Handle



### ESPRO1 STATIC PRO WRIST STRAP

Dissipates Static During Electronic Repair and Maintenance

- Current Limiting Resistor
- Adjustable



### GFK1 GREASE KIT

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• One Time Installation</li> <li>• Provides Easy Access to Hard-To-Reach Lubrication Points</li> <li>• Makes Preventative Maintenance (PM's) Routine</li> </ul> | <ul style="list-style-type: none"> <li>• Eliminates Need for Cover Removal and Equipment Disassembly</li> <li>• Complete with 10' High Pressure Tubing and Required Fittings</li> <li>• Tubing Rated -60°F to 200°F</li> </ul> |
|--|--|



### TB123A SPANNER WRENCH

- Wrench for Removing and Installing Washer Tub Retainer Nut
- Approximately 14" L x 2 1/2" W x 3/8" H



### SCWG3 WATER GUARD

- Fits Around Inlet Hose
- Starts Operation Immediately After Installation
- Prevents and Removes Limestone
- Saves Energy and Water
- 3 Magnets Per Side



## Tools

### SCWG4

#### SUPER WATER GUARD

- Fits Around Inlet Hose
- Starts Operation Immediately After Installation
- Prevents and Removes Limestone
- Saves Energy and Water
- 4 Magnets Per Side



### 445

#### KD® INTERNAL SNAP RING PLIER



### 446

#### KD® EXTERNAL SNAP RING PLIER



### 447

#### KD® REPLACEMENT TIPS FOR 445 & 446



### 145

#### KD® HOSE PINCH OFF PLIER



### 3793

#### 2.5" OD HOSE PINCH-OFF PLIERS

- Extra Long Cushioned Hand Grips for Comfort and Control
- Patented Clamping Mechanism Locks Automatically. No Screws or Levers to Set or Adjust
- Black Oxide Coated to Resist Rust and Corrosion



### 3975

#### KD® CORBIN HOSE CLAMP PLIER



### FBP100

#### FAN BLADE PULLER

- Sturdy, Heavy Duty Steel
- 5/8" Steel Center Shaft
- 4 Pull Fingers
- Alignment Tool Included
- Has Flats for Wrench
- Fine Thread Version Provides Additional Torque & Pulling Power



T  
O  
O  
L  
S

## Tools

### CTP1 CAPILLARY TUBE CUTTER

- 5" Stripper and Cutter. Fast, Efficient and All Purpose



### FP1 FAUCET PRO

- For Easy Installation
- Slots Fit Most Hose Fittings
- Integrated Torque Amplifier



### TC2 HEAVY DUTY TUBE CUTTER

- For Clean Cuts in Hard or Soft Copper, Aluminum, Brass, Thin Wall Steel and Stainless Steel
- Complete with Foldaway Reamer Blade and Spare Cutting Wheel
- Cuts Tubes from 1/8" Thru 1 1/8" O.D.
- Replacement Cutting Wheel P/N: TC2W
- Rollers have Flared Cut Off Groove



### SF4311 "FASTAP" TUBE PIERCING PLIERS

- Fast Refrigerant Recovery: Just Clamp and Recover
- Tubing Sizes 1/4" to 7/8" O.D.
- Replaceable Self-Sharpening Tip
- Simple To Use
- Light Weight



### SF4314 TUBE PIERCING PLIERS REPLACEMENT TIP



### SF3970 INTERNAL TEMPERATURE READING TOOL

Take Internal Temperatures of Refrigerant Lines Digitally

- Accurately Adjust Superheat
- Simple Instructions
- Inserts Through Access Fitting (supplied)
- Includes Core Removal Tool and Digital Thermometer



### DHS55 DIGITAL HANDHELD SCALE

This Compact Handheld Scale Provides Quick Measurements for your Refrigeration Applications

- 55 lbs Max Scale
- 2% Accuracy
- One Button Operation
- Auto Shut Off
- Lbs/Kgs Switchable
- Max Weight Memory
- 9V Battery Included



## Tools

### HVT2 SAFE-T-TESTER SCREWDRIVER

- 110-220 VAC
- Light in Handle Indicates Power



### FWB1 FIN WISK BRUSH

- Long Lasting, Sturdy Bristle Design



### RCB1 REFRIGERATION COIL BRUSH

- 27 1/2" Long
- 12" Brush Length
- 1 1/2" and 3/4" Bristle Length



### AIR CONDITIONING & REFRIGERATION WRENCHES

PART NO.	DESCRIPTION
RW516	1/4" - 3/16" Sq. x 3/8" - 5/16" Hex
RW916	1/4" - 3/16" Sq. x 1/2" - 9/16" Hex
RWA10	Hex adapter for refrigeration wrenches



RW516

### UW1 UNIVERSAL WRENCH

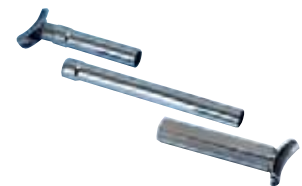
- Sizes from 1/4", 5/16", 11/32" and 3/8"



### BJ10 BELT-JACK INSTANT BELT TIGHTENER

Designed to Set Belt Tension and to Help Align Pulleys on All Belt Driven Units Including Blower Motors, Compressors, Transmissions and Automotive Components

- Opens from 4 1/2" to 15" with Extender
- Heavy Duty 3/8-16 Thread



### TC103 TEST CORD

- 6' Length, Heavy Duty, 16 Gauge Wire
- Male Plug to Medium Duty Spring Clips
- 2 Wire, Black/Red



# Tools

## SR6N1 6 IN 1 RATCHET SCREWDRIVER

- Ratchet Action
- 3-Settings: Forward, Manual, Reverse
- Bit Sizes: Slotted 3/16" and 1/4", Phillips #1 and #2, Nut Driver 1/4" and 5/16"
- 12 Pack Counter Display



## LBIT LARGE PHILLIPS/SLOTTED REPLACEMENT BIT

- SR6N1 Replacement Bit



## SBIT SMALL PHILLIPS/SLOTTED REPLACEMENT BIT

- SR6N1 Replacement Bit



## DA86420 4 IN 1 MULTI-SOCKET

- Replaces the Four Most Common Nut Drivers
- SAE Socket Sizes 1/4", 3/8", 5/16", 7/16"
- Telescoping Action Provides Two Socket Sizes at Each End
- High-Torque Grip Textured, Non-Slip Surface
- 12/Display Box



## SAB454 SECURITY MULTI-DRIVER

- Features Extra-Long 3" Nosepiece Reaches Even Recessed Fasteners
- Includes 14 Security Tips Plus 2 Standard Tips on Eight 3" Long, Double-Ended Bits
- Countertop Display of 12

### Bits Included

Hex Security	1/8", 9/64", 5/32", 3/16"
Spanner	4, 6, 8, 10
Roberts Security	1, 2
Torx Security	10, 15, 20, 25
Phillips	2
Slot	7/32"



## SAB233 CLASSIC MULTI-DRIVER

- Standard Size Driver. Replaces 16 of the Most Frequently Used Bits

### Bits Included

Hex Security	3/32", 1/8", 5/32", 3/16"
Roberts Security	2, 3
Torx Security	15, 20, 25, 30
Phillips	0, 1, 2, 3
Slot	1/4", 3/16"



## SAB710 RATIO MULTI-DRIVER

- Multi-Driver Replaces 16 Screwdrivers
- 4 to 1 Ratio Nosepiece Turns Four Times with Each Turn of the Handle
- 1 to 1 Ratio Nosepiece Turns with the Handle
- Reversible Ratchet Changes Direction Quickly with One Hand, Even During Use
- 8 Extra-Long (3") Double-Ended Bits. Bits Stored in the Handle and a 1/4" Nut Driver in the Nose

### Bits Included

Hex Security	3/32", 1/8", 5/32", 3/16"
Roberts Security	2, 3
Torx Security	15, 20, 25, 30
Phillips	0, 1, 2, 3
Slot	1/4", 3/16"



## Tools

**DA76070**

### **2 IN 1 CUTTER/STRIPPER**

- Cuts Wire with One End, Grabs and Strips Wire with the Other
- Stripper Self-Adjusts to Wire; No Stripping Holes
- Cutting Head is Full-Flush Cutting and Low Profile with Stainless Steel, Induction-Hardened Jaws



**ELB320**

### **HEAVY DUTY PLIERS - 11" EXTENDED**

- Specialty Pliers, 11" Reach
- Professional Quality
- Two-Color Textured Handles



**DA76190**

### **DUAL SNAP RING PLIERS**

- Lighten Your Toolbox
- All-In-One Tool Removes Both Internal and External Snap Rings
- Spring-Loaded Oversized Handle, Cushioned for Comfortable Use



**RC2108 & RC2110**

### **PRECISION ADJUSTABLE WRENCHES**

- Oversized Jaw Opens 18% Wider than Standard Wrenches
- Dual Calibrated Jaw
- Oversized Grip has Superior Balance to Reduce Hand Fatigue
- Constructed of Heavy-Gauge, Industrial-Quality Steel Insuring Durability



RC2108

**ELB721**

### **MINI CABLE TIE GUN**

- The Right Cable Tie Gun for Small Jobs
- Compact Size Accommodates Plastic Cable Ties up to 0.25" in Width
- Twist Cable Gun to Cut and Trim Off Excess Cable Tie Length



**ELB701-L**

### **CABLE SPLICING KNIFE**

- Coping-Type Blade is Machined From Fine Cutlery Steel
- Non-Slip, Textured Rubberized Handle
- Heavy-Duty Leather Carrying Sheath Included



T  
O  
O  
L  
S

## Terminals & Connectors

### INSULATED MALE SLIP-ONS

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM
T2003	Pack of 20 pc.	16-14	.187	PK
T2003C	Pack of 100 pc.	16-14	.187	PK
T1003	Pack of 20 pc.	16-14	.250	PK
T1003C	Pack of 100 pc.	16-14	.250	PK
T1004	Pack of 15 pc.	12-10	.250	PK
T1004C	Pack of 100 pc.	12-10	.250	PK



T1003



T1004

### NON-INSULATED MALE SLIP-ONS

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM
T1103	Pack of 20 pc.	16-14	.250	PK
T1103C	Pack of 100 pc.	16-14	.250	PK



T1103

### INSULATED FEMALE SLIP-ONS

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM
T2004	Pack of 20 pc.	22-18	.250	PK
T2004C	Pack of 100 pc.	22-18	.250	PK
T2002	Pack of 20 pc.	16-14	.187	PK
T2002C	Pack of 100 pc.	16-14	.187	PK
T1002	Pack of 20 pc.	16-14	.250	PK
T1002C	Pack of 100 pc.	16-14	.250	PK
T1001	Pack of 15 pc.	12-10	.250	PK
T1001C	Pack of 100 pc.	12-10	.250	PK



T2004



T2002



T1002



T1001

### NON-INSULATED FEMALE SLIP-ONS

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM
T2001	Pack of 20 pc.	22-18	.110	PK
T2001C	Pack of 100 pc.	22-18	.110	PK
T1105	Pack of 20 pc.	16-14	.187	PK
T1105C	Pack of 100 pc.	16-14	.187	PK
T1102	Pack of 20 pc.	16-14	.250	PK
T1102C	Pack of 100 pc.	16-14	.250	PK
T1107	Pack of 20 pc.	22-18	.110	PK
T1107C	Pack of 100 pc.	22-18	.110	PK



T2001



T1105



T1107

### FULLY INSULATED FEMALE SLIP-ONS

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM
T1007	Pack of 10 pc.	22-18	.250	PK
T1007C	Pack of 100 pc.	22-18	.250	PK
T1005	Pack of 10 pc.	16-14	.250	PK
T1005C	Pack of 100 pc.	16-14	.250	PK
T1009	Pack of 10 pc.	12-10	.250	PK
T1009C	Pack of 100 pc.	12-10	.250	PK



T1007



T1005



T1009

### FULLY INSULATED MALE SLIP-ONS

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM
T1006	Pack of 10 pc.	16-14	.250	PK
T1006C	Pack of 100 pc.	16-14	.250	PK
T1010	Pack of 10 pc.	12-10	.250	PK
T1010C	Pack of 100 pc.	12-10	.250	PK



T1006



T1010

# Terminals & Connectors

## TAP CONNECTORS

PART NO.	DESCRIPTION	WIRE RANGE	UOM	ORDER MULTIPLE
T1062	Pack of 10 pc.	16-14	PK	1
T1062C	Pack of 100 pc.	16-14	PK	1
T1061	Pack of 10 pc.	22-18	PK	1
T1061C	Pack of 100 pc.	22-18	PK	1
T1064	Pack of 5 pc.	12-10	PK	1
T1064C	Pack of 100 pc.	12-10	PK	1
T1065	Pack of 10 pc.	18-14	PK	1
T1065C	Pack of 100 pc.	18-14	PK	1



T1064



T1061

## INSULATED CLOSED END CONNECTORS

PART NO.	DESCRIPTION	WIRE RANGE	UOM	ORDER MULTIPLE
T1056	Pack of 20 pc.	22-14	PK	1
T1056C	Pack of 100 pc.	22-14	PK	1
T1057	Pack of 15 pc.	16-14	PK	1
T1057C	Pack of 100 pc.	16-14	PK	1
T1058	Pack of 15 pc.	18-10	PK	1
T1058C	Pack of 100 pc.	18-10	PK	1
T1059	Pack of 15 pc.	NA	PK	1
T1059C	Pack of 100 pc.	8	PK	1



T1056



T1057



T1058

## INSULATED TAB ADAPTERS - PIGGY BACK SLIP-ONS

PART NO.	DESCRIPTION	WIRE RANGE	UOM	ORDER MULTIPLE
T1027	Pack of 10 pc.	16-14	PK	1
T1027C	Pack of 100 pc.	16-14	PK	1
T1028	Pack of 10 pc.	22-18	PK	1
T1028C	Pack of 100 pc.	22-18	PK	1
T1029	Pack of 10 pc.	12-10	PK	1
T1029C	Pack of 100 pc.	12-10	PK	1



T1027



T1028



T1029

## NON-INSULATED FLAG FEMALE SLIP-ONS

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM	ORDER MULTIPLE
T1106	Pack of 20 pc.	16-14	.187	PK	1
T1106C	Pack of 100 pc.	16-14	.187	PK	1
T1104	Pack of 20 pc.	16-14	.250	PK	1
T1104C	Pack of 100 pc.	16-14	.250	PK	1



T1104

## FLAG FEMALE COMPRESSOR TERMINALS

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM	ORDER MULTIPLE
T1129	Pack of 10 pc.	12-8	.250	PK	1
T1129C	Pack of 100 pc.	12-8	.250	PK	1
T1130	Pack of 10 pc.	16-14	.250	PK	1
T1130C	Pack of 100 pc.	16-14	.250	PK	1



T1129



T1130

## EC10 COMPRESSOR LEAD KIT

Kit Includes Three Leads:

- Three - 23", 10 AWG Wires
- Flag Female Compressor Terminal (.250 tab)
- Waterproof Butt Connector (12-10 Wire Range)
- Sandpaper

PART NO.	DESCRIPTION	UOM	ORDER MULTIPLE
EC10	Kit with 12" Wire	EA	1



# Terminals & Connectors

## INSULATED BUTT CONNECTORS

PART NO.	DESCRIPTION	WIRE RANGE	UOM	ORDER MULTIPLE
T1051	Pack of 20 pc.	22-18	PK	1
T1051C	Pack of 100 pc.	22-18	PK	1
T1052	Pack of 20 pc.	16-14	PK	1
T1052C	Pack of 100 pc.	16-14	PK	1
T1053	Pack of 15 pc.	12-10	PK	1
T1053C	Pack of 100 pc.	12-10	PK	1



## NON-INSULATED BUTT CONNECTORS

PART NO.	DESCRIPTION	WIRE RANGE	UOM	ORDER MULTIPLE
T2112	Pack of 20 pc.	12-10	PK	1
T2112C	Pack of 100 pc.	12-10	PK	1
T1119	Pack of 20 pc.	22-18	PK	1
T1119C	Pack of 100 pc.	22-18	PK	1
T2111	Pack of 20 pc.	16-14	PK	1
T2111C	Pack of 100 pc.	16-14	PK	1
T2067	Pack of 20 pc.	#8	PK	1
T2067C	Pack of 100 pc.	#8	PK	1
T2068	Pack of 20 pc.	#6	PK	1
T2068C	Pack of 100 pc.	#6	PK	1



## INSULATED SPADES

PART NO.	DESCRIPTION	WIRE RANGE	STUD	UOM	ORDER MULTIPLE
T1047	Pack of 20 pc.	22-18	#8	PK	1
T1047C	Pack of 100 pc.	22-18	#8	PK	1
T1048	Pack of 20 pc.	16-14	#10	PK	1
T1048C	Pack of 100 pc.	16-14	#10	PK	1
T1049	Pack of 15 pc.	12-10	#10	PK	1
T1049C	Pack of 100 pc.	12-10	#10	PK	1
T1050	Pack of 15 pc.	12-10	#8	PK	1
T1050C	Pack of 100 pc.	12-10	#8	PK	1



## NON-INSULATED SPADES

PART NO.	DESCRIPTION	WIRE RANGE	STUD	UOM	ORDER MULTIPLE
T1145	Pack of 10 pc.	22-18	#10	PK	1
T1145C	Pack of 100 pc.	22-18	#10	PK	1
T1146	Pack of 10 pc.	16-14	#10	PK	1
T1146C	Pack of 100 pc.	16-14	#10	PK	1
T1147	Pack of 10 pc.	12-10	#10	PK	1
T1147C	Pack of 100 pc.	12-10	#10	PK	1



## INSULATED FLANGE SPADES

PART NO.	DESCRIPTION	WIRE RANGE	STUD	UOM	ORDER MULTIPLE
T1042	Pack of 20 pc.	22-18	#8	PK	1
T1042C	Pack of 100 pc.	22-18	#8	PK	1
T1043	Pack of 20 pc.	16-14	#8	PK	1
T1043C	Pack of 100 pc.	16-14	#8	PK	1
T1044	Pack of 20 pc.	16-14	#10	PK	1
T1044C	Pack of 100 pc.	16-14	#10	PK	1
T1046	Pack of 15 pc.	12-10	#10	PK	1
T1046C	Pack of 100 pc.	12-10	#10	PK	1



# Terminals & Connectors

## NON-INSULATED FLANGE SPADES

PART NO.	DESCRIPTION	WIRE RANGE	STUD	UOM	ORDER MULTIPLE
T1141	Pack of 20 pc.	22-18	#8	PK	1
T1141C	Pack of 100 pc.	22-18	#8	PK	1
T1142	Pack of 20 pc.	22-18	#10	PK	1
T1142C	Pack of 100 pc.	22-18	#10	PK	1
T1143	Pack of 20 pc.	16-14	#8	PK	1
T1143C	Pack of 100 pc.	16-14	#8	PK	1
T1144	Pack of 20 pc.	16-14	#10	PK	1
T1144C	Pack of 100 pc.	16-14	#10	PK	1



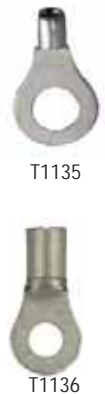
## INSULATED RINGS

PART NO.	DESCRIPTION	WIRE RANGE	STUD	UOM	ORDER MULTIPLE
T1030	Pack of 10 pc.	22-18	#6	PK	1
T1030C	Pack of 100 pc.	22-18	#6	PK	1
T1031	Pack of 20 pc.	22-18	#8	PK	1
T1031C	Pack of 100 pc.	22-18	#8	PK	1
T2033	Pack of 20 pc.	16-14	#6	PK	1
T2033C	Pack of 100 pc.	16-14	#6	PK	1
T1032	Pack of 20 pc.	22-18	#10	PK	1
T1032C	Pack of 100 pc.	22-18	#10	PK	1
T1033	Pack of 20 pc.	16-14	#8	PK	1
T1033C	Pack of 100 pc.	16-14	#8	PK	1
T1034	Pack of 20 pc.	16-14	#10	PK	1
T1034C	Pack of 100 pc.	16-14	#10	PK	1
T1035	Pack of 15 pc.	16-14	1/4"	PK	1
T1035C	Pack of 100 pc.	16-14	1/4"	PK	1
T1039	Pack of 15 pc.	16-14	3/8"	PK	1
T1039C	Pack of 100 pc.	16-14	3/8"	PK	1
T1036	Pack of 15 pc.	12-10	#8	PK	1
T1036C	Pack of 100 pc.	12-10	#8	PK	1
T1037	Pack of 15 pc.	12-10	#10	PK	1
T1037C	Pack of 100 pc.	12-10	#10	PK	1
T1038	Pack of 15 pc.	12-10	1/4"	PK	1
T1038C	Pack of 100 pc.	12-10	1/4"	PK	1
T1040	Pack of 15 pc.	12-10	3/8"	PK	1
T1040C	Pack of 100 pc.	12-10	3/8"	PK	1
T2065	Pack of 15 pc.	8	1/4"	PK	1
T2065C	Pack of 100 pc.	8	1/4"	PK	1
T2066	Pack of 15 pc.	6	1/4"	PK	1
T2066C	Pack of 100 pc.	6	1/4"	PK	1



## NON-INSULATED RINGS

PART NO.	DESCRIPTION	WIRE RANGE	STUD	UOM	ORDER MULTIPLE
T1131	Pack of 10 pc.	22-18	#8	PK	1
T1131C	Pack of 100 pc.	22-18	#8	PK	1
T1133	Pack of 20 pc.	16-14	#8	PK	1
T1133C	Pack of 100 pc.	16-14	#8	PK	1
T1134	Pack of 20 pc.	16-14	#10	PK	1
T1134C	Pack of 100 pc.	16-14	#10	PK	1
T1135	Pack of 20 pc.	16-14	1/4"	PK	1
T1135C	Pack of 100 pc.	16-14	1/4"	PK	1
T1136	Pack of 20 pc.	12-10	#8	PK	1
T1136C	Pack of 100 pc.	12-10	#8	PK	1
T1137	Pack of 20 pc.	12-10	#10	PK	1
T1137C	Pack of 100 pc.	12-10	#10	PK	1
T1138	Pack of 15 pc.	12-10	1/4"	PK	1
T1138C	Pack of 100 pc.	12-10	1/4"	PK	1



## Terminals & Connectors

TERMINALS & CONNECTORS

### HIGH TEMPERATURE FEMALE SLIP-ONS

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM	ORDER MULTIPLE
T1111	Pack of 20 pc.	16-14	.250	PK	1
T1111C	Pack of 100 pc.	16-14	.250	PK	1
T1112	Pack of 15 pc.	12-10	.250	PK	1
T1112C	Pack of 100 pc.	12-10	.250	PK	1



T1111



T1112

### HIGH TEMPERATURE FLAG FEMALE SLIP-ONS

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM	ORDER MULTIPLE
T1113	Pack of 20 pc.	16-14	.250	PK	1
T1113C	Pack of 100 pc.	16-14	.250	PK	1
T1114	Pack of 20 pc.	12-10	.250	PK	1
T1114C	Pack of 100 pc.	12-10	.250	PK	1



T1113



T1114

### HIGH TEMPERATURE RINGS

PART NO.	DESCRIPTION	WIRE RANGE	STUD	UOM	ORDER MULTIPLE
T1115	Pack of 20 pc.	16-14	#10	PK	1
T1115C	Pack of 100 pc.	16-14	#10	PK	1
T1116	Pack of 20 pc.	16-14	1/4"	PK	1
T1116C	Pack of 100 pc.	16-14	1/4"	PK	1
T1117	Pack of 20 pc.	12-10	#10	PK	1
T1117C	Pack of 100 pc.	12-10	#10	PK	1
T1118	Pack of 15 pc.	12-10	1/4"	PK	1
T1118C	Pack of 100 pc.	12-10	1/4"	PK	1



T1115



T1116



T1117



T1118

### NON-INSULATED RECEPTACLES

PART NO.	DESCRIPTION	WIRE RANGE	UOM	ORDER MULTIPLE
T1110	Pack of 20 pc.	16-14	PK	1
T1110C	Pack of 100 pc.	16-14	PK	1



T1110

### TAB ADAPTERS - SINGLE FEMALE - DOUBLE MALE

PART NO.	DESCRIPTION	TAB SIZE	UOM	ORDER MULTIPLE
T1122	Pack of 10 pc.	.250	PK	1
T1122C	Pack of 100 pc.	.250	PK	1
T1125	Pack of 10 pc.	.250	PK	1
T1125C	Pack of 100 pc.	.250	PK	1



T1122



T1125

### TAB ADAPTERS - MALE TABS

PART NO.	DESCRIPTION	TAB SIZE	STUD	UOM	ORDER MULTIPLE
T1123	Pack of 10 pc.	.250	#10	PK	1
T1123C	Pack of 100 pc.	.250	#10	PK	1



T1123

### TAB ADAPTERS - QUICK DISCONNECT WITH SCREW

PART NO.	DESCRIPTION	TAB SIZE	SCREW	UOM	ORDER MULTIPLE
T1124	Pack of 10 pc.	.250	#6	PK	1
T1124C	Pack of 100 pc.	.250	#6	PK	1



T1124

# Terminals & Connectors

## CHAIR TERMINALS

PART NO.	DESCRIPTION	TAB SIZE	UOM	ORDER MULTIPLE
T1121	Pack of 10 pc.	.250, 2 Male x 1 Female QC	PK	1
T1121C	Pack of 100 pc.	.250, 2 Male x 1 Female QC	PK	1



T1121

## QUICK DISCONNECTS - INSULATED ROUND

PART NO.	DESCRIPTION	TAB SIZE	UOM	ORDER MULTIPLE
T1021	Pack of 10 pc.	.250, Double Male Tab	PK	1
T1021C	Pack of 100 pc.	.250, Double Male Tab	PK	1



T1021

## QUICK DISCONNECTS - INSULATED SQUARE

PART NO.	DESCRIPTION	TAB SIZE	UOM	ORDER MULTIPLE
T1022	Pack of 10 pc.	.250, Double Male Tab	PK	1
T1022C	Pack of 100 pc.	.250, Double Male Tab	PK	1



T1022

## QUICK DISCONNECTS - INSULATED

PART NO.	DESCRIPTION	TAB SIZE	UOM	ORDER MULTIPLE
T1023	Pack of 10 pc.	.250, Triple Male Tab	PK	1
T1023C	Pack of 100 pc.	.250, Triple Male Tab	PK	1



T1023

## QUICK DISCONNECTS - NON-INSULATED

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM	ORDER MULTIPLE
T1108	Pack of 20 pc. Bullet Male	16-14	.157	PK	1
T1108C	Pack of 100 pc. Bullet Male	16-14	.157	PK	1



T1108

## QUICK DISCONNECTS - NON-INSULATED

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM	ORDER MULTIPLE
T1109	Pack of 20 pc. Female Tab w/ Crimp	16-14	.250	PK	1
T1109C	Pack of 100 pc. Female Tab w/ Crimp	16-14	.250	PK	1



T1109

## QUICK DISCONNECTS - NON-INSULATED

PART NO.	DESCRIPTION	WIRE RANGE	TAB SIZE	UOM	ORDER MULTIPLE
T1120	Pack of 10 pc. Female Tab w/ Crimp	16-14	.312	PK	1
T1120C	Pack of 100 pc. Female Tab w/ Crimp	16-14	.312	PK	1



T1120

## Terminals & Connectors

### WIRE CONNECTORS - PLASTIC

PART NO.	DESCRIPTION	UOM	ORDER MULTIPLE
T1150	Pack of 20 pc., Small Blue w/ Spring Insert	PK	1
T1150C	Pack of 100 pc., Small Blue w/ Spring Insert	PK	1
T1151	Pack of 15 pc., Medium Orange w/ Spring Insert	PK	1
T1151C	Pack of 100 pc., Medium Orange w/ Spring Insert	PK	1
T1152	Pack of 15 pc., Large Yellow w/ Spring Insert	PK	1
T1152C	Pack of 100 pc., Large Yellow w/ Spring Insert	PK	1
T1153	Pack of 10 pc., Extra Large Red w/ Spring Insert	PK	1
T1153C	Pack of 100 pc., Extra Large Red w/ Spring Insert	PK	1



### WIRE CONNECTORS - PORCELAIN HIGH TEMPERATURE (UP TO 1800°F)

PART NO.	DESCRIPTION	GAUGE (AWG)	STUD	UOM	ORDER MULTIPLE
T1164	Pack of 15 pc.	18-14	#1	PK	1
T1164C	Pack of 100 pc.	18-14	#1	PK	1
T1165	Pack of 15 pc.	12-10	#3	PK	1
T1165C	Pack of 100 pc.	12-10	#3	PK	1
T2070	Pack of 10 pc.	10-8	#7	PK	1
T2070C	Pack of 100 pc.	10-8	#7	PK	1



### WIRE CONNECTORS - SCOTCHLOK® SPRING

PART NO.	DESCRIPTION	UOM	ORDER MULTIPLE
T1166	Pack of 15 pc., Small Yellow Spring	PK	1
T1166C	Pack of 100 pc., Small Yellow Spring	PK	1
T1167	Pack of 10 pc., Medium Red Spring	PK	1
T1167C	Pack of 100 pc., Medium Red Spring	PK	1
T1168	Pack of 5 pc., Large Grey Spring	PK	1
T1168L	Pack of 50 pc., Large Grey Spring	PK	1
T1169	Pack of 5 pc., Extra Large Blue Spring	PK	1
T1169L	Pack of 50 pc., Extra Large Blue Spring	PK	1



### BANANA PLUG - INCLUDES BLACK & RED INSULATORS

PART NO.	DESCRIPTION
T1179	1 Pair



### HEAVY DUTY ALLIGATOR CLIPS

PART NO.	DESCRIPTION	UOM	ORDER MULTIPLE
T1186	Small, Includes Black and Red Insulators	PK	1
T1187	Medium, Includes Black and Red Insulators	PK	1
T1188	Large, Includes Black and Red Insulators	PK	1



## Terminals & Connectors

### ALLIGATOR CLIPS - STANDARD

PART NO.	DESCRIPTION	UOM	ORDER MULTIPLE
T1191	Small	PK	1
T1192	Medium	PK	1
T1193	Medium, For Use with Test Leads	PK	1
T1196	Small, Includes Black and Red Insulators	PK	1
T1197	Medium, Includes Black and Red Insulators	PK	1



T1191



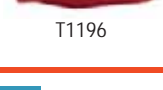
T1192



T1193



T1196



## Cable Clamps, Grommets, Heat Shrink Tubing, Cable & Duct Ties

Available in Two Convenient Packages:

- The Service Pack - Handy and Low Priced, Ideal for Small Jobs
- The C Pack (Bag) - Includes 100 Pieces

### NYLON CABLE CLAMPS

PART NO.	DESCRIPTION	SIZE
SWC02	Pack of 40 pc.	.125"
SWC03	Pack of 40 pc.	.187"
SWC04	Pack of 35 pc.	.250"
SWC05	Pack of 35 pc.	.3125"
SWC06	Pack of 30 pc.	.375"
SWC08	Pack of 25 pc.	.500"
SWC110	Pack of 20 pc.	5/8"
SWC112	Pack of 15 pc.	3/4"
SWC116	Pack of 14 pc.	1"
SWCA1	Pack of 26 pc.	1/8" to 1"



SWC03



SWC08



SWC110

### VINYL GROMMETS

PART NO.	DESCRIPTION	SIZE
SGV04	Pack of 18 pc.	.250"
SGV05	Pack of 15 pc.	.3125"
SGV06	Pack of 13 pc.	.375"
SGV07	Pack of 12 pc.	.437"
SGV08	Pack of 12 pc.	.500"
SGV10	Pack of 7 pc.	.625"
SGV14	Pack of 4 pc.	7/8"
SGV16	Pack of 4 pc.	1"
SGVA1	Pack of 15 pc.	Assorted Small
SGVA2	Pack of 5 pc.	Assorted Large



SGV05



SGV07



SGV08



SGV14

### HEAT SHRINK TUBING - POLYOLEFIN 50% SHRINK

PART NO.	DESCRIPTION	SIZE
SHS03	Pack of 8 pc.	3/16" ID x 4"
SHS04	Pack of 7 pc.	1/4" ID x 4"
SHS06	Pack of 6 Pc.	3/8" ID x 4"
SHS08	Pack of 5 pc.	1/2" ID x 4"
SHS012	Pack of 4 pc.	3/4" ID x 4"
SHS16	Pack of 3 pc.	1" ID x 4"
SHSA1	Pack of 7 pc.	3/16", 1/4", 3/8" x 4"
SHSA2	Pack of 4 pc.	1/2", 3/4", 1" x 4"



SHS03



SHS16



SHSA1

## Cable Clamps, Grommets, Heat Shrink Tubing, Cable & Duct Ties

### NYLON CABLE TIES - WHITE

PART NO.	DESCRIPTION	SIZE
SWT04	Pack of 40 pc.	3- 3/4" Max, Bundle Size 3/4"
SWT04C	Pack of 100 pc.	3- 3/4" Max, Bundle Size 3/4"
SWT05	Pack of 35 pc.	5- 1/2" Max, Bundle Size 1- 1/4"
SWT05C	Pack of 100 pc.	5- 1/2" Max, Bundle Size 1- 1/4"
SWT07	Pack of 30 pc.	7" Max, Bundle Size 2- 1/8"
SWT07C	Pack of 100 pc.	7" Max, Bundle Size 2- 1/8"
SWT11	Pack of 15 pc.	11" Max, Bundle Size 3"
SWT11C	Pack of 100 pc.	11" Max, Bundle Size 3"
SWT15	Pack of 12 pc.	14" Max, Bundle Size 3- 5/8"
SWT15C	Pack of 100 pc.	14" Max, Bundle Size 3- 5/8"
SWTA1	Pack of 30 pc.	4", 7" and 11" Assorted



### NYLON CABLE TIES - SCREW MOUNT

PART NO.	DESCRIPTION	SIZE
SWTM05	Pack of 13 pc.	5- 1/2" Max, Bundle Size 1- 1/4"
SWTM05C	Pack of 100 pc.	5- 1/2" Max, Bundle Size 1- 1/4"
SWTM07	Pack of 11 pc.	6- 3/4" Max, Bundle Size 2- 1/8"
SWTM07C	Pack of 100 pc.	6- 3/4" Max, Bundle Size 2- 1/8"
SWTM11	Pack of 6 pc.	11" Max, Bundle Size 3"
SWTM11C	Pack of 100 pc.	11" Max, Bundle Size 3"
SWTM14	Pack of 5 pc.	14" Max, Bundle Size 4"
SWTM14C	Pack of 100 pc.	14" Max, Bundle Size 4"



### DUCT TIES

PART NO.	DESCRIPTION
S7P24	Pack of 50 pc. Duct Tie 24", Fits 6" Duct, 175 lb. Tensile
S7P36	Pack of 50 pc. Duct Tie 36", Fits 10" Duct, 175 lb. Tensile
S7P48	Pack of 50 pc. Duct Tie 48", Fits 14" Duct, 175 b. Tensile



# Chemicals

## MO98

### ZOOM SPOUT® OILER

A Paraffin Based, Non-Gumming, High Quality Lubricating Oil

- All-Purpose Lubricating Oil
- Flexible Spout Extends and Retracts, Adjusts to Any “In-Between” Length
- Withstands High Temperatures Without Breaking Down
- Viscosity 92-99 @ 140°F
- 4 oz. Bottle
- 12 Per Case



## MO44

### RUST BUSTER® SOLVENT

Dissolves Rust

- Telescoping Pullout Spout
- Loosens Rust in Seconds
- No Lingering Odor
- Counter Display Case
- 4 oz. Bottle
- 12 Per Case



## S8

### SUPCO88 OIL ADDITIVE

Introduced in 1954 and Valued Worldwide, this Super Lubricant is a “Must Use” in Repair and Preventative Maintenance Programs

- **Compatible with ALL Refrigerant Oils**
- Dissolves Sludge Buildup on Bearing and Valve Surfaces
- Prevents Binding of High Speed Compressors
- Prevents Excess Wear in Motors and Compressors
- 8 oz. Bottle
- 24 Per Case

#### Application Notes

To Prevent Excess Wear on Expansion Valves and Capillaries Mix 1 Part SUPCO88 to 9 Parts Refrigeration Oil.

- Prevents Excess Wear on Expansion Valve Needles and Seats
- Penetrates the Pores of ALL Moving Metal Parts of the Expansion Valve for Constant Lubrication

Extend the Life of ALL Motors (i.e. for blowers and air conditioners)

- A Few Drops Will Help Free a “Frozen” or Sticking Motor Shaft
- Mix 9 to One for Regular Bearing Maintenance
- Decreases “Bearing to Shaft” Friction and Sludge Accumulation when Mixed 9 to 1

More Efficiency for High Speed Compressors

- Increases the Lubricating Capability of Mineral Oils in High Speed Compressors
- Used in New Units to Reduce Current Draw by Reducing Friction and Preventing Overloading
- SUPCO88 Can be Left in the System Permanently



## S132

### SIL GLYDE

Long Lasting, High Film Strength Lubricant for All Surfaces Including Rubber, Metal, Wood and Glass.

- Weatherproof
- -20°F to 600°F Range
- 12-1.5 oz. Tubes/Case



# Chemicals



## HS52200 GREEN PANTABS

Economical Condensate Drain Pan Treatment

- Helps Eliminate Odors
- Prevent Overflows & Water Damage
- Non-Corrosive
- Easy to Install
- Cleans Scale & Sludge
- Non-Toxic
- Acceptable for Computer Room Use
- Suitable for Use in Humidifiers
- Ideal for Fan Coils and Window Units
- Great for Refrigerated Food Cases
- Use 2 to 4 Tablets Per Month for Every 1 Ton of Air Conditioning/Refrigeration



## SO100/ST200 SLIMEOUT® CONDENSATE PAN CONDITIONING TABLETS

- Prevent Plugging of the Air Conditioning Condensate Drip Pans and Drain Lines
- Does Not Release Any Chlorine or Other Noxious Fumes
- Eliminates Odors
- Easily Solves Problems

	PART NO.	PART NO.
	SO100	ST200
Description	Slime Out	Slime Tab
Tablets Per Jar	100	200
Tablet Size	35 grams	20 grams
Initial Application	2 tabs/3 tons	3 tabs/3 tons
Maintenance	2 per month	3 per month



## HS60002 R3 AC LEAK REPAIR QUICK SERVICE KIT

- All-In-One
  - Quick Sealing Small Leak Repair
  - Lubricator
  - UV Dye to Reveal Larger Leaks Needing Repair
- Extends System Life and Quiets Noisy Compressor
- Seals Existing Leaks in Condensers, Evaporators, Hoses, Gaskets and O-Rings
- Renews O-Ring and Seal Elasticity
- Lubricates Moving Metal Parts
- Prevents Future Leaks
- Refills Available (HS60022)
- Includes 2 Preloaded Injectors

### REPAIR • RESTORE • REVEAL

#### R3 Quantity Chart for System Injection

One injector unit contains 2 oz. (59ml) of R3

##### Residential AC

TONS	INJECTOR UNIT(S) (2 OZ.)
1-6	1
7-12	2
13-19	3
20-26	4

\*For Automotive Use: Remove 1 oz. of oil from system and replace with 1 oz. of R3. 1/2 injector unit.



HS60022

#### Will R3-AC LEAK REPAIR fix my leak?

In general, R3 is designed to seal an AC system that has slow leaks and loses refrigerant over time. Maximum leak size approximately 0.50 mm. The system must be able to hold a vacuum on the low side for 15 minutes, at a minimum. If the vacuum leaks out or changes, the hole is too large to be sealed and mechanical repairs may be needed.

**R3-AC Leak Repair®** Extends system life and quiets a noisy compressor. It improves system lubrication up to 1200% and reduces energy consumption. It also improves the efficiency of older AC systems.

## HS17002

### THAWZONE® QUICK SERVICE KIT

Frees a Frozen System

- The Original Liquid Dehydrant for Control of Moisture in Refrigeration Systems
- Compatible with All Refrigerants and Lubricants
- Aids with Oil Return in Low Temperature Systems
- Enhanced Moisture Control in Even the Most Advanced Systems
- Helps Prevent the Formation of Acid
- Refills Available (HS17022)



HS17022



## HS18002

### ACID NEUTRALIZER QUICK SERVICE KIT

Keeps the Acid Away

- No Solids or Solid Residuals
- Easy to Use, No Complicated Charts
- Compatible with ALL Refrigerants and Lubricants
- Neutralizes Acid in Recovery Equipment
- Safe, Will Not Harm System Components
- Refills Available (HS18022)



HS18022



## HS21002

### TRACE 2® QUICK SERVICE KIT

Internal Refrigerant Leak Detector

- Works Under ALL Conditions
- Not Affected by Noise or Wind
- Visible in Bright Light
- Visible Under Ultraviolet Light
- For Refrigeration, Air Conditioning and Hydraulic Systems
- Refills Available (HS21022)



HS21022



## HS32098

### HVAC SUPER PRO

Perfect Solution for Bonding Copper, Aluminum and Brass in Any Combination

- Bonds Dissimilar Metals
- Compatible with ALL Refrigerants
- Formulated to Exceed all Requirements for R-410A Refrigerant and POE Oils
- Vibration Tested for HVAC and Refrigeration Applications
- Maximum Pressure > 850 psi
- Bonds in 3-5 Minutes
- 1 Bottle = 200 Bonds (5/8" Tube)
- Non-toxic
- Sold in Display Case (12/case)



Scan for the HS32098 video

## HS32032

### INSTANT HVAC/R PATCH

A Space-Age Bonding System that Seals Holes, Cracks and Leaks

- Repairs are Made in a Minute
- Safe to Use with ALL Refrigerants
- Rated at 350 psi, 200°F
- Should Only be Used on the Low Pressure Side of Systems
- Non-toxic
- Available 12/Case



Scan for the HS32032 video



## HS31032

### HEAT SHIELD GEL

- Protects Heat-Sensitive Components
- Prevents Heat Damage with No Drip, No Clean up
- Non-corrosive, Non-toxic and Non-staining
- Evaporates Within 24-48 Hours
- For Use on All Surfaces, Including Wood, Insulation, Valves, Piping and Drywall
- Available 12/Case



## LEAK LOCK AND

### LEAK LOCK GOLD WITH TEFLON

Resin Based Soft Setting Brushable Paste Pipe Joint Compound Resistant to All Refrigerants, Oils, Water and Most Chemicals, Liquids and Gases.

- Use with Pressures to 10,000 psi to Full Vacuums
- Temperature Range -200°F to 400°F (-93°C to 204°C)
- It Never Hardens and it Never Becomes Brittle
- Ideal for Joining all Metals, Plastics and Other Materials
- Will Stick to All Clean Surfaces
- Guarantees a Perfect Seal Under All Conditions
- Prevent Vibration From Loosening Nuts, Bolts, Plugs and Fittings
- Non-toxic



#### Leak Lock

PART NO.	SIZE	PKG
HS10001	1-1/3 oz. Tube	12/Case
HS10004	4 oz. Brush Top Plastic Jar	12/Case
HS10016	16 oz. Brush Top Plastic Jar	12/Case
HS10128	1 Gallon Can	1

#### Leak Lock Gold with Teflon

PART NO.	SIZE	PKG
HS11001	1-1/3 oz. Tube	12/Case
HS11004	4 oz. Brush Top Plastic Jar	12/Case
HS11016	16 oz. Brush Top Plastic Jar	12/Case
HS11128	1 Gallon Can	1

## HS12001 RED EPOXY

When You Need a Sealant You Can Count On. High Performance, Heat Cured, Two Part Epoxy Kit

- Exhibits a Color Change When Cured (Turns Gold)
- May be Cured with a Hot Air Gun or Open Flame in Minutes
- -100°F to 300°F (-73°C to 149°C)
- Working Pressure in Excess of 3000 psi
- Tensile Strength: 6000 psi
- Works on Vertical Surfaces
- Pressure Tested to 3000 psi
- Simple, Quick Mixing Application
- Oil, Gas, Fuel & Solvent Resistant
- No Rush, No Wait, You Control Curing Time
- Kit Includes 2-1/2 oz. Tubes
- 12/Case



## HS30004 & HS30016 SOLDERLENE

High Quality, Paste Type, Non-Acid Soldering Flux

- Industrial Strength Wetting Agents to Promote Solder Flow
- For Use with Low and Mid-Temp Soft Solders, Both Lead and Lead-Free
- Effective on All Metals Except Aluminum and Magnesium
- Brush Top Plastic Jars

PART NO.	SIZE	PKG
HS30004	4 oz.	12/Case
HS30016	16 oz.	12/Case



## THAWZONE®

- Enhanced Moisture Control in Even the Most Advanced Systems
- Aids with Oil Return in Low Temperature Systems
- Compatible with ALL Refrigerants and Refrigeration Lubricants
- Helps Prevent the Formation of Acid
- No Methanol
- Environmentally Sound

PART NO.	SIZE	PKG
HS17001	1 oz.	24/Case
HS17004	4 oz.	12/Case
HS17016	16 oz.	6/Case



## HS13001 THREADLOCKER

Prevents Loosening Nuts, Bolts, Brushings, Plugs and Fittings From Shock and Vibration

- Use on All Metals and Rigid Plastics
- Disassembles with Standard Hand Tools
- Excellent for Use with Dissimilar Metals and Materials
- Single Component - Easy To Use
- Helps Prevent Rust and Other Corrosion
- Use on a Wide Range of Fastener Types and Sizes
- Non-toxic
- Lower Cost than Mechanical Fastener



## HSUVB001 SPIRO LITE UV BULB

- 120 Volt Fluorescent UV Light Source For Your Light Trouble



## HSINJ001 HIGH SIDE® SYSTEM INJECTOR

Use For Introducing Any Liquid Into the Low Side of a Chemical Hermetic System

- Entirely Reusable
- Constructed of Rugged Aluminum for Long Life
- Designed For Use with Any Standard Manifold Gauge and Requires No Extra Valves or Fittings
- Drip Proof, No Spill Design Takes the Mess Out of the Atmosphere
- Prevents the Introduction of Air Into an Operating System
- Can be Used on Sealed Operating Systems to Avoid Shutdowns
- Use with Trace, Trace 2, Thawzone and Acid Neutralizer
- Compatible with All Refrigerants



## GAS LEAK DETECTOR LOW TEMP

Leaks Appear as Large Strong Bubbles Which Cling to the Surface and are Fluorescent Under a Black Light

- Non-freezing
- Fluorescent
- Rated to -30°F (-34°C)
- Non-toxic
- Non-hazardous
- Bubble-type Gas Leak Detector
- Use on Hot and Cold Piping, Natural Gas, Most Gases, Air, All Refrigerants



PART NO.	LOW TEMP	SIZE	TYPE	PKG
HS22008	8 oz		Plastic Bottle w/Dauber	24/Case
HS22032	32 oz		Trigger Sprayer Bottle	12/Case
HS22128	1 Gal.		Plastic Bottle	6/Case
MID TEMP				
HS23008	8 oz		Plastic bottle w/Dauber	24/Case
HS23032	32 oz		Trigger Sprayer Bottle	12/Case
HS23128	1 Gal.		Plastic Bottle	6/Case

## GAS LEAK DETECTOR MID TEMP

Same as Above Except:

- Rated to 27°F (-3°C)

## TRACE2

A Red Penetrant Dye in a Polyolester Base that is Completely Compatible with All Refrigerants and Lubricants, Old and New.

Use to Locate the Hardest to Find Leaks Under the Toughest Conditions in Low Light or Dark Areas

- Leaks Show as Bright Red Stains
- For Refrigeration and Hydraulic Systems
- Fluorescent with Any Ultraviolet Light Source
- Non-volatile and Will Not Sludge or Deposit Gum
- Clearly Visible, Even Through Ice and Frost
- Locates Leaks Exactly, No False Positives
- Use 1/8 Ounce Per Pound of Refrigerant

### WITH SUPERBRITE UV TRACER

PART NO.	TRACE2	SIZE	PKG
HS21004	4 oz Plastic Bottle		12/Case
HS21016	16 oz Plastic Bottle		6/Case
HS21128	1 Gallon Can		4/Case
TRACE			
HS20004	4 oz Plastic Bottle		12/Case
HS20016	16 oz Plastic Bottle		6/Case
HS20128	1 Gallon Can		4/Case



## TRACE

A Red Penetrant Dye in a Mineral Oil Base that is Completely Harmless to Refrigeration, Air Conditioning and Hydraulic Equipment

## HYDRO TRACE

Locate Hard-To-Find Leaks in Any Closed System Containing Water And/Or Antifreeze Compounds Such as Propylene Glycol and Ethylene Glycol. When Added to a System Leaks are Easily Visible as Bright Red Stains Under Normal Lighting Conditions and as a Bright Orange Glow when Exposed to an Ultraviolet Light Source

- Use 1 Ounce Per 2 Gallons of Water

### Applications

- Refrigeration
- Hydronics
- Automotive
- Process Cooling
- Chemically Inert
- Will Not Harm Equipment or Seals

PART NO.	SIZE	PKG
HS26004	4 oz Plastic Bottle	12/Case
HS26016	16 oz Plastic Bottle	6/Case
HS26128	1 Gallon Can	4/Case



## TRAX

Bubble-type Liquid Leak Detector Formulated to Produce Long Lasting Bubbles Under 'Job-Site' Conditions

- Clear
- No Cleanup
- Environmentally Friendly
- Evaporates Leaving No Residue
- Temp Range: 27°F to 200°F (-3°C to 93°C)
- Non-toxic
- Does Not Pit Surfaces
- Detects Leaks as Small as 1 Micron
- Oxygen Compatible
- Meets the Performance Requirements of Military Specifications: MIL 25567 Type 1 A, B & C

PART NO.	SIZE	TYPE	PKG
HS24001	1 1/3 oz	Squeeze Bottle	24/Case
HS24010	10 oz	Squeeze Bottle w/ Extendable Spout	12/Case
HS24128	1 Gal.	Bottle	6/Case



## HS51032

### DYE WASH

Removes Any Type of Leak Detecting Dye from Equipment and Pipe Surfaces to Prevent False Readings During Future and Follow-up Leak Detection

- Non-toxic
- Environmentally Friendly
- Non-corrosive
- Easy To Use
- 32 oz. Spray Bottle
- 12/Case



## HS16501 OIL CHECKER

Easily Identify All Refrigeration, Air Conditioning and Heat Pump Lubricants in Just Seconds

- Easy To Use Two Step Process that Identifies All Types of Oils
- Test Results Within Seconds
- Each Kit Includes Two Complete Tests
- Should Be Used to Check the Type of Oil in a System Before Adding Any Additional Oil
- Compatible with Mineral, Alkybenzene and Polyolester Type Oils
- Saves Time and Money by Eliminating the Need for a Refractometer or Expensive Laboratory Tests
- Avoids the Costly Mistake of Mixing POE and Mineral Refrigeration Oils
- 12/Case






## HS16001 THE ACID TEST

For Detecting the Presence and Formation of Acid in Air Conditioning and Refrigeration Systems

- Easy to Use
- No Complicated Charts
- Results in Seconds
- Very Inexpensive
- Non-toxic
- Non-hazardous
- Accurate Results
- Eliminates Guess Work
- Safe Formula
- Biodegradable
- Non-flammable
- For Use With All Refrigerants
- 4 Complete Tests in Each Kit
- 12/Case



### Color Change Indicators

	BLUE OR VIOLET.....No Acid Present
	GREEN.....Moderately Acidic
	YELLOW .....Acidic

## HS18004 ACID NEUTRALIZER

The BEST Acid Treatment Available, Neutralizes Residual Acid Caused by Compressor Burnout

- Works Fast
- Circulates Quickly
- Compatible with ALL Lubricants
- Safe, Will Not Harm System Components
- No Complicated Charts
- 4 oz. Bottle
- No Solids or Solid Residuals
- Compatible with ALL Refrigerants
- Neutralizes Acid in Recovery Equipment
- Easy To Use
- Can Prevent Compressor Burnout
- 12/Case



C  
H  
E  
M  
I  
C  
A  
L  
S

# Chemicals

C  
H  
E  
M  
I  
C  
A  
L  
S

## SUPER FLUSH AC/R INTERNAL SYSTEM CLEANER

Neutralizes and Removes Acid Caused by  
Compressor Burnout

- Biodegradable
- Easy To Use
- Cleans in a Single Treatment
- Compatible with All Refrigerants and Refrigeration Oils
- Does Not Contain Halogenated Solvents
- Cleaning Agent for All A/C and Refrigeration Parts
- Environmentally Safe
- Non-flammable
- Saves Time and Money



### Use

- Before a System Retrofit
- After a Compressor Burnout
- Recovery, Recycling and Reclamation Equipment
- On Automotive (Remove Immediately)

### One Treatment Cleans and Removes

- Sludge
- Gum
- Debris
- Moisture
- Carbon Deposits
- Tar
- Grease
- Organic Acids
- Soot
- Mineral Acids

PART NO.	SIZE	PKG
HS55032	32 oz Plastic Bottle	12/Case
HS55128	1 Gal. Plastic Bottle	6/Case

## HS58128 PINK STUFF

Heavy Duty, Foaming, Acid Based Concentrated Liquid  
Coil Cleaner Foaming Action Pushes Dirt Out of Coils to  
be Rinsed Away

- Non-flammable
- Easy To Use
- Non Oily
- Biodegradable
- 1 Gal. Plastic Bottle
- 4/Case

### Cleans and Brightens:

- Condenser Coils
- Evaporator Coils
- Equipment Surfaces

### Effective On:

- Heavy Oxidation
- Mold
- Lint
- Oily Dirt
- Algae
- Mildew
- Grease
- Oils



## HS59128 GREEN STUFF

Concentrated Alkaline Based Liquid Coil Cleaner

- Non-flammable
- Fast Acting
- Non Oily
- Biodegradable
- Brightens
- 1 Gal. Plastic Bottle
- 4/Case

### For Heavy Duty Cleaning and Degreasing of:

- Condenser Coils
- Permanent Filters
- Evaporator Coils
- Equipment Surfaces
- Fins
- Electronic Coils

### Effective On:

- Grease
- Lint
- Tar
- Mold
- Dirt
- Mildew
- Oil
- Dust
- Algae
- Nicotine



# Chemicals

## HS56011

### EV COIL MAX

Powerful Coil Cleaner in Powder Form to Avoid Dangerous Liquid Spills

- Environmentally Friendly
- Virtually Odorless
- Easy to Use and Clean Up
- Lowers Freight Costs
- Extra Long Shelf Life
- Its Powder Form is a Safer Alternative to Liquid Coil Cleaners
- No Acidic Residue
- Fast Acting
- Prevents Corrosion
- Less Storage Space
- 16 oz. Plastic Jar
- 12/Case



## HS57014

### HL COIL BRITE COIL CLEANER

Acid Based, Powder Coil Cleaner with Controlled Foaming Action

- Clean the Toughest Coils
- Mild Odor
- Indefinite Shelf Life
- Non-flammable
- Lowers Freight Costs
- Less Storage Space
- Easy To Use
- No Dangerous Liquid Spills
- Makes Old Coils Look New
- Easy Rinse for Quick Cleaning
- 14 oz. Plastic Bottle
- 12/Case



## HS58520

### COIL BLASTER SOLVENT

Solvent Based High Pressure Aerosol Coil Cleaner

- Pleasantly Scented
- Non-flammable
- Degreases
- Fast Drying
- Nonconductive
- Safe to Use on Equipment While Running
- Blasting Aerosol Nozzle
- No Residue
- 18 oz. Aerosol Can
- 12/Case



#### Use On:

- Evaporator Coils
- Electrical Equipment
- Condenser Coils
- Automotive Parts
- All HVAC/R Equipment
- Electrical Components

#### Effective On:

- Dirt
- Grime
- Grease
- Oil

## HS59520

### HD JET FOAMER COIL CLEANER

Heavy Duty Foaming Coil Cleaner in an Aerosol Can

- Convenient
- Pleasant Scent
- Environmentally Safe
- No Ozone Depleters
- 360° Spray Nozzle
- No Chlorinated Solvents
- Easy to Store
- Water Based
- Corrosion Inhibitors
- 19 oz. Aerosol Can
- 12/Case

#### Quickly and Easily Liquifies:

- Dirt
- Oil
- Deposits
- Grease
- Residues

#### Use On:

- Evaporator Coils
- Condenser Coils



# Chemicals

## HS50004 ICEMAX NICKEL SAFE ICE MACHINE CLEANER

### Prevents Liquid Spills

- Inhibits Formation of Scale
- Prevents Corrosion
- Environmentally Friendly
- Will Not Separate or Chemically Change Over Time
- Indefinite Shelf Life (When Kept Sealed)
- Saves Freight Costs
- Maximum Scale Removing Power
- No Acidic Residue
- Makes 1 Gallon of Concentrated Cleaner
- 4.4 oz.
- 12/Case



## FILTER FAN & VENT CLEANER

Heavy Duty Cleaner Specifically Formulated for the Heating, Ventilation, Air Conditioning and Refrigeration Industry

- Biodegradable
- Non-corrosive
- Easy To Use
- Environmentally Friendly
- Non-toxic
- Safe & Effective

PART NO.	SIZE	PKG
HS52032	32oz Plastic Spray Bottle	12/Case
HS52128	1 Gal. Plastic Refill	6/Case



### Removes:

- Dust
- Grease
- Tar Deposits
- Dirt
- Oil

### Use On:

- Electronic Cells
- Permanent Air Filters
- All Vents & Vent Surfaces
- Equipment Surfaces
- Most Air Cleaning Equipment
- Permanent Pre-Filters
- Fan Blades, Plastic & Metal

## CDC ANTI-CLOG

Condensate Drainpan Conditioner

- EPA Registered
- Improved Chemical Formulation
- Water Activated Timed-Release
- 3 to 6 Months, 24 Hours/Day Service
- Works in Equipment of All Sizes (Available in 2 Sizes)
- Filter Material Meters Biocide for Consistent Chemical Release
- Sealed, Tamper Proof Housing Prevents Skin Contact with Biocide
- Designed Not to Clog Drain Hole
- Can be Placed Vertically or Horizontally
- pH Neutralizers Help Protect Drainpan Against Corrosion
- 40% More High Efficiency Biocide (by weight)



PART NO.	SIZE	PKG
HS52105	Units up to 5 Tons	24/Case
HS52115	Units up to 15 Tons	12/Case

# Chemicals

## HS15128 ICE BLOCK HEAT TRANSFER & ANTI-FREEZE

Propylene Glycol Based Anti-Freeze and Heat Transfer Fluid  
Capable of Providing Pipe Burst Protection to Temperatures as  
Low as -100°F (-73°C). All Ingredients are Generally Regarded as  
Safe by the FDA, Making ICE BLOCK the Recommended  
Anti-Freeze Protection Where There is Possible Contact with  
Potable Water Sources

- Non-toxic
- Chemically Stable - Will Not Separate
- Maximum Heat Transfer
- Protects Pipes and Other System Components From Freeze Damage
- Safe & Easy To Use
- Lubricates As It Works
- Safe For Use Where Contact with Potable Water is Possible
- Maximum Corrosion Protection
- Will Not Leave Deposits
- 1 Gallon
- 6/Case

### Applications Include:

- Refrigeration Systems
- Chilled Water Systems
- Coil Defrosting
- Ice Making Machines
- Water Based Heat Extraction System
- Snow Melting Systems
- Winterization of Any Water Based Systems
- Hydronic Heating Systems
- Solar Heating & Hot Water Systems
- Cooling Systems & Chillers
- Immersion Freezing
- Air Hydronic, Heat Pumps & Furnaces
- Process Cooling
- Ground Water Coupled Heat Pumps
- Cooling Towers
- Industrial Heat Transfer Systems
- Fire Hydrant & Sprinkler System



## KA12 KLEEN-AIR ODOR ABSORBER

- Simply Open the Spout to Absorb and Remove All Kinds of Odors
- One 8 Ounce Bottle Works for 1 Year in a 9' x 12' Room
- 12/Case



## HS53001 CRYSTAL GEL T-SORB

Tea Tree Oil Odor Neutralizing Crystal Gel

- Highly Effective Deodorant
- Malodor Absorber Totally Eliminates Odors on Contact
- Combines the Essential Oil of the Australian Tea Tree with Environmentally Safe Super Absorbant Polymer Crystals
- Absorbs Tough Odors in the Air, then Adds a Fresh Tea Tree Fragrance for Up to 90 Days
- Easy To Use
- 1 lb. Jar
- 12/Case

### Eliminates Odor From:

- Pets
- Cleaning Compounds
- Mold & Mildew
- Cigarettes
- Paint
- Flood & Fire Damage



Australian Tea Tree Oil is used in hospitals as an antiseptic. According to studies published in American Scientific Journals, Tea Tree Oil has proven effective against MRSA, the hospital killer bug, Candida (a yeast), and Legionella (a bacteria). Tea Tree Oil is considered to be the most powerful natural antiseptic known to man, while being 100% natural, biodegradable and environmentally friendly.

Formulated with surfactants contained in the US E.P.A.'s DfE (Design for the Environment) CleanGredients database. The vapors of the Australian Tea Tree Oil are not harmful to humans or pets and the essential oil is classified as non-hazardous. All claims regarding antimicrobial and disinfectant properties are presented for information use only. Tea Tree Oil cannot be marketed as pesticide, fungicide or bactericide in the US as it has not been approved by the government for that use.

C  
H  
E  
M  
I  
C  
A  
L  
S

# Chemicals

## FRESHAIR AIR QUALITY KIT

- Improves Air Quality
- Improves A/C Efficiency
- Prevents Bacteria
- Prevents Unpleasant Odors From Forming



## R410A18 REFRIGERANT R410A - 1.8 LBS.

- For Charging Small to Medium A/C Systems
- Perfect for Mini-Splits
- 1/4" SAE Connection
- Use R410AG Adapter & Gauge
- 12/Case



## R410AG R410A ADAPTER & GAUGE

- Push Button Operation
- Reusable
- 5/16" Connection to System



## R134A20 REFRIGERANT R134A - 20.3 OZ.

- For Charging Appliances
- Perfect for Small to Medium Refrigeration Systems
- Use R134AG Adapter & Gauge
- 12/Case



## R134AG R134A ADAPTER & GAUGE

- Push Button Operation
- Re-Usable
- 1/4" Connection to System



## UV12K UNIVERSAL UV DYE KIT

- Kit Includes UVCONN Adapter
- Adapter has Push Button Operation and Standard 1/4" Connection



## UV12 UNIVERSAL DYE

- Convenient Aerosol
- Compatible with All Refrigerants
- Up to 12 Applications
- 12/Case



C  
H  
E  
M  
I  
C  
A  
L  
S

## Dishwasher

### DW157 CORNER DOOR GASKET

Corner Door Baffle Fits Lower Lefthand Corner of Dishwasher. It is Recommended this Item be Replaced Along with the Right Side Baffle (DW156).

- Black Rubber
- Fits Lower Lefthand Corner of Tub
- Can Replace GE® WD8X228



### DW156 CORNER DOOR GASKET

Corner Door Baffle Fits Lower Righthand Corner of Dishwasher. It is Recommended this Item be Replaced Along with the Left Side Baffle (DW157).

- Black Rubber
- Fits Lower Righthand Corner of Tub
- Can Replace GE® WD8X227



### DW3681 DISHWASHER ELEMENT

Designed to Meet or Exceed OEM Specifications.

- Used on Admiral®, Amana®, Crosley®, Jenn-Air®, Magic Chef®, Maytag® and Samsung®



### DW804 DISHWASHER & DISPOSAL HOSE ADAPTER

Dishwasher to Garbage Disposal Drain Connector Kit.

- Will Fit 2 Sizes on Each End
- Used to Connect Mini-Split Drain Lines to PVC
- Connector Includes 4 Clamps



### SSDW7 UNIVERSAL DRAIN HOSE

- Universal Drain Hose for 5/8", 3/4" and 1 1/8" Cutoffs



## Dishwasher

### DW132

#### SPRAY ARM NOZZLE/CAP

- Used to Hold Spray Arm in Place
- Used on Whirlpool® and Sears® Models
- Can Replace Whirlpool® 3367910, 3367198, 3367446



### DW307

#### DOOR SPRING

- Kit Includes Spring, Wire Retainer and Red Plastic Tip
- 2 Kits Required
- Used on Whirlpool®, Sears®, Frigidaire® and D&M®
- Can Replace Whirlpool® 674744



### DW144

#### SUMP COVER

- Used on Most GE® Models
- Can Replace GE® WD12X5028



### DW309

#### DOOR CABLE

Connects to Door Spring to Help Close the Door and to Prevent the Door from Falling Open. It is Recommended Both Sides be Replaced Together.

- Can Replace GE® WD7X14, WD7X13, Amana® R0905640, Jenn-Air® 793133, Maytag® 3000108



### VI3460

#### DISHWASHER ELBOW FITTING

- Improves Seal Quality and Accessibility
- Fitting is Easy to Align and Attach
- Less Torque Required
- Can Replace Whirlpool® W10273460



### LP0005A

#### DISHWASHER PUMP ASSEMBLY

- Can Replace Samsung® DD31-00005A



## Dishwasher

### DW10013

#### DISHWASHER PUMP ASSEMBLY

- Ready to Install, Solenoid and Capacitor Pre-Mounted
- Hardware Kit Included
- Can Replace GE® WD26X10013, WD26X10011, WD26X10007, WD26X77



### DW995

#### DISHWASHER PUMP REPLACEMENT

- Can Replace Whirlpool® W10348269



### DW10001

#### DISHWASHER LOWER RACK REPLACEMENT

- 20 1/4" x 22" x 5 1/2"
- Replaces Many GE®, Hotpoint®, Kenmore®, Montgomery Ward® and RCA® Models
- Can Replace GE® WD28X10001



### DW10230

#### DISHWASHER UPPER RACK REPLACEMENT

- 25" x 25 1/2"
- Replaces Many GE®, Hotpoint®, Kenmore®, Montgomery Ward® and RCA® Models
- Can Replace GE® WD28X10230



### DW10074

#### LOWER RACK ROLLER

- Rack Roller or Wheel, Used on GE® Models and Brands
- Designed to Meet or Exceed OEM Specifications
- Can Also Replace Hotpoint®, Kenmore®, RCA® and others
- Can Replace GE® WD12X10074, WD12X10082, WD12X10094, WD12X10100



### DW10136

#### LOWER RACK ROLLER

- Rack Roller or Wheel, Used on GE® Models and Brands
- Designed to Meet or Exceed OEM Specifications
- Can Also Replace Hotpoint®, Kenmore®, RCA® and Others
- Can Replace GE® WD12X10136



# Dishwasher

## DW10267

### STUD & ROLLER ASSEMBLY

- Rack Roller and Axle Assembly for Most GE® Brands
- Designed to Meet or Exceed OEM Specifications
- Can Replace GE® WD12X10267, WD12X272, WD12X427, WD12X441



## DW271

### RACK ROLLER ASSEMBLY

- Rack Roller Used on Many GE® Brands
- Includes Clip-On Axle
- Designed to Meet or Exceed OEM Specifications
- Can Replace GE® WD12X271, WD12X440, WD12X0271, WD12X426



## DW10277

### STUD ROLLER LOWER RACK

- Clip-On Style Dishrack Roller Axle Used on GE® Brands
- Snaps on to the Rack to Support the Wheel
- Designed to Meet or Exceed OEM Specifications
- Can Replace GE® WD12X10277, WD12X10261, WD12X10126, WD12X10075



## DW10018

### PISTON & NUT ASSEMBLY

- Used for Check Valve on Several GE® Manufactured Dishwashers
- Designed to Meet or Exceed OEM Specifications
- Can Replace GE® WD24X10018, WD24X220, WD24X199



## DW10304

### RACK SLIDE END CAP

- Attaches to Rails for Upper Rack to Prevent the Dishrack from Sliding All the Way Out
- Designed to Meet or Exceed OEM Specifications
- Can Replace WD12X10304, WD12X0344, WD12X344, WD30X0093



## DW5314

### ROLLER LOWER RACK

- Can Replace Bosch® 165314



## EBDW

### DISHWASHER REPAIR MANUAL

- Economical and User Friendly Repair Manual



A  
P  
P  
L  
I  
A  
N  
C  
E

# Dryer Parts

## BELTS

- Replacement Dryer Belts

PART NO.	LENGTH (IN.)	WIDTH (IN.)	REPLACES
LB131	42	1/2	Maytag® 33-6104, Norge® 35-0465, Gem® 350425
LB151	41 1/2	3/8	Frigidaire® Q62149, Electrolux® 321155, Maytag® 211451
LB161	47 1/2	3/4	Gem® 96388, Whirlpool® 352967, Whirlpool® 96388
LB216	87	1/4	GE® WE12X82P, WE12X10014, WE12X42
LB230	47	3/8	Gem® 311012, Maytag® 311012
LB231	68	3/8	Gem® 310013, Maytag® 310013, Alliance® 75098
LB232	31	5/32	Maytag® 312512, Maytag® 55060
LB234	100	3/8	Maytag® 312959
LB260	88	1/2	Gem® Q63807, Electrolux® 3204314, Electrolux® 3281154, GE® WE12X88
LB276	91 5/8	3/8	Admiral® 53-2910, Whirlpool® 532910, Maytag® 31001026
LB279	92	1/2	Whirlpool® 660997, Maytag® 3301777
LB295	54	5/8	Electrolux® 131276300, 134051000, 3203018
LB788	55 1/2	1/2	Maytag® 12001788, 22002040, 22002313
LB1655	92	5/16	Samsung® 6602001655
LB029	89 1/2		GE® WE12M29



LB161



LB216

APPLIANCE

## DE602 BLOWER WHEEL

- Can Replace Maytag® 303836



## DE382BWR GAS VALVE COIL - 2 TERMINAL

- Used on "M" Series Valves
- 2 Terminal
- Can Replace Electrolux® Q622602, GE® WE4X693, Whirlpool® 695397



## DE382AWR GAS VALVE COIL - 3 TERMINAL

- Used on "M" Series Valves
- 3 Terminal
- Can Replace Electrolux® Q622601, GE® WE4X692, Whirlpool® 695398



## DE382WR GAS VALVE COIL KIT - 25M SERIES

- Designed by White Rodgers® to Replace the "M" Series Valves
- Kit Contains Valves, 8 Orifices, 2 Bushings and 2 Nuts
- Contains DE382AWR (3 Terminal) and DE382BWR (2 Terminal)
- Can Replace Electrolux® 5303931775, GE® WE04X10004, Whirlpool® 279834, GE® WE04X10020



## Dryer Parts

### DE692

#### DRUM ROLLER REAR

- Used in LA1008 Kit
- Used on Whirlpool®, Kenmore®, Roper®, KitchenAid®, GE® and More
- Can Replace Maytag® 31001096



### DRUM ROLLERS

- Dryer Drum Roller and Shaft Assembly Kit Includes: Roller, Shaft and Triangle Ring Clips
- **DE2002A** Can Replace LG® 4581EL2002A
- **DE7523** Can Replace Samsung® DC97-07523B



DE2002A



DE7523

### DE693

#### DRUM SUPPORT ROLLER

- Drum Roller with Pre-Lubricated Bronze Bearing
- For Use on Maytag® Models
- Kit Contains Roller and 2 Washers
- Low Durometer Rubber Over Hub Produces Less Noise
- Less Slippage
- Can Replace Maytag® 303373, 3-3373, 12001541



### DE702

#### DRUM SUPPORT ROLLER

- Whirlpool® Kit Includes: Drum Roller, Tri-Ring and Pushnut
- Used with 339489 Right or 3399506 Left Shaft
- Pre-Lubricated Bronze Bushing
- Low durometer Rubber Over Hub Produces Less Noise
- Less Spillage
- Can Replace Whirlpool® 349241



### DE702T

#### 349241T DRUM ROLLER SET

- Whirlpool® Kit Includes: 2 Drum Rollers, Tri-Rings and Pushnuts
- Used with 339489 Right or 3399506 Left Shaft
- Pre-Lubricated Bronze Bushing
- Low Durometer Rubber Over Hub Produces Less Noise
- Less Slippage
- Can Replace Whirlpool® 349241T, 661562, 337089, GE® WE3X82



### DE696

#### LA1008 ROLLER KIT

- Drum Roller with Pre-Lubricated Bronze Bearing
- For Use on Maytag® Models
- Kit Contains 2 Rollers, 2 Support Shafts and Hardware
- Low Durometer Rubber Over Hub Produces Less Noise
- Less Slippage
- Can Replace Maytag® LA1008, Norge® 53-0312N



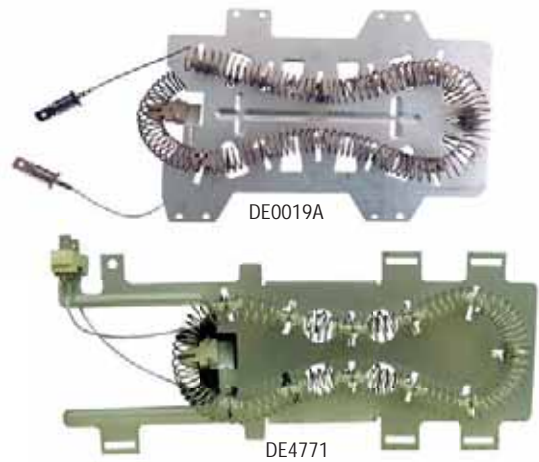
A  
P  
P  
L  
I  
A  
N  
C  
E

# Dryer Parts

## DRYER ELEMENTS

- Direct Replacement Elements

PART NO.	WATTS	VOLTS	REPLACES
DE138	5300	240	Maytag® 303404
DE148	4750	240	Maytag® LA-1044
DE698	5200	240	Whirlpool® 4391960
DE838	5400	240	GE® WE11X10004, Whirlpool® 279838
DE0019A	5300	240	Samsung® DC47-00019A
DE1001	5400	240	LG® 6931EL1001
DE4771	5400	240	Whirlpool® 8544771
DE7747	5200	240	Whirlpool® 3387747



## DRYER RESTRING KITS

- Direct Replacement Restring Kits

PART NO.	REPLACES
DE315	GE® WE11X60
DE333	GE® WE11X203
DE334	GE® WE11M21C
DE335	Electrolux® 5300622032
DE336	Electrolux® 5300622034
DE1746C	Maytag® 31001746C
DE019AC	LG® DC47-00019A



## DRYER IGNITERS

- Includes Mounting Hardware Where Necessary

PART NO.	STYLE	REPLACES
SDE350	Round	GEM® DE350, ADC® 128910 and More
SDE358	Round	Gem® DE359, GE® WE4X739 and More
SDE359	Round	Gem® DE359, DE363, Amana® 40069801P and More
SDE365	Round	LG® 5318EL3W1A
SDE364	Flat	Whirlpool® 4391996, Glo Bar® 304970 and More
SDE366	Flat	Maytag® 31001556 and More



## FLAME SENSORS

- Exact Replacement Dryer Flame Sensor for Many OEM Brands
- Senses Igniter for Heat and Opens Gas Valve for Burner
- Safety Device in Flame Out Condition

PART NO.	REPLACES
DE353	Whirlpool® 338906
DE355	GE® WE4X448



## Dryer Parts

### LINT SCREENS

- Captures Lint as it Exits the Dryer Vent
- Made with Fine Mesh Metal Screen

PART NO.	LENGTH (IN.)	REPLACES
DE520	12 5/8	Electrolux® 5300137504, GE® WE18X26, Westinghouse® Q115071
DE522	18 3/4	Whirlpool® 339392, 690634, 337133 and More
DE524	20 3/4	Whirlpool® 348855, 341256, 689469
DE525	20 3/4	Whirlpool® 349639
DE526	22 1/4	Whirlpool® 8557882
DE534	12 1/4	Maytag® 33001808
DE0998	11 1/2	Whirlpool® W10120998
DE1002E	12 1/2	LG® 5231EL1002E
DE964	9 1/2	Whirlpool® 8531964 and More



DE522



DE526

### SWITCHES

PART NO.	DESCRIPTION	AMPERAGE	VOLTS	MOUNT	REPLACES
ES16802	Micro Switch	15	125-250	Bolt	Gem® 16802, 168-2
ES15253	Micro Switch	10	125	Snap-In	Micro® V3L1
ES15252	Micro Switch	1/2	125	Snap-In	Micro® V3L107D8
		1/4	250		
ES15805	Toggle Switch	20	125	Snap-In	Gem® 15805, 158-5
		10	250		
ES15806	Toggle Switch	20	125	Pal-Nut	Gem® 15806, 158-6
		10	250		
ES15903	Panel Rocker Switch	7.5	125	Snap-In	Gem® 15903, 159-3
		10	250		
ES15905	Panel Rocker Switch	7.5	125	Snap-In	Gem® 15905-159-5
		10	250		
ES15907	Panel Rocker Switch	15	125-250	Snap-In	Gem® 15907, 159-7
ES16806	Door Switch	10	125	Snap-In	Gem® 16806
DE6105	Door Switch	11	120-240	Snap-In	Whirlpool® 3406105
DE6107	Door Switch	11	120-240	Snap-In	Whirlpool® 3406107



ES16802



ES15805

### RJR601 LINT EATER® 3 FT. DRYER VENT CLEANING KIT

- Effective on All Types of Dryer Vents
- Includes (2) 18" Extension Rods, a 4" Self Feeding Auger Brush and a 2 1/2" Lint Trap Brush



### R3203612 LINT EATER® 12 FT. VENT CLEANER EXTENSION KIT

- Add Length to Your Lint Eater® Rotary Dryer Vent Cleaning System
- For Vents Running Longer Than 12 ft.
- Includes (4) 36" Extension Rods and Storage Tube



## Dryer Parts

### RLE202 LINT EATER® 12 FT. DRYER VENT CLEANING KIT

- Effective On All Types of Dryer Vents
- (4) 36" Extension Rods
- 4" Self Feeding Auger Brush
- Blockage Removal Tool
- 2 1/2" Lint Trap Brush
- Vacuum Adapter
- Dryer Adapter
- Instruction Manual



### "SET" SERIES THERMOSTATS

- The "SET" Series Offers Proven Reliability in a Versatile, Cost-Effective Design
- Can Handle Loads Up to 25 Amps at 240 VAC

PART NO.	DESCRIPTION	OPEN (°F)	CLOSE (°F)	REPLACES
SET149	Direct Replacement Thermostat	290	250	279054
SET176	Thermostat	248	168	Maytag® 53-0771, 702548 Whirlpool® 3390291, 696397
SET196	Thermostat L145-25 Double Tab	250	Single Shot	
SET198	Thermostat	250	190	Whirlpool® 3390291
SET404	High Limit Thermostat	240	200	Maytag® 53-1096
SET401	Thermal Fuse	196	Single Shot	GE® WE4X857, Whirlpool® 3392519, 33886651
SET402	Thermal Fuse	196	Single Shot	Whirlpool® 3390719, 690198
SET403	Thermal Fuse	300	Single Shot	Maytag® 53-1182
SET407	Thermal Cutout	183	Single Shot	Maytag® 33001762
SET409	Thermal Cutout	243	Single Shot	Maytag® 307473
SET410	Thermal Cutout	196	Single Shot	Whirlpool® 3399849
SET184	Thermal Cutoff Kit	352	Single Shot	Whirlpool® 279769
SET194	Thermal Cutoff Kit	325	Single Shot	Whirlpool® 279816
SET195	Thermostat Kit	120	110	
SET197	Thermostat Kit	250	Single Shot	Whirlpool® 3977767



SET149



SET195

### "L" SERIES THERMOSTATS

- Available with Automatic Reset SPST Switch Configurations

PART NO.	DESCRIPTION	OPEN (°F)	CLOSE (°F)
L14625W	Multi-Temp Thermostat	146	121
L15015W	Multi-Temp Thermostat	150	135
L15525W	SPST Limit Thermostat w/ Heater	155	130



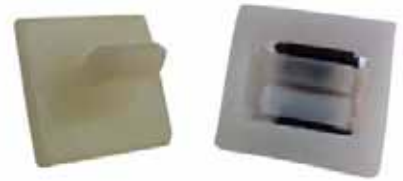
L15525W

## Dryer Parts

### DE902

#### DOOR CATCH/STRIKE PACKAGE

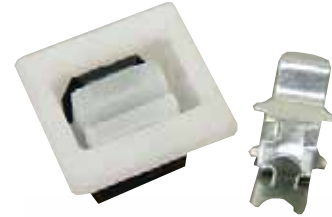
- Used to Keep Dryer Door Closed on Several Brands and Models
- Plastic Strike/Plastic Catch
- Can Replace Whirlpool® 279570, 690082



### DE902M

#### DOOR CATCH METAL STRIKE PACKAGE

- Used to Keep Dryer Door Closed on Several Brands and Models
- Metal Strike/Plastic Catch
- Can Replace Whirlpool® 279570



### DE766

#### LOWER FRONT SEAL

- Felt Drum Seal Used on Frigidaire®, Kenmore®, Gibson®, Kelvinator® and Tappan® Models
- Does Not Include High Temperature Adhesive
- Can Replace Electrolux® 5303281049, Frigidaire® 5303212849



### DE411

#### IDLER ASSEMBLY

- Keeps Tension on the Dryer Drum Belt and Aids in Rotating the Drum
- Heavy Duty Style
- Can Be Used on Whirlpool®, Kenmore®, Roper®, Kitchen Aide® and GE® Models
- Can Replace Whirlpool® 691366, GE® WE12X95



### DE726

#### DRUM BEARING

- Helps Keep Dryer Running as Smoothly as Possible with as Little Noise as Possible
- Can Replace GE® WE25X205, WE3X375, WE3X37, WE3X72



### SM1008 & SM279827

#### DRYER MOTOR

- SM1008 Can Replace LG® 4681EL1008A
- SM279827 Can Replace Whirlpool® 279827



## Dryer Parts

### DE340 BEARING IDLER ASSEMBLY

- Can Replace Whirlpool® 6-3700340



### DE3001A BEARING IDLER ASSEMBLY

- Can Replace LG® 4560EL3001A



### DE405 IDLER ROLLER FOR BELT

- Replacement Idler Pulley for Maytag® Large Capacity and Commercial Dryers
- Pre-Lubricated Bronze Brushing
- Can Replace Maytag® 303705
- 3/4" Diameter



### DE1067 BEARING GLIDE

Attaches to Outer-Most Sides of Bearing. Manufacturer Recommends Replacing Both Glides Together. Sold Individually.

- Can Replace GE® WE1M1067



### DE504 BEARING GLIDE

Attaches to Outer-Most Sides of Bearing. Manufacturer Recommends Replacing Both Glides Together. Sold Individually.

- Can Replace GE® WE1M504



### FCS003 CURRENT SENSING RELAY

This Unit Senses as Soon as your Dryer Draws more than 1 amp of Current. It Will Automatically Turn on the Booster Fan, Eliminating Additional Sensors, Switching or Speed Controls.



### TH9973 & TH7274 THERMISTORS

- TH9973 Can Replace Whirlpool® 279973
- TH7274 Can Replace Whirlpool® 8577274



### TH2001B THERMISTOR

Dryer Thermistor with Temperature Sensor

- Designed to Meet or Exceed OEM Specifications
- Can Replace LG® 6323EL2001B



## Dryer Parts

### DE724

#### SHAFT & BEARING PACKAGE

- Includes Plate Bearing, Tub Bushing and Mounting Hardware
- Can Replace Electrolux® 5303281153, 5303281136 and GE® WE13X10011



### DE901

#### 230131 DRYER DOOR CABLE

- Used for Dryers with a “Drop-Down” Door to Help Support the Door
- 25 Pack
- Can Replace Whirlpool® 230131, 230131D



### DE905

#### 342601 METAL PANEL CLIP (2 PC.)

- Used to Keep Dryer Panel Attached, on Several Brands and Models
- 2 Pack
- Can Replace Whirlpool® 342601, GE® WE01X10122



### DRUM GLIDES

PART NO.	DESCRIPTION	REPLACES
DE729	Drum Glide	GE® WE13X68K
DE775	Drum Glide (4 pc.)	GE® WE1M481, WE1M316, WE1X333
DE790	Drum Glides/ Top Front Seal	Frigidaire® 5303937139, Electrolux® 5303937139
DE747	Drum Glide Package	Maytag® 306508



DE729

### EBHD

#### DRYER REPAIR MANUAL

- Economical and User Friendly Dryer Repair Manual



## Range Parts

### SWITCHES

PART NO.	DESCRIPTION	AMPS	VOLTS	MOUNT	REPLACES
ES15100	Switch	5 2.5	125 250	Snap-In	Gem® 18806, 188-6
ES15102	Switch	3 1	125 250	Threaded	Gem® 15102, 151-2
ES15105	Switch	3 1	125 250	Threaded	Gem® 15105, 151-5
ES15106	Switch	3 1	125 250	Threaded	Gem® 15106, 151-6
ES15400	Switch	3 1	125 250	Snap-In	Gem® 15400, 154
ES15805	Switch	20 10	125 250	Snap-In	Gem® 15805, 158-5
ES15806	Switch	20 10	125 250	Pal-Nut	Gem® 15806, 158-6
ES15903	Switch	7.5 10	125 250	Snap-In	Gem® 15903, 159-3
ES15905	Switch	7.5 10	125 250	Snap-In	Gem® 15905, 159-5
ES18200	Switch	10 5	125 250	Snap-In	Gem® 18200, 182
ES18600	Switch	5 2.5	125 250	Snap-In	Gem® 18814, 188-14
ES16100	Univ. Repl. Switch	15	125/250	Snap-In	Sears® 793085, GE® WD21X557, Maytag® 3135-0006 and More
ES16200	Univ. Repl. Switch	15	125/250	Snap-In	Gem® 16200, 162
ES16300	Univ. Repl. Switch	15	125/250	Snap-In	Gem® 16300, 163
ES16301	Univ. Repl. Switch	15	125/250	Snap-In	Gem® 16301, 163-1
ES16600	Univ. Repl. Switch	15	125/250	Bolt	GE® 303919, Gem® 16600, 166
ES18818	Compactor/Interlock Switch	11 5.5	125 250	Snap-In	Gem® 18806, 188-6
ES16802	Micro Switch	15	125/250	Bolt	Gem® 16802, 168-2
ES15201	Pilot Light	1-3 Watts	125	Snap-In	Whirlpool® 4157976, 4157870, Gem® 15201, 152-1
ES15202	Pilot Light	1-3 Watts	250	Snap-In	Maytag® 00886400088777, Gem® 15202, 152-2
ES15205	Pilot Light	1-3 Watts	125	Snap-In	GE® WB2X1608, Gem® 15205, 152-5
ES15501	Pilot Light	1-3 Watts	125	Snap-In	Gem® 15501, 155-1
ES15601	Pilot Light	1-3 Watts	125	Snap-In	Gem® 15601, 156-1



ES15202



ES15903



ES15100

### ES9400/ES9404 INFINITE SWITCHES

- ES9400 is a Large Surface Unit Switch for 8" Burner.  
Can Replace Whirlpool® 314900
- ES9404 is a Small Surface Unit Switch for 6" Burner.  
Can Replace Whirlpool® 3149404



ES9404

# Range Parts



## MOTOR VENTILATION

- Replacement Motors



SM550



SM555

PART NO.	DESCRIPTION	ROTATION (SHAFT END)	STACK (IN.)	LEADS	RPM	SPEED	REPLACES
SM550	Vent Hood Motor	CCW	1/2	120V Plug	3000	1	Gem® EM550, EM750, Nutone® 65878000 and More
SM551	2 Speed Hood Motor	CW	1/4	Molex 3 Pin	3000/1640	2	Gem® EM551, EM751, Nutone® 52637000 and More
SM552	Vent Fan Motor	CCW	3/4	120V Plug	3000	1	Gem® EM552, Nutone® 63675000, C63675 and More
SM553	Vent/Heater Fan Motor	CCW	3/7	Eyelet	3000	1	Gem® EM553, Nutone® 66582000, C66582 and More
SM554	2 Speed Hood Motor	CCW	7/8	Molex 3 Pin	3000/1500	2	Gem® EM554, Nutone® 279870001, C27987 and More
SM555	Vent Hood Motor	CCW	5/8	120V Plug	3000	1	Gem® EM555, K5895, Nutone® 68627000 and More
SM556	Vent Fan Motor	CCW	5/8	120V Plug	3000	1	Gem® EM556, Nutone® 34484000, C34484
SM681	Utility Motor	CW/CCW	5/8	Eyelet	3000/1550	2	Robertshaw® 14021
SM140-40A	Blower Fan Assembly	CCW	3/4	120V Plug	2400	1	Nutone® K5894, K5895

## WIRE



PART NO.	DESCRIPTION	MAX AMPS (@104°F/40°C)	MAX WATTAGE (@104°F/40°C)	TEMP. RATING (°F/°C)	LENGTH (FT.)	GAUGE (AWG)	PACKAGE
RP0512G	200C Triplex	45	10KW/5KW	392/200	5	12	Bag
RP0512NG	450C Single Cond	56	13KW/6.5KW	842/450	5	12	Bag
RP0514G	200C Triplex	36	8KW/4KW	392/200	5	14	Bag
RP0514NG	450C Single Cond	45	10KW/5KW	842/450	5	14	Bag
T301025	Nickel Hinge Wire	73	17KW/8.5KW	482/250	25	10	Bag
RP2512G	200C Triplex	45	10KW/5KW	392/200	25	12	Box
RP2512NG	450C Single Cond	56	13KW/6.5KW	842/450	25	12	Bag
RP2514G	200C Triplex	36	8KW/4KW	392/200	25	14	Box
RP2514NG	450C Single Cond	45	10KW/5KW	842/450	25	14	Box
T301225	Nickel Hinge Wire	54	12KW/6KW	482/250	25	12	Bag
RP5012G	200C Triplex	45	10KW/5KW	392/200	50	12	Box
RP5014G	200C Triplex	36	8KW/4KW	392/200	50	14	Box
RP0514G	200C Triplex	36	8KW/4KW	392/200	5	14	Bag
T301625	Nickel Hinge Wire	26	6KW/3KW	482/250	25	16	Bag
T301425	Nickel Hinge Wire	39	9KW/4.5KW	482/250	25	14	Bag
T301825	Nickel Hinge Wire	20	4KW/2KW	482/250	25	18	Bag
RP2512G	200C Triplex	45	10KW/5KW	392/200	25	12	Box
RP2516H	HV Silicone Cable	31	7KW/3.5KW	482/250	25	16	Bag
RP5014GB	200C Triplex	36	8KW/4KW	392/200	50	14	Box



RP0514G



T301425



RP2514NG

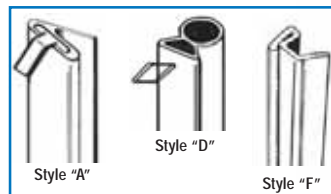
## DOOR GASKETS

- High Temperature Silicon Rubber
- FDA Approved Material
- Exact OEM Replacement
- Stretch Gasket



DG1416

PART NO.	DESCRIPTION	LENGTH (IN.)	STYLE	REPLACES
DG1416	Stretch Gasket	13 13/16	A	GE® WB2X7314 Whirlpool® 4364084
DG2224	Stretch Gasket	21 13/16	A	Whirlpool® 4364083
DG5103	Extruded Gasket	44	F	GE® WB2X5103
DG42	Extruded w/ Clips	54	D	GE® WB32K3



Style "A"

Style "D"

Style "F"



DG42

APPLIANCE

## Range Parts

### EMERSON® SURFACE ELEMENTS

PART NO.	DESCRIPTION
CH30M1	Replaces WB30M1
CH30M2	Replaces WB30M2
CH30T10074	Replaces WB30T10074
CH30T10078	Replaces WB30T10078
CH30X341	Replaces WB30X341
CH30X342	Replaces WB30X342
CH30X354	Replaces WB30X354
CH30X356	Replaces WB30X356
MP15MA	4D6 1500W Surface Element
MP15YA	4T6 1500W Surface Element
MP21YA	5T8 2100W Surface Element
MP26YA	5T8 2600W Surface Element
MP21MA	5D8 2100W Surface Element
MP26MA	5D8 2600W Surface Element
SP12MA	3D6 1250W Surface Element
SP21MA	4D8 2100 Surface Element



CH30M1



MP15MA

### EMERSON® BAKE & BROIL

PART NO.	REPLACES
CH1011	RP743
CH2851	RP799
CH2858	RP777
CH2859	RP789
CH2860	RP841
CH2864	RP716
CH2866	RP2866
CH2867	RP2867
CH2891	RP774
CH4107	74004107
CH44K10002	WB44K10002
CH44K10005	WB44K10005
CH44K5009	WB44K5009
CH44K5012	WB44K5012
CH44T10009	WB44T10009
CH44T10010	WB44T10010
CH44T10011	WB44T10011
CH44T10014	WB44K10014
CH44T10018	WB44K10018
CH44X10009	WB44X10009
CH44X10016	WB44X10016
CH44X126	RP44X126
CH44X134	RP44X134
CH44X185	RP44X173
CH44X200	RP44X200
CH44X5019	RP980
CH44X5043	RP44X5043
CH44X5074	RP44X5074
CH44X5082	RP44X5082
CH44X5083	RP44X5083
CH44X5099	RP44X5099
CH4825	RP828
CH4836	RP790
CH4854	RP838
CH4874	RP829
CH4879	RP837
CH4896	RP832
CH5002	318255002
CH5104	316075104
CH528	RP528
CH550	RP550

PART NO.	REPLACES
CH556	RP556
CH5818	RP842
CH5828	RP795
CH5829	RP856
CH5830	RP798
CH5837	RP796
CH584	RP584
CH5841	RP5841
CH5853	RP5853
CH5855	RP5855
CH5862	RP5862/RP7019
CH587	RP587
CH613	RP613
CH620	RP620
CH624	RP624
CH625	RP625
CH628	RP628
CH629	RP629
CH641	RP641
CH643	RP643
CH653	RP653
CH664	RP664
CH671	RP671
CH672	RP672
CH673	RP673
CH679	RP679
CH687	RP687/RP778
CH691	RP691
CH700	RP700
CH7340	9757340
CH775	RP775
CH776	RP776
CH779	RP779
CH781	RP781
CH809	RP809
CH825	RP825
CH8541	9758541
CH978	RP978
CH979	RP979
CH987	RP987



CH1011



CH44X5074



CH625

APPLIANCE

## Range Parts

### SGR4001 DIRECT REPLACEMENT IGNITER

- Can be Used on All Viking® Glow Bar Ignition Systems Both Bake and Broil
- Can Replace Viking® PB04001



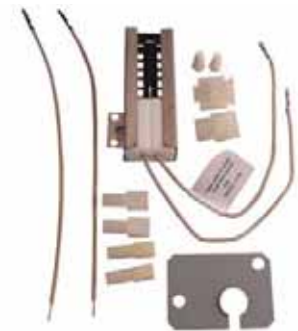
### SGR429 DIRECT REPLACEMENT IGNITER

- Meets or Exceeds OEM Specifications
- Used with 2.8 to 3.0 Amp Rated Gas Safety Valves
- High Temperature Stainless Steel Shield & MGT Wire Leads
- UL® and CSA® Approved
- Can Replace Market Forge® 86350, Southbend® A93-00007 and More



### SGR414 DIRECT REPLACEMENT IGNITER

- Can Replace Hundreds of OEM Part Numbers
- Hardware Included
- Can Replace SGR407-SGR412



### SGR SERIES ROUND IGNITERS

PART NO.	LENGTH (IN.)	REPLACES
SGR403	5 1/2	Gem® GR403, GE® WB2X9154, Electrolux® 5304401265



### SGR SERIES FLAT IGNITERS

PART NO.	LENGTH (IN.)	REPLACES
SGR407	7 1/2	Gem® GR407, GE® WB02X4827, Electrolux® 08067970, Whirlpool® 4163781
SGR409	5 1/2	Gem® GR409, Electrolux® 3016211, GE® WB02X4221, Whirlpool® 9751123
SGR410	6 1/4	Gem® GR410, Electrolux® 5303200508, GE® WB2X4385, Whirlpool® 4371216
SGR412	4 1/2	Gem® GR412, Electrolux® 5303935066, Maytag® 98005652, Whirlpool® 814269, GE® WB02X4528



SGR407



SGR409



SGR410



SGR412

A  
P  
P  
L  
I  
A  
N  
C  
E

## Range Parts

### KNOBS

PART NO.	DESCRIPTION	REPLACES
RK100	Range Knob Kit	Universal
RK101	Range Knob Kit	Universal
RK103	Electric Stove Knob Kit	Universal
RK458	Control Knob	Whirlpool® 307458
RK200	Gas Burner Knob Kit	Universal
RK201	Gas Burner Knob Kit	Universal
RK203	Gas Stove Knob Kit	Universal
RK362	Knob Kit	Whirlpool® 814362
RK699	3 Knob Set	GE® WB3X5699



RK100



RK200

### RECEPTACLES

PART NO.	DESCRIPTION	INCLUDES	REPLACES
RRUPR	Receptacle	2 Brackets, Insulated Wire, Wire Nuts	GE® WB17X210, Whirlpool® 330031, Electrolux® 5303935058
RRUPS	Receptacle	2 Brackets, Insulated Wire, Wire Nuts	Universal
RR105	R300 Receptacle Kit	Horizontal Mounting Clip, Block, 2 Terminals	Electrolux® 5300219245, GE® WB17X210
RR109	Receptacle Kit	Vertical Mounting Clip, Block, Hardware	Electrolux® 5303912666
RR110	Receptacle Kit	Horizontal Mounting Clip, Block, Hardware	Electrolux® 5301167733, GE® WB17X210, Whirlpool® 330031
RR117	Receptacle Kit	Horizontal and Vertical Mounting Clip, Block and Hardware	Electrolux® 5303935058, GE® WB17X210, Whirlpool® 330031, Maytag® 89336
RR122	Receptacle Kit	Horizontal and Vertical Mounting Clip, Block, 2 Wire Leads, Wire Nuts	GE® WB17X5051
RR123	Receptacle Kit	Horizontal and Vertical Mounting Clips, Block, 2 Wire Leads, Wire Nuts	Maytag® 12001676
RR124	Receptacle Kit	2 Brackets, 2 Wire Leads, Wire Nuts	Whirlpool® 33031
RR137L	Receptacle		GE® WB17M137LL
RR058L	Receptacle		Frigidaire® 5303935058L and More
RR500	Receptacle	28" Lead Wires, Single-Screw Mounting	Frigidaire® 203363-903 and More
RR031L	Receptacle Kit		Maytag® 330031L and More
RR146	Receptacle	24" Lead Wires, Spade-Style Terminals	GE® WB17M146
RR261	Receptacle	24" Lead Wires, Spade-Style Terminals	GE® WB2M2261 and More



RR117



RR122



RR109

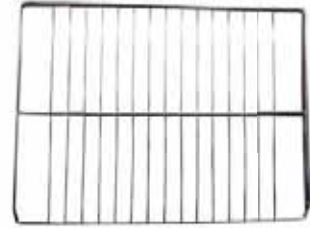


RR124

## Range Parts

### OR102 OVEN RACK

- Manufactured from Heavy Duty Steel Rods with Welded Frame Construction
- Heat Tested to 1200°F to Insure the Highest Quality Plating
- Replaces Regular, Self-Cleaning Gas or Electric
- Replacement Part Numbers by Brand or Measurements for Universal Applications
- Can Replace GE® WB48X5012, WB48X5026, WB48X5031



### GA28 APPLIANCE OUTLET

- Range Accessory
- Three Wire Snap-In Plastic Outlet
- 15 Amp @ 115 Volts



### HOT MICRO SURGE PROTECTOR

- Helps Prevent Blown Fuses
- Short Cycle Protection
- Prevents False Starting Attempts
- Easy Installation
- Automatically Restarts
- LED to Indicate Proper Operation



### EBOC OVEN AND COOKTOP REPAIR MANUAL

- Economical and User Friendly Range Repair Manual



# Refrigerator

## SC1002

### UNIVERSAL FREEZER CONTROL

- Keeps Equipment Up and Running Until Permanent Replacement is Installed
- For Use on Freezers Only
- Three Mounting Options: Suction Cup, Velcro or Screw Mount
- Safe and Easy Installation
- Can Be Used as a Permanent Control
- Temperature Range is -6°F to 39°F



PART NO.	TEMPERATURE RANGE (°F)	TEMPERATURE RANGE (°F)			DIFF °F	APPLICATION
		RANGE	COLD	MEDIUM WARM		
SC1002	28 to 45	28 to 34	33 to 39	39 to 45	6	Refrigerator

### DIRECT REPLACEMENT COLD CONTROLS

PART NO.	NOMINAL IN (°F)	NOMINAL OUT (°F)	CAP (IN.)	REPLACES
GC116	37.5	-10.5	39	GE® WR9X208
GC177	32	22	34.5	GE® WR9X411
GC192	38	23	AIR	GE® WR9X499



GC116

### GC500 SERIES UNIVERSAL COLD CONTROLS

- Universal Mounting Hardware Insures Controls Will Replace Wide Range of Controls
- Ideally Suited for “Frost-Free” Refrigerators and Conventional Units

PART NO.	NORMAL °F		CALIBRATION °F		DIFF °F	CAPILLARY LENGTH (IN.)
	OFF	ON	WARM OFF	COLD ON		
GC503	9	26	42.5	-16	17	42
GC505	31	36	49	16	5	24
GC506	18	31	48.5	-7	13	24



GC505

Thermostats Rated 125VAC, 1/2 HP, 20 Amps F.L. - 80 Amps L.R., SPST Switch Action.

### GC600 SERIES UNIVERSAL COLD CONTROLS

- Universal Mounting Hardware Insures Controls Will Replace Wide Range of Controls
- Designed for Freezers, Offering the Most Popular Temperature and Capillary Lengths

PART NO.	NORMAL °F		CALIBRATION °F		DIFF °F	CAPILLARY LENGTH (IN.)
	OFF	ON	WARM OFF	COLD ON		
GC601	-5	4	22	-29	9	78
GC602	-13	0	12	-30	13	78
GC604	-12	6	20	-34	18	36
GC607	-8	1	13	-23	9	31



GC607

### GC707 UNIVERSAL COLD CONTROL

- Hardware Accessory Pack Covers Most Major Brands for a Wide Range of Applications

PART NO.	RANGE °F		DIFF °F	CAPILLARY		ELECTRICAL RATINGS		120/208/240 VAC
	COLD OFF	WARM ON		LENGTH (IN.)	STYLE	SWITCH	F.I.A.L.	R.A
GC707	52	93	6	36	Straight	SPDT	25A	80A



GC707

APPLICATION

# Refrigerator

## CS10398

### CRISPER TRAY

- New Design is Stronger than the Old Shelf
- Can Replace GE® WR32X10398, WR32X1094, WR32X1107, WR32X1122



## DIRECT REPLACEMENT DEFROST HEATERS

- Heavy Duty Vycor® Glass Construction
- Protective Oxide-Coated Element Wire for Longer Lasting Heater Life
- High Temperature Molded Silicone End Caps
- Manufactured to Proper Lengths, Mountings and Electrical OEM Specifications

PART NO.	VOLTS	WATTS	LENGTH (GLASS) (IN.)	LENGTH OVERALL (IN.)	REPLACES
SH303LB	115	615	8 1/4	9 3/4	GE® WR49X249, WR49X391
SH307	115	425	22 1/8	23 7/16	GE® WR51X194, WR51X411
SH308	115	450	13 7/16	15 1/4	GE® WR51X413
SH309	115	600	8 1/4	9 1/2	GE® WR51X442
SH310	115	772	11 3/8	12 13/16	GE® WR51X443
SH319	115	400	17 1/8	17 7/8	Admiral® 60106-19
SH320	115	450	19 5/8	20 7/16	Admiral® 60106-20
SH323	115	725	10 1/2	12	GE® WR51X10055
SH324	115	575	8	9 1/2	GE® WR51X10053
SH325	115	575	8	9 1/2	GE® WR5X10101



SH307



SH323



SH419

### SH400 Series

PART NO.	VOLTS	WATTS	DIMENSIONS (IN.)	REPLACES
SH413	120	650	23 5/8 X 6 1/2	Whirlpool® 978331
SH414	120	650	26 5/8 x 6 1/4	Whirlpool® 978945
SH419	115	425	20 1/4 x 3 1/8	Electrolux® 5303001362
SH442	120	775	18 5/8 x 9 5/16	Whirlpool® 851363

## UNIVERSAL DEFROST HEATERS

- Heavy Duty Vycor® Glass Construction
- Protective Oxide-Coated Element Wire for Longer Lasting Heater Life
- High Temperature Molded Silicone End Caps
- Manufactured to Proper Lengths, Mountings and Electrical OEM Specifications



SH261



SH271

PART NO.	VOLTS	WATTS	LENGTH (GLASS) (IN.)	LENGTH OVERALL (IN.)
SH261	115	550	21 3/16	21 15/16
SH264	115	550	8 1/2	9 1/4
SH267	115	500	22 13/16	23 13/16
SH271	115	600	8	8 3/4

# Refrigerator



## ENERGY SAVING EXACT REPLACEMENT DEFROST TIMERS

- Exact OEM Features and Specifications
- Energy Saving Plastic Construction
- Available in 120 or 220 Volts
- Available in Bulk (200) or 12 Pack
- Domestic Refrigerators & Freezers



SPA1401AD

PART NO.	CYCLE TIME HOURS	DEFROST TIME MINUTES	GP SERIES	GEM® NUMBER	OEM REPLACES
SPA1401AD	6	21	GP1	CC922	Admiral® 66128-1, Electrolux® 215846604
SPB1401F	8	20	GP4	CC925	Frigidaire® 5300628518, Maytag® 68233-2
SPD1401AM	8	32	GP19	CC926	Amana® D70041-4, Maytag® R0131577 Frigidaire® 5303321915
SPG1401GE	6	25	GP2	CC923	GE® WR9X330, Maytag® R0168026
SPK1401GE	10	30	GP18	CC907	GE® WR9X387, Maytag® R0168027, Amana® D7004119, D7790403
SPM6823-3	10	23	GP9	CC924	Maytag® 68233-3, Amana® D7004112, GE® WR9X388
K1401GEO	10	30	GP18	CC907	GE® WR9X387, Maytag® R0168027, Amana® D7004119, D7790403

## FLYING LEAD TIMERS

- Energy Saving Plastic Construction
- Direct Whirlpool® Replacement
- Hardware Kit Included
- Domestic Refrigerators & Freezers



PART NO.	CYCLE TIME	DEFROST TIME	GP SERIES	GEM® NO.	MALLORY® NO.	PARAGON® NO.	UNI-LINE® NO.	REPLACES OEM NO.
SPA1403FL	8	21	GP4 GP6 GP11 GP21	CC904 CC920 CC309 CC320	34885	E769-00 B931-00	3002-904 UX-2001-00	Whirlpool® 482493 Electrolux® 5303917634 Maytag® 68233-2 Haier® 60938312 Sub-Zero® 3081180

## CLASSIC STYLE DEFROST TIMERS (METAL TOP)

- Exact OEM Features and Specifications
- Metal Construction
- Available in 120 or 220 Volts
- Available in Bulk (75) or 12 Pack
- Hardware Kit Included
- Domestic Refrigerators & Freezers

PART NO.	CYCLE TIME	DEFROST TIME	GP SERIES	GEM® NO.	MALLORY® NO.	PARAGON® NO.	PARAGON® NO.	UNI-LINE® NO.	REPLACES OEM NO.
SP931WP	8	21	GP11 GP20	CC904 CC920 CC928	34885	E769-00	E931-00	3002-904 UX-2001-00	Whirlpool® 876369, 482493 Sub-Zero® 3081180
SPG1111GE	6	25	GP2	CC900	34887	B769-00	D1111-00	3002-902	GE® WR9X330
SPF1111F	8	20	GP4	CC902	34890	F769-00	A1111-00	3002-906	Frigidaire® 5300628518
SPJ1111AM	8	32	GP19	CC905 CC925	34982	D769-00	K1111-00	3002-905	Amana® D700414, Frigidaire® 5303321915 GE® WR9X396
SPL1111W	6	25	GP3	CC903	34891	G769-00	B1111-00	3002-903	Westinghouse® 5300900072
SPN1111AD	6	21	GP1	CC901 CC922	34886	A769-00	E1111-00	3002-901	Whirlpool® 4391974 Admiral® 66128-1



SP931WP



SPF1111F

APPLIANCE

# Refrigerator



## EXACT ENERGY SAVING DEFROST TIMERS

- Exact OEM Features and Specifications
- Energy Saving Plastic Construction
- Individually Boxed
- Domestic Refrigerators & Freezers

PART NO.	INTERNAL	CYCLE TIME (HRS)	DEFROST TIME (MIN.)	VOLTS	REPLACES OEM NO.
SC950	Resistor	6	25	120	GE® WR9X481
SC952	Capacitor	16	35	120	GE® WR9X489, WR9X10049 Electrolux® 5304406555
SC953	Resistor	6	25	120	GE® WR9X548
SC954	Resistor	10	30	120	GE® WR9X483, WR9X10041, WR9X10075, WR9X10101, WR9X10111
SC955	Resistor	6	25	120	GE® WR9X502, WR9X387
SC959	Capacitor	8	30	120	GE® WR9X566, Electrolux® 215846602



SC950



SC953

## UNIVERSAL DEFROST TIMERS

- Universal Replacement
- Electronic Circuitry
- Adjustable Defrost Frequency 4 to 12 Hours
- Adjustable Defrost 10 to 35 Minutes
- Cycle Advance Button
- Standard Size and Mounting to Fit Most Applications
- No Ground Wire
- Quiet Operation and Durability
- Standard Terminal Configuration to Accommodate Most Connections
- Dust Proof Case
- Temperature Range 32°F to 135°F (0°C to 57°C)
- Humidity Range 10-95% Non-Condensing

PART NO.	DESCRIPTION	VOLTAGE	MAX. COMPRESSOR RATING	MAX RESISTIVE LOAD (AMPS)
UET120	Universal Electronic Timer	120 VAC	1/2 HP	10
UET240	Universal Electronic Timer	120 VAC	1/2 HP	5
EDT10	Electronic Defrost Timer	115 VAC	1/3 HP	10
EDT11	Electronic Defrost Timer	115 VAC	3/4 HP	20
EDT20	Electronic Defrost Timer	208/240 VAC	3/4 HP	5
EDT21	Electronic Defrost Timer	208/240 VAC	3/4 HP	20



UET120



UET240



EDT11



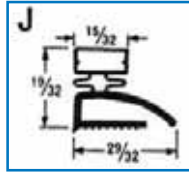
EDT20

A  
P  
P  
L  
I  
A  
N  
C  
E

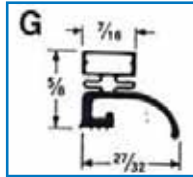
# Refrigerator

## FOUR PIECE MAGNETIC UNIVERSAL DOOR GASKETS

PART NO.	COLOR	MAXIMUM DOOR SIZE (IN.)	PROFILE
SU2001	White	20 x 30	J
SU2002	White	32 x 42	J
SU2003	White	32 x 55	J
SU2004	White	36 x 84	J

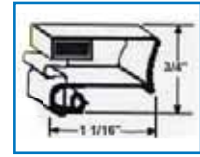


PART NO.	COLOR	MAXIMUM DOOR SIZE (IN.)	PROFILE
SU2301	White	20 x 30	G
SU2302	White	32 x 42	G
SU2303	White	32 x 55	G
SU2304	White	36 x 84	G

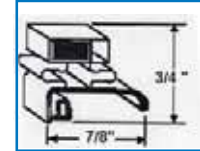


## SUB-ZERO® REPLACEMENT DOOR GASKETS

PART NO.	Sub-Zero® NO.	MAXIMUM DOOR SIZE (IN.)
SZ0573	7010573	67.5 x 27.5
SZ0574	7010574	67.25 x 17.625
SZ0575	7010575	47.75 x 33.75
SZ0578	7010578	58.5 x 33.75
SZ0583	7010583	59 x 34
SZ0584	7010584	67.75 x 27.75
SZ0592	7010592	33.75 x 18.25

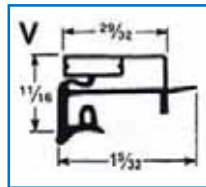


PART NO.	Sub-Zero® NO.	MAXIMUM DOOR SIZE (IN.)
SZ0609	7010609	29.625 x 23.25



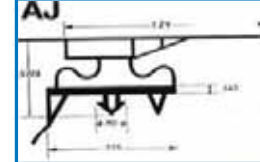
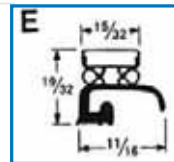
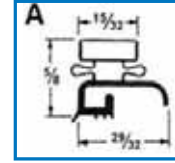
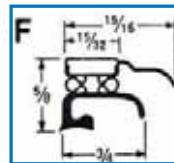
## DIRECT REPLACEMENT DOOR GASKETS FOR ELECTROLUX®

PART NO.	OEM NO.	PROFILE	DIMENSIONS (IN.)	COLOR
SWC26	218730603	V	11 13/16 x 19 1/4	TN



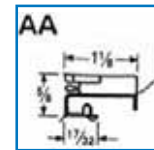
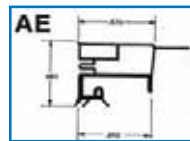
## DIRECT REPLACEMENT DOOR GASKETS FOR GE®

PART NO.	OEM NO.	PROFILE	DIMENSIONS (IN.)	COLOR
SGE286	WR24X286	F	17 1/8 x 26 3/16	BR
SGE287	WR24X287	E	26 7/16 x 36 3/4	BR
SGE312	WR24X312	F	17 1/8 x 26 3/16	WH
SGE127	WR24X313	E	26 1/4 x 36 1/2	WH
SGE318	WR24X318	A	26 1/8 x 39 3/4	BR
SGE319	WR24X319	A	26 1/4 x 39 3/4	WH
SGE450	WR24X450	AJ	27 1/4 x 38 5/8	WH
SGE485	WR24X485	AJ	26 1/8 x 37 15/16	WH
SGE486	WR24X486	AJ	25 15/16 x 41	WH



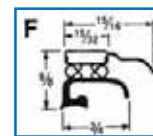
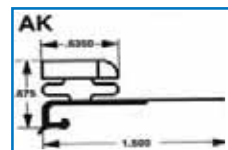
## DIRECT REPLACEMENT DOOR GASKETS FOR MAYTAG®

PART NO.	OEM NO.	PROFILE	DIMENSIONS (IN.)	COLOR
SAM59	12550116Q	AE	23 1/2 x 31 1/4	WH
SAD68	70048-1	AA	28 1/4 x 36 5/8	WH
SAD70	70048-2	AA	28 1/4 x 39 1/8	WH
SAD72	70048-3	AA	30 3/4 x 39 1/8	WH



## DIRECT REPLACEMENT DOOR GASKETS FOR WHIRLPOOL®

PART NO.	OEM NO.	PROFILE	DIMENSIONS (IN.)	COLOR
SCS115	592945	AK	27 x 42 1/2	WH
SCS44	2188404A	F	19 1/8 x 59 1/32	WH
SCS75	2188444A	F	30 1/4 x 42 3/8	WH
SCS115	2188445A	F	27 x 42 1/2	WH
SCS112	2188448A	F	27 1/16 x 39 7/8	WH
SCS42	2188450A	F	31 13/32 x 39 1/8	WH
SCS46	2188451A	F	28 13/32 x 39 1/8	WH
SCS102	2188456A	F	16 1/2 x 26 3/4	WH



APPLIANCE

# Refrigerator

## RIM277

### ICEMAKER REPLACEMENT KIT

- Can Replace Electrolux® 5303918277, 5303291912, 218226700, 218699501
- Includes 2 Harnesses. This Unit can also Replace: Amana®/Maytag® D7824706Q



## RIM300

### ICEMAKER REPLACEMENT KIT

- Can Replace GE® IM1, IM2, IM3, UKKIT, WR30X328
- Offering the Dependability of the Modular Design, this Icemaker Includes Mounting Plate to Match the GE® Style Round Plug with Four Pin Connection



## RIM313

### ICEMAKER REPLACEMENT KIT

- Can Replace Whirlpool® 1129313, ECKMF-64
- Used on many Whirlpool® brands



## RIM316

### ICEMAKER REPLACEMENT KIT

- Can Replace Whirlpool® 1129316, ECKMF-60
- Used on many Whirlpool® brands



## RIM469

### ICEMAKER REPLACEMENT KIT

- Can Replace Whirlpool® 2155469A, ECKMF-94, 2155468
- Unit can also be used on Amana®, Estate®, Maytag® and SubZero®



## RIM500

### ICEMAKER REPLACEMENT KIT

- Can Replace Whirlpool® 4211173, 4317943, W10122496, W10190952



## Refrigerator

### RIM501 ICEMAKER REPLACEMENT KIT

- Can Replace Amana® D7824706, 1110702A Kit, D7567102



### RIM597 ICEMAKER REPLACEMENT KIT

- Can Replace Whirlpool® 2198597, 2198678, 626663, W10122502, W10190960



### RIM900 ICEMAKER REPLACEMENT KIT

- Universal Replacement for all Modular Style Ice makers Including 4317943, 626636, D7824706Q, W10122496
- Replaces Most of the 120 VAC Modular Ice makers on the Market Today



### RIM943 ICEMAKER REPLACEMENT KIT

- Can Replace Whirlpool® 4317943, 625601, W10122496 and W10190952



### RIM2000 ICEMAKER REPLACEMENT KIT

- Universal Replacement for all Modular Style Ice makers Including 4317943, 626636, D7824706Q, W10122496
- Replaces Most of the 120 VAC Modular Ice makers on Tens of Thousands of Refrigerators.



### RIM961 ICEMAKER REPLACEMENT KIT

- Can Replace W10190961, W10122503, 2212353 and 2212352



### SZ4200520 ICEMAKER REPLACEMENT KIT

- Can Replace SubZero® 501F, 522, 532, 561 and 221M



# Refrigerator

## ICEMAKER REPLACEMENT INSTALLATION KITS

Each Kit Contains SUPCO's Unique "Self-Tapping Valve" and All the Fittings Necessary for Installations with Copper or Plastic Tubing.

- Includes Valve, 25' of 1/4" Plastic Tubing and Fittings
- Installs Quickly and Easily
- Water Lines Do Not Have to be Drained
- Water Does Not Have to be Shut Off
- Can be Installed Under Any Sink, or From Any Branch Line



PT25

PART NO.	DESCRIPTION	TUBING	VALVE	VALVE TYPE	CONNECTION AT TAP	CONNECTION AT APPL.
PT25	Valve, 25 ft., All Fittings	Plastic	STV2LL	Self Tapping	1/4" Compression	1/4" Compression
PT25E	Valve, 25 ft., 2 Fittings	Plastic	STV2LL	Self Tapping	1/4" Compression	1/4" Compression

## COPPER ICEMAKER REPLACEMENT KITS

Each Kit Contains SUPCO's Unique "Self-Tapping Valve" and All the Fittings Necessary for Installations with Copper or Plastic Tubing.

- Includes Valve, 15' of Copper 1/4" OD, and Fittings
- Installs Quickly and Easily
- Water Lines Do Not Have to be Drained
- Water Does Not Have to be Shut Off
- Can be Installed Under Any Sink, or From Any Branch Line



C15

PART NO.	DESCRIPTION	TUBING	VALVE	VALVE TYPE	CONNECTION AT TAP	CONNECTION AT APPL.
C15	Valve, 15 ft., 1/4" OD	Copper	STV2LL	Self Tapping	1/4" Compression	1/4" Compression
C25	Valve, 25 ft., 1/4" OD	Copper	STV2LL	Self Tapping	1/4" Compression	1/4" Compression

## GA31 ICEMAKER GEAR

- Drive Gear for Mechanical Ice makers
- Can Replace Electrolux® 3206301, GE® WR29X5162, Maytag® R0183094 and Whirlpool® 628210



## VI2404 BRASS ADAPTER

- All Brass - Will Not Rust
- Angled 90° Fitting to Reduce Stress on Tubing
- Connection 3/4" MHT to 1/4" Compression
- Washer Included



## ICEMAKER HEADS

- Direct Replacement Ice maker Modular Head

PART NO.	REPLACES
IMM1515	Whirlpool® 8201515, 626653, W10122535
IMM8366	Whirlpool® W10190935, 628366, W10122536



IMM1515



IMM8366

# Refrigerator

## SL7985

### HARVEST THERMOSTAT

- Can Replace W10290336, 627985, 0056603 and 627808
- This Harvest Thermostat Opens at 32°F and Closes at 17°F



## ICEMAKER CONTROL BOARDS

- Power Control Board Kit
- Emitter and Receiver



ADC9102

PART NO.	REPLACES
ADC9102	4389102
ADC5988	61005988
ADC8931	4388931
ADC8932	4388932
ADC4099	2304099

## CB10942

### MAIN CONTROL BOARD

- Controls the Operation of the Unit
- Can Replace Several GE® Models



## TH10025

### THERMISTOR

Used to Sense the Temperature in Refrigerator Cabinet, Connects to the Control Board.

- Designed to Meet or Exceed OEM Specifications
- Can Replace GE® WR55X10025



## SWITCHES

ES18809	Switch	5	125	Snap-In	Gem® 18809, 188-9
		2.5	250		
ES18811	Switch	5	125	Snap-In	Gem® 18811, 188-11
		2.5	250		
ES18812	Switch	10	125	Snap-In	Gem® 18812, 188-2
		5	250		
ES18814	Switch	5	125	Snap-In	Gem® 18814, 188-4
		2.5	250		
ES18806	Light Switch	3	125	Threaded	Gem® 15100, 151
ES18810	Light Switch	1	250		
		5	125	Snap-In	Gem® 18810, 188-10
ES18805	Fan Switch	2.5	250		
		5	125	Snap-In	Gem® 18805, 188-5
2.5	250				



ES18805



ES18809

## TH4150

### THERMISTOR

Used to Sense the Temperature in Refrigerator Cabinet, Connects to the Control Board.

- Designed to Meet or Exceed OEM Specifications
- Can Replace Sub-Zero® 4204150



## SCWG3 & SCWG4

### WATER GUARDS

- Fits Around Inlet Hose
- Starts Operation Immediately After Installation

- Prevents and Removes Limestone
- Saves Energy and Water

PART NO.	NO. OF MAGNETS
SCWG3	3
SCWG4	4



SCWG4

# Refrigerator

## CONDENSER FAN MOTORS

- Designed to Meet or Exceed OEM Specifications for Superb Performance and Reliability

PART NO.	REPLACES	WATTS	ROTATION
SM0740	Sub-Zero® 4200470	2.3	CWLE
SM5109	Whirlpool® 833697	2	CWLE
SM5113	Universal	2.5	CWLE
SM5211	Light Commercial, Display Coolers	4	CWLE
SM5311	Restaurant Units	6	CWLE
SM5411	Beer/Soda Coolers	9	CWLE



## EVAPORATOR FAN MOTORS

- Designed to Meet or Exceed OEM Specifications for Superb Performance and Reliability

PART NO.	REPLACES
SM329	Whirlpool® 4318001
SM335	Maytag® 56488-2
SM336	Electrolux® 5300158289
SM10220	GE® WR60X10220
SM0020E	Samsung® OA31-00020E
SM0146B	Samsung® OA31-00146B

PART NO.	REPLACES
SM343	Whirlpool® 482731
SM338	GE® WR60X162
SM399	Whirlpool® 4389144
SM345	Whirlpool® 4389142
SM8549	Electrolux® 5303918549
SM4888	Maytag® 61004888
SM10172	GE® WR60X10172
SM2744	Maytag® 12002744
SM9703	Whirlpool® W01089703
SM10074	GE® WR60X10074
SM10141	GE® WR60X10141
SM10185	GE® WR60X10185
SM10257	GE® WR60X10257



## SM998/SM999

### UNIVERSAL EVAPORATOR FAN MOTOR KIT

- Prefastened Multi Fit, Break Off Mounting Bracket
- Break Off 2" Motor Shaft with Breakaways at 1/2" and 1 1/2"
- Includes All Mounting Accessories and Hardware
- Reversible Rotation
- Single Speed
- Shaft Diameter 1/8"
- Replaces Over 450 Different Evaporator Type Motors
- SM999 is Direct Replacement for the Gem® 240 Series, Mars® 90999 and Robertshaw® 33-110, 33-112, 33-114
- SM998 is Direct Replacement for Mars® 90998

PART NO.	DESCRIPTION
SM999	120 VAC, 3000 RPM, 1/200 H.P., .31 AMP Impedance Protected
SM998	220 VAC, 3000 RPM, 1/200 H.P., .31 AMP Impedance Protected



## SM1127

### UNIVERSAL EVAPORATOR FAN MOTOR

Universal 3.3" Commercial Refrigeration Motor Replaces Over 100 OEM Shaded Pole Evaporator Fan Motors.

- Thermal Protection
- Reversible Rotation
- Open Ventilation
- 7.5 Microfarad, 370V Run Capacitor Included
- Sleeve Bearing



## WATER VALVES

PART NO.	REPLACES
WV8047	Whirlpool® 4318047
WV8046	Whirlpool® 4318046
WV10051	GE® 57X10051
WV10032	GE® WR57X10032
WV10033	GE® WR57X10033

PART NO.	REPLACES
WV8179	Whirlpool® W10408179
WV1450	Sub-Zero® 4201450
WV2790	Sub-Zero® 4202790
WV2	Universal
WV1460	Sub-Zero® 4201460



## Refrigerator

### WATER FILTERS

- Uses Advanced Filtering Technology to Turn Tap Water into Great Tasting Water
- Removes the Turbidity (Taste and Odor), Sediment, Lime Scale, Dirt, Rust and Chlorine From Water
- Operating Temperature is 33° to 100°F (0.6° to 37°C)



**EFF-6001A**  
Can Replace Whirlpool®  
4396701, 4396702



**EFF-6002A**  
Can Replace Kenmore®/  
Sears® 9010P, Whirlpool®  
4396508, 4396510



**EFF-6003A**  
Can Replace  
LG® 5231JA2006B



**EFF-6005A**  
Can Replace CUNO®  
LT500P, 5231JA2002A-S



**EFF-6006A**  
Can Replace Samsung®  
DA29-00012B, DA29-00012A,  
DA2900012B



**EFF-6007A**  
Can Replace Maytag®  
UKF8001



**EFF-6009A**  
Can Replace Whirlpool® 6010,  
8171414, KitchenAid® 8171787,  
8171788, Kenmore®/Sears® 9002



**EFF-6010A**  
Can Replace Whirlpool®, Kenmore®,  
KitchenAid® 817413, 8171413R,  
8171413T



**EFF-6011**  
Can Replace Samsung®  
DA29-00003A, DA29-  
00003G, Whirlpool® /  
Maytag® W10132126



**EFF-6013A**  
Can Replace GE® MWE,  
Hotpoint® HWE,  
Kenmore®/Sears® 9905



**EFF-6014A**  
Can Replace Maytag®  
UKF7003



**EFF-6017A**  
Can Replace  
Fisher & Paykel® 836848

GE® is a registered trademark of General Electric.

Part Numbers and illustrations are intended solely for identification. Water filters offered are not represented to be manufactured by the original equipment manufacturer. All trademarks and registered trademarks are the property of their respective owners.

# Refrigerator



**EFF-6021A**  
Can Replace Amana®/  
Maytag® WF401,  
Kenmore® 9014



**EFF-6022A**  
Can Replace GE® MSWF



**EFF-6023A**  
Can Replace  
GE®/Hotpoint® GSWF



**EFF-6025A**  
Can Replace  
Bosch® 644845



**EFF-6026A**  
Can Replace  
Bosch® 640565



**EFF-6027A**  
Can Replace Samsung®  
DA29-00020B



**EFF-6032A**  
Can Replace LG® LT700P,  
Sears®/Kenmore® 9690,  
46-9690

## UNIVERSAL INLINE



**EFF-6036A**



**EFF-6034A**



### WF1CB-EFF REPLACEMENT CARTRIDGE

Can Replace Frigidaire®/Electrolux®  
WF1CB, WFCB, Kenmore® 9910P

### EBHR REFRIGERATOR REPAIR MANUAL

- Economical and User Friendly  
Refrigerator Repair Manual



A  
P  
P  
L  
I  
A  
N  
C  
E

Part Numbers and illustrations are intended solely for identification. Water filters offered are not represented to be manufactured by the original equipment manufacturer. All trademarks and registered trademarks are the property of their respective owners.

# Washer

## AGITATOR PARTS

- Designed to Meet or Exceed OEM Specifications

PART NO.	DESCRIPTION	REPLACES
LP285	Agitator Cam Kit	Whirlpool® 285811
LP301	Drive Spline	GE® WH1X1944
LP319	T- Bearing	Whirlpool® 350920
LP338	Agitator Dogs (4 pc.)	Whirlpool® 285770
LP338D	Agitator Dogs (12 pc.)	Whirlpool® 285770D
LP630	Center Post Upper Seal	Whirlpool® 356394
LP631	Spin Tube Seal	Whirlpool® 91938
LP1586	Anit-Siphon Kit	Alliance® 297P3, 386P3, Maytag® 12001586 and More
LP5834	Calypso Anti-Siphon Kit	Whirlpool® 285834



LP630



LP285

## WASHER BELTS

- Consists of Rubber Core, Cord Members, Top Cushion and Rubber Impregnated or Cloth Cover

PART NO.	LENGTH (IN.)	WIDTH (IN.)	REPLACES
LB131	42	1/2	Norge® 35-0465, Gem®350425 Maytag® 33-6104
LB151	41 1/2	3/8	Frigidaire® Q62149, Electrolux® 321155 Maytag® 211451 and More
LB161	47 1/2	3/4	Gem® 96388, Whirlpool® 352967, 96388
LB230	47	3/8	Gem® 311012, Maytag® 311012
LB231	68	3/8	Gem® 311013, Maytag® 311013, Alliance® 75098
LB260	88	1/2	Gem® Q63807, Electrolux® 3204314, 3281154 and More
LB276	91 5/8	3/8	Admiral® 53-2910, Whirlpool® 532910, Maytag® 31001026
LB279	92	1/2	Maytag® 3301777, Whirlpool® 660997
LB788	55 1/2	1/2	Maytag® 12001788, 22002040, 22002313
LB0024	48	5/8	GE® WHO3X10024
LB0101	48	1/2	Whirlpool® 8540101
LB6384	22	3/8	Whirlpool® W10006384



LB230



LB161



LB276



LB279

## LP785

### CLUTCH KIT

- Includes Blue Spring for Large Capacity Washers
- Includes Black Spring for Compact Washers
- Can Replace Whirlpool® 285785



## LP790

### CLUTCH KIT

- Can Replace Whirlpool® 285790



## Washer

### LP956

#### PUMP TO DRAIN HOSE

- 15/16" Inside Diameter
- 15" Length
- Can Replace Maytag® 212989, 211107



### GNB/GNBA

#### GOOSENECK

- GNB is 1" OD Plastic Gooseneck
- GNBA is 1" OD Aluminum Gooseneck



GNB



GNBA

### SSD6/SSD6GE

#### NO-KINK DRAIN HOSE 6"

- 1" x 6"
- Universal Design
- Can Fit Hundreds of Models
- SSD6GE is GE® Style, Order LA188 Clip
- SSD6 Can Replace Whirlpool® 4391969



### SSD8/SSD8GE

#### NO-KINK DRAIN HOSE 8"

- 1" x 8"
- Universal Design
- Can Fit Hundreds of Models
- SSD8GE is GE® Style, Order LA188 Clip



### SSDW7

#### DRAIN HOSE

- 5/8" Diameter
- 7' Length



### 513P

#### LA172 FILL HOSE COUPLING

Used to Connect Fill Hose Sections on Most Domestic Washers



### HM101

#### DRAIN HOSE COUPLING

- Manufactured from High Impact Polyethylene
- Straight Hose Mender
- 1" Diameter



# Washer

## INLET HOSES

- Pressure Tested to 800 psi (Cold) and 600 psi (Hot)
- Double Crimped Fittings for Strength and Safety
- Ozone Resistant to Prevent Rubber Decay

PART NO.	LENGTH (FT.)	FITTINGS	REPLACES
3804FF	4	Female	Electrolux® 5303271009, 5303280320, ERP® ER804FF
3805FF	5	Female	
3806FF	6	Female	ERP® ER3806FF, GE® WX41X60DS
3808FF	8	Female	ERP® ER3808FF
3810FF	10	Female	ERP® 3810FF
3805FE	5	Female/Elbow	



## LTK1 WASHER LINT SCREEN KIT



## WASHER PUMPS

- Designed to Meet or Exceed OEM Specifications

PART NO.	# OF PORTS	REPLACES
LP112	4	GE® WH23X42, WH1X1694, WH1X1885 and More
LP115	3	Whirlpool® 285317, 358258, 370403 and More
LP116	2	Whirlpool® 3348015, 3363394, 3348014 and More
LP121	2	Whirlpool® 3363892, 3352496
LP123	2	Whirlpool® 3363892, 3352496
LP128	2	Maytag® 21001873, 21002240
LP397	2	Whirlpool® W10276397
LP280187	2	Whirlpool® 280187
SM285990	2	Whirlpool® 285990
LP1585L	2	Samsung® DC96-01585L
LP5974C	2	Samsung® DC97-15974C
LP2002H	N/A	LG® 4681EA2002H and More
LP36347	2	Whirlpool® W10536347
LP2001T	N/A	LG® 4681EA2001T
LP054D	N/A	Samsung® DC31-00054D
LP30913	N/A	Samsung® W10130913



## SWITCHES

- Designed to Meet or Exceed OEM Specifications

PART NO.	DESCRIPTION	# OF TERMINALS	REPLACES
LP210	Lid Switch and Actuator Package	3	GE® WE4X814, WE4X866, WE04X0866 and More
ES682	Lid Switch	2	Maytag® 22001682
ES247	Lid Switch	3 Round	Whirlpool® 3949247
ES671	Lid Switch	3	Whirlpool® 285671
ES8084	Lid Switch	3 Flat	Whirlpool® 8318084
ES9238	Lid Switch	3 Flat	Whirlpool® 3949238
ES7166	Microswitch	3 Flat	Whirlpool® 285671



## Washer

### LP510 TUB BOOT

- Can be Used on GE® Washers Pre-1995
- Can Replace GE® WH8X246



### LA189 TUB STRAP

- Made from High Quality Rubber
- 6" Length
- Not For Use on Compacts or Stackable Washers
- Can Be Used on GE® Washers From 1996 to Present
- Can Replace GE® WH1X2727



### GVW151 UNIVERSAL REPLACEMENT VALVE

- 120V Water Valve, Replaces Most Washer Valves with Side by Side Coils on Metal Bracket
- Can Replace Several Major Brands
- Can Replace Electrolux® 131208500, GE® WH13X81, Maytag® 205614 and More



### WV1 UNIVERSAL WATER VALVE KIT

- Replaces 95% of the Valves in the Field
- Easy to Change Configuration, Allows One Valve to Replace Most Modern 2 Coil Valves
- Can Replace Alliance® 33930, 34963, Electrolux® 134190200 and More



### DIRECT REPLACEMENT WATER VALVES

PART NO.	REPLACES
WV0026	GE® WH13X10026
WV0027	GE® WH13X10027
WV0314K	Samsung® DC62-30314K
WV0312J	Samsung® DC62-30312J
WV0142G	Samsung® DC62-00142G



WV0026

### LP580 INJECTOR NOZZLE

- Plastic Injector Nozzle Used on Whirlpool® and Maytag® Models
- Can Replace Whirlpool® 213015



### LP581 MAYTAG® INJECTOR VALVE

- Washer Air Gap Rubber Injector Valve
- Can Replace Whirlpool® 213016



## Washer

### LP585 INJECTOR TUBE

- Rubber Side Mount
- 13" Length
- U- Shaped
- Can Replace Whirlpool® 206154



### LP663 WASHER INJECTOR KIT

- Includes Hose, Injector Tube, Spout and 2 Clamps
- Can Replace Whirlpool® 204660



### LP655 TUB REPAIR KIT

- Outer Tub Repair Kit, Used on Small Leaks that May Develop Around the Tub Bolts
- Can Replace Whirlpool® 76673



### LP617 BUMPER

- Rubber Bumper for Whirlpool® Models
- 50 Per Pack
- Can Replace Whirlpool® 93770



### LP925 SPRING SEAL PACKAGE

- For Use on Belt Drive Models
- Can Replace Whirlpool® 285672



### LP939 SHAFT SEAL

- Transmission Shaft Seal Used on Whirlpool® Brands
- Can Replace Whirlpool® 91939



### TH2046C THERMISTOR

Used to Sense the Temperature in Refrigerator Cabinet, Connects to the Control Board.

- Designed to Meet or Exceed OEM Specifications
- Can Replace LG® 6322FR2046C



# Washer

## WASHER TIMERS

PART NO.	REPLACES
LP1000	GE® WH12X1000
LP10348	GE® WH12X10348
LP10350	GE® WH12X10350
LP10338	GE® WH12X10338



LP1000

## LP933 FOOT PAD

- Leveling Leg Cap for GE® Models
- Can Replace GE® WH1X484



## LP753 MOTOR COUPLER

- Used on Direct Drive Washers with No Belt
- Reinforced with Metal Sleeves
- Can Replace Whirlpool® 285753A



## EBGW REPAIR MANUAL FOR GE® WASHERS

- Economical and User Friendly Washer Repair Manual for GE® Models



## EBMW REPAIR MANUAL FOR MAYTAG® WASHERS

- Economical and User Friendly Washer Repair Manual for Maytag® Models



## EBWM WASHER REPAIR MANUAL

- Economical and User Friendly Washer Repair Manual



## EBWW REPAIR MANUAL FOR WHIRLPOOL® WASHERS

- Economical and User Friendly Washer Repair Manual for Whirlpool® Models



# PART NUMBER INDEX

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
11234	88	71100N	39	A21	43	A67	43
11234	90	71157P	39	A22	43	A68	43
12070-001	86	73200N	40	A23	43	A69	43
12867	103	73257P	40	A24	43	A70	43
14265-001	101	75	56	A25	43	A71	43
145	127	75-220	56	A26	43	A72	43
22792	108	84210T	41	A27	43	A73	43
2D51	20	90290	6	A28	43	A74	43
30-05	56	90291	6	A29	43	A75	43
30-22-06	56	90292	6	A30	43	A76	43
30WM	56	90293	6	A31	43	A77	43
31	56	90294	6	A32	43	A78	43
31-220	56	90295	6	A33	43	A79	43
31WM	56	90340	6	A34	43	A80	43
3793	127	90341	6	A35	43	A81	43
3804FF	186	90342	6	A36	43	A82	43
3805FE	186	90370	6	A37	43	A83	43
3805FF	186	90372	6	A38	43	A84	43
3806FF	186	90374	6	A39	43	A85	43
3808FF	186	90380	6	A40	43	A86	43
3810FF	186	90382	6	A41	43	A87	43
3975	127	90384	6	A42	43	A88	43
3W1	5	9063	6	A43	43	A89	43
3W2	5	9064	6	A44	43	A90	43
3W3	5	9065	6	A45	43	A91	43
43004	34	9066	6	A46	43	A92	43
43005	34	9067	6	A47	43	A93	43
43054	34	9068	6	A48	43	A94	43
43154	34	9069	6	A49	43	A95	43
445	127	9070	6	A50	43	A96	43
446	127	9071	6	A51	43	A97	43
447	127	A1	60	A52	43	A98	43
513P	185	A100	43	A53	43	A99	43
53100	35	A105	43	A54	43	ADC4099	180
53200	35	A110	43	A55	43	ADC5988	180
53300	36	A112	43	A56	43	ADC8931	180
61100N	37	A116	43	A57	43	ADC8932	180
61152P	37	A120	43	A58	43	ADC9102	180
62100N	38	A124	43	A59	43	ADTA	122
62152P	38	A128	43	A60	43	AFC01T110201	24
6390	41	A136	43	A61	43	AFS222121	23
6490	41	A144	43	A62	43	AOS	20
70	56	A158	43	A63	43	APA151	20
70-220	56	A19	43	A64	43	APP120	14
70CSA	56	A2	60	A65	43	APR5	6
70CSA220	56	A20	43	A66	43	AT012	26

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
AT013	26	B30	43	B75	43	BPV31	60
AT014	26	B300	43	B76	43	BPV31D	60
AT015	26	B31	43	B77	43	BPV34	60
AT021	26	B315	43	B78	43	BPV36	60
AT022	26	B32	43	B79	43	BPV38	60
ATP1	124	B33	43	B80	43	BPV56	60
AVU24	62	B330	43	B81	43	BPV58	60
AX56	43	B34	43	B82	43	BPV78	60
B101	43	B35	43	B83	43	BTG-0	42
B102	43	B36	43	B85	43	BTG-54VL	42
B104	43	B360	43	B86	43	BTG-54VLW	42
B105	43	B37	43	B87	43	BTG-EK	42
B106	43	B38	43	B88	43	BTG-K	42
B107	43	B39	43	B89	43	BTG-KWM	42
B110	43	B40	43	B90	43	BTG-RK	42
B111	43	B41	43	B91	43	BTG-RWM	42
B112	43	B42	43	B92	43	BTG-U02	42
B114	43	B43	43	B93	43	BTG-UK2	42
B115	43	B44	43	B94	43	BTG-UM	42
B116	43	B45	43	B95	43	BTG-UN	42
B118	43	B46	43	B96	43	BTG-UWM	42
B120	43	B47	43	B97	43	BX100	43
B124	43	B48	43	B98	43	BX103	43
B126	43	B49	43	B99	43	BX105	43
B128	43	B50	43	BC26X16	52	BX112	43
B130	43	B51	43	BC28X10	52	BX116	43
B133	43	B52	43	BC31X10	52	BX120	43
B134	43	B53	43	BC36X12	52	BX124	43
B135	43	B54	43	BC40X12	52	BX128	43
B136	43	B55	43	BC42X12	52	BX133	43
B140	43	B56	43	BC44X12	52	BX136	43
B144	43	B57	43	BC46X12	52	BX144	43
B152	43	B58	43	BC49X11	52	BX150	43
B158	43	B59	43	BC50X100	52	BX158	43
B162	43	B60	43	BC52X100	52	BX162	43
B195	43	B61	43	BC54X100	52	BX173	43
B210	43	B62	43	BC55X100	52	BX180	43
B225	43	B63	43	BC59X100	52	BX195	43
B23	43	B64	43	BC64X100	52	BX210	43
B24	43	B65	43	BC7070	24	BX225	43
B240	43	B66	43	BC70X100	52	BX240	43
B25	43	B67	43	BC75X100	52	BX255	43
B255	43	B68	43	BC80X100	52	BX270	43
B26	43	B69	43	BC85X100	52	BX300	43
B27	43	B70	43	BC90X100	52	BX35	43
B270	43	B71	43	BJ10	129	BX36	43
B28	43	B72	43	BPV12	60	BX37	43
B285	43	B73	43	BPV14	60	BX38	43
B29	43	B74	43	BPV21	60	BX42	43

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
BX43	43	CH2859	168	CH5829	168	CP815	55
BX46	43	CH2860	168	CH5830	168	CP815-240	55
BX48	43	CH2864	168	CH5837	168	CP816	55
BX50	43	CH2866	168	CH584	168	CP817	55
BX51	43	CH2867	168	CH5841	168	CP818	55
BX53	43	CH2891	168	CH5853	168	CP819	55
BX55	43	CH30M1	168	CH5855	168	CP820	55
BX56	43	CH30M2	168	CH5862	168	CP821	55
BX57	43	CH30T10074	168	CH587	168	CPH100	114
BX58	43	CH30T10078	168	CH613	168	CPP3W1	13
BX59	43	CH30X341	168	CH620	168	CPP3W2	13
BX60	43	CH30X342	168	CH624	168	CPP3W3	13
BX61	43	CH30X354	168	CH625	168	CPP8E	13
BX62	43	CH30X356	168	CH628	168	CPPMPR1	13
BX63	43	CH4107	168	CH629	168	CPPMPR5	13
BX65	43	CH44K10002	168	CH641	168	CR4	92
BX66	43	CH44K10005	168	CH643	168	CR40X440	
BX67	43	CH44K5009	168	CH653	168	THROUGH	
BX70	43	CH44K5012	168	CH664	168	CS88-108X330	10
BX71	43	CH44T10009	168	CH671	168	CR87B	88
BX75	43	CH44T10010	168	CH672	168	CR87B220C	88
BX77	43	CH44T10011	168	CH673	168	CR87BC	88
BX78	43	CH44T10014	168	CH679	168	CR87E	90
BX80	43	CH44T10018	168	CH687	168	CR87E220	90
BX81	43	CH44X10009	168	CH691	168	CR87HT	89
BX82	43	CH44X10016	168	CH700	168	CR87HT220	89
BX83	43	CH44X126	168	CH7340	168	CR87HT22C	89
BX90	43	CH44X134	168	CH775	168	CR87HTC	89
BX93	43	CH44X185	168	CH776	168	CR87J	89
BX95	43	CH44X200	168	CH779	168	CR87J220C	89
BX96	43	CH44X5019	168	CH781	168	CR87JC	89
BX97	43	CH44X5043	168	CH809	168	CR87P	90
BX99	43	CH44X5074	168	CH825	168	CR87P220	90
C15	179	CH44X5082	168	CH8541	168	CR87PA	90
C25	179	CH44X5083	168	CH978	168	CR87PB	90
CA1	60	CH44X5099	168	CH979	168	CR87PB220	90
CABLE10H	84	CH4825	168	CH987	168	CRPENB	84
CABLE15	86	CH4836	168	CIVA5	24	CRPENR	84
CABLE25	86	CH4854	168	CO1000	107	CRT	84
CABLE6	86	CH4874	168	CP1A	57	CRT220	84
CB10942	180	CH4879	168	CP801	55	CRTH2	84
CD+10X370R		CH4896	168	CP802	55	CRTH2-220	84
THROUGH		CH5002	168	CP802-240	55	CS10398	173
CD45+5X440R	8	CH5104	168	CP804	55	CSLD14S4	67
CD45+6X440R		CH528	168	CP804-240	55	CSLD14S6	67
THROUGH		CH550	168	CP804HD	55	CSLD14S7	67
CR40X370R	9	CH556	168	CP804HD-240	55	CSLD14S9	67
CH1011	168	CH5818	168	CP807	55	CTP1	128
CH2851	168	CH5828	168	CP807-240	55	CVPRO46	113
CH2858	168						

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
D4120	20	DE525	161	DP251201	11,12	DW10074	156
D4120W	20	DE526	161	DP251202	11,12	DW10136	156
D4P120	20	DE534	161	DP251203	11,12	DW10230	156
D4S	20	DE602	158	DP252401	11,12	DW10267	157
DA76070	131	DE6105	161	DP252402	11,12	DW10277	157
DA76190	131	DE6107	161	DP252403	11,12	DW10304	157
DA86420	130	DE692	159	DP25241	11,12	DW132	155
DAVM+	109	DE693	159	DP25242	11,12	DW144	155
DB10	21	DE696	159	DP25243	11,12	DW156	154
DB12	21	DE698	160	DP301201	11,12	DW157	154
DB6	21	DE702	159	DP301202	11,12	DW271	157
DB6-220	21	DE702T	159	DP301203	11,12	DW307	155
DB8	21	DE724	165	DP302401	11,12	DW309	155
DB8-220	21	DE726	163	DP302402	11,12	DW3681	154
DDM55	109	DE729	165	DP302403	11,12	DW5314	157
DE0019A	160	DE747	165	DP30241	11,12	DW804	154
DE005LUA720	22	DE7523	159	DP30242	11,12	DW995	156
DE019AC	160	DE766	163	DP30243	11,12	EBDW	157
DE05LUA520	22	DE7747	160	DP401202	11,12	EBGW	189
DE05LUA660	22	DE775	165	DP401203	11,12	EBHD	165
DE05LUB100	22	DE790	165	DP402402	11,12	EBHR	183
DE05LUB110	22	DE82AWR	158	DP402403	11,12	EBMW	189
DE05LUB120	22	DE82BWR	158	DP40242	11,12	EBOC	171
DE05LUB130	22	DE838	160	DP40243	11,12	EBWM	189
DE0998	161	DE901	165	DP501203	11,12	EBWW	189
DE1001	160	DE902	163	DP502403	11,12	EC10	133
DE1002E	161	DE902M	163	DP50243	11,12	ECAP321	44
DE1067	164	DE905	165	DP601203	11,12	EDT10	175
DE138	160	DE964	161	DP602403	11,12	EDT11	175
DE148	160	DG1416	167	DP60243	11,12	EDT20	175
DE1746C	160	DG2224	167	DP751203	11,12	EDT21	175
DE2002A	159	DG42	167	DP752403	11,12	EF1CB-EFF	183
DE3001A	164	DG5103	167	DP75243	11,12	EFF-6001A	182
DE315	160	DH500	21	DP901203	11,12	EFF-6002A	182
DE333	160	DH500-3	21	DP902403	11,12	EFF-6003A	182
DE334	160	DH500FC	21	DP90243	11,12	EFF-6005A	182
DE335	160	DH501	21	DPG100	83	EFF-6006A	182
DE336	160	DH502-4	21	DPG1000	83	EFF-6007A	182
DE340	164	DH506	21	DPG25V	83	EFF-6009A	182
DE353	160	DH507	21	DR10	94	EFF-6010A	182
DE355	160	DH520	21	DR40	94	EFF-6011	182
DE382WR	158	DH534	21	DSP1000	115	EFF-6013A	182
DE405	164	DH560	21	DST	20	EFF-6014A	182
DE411	163	DHS55	112,128	DVCV	96	EFF-6017A	182
DE4771	160	DLTP6	101	DVT4	96	EFF-6021A	183
DE504	164	DM10T	114	DVTH	95	EFF-6022A	183
DE520	161	DP201202	11,12	DW10001	156	EFF-6023A	183
DE522	161	DP202402	11,12	DW10013	156	EFF-6025A	183
DE524	161	DP20242	11,12	DW10018	157	EFF-6026A	183

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
EFF-6027A	183	ES18810	180	FB455	80	GA31	179
EFF-6032A	183	ES18811	180	FB460	79	GB10	45
EFF-6034A	183	ES18812	180	FB501	79	GC116	172
EFF-6036A	183	ES18814	180	FB504	79	GC177	172
EL10	45	ES18818	166	FB550	79	GC192	172
ELB320	131	ES247	186	FB590	79	GC503	172
ELB701-L	131	ES671	186	FB601	79	GC505	172
ELB721	131	ES682	186	FB604	79	GC506	172
EM10	116	ES7166	186	FB650	79	GC601	172
EM20	111	ES8084	186	FB651	79	GC602	172
EM30	111	ES9238	186	FB660	79	GC604	172
EM5	110	ES9400	166	FB665	79	GC607	172
EM60	116	ES9404	166	FB702	79	GC707	172
EM80	111	ESPRO1	126	FB703	79	GFK1	126
EM90	116	F21412A14025C	24	FBP100	127	GNB	185
ES15100	166	F21413A14025C	24	FC0810	125	GNBA	185
ES15102	166	F336	42	FC0915	125	GVW151	187
ES15105	166	F473TD12025C	24	FC1113	125	HLD200	113
ES15106	166	F477TD12025C	24	FC1214	125	HM101	185
ES15201	166	FA47TS3110	24	FC1617	125	HOT	171
ES15202	166	FA47TS7110	24	FC1820	125	HP083	71
ES15205	166	FAL3C05TD120A	24	FC2224	125	HP083S	71
ES15252	161	FAL7C05TD120A	24	FC4011	32	HP084	71
ES15253	161	FAL7C20BT120AB	24	FC4031	32	HP084S	71
ES15400	166	FALTS57C05T120A	24	FCH0810	125	HP163	71
ES15501	166	FALTS57C13B120A	24	FCH0915	125	HP163S	71
ES15601	166	FALTS57C65T120A	24	FCH1113	125	HP164	71
ES15805	161	FB101	80	FCH1214	125	HP164S	71
ES15805	166	FB103	80	FCH1617	125	HP165	71
ES15806	161	FB104	80	FCH1820	125	HP165S	71
ES15806	166	FB105	80	FCH2224	125	HS10001	144
ES15903	161	FB106	80	FCR6	124	HS10004	144
ES15903	166	FB107	80	FCRH6	124	HS10016	144
ES15905	161	FB108	80	FCS003	164	HS10128	144
ES15905	166	FB109	80	FIM20	124	HS11001	144
ES15907	161	FB152	79	FL50	27	HS11004	144
ES16100	166	FB157	79	FL60	27	HS11016	144
ES16200	166	FB159	79	FL6N1	125	HS11128	144
ES16300	166	FB180	79	FLT3M	125	HS12001	145
ES16301	166	FB182	79	FP18	126	HS13001	145
ES16600	166	FB190	79	FP18	128	HS15128	152
ES16802	161	FB250	79	FPT10	124	HS16001	148
ES16802	166	FB350	79	FPT13	124	HS16501	148
ES16806	161	FB353	80	FPT15	124	HS17001	145
ES18200	166	FB401	79	FRESHAIR	153	HS17001	145
ES18600	166	FB402	79	FSKEY	45	HS17002	143
ES18805	180	FB403	79	FTV12	61	HS17004	145
ES18806	180	FB404	79	FWB1	129	HS17004	145
ES18809	180	FB450	80	GA28	171	HS17016	145

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
HS17016	145	HSUVB001	146	L130	26	LB260	184
HS17022	143	HTP5	86	L135	26	LB276	158
HS18002	143	HTP5100	86	L140	26	LB276	184
HS18004	148	HTP525	86	L145	26	LB279	158
HS18022	143	HTP550	86	L14625W	162	LB279	184
HS20004	146	HVAC STRAP	46	L150	26	LB295	158
HS20016	146	HVT2	129	L15015W	162	LB6384	184
HS20128	146	IAQ50	107	L155	26	LB788	158
HS21002	143	IAQ55	107	L15525W	162	LB788	184
HS21004	146	IC100	49	L160	26	LBIT	130
HS21016	146	IC102	49	L165	26	LCV	103
HS21022	143	ICG1	49	L170	26	LD120	26
HS21128	146	ICG-220	49	L175	26	LD130	26
HS22008	146	IG4000	16	L180-20	26	LD135	26
HS22032	146	IG401	16	L180-40	26	LD140	26
HS22128	146	IG402K	16	L190	26	LD145	26
HS23008	146	IG403K	16	L200	26	LD155	26
HS23032	146	IG404	16	L205	26	LD170	26
HS23128	146	IG405	16	L225	26	LD200	26
HS24001	147	IG406	16	L240	26	LD225	26
HS24010	147	IG407	16	L250	26	LD240	26
HS24128	147	IG408	16	L260	26	LD270	26
HS26004	147	IG409	16	L270	26	LIT11TC	119
HS26016	147	IG410	17	L290	26	LIT6P	119
HS26128	147	IG411	17	L300	26	LLD032	68
HS30004	145	IG412	17	L320	26	LLD032S	68
HS30016	145	IG414	17	L340	26	LLD052	68
HS31032	144	IG418	17	L420	104	LLD052S	68
HS32032	144	IM1	124	L593BA	24	LLD053	68
HS32098	143	IM2	124	L597BA	24	LLD053S	68
HS50004	151	IM3	124	LA189	187	LLD082	68
HS51032	147	IM4	124	LB0024	184	LLD082S	68
HS52032	151	IM5	124	LB0101	184	LLD083	68
HS52105	151	IMK3	124	LB029	158	LLD083S	68
HS52115	151	IMM1515	179	LB131	158	LLD084	68
HS52128	151	IMM8366	179	LB131	184	LLD084S	68
HS52200	142	JV1	57	LB151	158	LLD162	68
HS53001	152	K1401GE0	174	LB151	184	LLD163	68
HS55032	149	KA12	152	LB161	158	LLD163S	68
HS55128	149	KEL	90	LB161	184	LLD164	68
HS56011	150	KES	90	LB1655	158	LLD164S	68
HS57014	150	KEV	90	LB216	158	LLD165	68
HS58128	149	KPP	93	LB230	158	LLD165S	68
HS58520	150	KTE	94	LB230	184	LLD303	68
HS59128	149	KTH	93	LB231	158	LLD303S	68
HS59520	150	KTP	94	LB231	184	LLD304	68
HS60002	142	KTT	93	LB232	158	LLD304S	68
HS60022	142	L120	26	LB234	158	LLD305	68
HSINJ001	146	L125	26	LB260	158	LLD306S	68

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
LLD307S	68	LT2	101	OV32	51	Q115	25
LLD309S	68	LTC	102	OV34	51	Q116	25
LLSU	104	LTH	102	OV36	51	R041	49
LP0005A	155	LTK	186	OV38	51	R062	49
LP054D	186	LTT	101	OV40	51	R081	49
LP1000	189	M1000D	108	OV42	51	R082	49
LP10338	189	M500	108	OV44	51	R100	81
LP10348	189	M501	108	OV46	51	R134A20	153
LP10350	189	M814520	78	OV48	51	R134AG	153
LP112	186	MAG1BL	45	OV50	51	R3203612	161
LP115	186	MAG1GR	45	OVKIT	51	R410A18	153
LP116	186	MAG1RD	45	P0115	49	R410AG	153
LP121	186	MAG1YL	45	P0230	49	RA100Z	20
LP123	186	MAGBK	45	P2W-P	20	RC2108	131
LP128	186	MB55	46,77	PCS220	112	RC2110	131
LP1585L	186	MB554	46,77	PIT1	119	RCB1	129
LP1586	184	MCASE	108	PIT6L	119	RCO210	48
LP2001T	186	MD5	67	PL6	125	RCO220	48
LP2002H	186	MD6	67	POP3	44	RCO410	48
LP210	186	MD7	67	POP5	44	RCO420	48
LP280187	186	MFD10	108	PR022	49	RCO620	48
LP285	184	MFD FUSE	108	PR041	49	RCO810	48
LP301	184	ML37	58	PR042	49	RCO820	48
LP30913	186	ML45	58	PR062	49	RCS220	112
LP319	184	ML50	58	PR081	49	RIM2000	178
LP338	184	ML55	58	PR082	49	RIM277	177
LP338D	184	ML60	58	PR24120	24	RIM300	177
LP36347	186	ML70	58	PR2412036W	24	RIM313	177
LP397	186	ML80	58	PR2436W	24	RIM316	177
LP510	187	ML90	58	PT100	115	RIM469	177
LP580	187	MO44	141	PT100C	115	RIM500	177
LP581	187	MO98	141	PT100H	115	RIM501	178
LP5834	184	MP15MA	168	PT100HC	115	RIM597	178
LP585	188	MP15YA	168	PT25	179	RIM900	178
LP5974C	186	MP21MA	168	PT25E	179	RIM943	178
LP617	188	MP21YA	168	Q101	25	RIM961	178
LP630	184	MP26MA	168	Q102	25	RJR601	161
LP631	184	MP26YA	168	Q103	25	RK100	170
LP655	188	MPR1	5	Q104	25	RK101	170
LP663	188	MPR5	5	Q105	25	RK103	170
LP753	189	NS2000031	23	Q106	25	RK200	170
LP785	184	OL1	50	Q107	25	RK201	170
LP790	184	OL2	50	Q108	25	RK203	170
LP925	188	OL3	50	Q109	25	RK362	170
LP933	189	OL4	50	Q110	25	RK458	170
LP939	188	OLK1786	50	Q111	25	RK699	170
LP956	185	OLK7535	50	Q112	25	RLE202	162
LPT	103	OLK7913	50	Q113	25	RO42	49
LPT1000	103	OR102	171	Q114	25	RP0512G	167

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
RP0512NG	167	S214	67	SCS46	176	SF2245	63
RP0514G	167	S215	67	SCS75	176	SF2250	63
RP0514G	167	S216	67	SCWG3	126	SF2525	62
RP0514NG	167	S218	67	SCWG3	180	SF2595	64
RP2512G	167	S219	67	SCWG4	127	SF2597	64
RP2512G	167	S220	67	SCWG4	180	SF3338	62
RP2512NG	167	S6020BB	118	SD100F7	91	SF3600	62
RP2514G	167	S6020FB	118	SD120F24	91	SF3602	62
RP2514NG	167	S6020HL	118	SD120F7	91	SF3603	62
RP2516H	167	S6025FB	118	SD50C7	91	SF3604	62
RP5012G	167	S6025HL	118	SDE350	160	SF3605	62
RP5014G	167	S7P24	140	SDE358	160	SF3606	62
RP5014GB	167	S7P36	140	SDE359	160	SF3608	62
RPT61	113	S7P48	140	SDE364	160	SF3800	65
RR031L	170	S8	141	SDE365	160	SF3813	65
RR058L	170	S804100	78	SDE366	160	SF3900	65
RR105	170	S804120	78	SEPR60	6	SF3910	65
RR109	170	S804500	78	SET149	162	SF3920	65
RR110	170	S804520	78	SET176	162	SF3930	65
RR117	170	S814100	78	SET184	162	SF3970	66,128
RR122	170	S814120	78	SET194	162	SF4311	66,128
RR123	170	S814500	78	SET195	162	SF4314	128
RR124	170	S814520	78	SET196	162	SF4450	63
RR137L	170	S814521	78	SET197	162	SF5014	64
RR146	170	SAB233	130	SET198	162	SF5050	64
RR261	170	SAB454	130	SET401	162	SF5161	63
RR500	170	SAB710	130	SET402	162	SF5421	62
RRUPR	170	SAD68	176	SET403	162	SF5501	62,65
RRUPS	170	SAD70	176	SET404	162	SF5512	62
RSS495011	23	SAD72	176	SET407	162	SF5514	62
RSS498013	23	SAM59	176	SET409	162	SF5516	62
RTS151	20	SB001	79	SET410	162	SF5518	62
RTS151KEY	20	SBIT	130	SF0099	65	SF5534	62
RTS2	20	SC1002	172	SF0101	65	SF5538	62
RTS2-AOS	20	SC950	175	SF0111	65	SF5555	65
RW516	129	SC952	175	SF1010	62	SF5558	62
RW916	129	SC953	175	SF1060	65	SF5578	62
RWA10	129	SC954	175	SF1090	65	SF8400	63
S0230K00000S	16	SC955	175	SF1414	63	SF8403	63
S1061A40100C	24	SC959	175	SF1818	63	SF8404	63
S1061A4575C	24	SCM150	13	SF2010	63	SF8405	63
S1061A5040C	24	SCM60	13	SF2012	63	SF8406	63
S1061A5560C	24	SCR11	86	SF2020	63	SF8408	63
S1061B6545C	24	SCR12	86	SF2028	63	SF8412	63
S132	141	SCS102	176	SF2035	63	SF8414	63
S210	67	SCS112	176	SF2060	64	SF8416	63
S211	67	SCS115	176	SF2070	64	SF8418	63
S212	67	SCS42	176	SF2090	64	SF8434	63
S213	67	SCS44	176	SF2235	63	SF8438	63

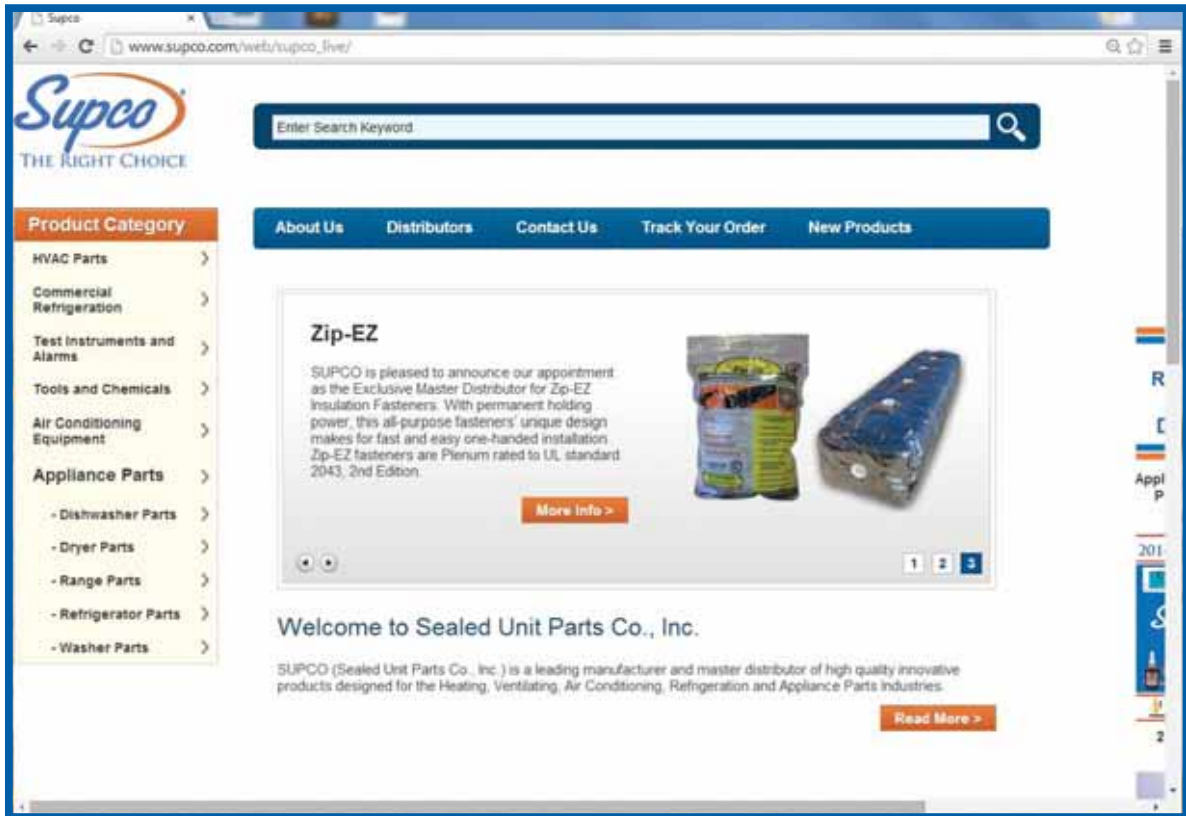
Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
SF8458	63	SGE318	176	SH320	173	SHL521	28
SF8478	63	SGE319	176	SH323	173	SHL522	28
SF8725	64	SGE450	176	SH324	173	SHL523	28
SF9601	64	SGE485	176	SH325	173	SHL524	28
SF9602	64	SGE486	176	SH413	173	SHL525	28
SF9603	64	SGR4001	169	SH414	173	SHM125	27
SF9614	65	SGR403	169	SH419	173	SHM130	27
SF9616	65	SGR407	169	SH442	173	SHM160	27
SF9620	65	SGR409	169	SH500	74	SHM170	27
SF9644	65	SGR410	169	SH502	74	SHM180	27
SFC110170	31	SGR412	169	SH503	74	SHM200	27
SFC125265	31	SGR414	169	SH504	74	SHM210	27
SFC150225	31	SGR429	169	SH505	74	SHM290	27
SFC170250	31	SGV04	139	SHF110	27	SHM350	27
SFC200240	31	SGV05	139	SHF110DC	27	SHP200150	31
SFC200365	31	SGV06	139	SHF120	27	SHP250150	31
SFC210275	31	SGV07	139	SHF140	27	SHP250180	31
SFC300400	31	SGV08	139	SHF250	27	SHP275195	31
SFC75120	31	SGV10	139	SHF90	27	SHP300200	31
SFPC	30	SGV14	139	SHL120	27	SHP325225	31
SG110	73	SGV16	139	SHL140	27	SHP325230	31
SG110R	73	SGVA1	139	SHL150	27	SHP350250	31
SG111	73	SGVA2	139	SHL160	27	SHP375265	31
SG111R	73	SH201	74	SHL170	27	SHP400200	31
SG114	73	SH202	74	SHL180	27	SHP400280	31
SG114R	73	SH203	74	SHL190	27	SHP400300	31
SG115	73	SH204	74	SHL200	27	SHP425300	31
SG115R	73	SH206	74	SHL230	27	SHP425325	31
SG118	73	SH207	74	SHL250	27	SHP450250	31
SG118R	73	SH221	74	SHL501	28	SHP480380	31
SG119	73	SH222	74	SHL502	28	SHP550450	31
SG119R	73	SH224	74	SHL503	28	SHP600475	31
SG204	73	SH225	74	SHL504	28	SHP610420	31
SG204R	73	SH226	74	SHL505	28	SHP665565	31
SG205	73	SH250	74	SHL506	28	SHS012	139
SG205R	73	SH261	173	SHL507	28	SHS03	139
SG206	73	SH264	173	SHL508	28	SHS04	139
SG206R	73	SH267	173	SHL509	28	SHS06	139
SG207	73	SH271	173	SHL510	28	SHS08	139
SG207R	73	SH281	74	SHL511	28	SHS16	139
SG208	73	SH282	74	SHL512	28	SHSA1	139
SG208R	73	SH283	74	SHL513	28	SHSA2	139
SG209	73	SH284	74	SHL514	28	SIG100	17
SG209R	73	SH303LB	173	SHL515	28	SIG101	17
SG429	169	SH307	173	SHL516	28	SIG102	17
SGE127	176	SH308	173	SHL517	28	SIG104	17
SGE286	176	SH309	173	SHL518	28	SIG106	17
SGE287	176	SH310	173	SHL519	28	SIG107	17
SGE312	176	SH319	173	SHL520	28	SIG108	17

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
SIG109	17	SLS265	29	SM5311	75	SPC660L	80
SIG1100	17	SLS275	29	SM5311	181	SPC836L	80
SKIT03033	16	SLS285	29	SM5312	75	SPC990L	80
SL243	59	SLS295	29	SM5411	75	SPD1401AM	174
SL245	59	SLS300	29	SM5411	181	SPF1111F	174
SL247	59	SLT45	59	SM5412	75	SPG1111GE	174
SL249	59	SLT50	59	SM5421	75	SPG1401GE	174
SL25581	58	SLT55	59	SM5422	75	SPJ1111AM	174
SL300TH	100	SLT60	59	SM550	167	SPK1401GE	174
SL300TH	100	SM0020E	181	SM551	167	SPL1111W	174
SL500T	97	SM0146B	181	SM552	167	SPLT3400	16
SL500TC	97	SM0740	181	SM553	167	SPM6823-3	174
SL500TH	97	SM10074	181	SM554	167	SPN1111AD	174
SL500XT	97	SM1008	163	SM555	167	SPP	5
SL5708	58	SM10141	181	SM556	167	SPP10E	5
SL5709	58	SM10172	181	SM5811	75	SPP4E	5
SL79002	58	SM10185	181	SM5812	75	SPP5	5
SL79005	58	SM10220	181	SM5821	75	SPP5E	5
SL7985	180	SM10257	181	SM5822	75	SPP6	5
SLF130VA	29	SM1127	181	SM670	76	SPP6E	5
SLF170VA	29	SM140-40A	76	SM6700B	76	SPP7E	5
SLF194HB	29	SM140-40A	167	SM671	76	SPP7S	5
SLF210HA	29	SM2744	181	SM672	76	SPP8E	5
SLF222VA	29	SM279827	163	SM673	76	SPP9E	5
SLF230HA	29	SM285990	186	SM675	76	SR4-20	87
SLF250HA	29	SM329	181	SM681	167	SR6N1	130
SLF330VA	29	SM335	181	SM8549	181	SRB	85
SLP0520	31	SM336	181	SM9703	181	SRJ	86
SLP0530	31	SM338	181	SM998	76	SRL130	29
SLP1025	31	SM343	181	SM998	181	SRL135	29
SLP1032	31	SM345	181	SM999	76	SRL220	29
SLP1535	31	SM351	75	SM999	181	SRL230	29
SLP2045	31	SM352	75	SMC11	11	SRL240	29
SLP2550	31	SM353	75	SMR375	31	SRL250	29
SLP2565	31	SM354	75	SMR410	31	SRL260	29
SLP2580	31	SM399	181	SMR440	31	SRL300	29
SLP3560	31	SM4888	181	SMR575	31	SRL350	29
SLP4080	31	SM501	75	SMR610	31	SRTH	86
SLP4560	31	SM502	75	SMR630	31	SS410	49
SLP5090	31	SM503	75	SNAT185	45	SSD6	185
SLP75100	31	SM504	75	SNAT316100	45	SSD6GE	185
SLP90120	31	SM5109	75	SNAT3165	45	SSD8	185
SLS120	29	SM5109	181	SO100	142	SSD8GE	185
SLS140	29	SM5113	181	SP12MA	168	SSDF20	118
SLS150	29	SM5211	75	SP21MA	168	SSDW7	154
SLS160	29	SM5211	181	SP931WP	174	SSFW7	185
SLS170	29	SM5212	75	SPA1401AD	174	SSGFM2	72
SLS180	29	SM5221	75	SPA1403FL	174	SSGFM3	72
SLS200	29	SM5222	75	SPB1401F	174	SSGFM4	72

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
SSGSS2	72	STC4257	30	STF4170	30	SWT07	140
SSGSS3	72	STC4257	59	STF4170	59	SWT07C	140
SSGSS4	72	STC4283	30	STF4183	30	SWT11	140
SSGSS5	72	STC4283	59	STF4183	59	SWT11C	140
SSGSS7	72	STC4300	30	STF4230	30	SWT15	140
SSLD164	70	STC4300	59	STF4230	59	SWT15C	140
SSLD165S	70	STC4333	30	STF4249B	30	SWTA1	140
SSLD166	70	STC4333	59	STF4249B	59	SWTM05	140
SSLD166S	70	STC4338	30	STF4291B	30	SWTM05C	140
SSLD167S	70	STC4358	30	STF4291B	59	SWTM07	140
SSLD305	70	STC4358	59	STF4305B	30	SWTM07C	140
SSLD305S	70	STC4438	59	STF4305B	59	SWTM11	140
SSLD306S	70	STC4468	30	STV2DLL	61	SWTM11C	140
SSLD307S	70	STC4468	59	STV2LL	61	SWTM14	140
SSLD417S	70	STC5257	30	SU2001	176	SWTM14C	140
SSLD419S	70	STC5257	59	SU2002	176	SXT100R	32,33
SSLD83	70	STC5300	30	SU2003	176	SXT101	32,33
SSLD83S	70	STC5300	59	SU2004	176	SXT103	32,33
SSLD84	70	STC5333	30	SU2301	176	SXT104	32,33
SSLD84S	70	STC5333	59	SU2302	176	SXT105	32,33
SSLD85	70	STC5377	30	SU2303	176	SXT106	32,33
SSLD85S	70	STC5377	59	SU2304	176	SXT111	32,33
SSN2000	17	STC6257	30	SUD103	66	SXT112	32,33
SSN24	17	STC6257	59	SUD109	66	SXT113	32,33
SSN3000	17	STC6300	30	SUD110	66	SXT114	32,33
SSN4000	17	STC6300	59	SUD111	66	SXT115	32,33
SSRT145	45	STC6333	30	SUD112	66	SXT116	32,33
SSRT185	45	STC6333	59	SUD113	66	SXT148	32,33
SSRT3165	45	STC6377	30	SUD114	66	SXT150	32,33
ST01	117	STC6377	59	SUD115	66	SXT160	32,33
ST02	117	STC8170	30	SUD116	66	SXT179R	32,33
ST03	117	STC8170	59	SUD8288	66	SYC2P27B	13
ST04	117	STC8242	30	SUD8358	66	SYCTC2403D	14
ST06	117	STC8242	59	SUPR	6	SYCTC4803D	14
ST08	117	STC8257	30	SWC02	139	SZ0573	176
ST09	117	STC8257	59	SWC03	139	SZ0574	176
ST10	117	STC8257	59	SWC04	139	SZ0575	176
ST101	78	STC8283	30	SWC05	139	SZ0578	176
ST102	78	STC8283	59	SWC08	139	SZ0583	176
ST103	78	STC8468	30	SWC110	139	SZ0584	176
ST104	78	STC8468	59	SWC112	139	SZ0592	176
ST1236-31	118	STC85283	30	SWC116	139	SZ0609	176
ST200	142	STC85283	59	SWC16	139	SZ4200520	178
STC4183	30	STC86257	30	SWC26	176	T1001	132
STC4183	59	STC86257	59	SWCA1	139	T1001C	132
STC4199	30	STC86283	30	SWT04	140	T1002	132
STC4199	59	STC86283	59	SWT04C	140	T1002C	132
STC4228	30	STC86377	30	SWT05	140	T1003	132
STC4228	59	STC86377	59	SWT05C	140	T1003C	132

Part No.	Page	Part No.	Page	Part No.	Page	Part No.	Page
T1004	132	T1043C	134	T1109	137	T1137C	135
T1004C	132	T1044	134	T1109C	137	T1138	135
T1005	132	T1044C	134	T1110	136	T1138C	135
T1005C	132	T1046	134	T1110C	136	T1141	135
T1006	132	T1046C	134	T1111	136	T1141C	135
T1006C	132	T1047	134	T1111C	136	T1142	135
T1007	132	T1047C	134	T1112	136	T1142C	135
T1007C	132	T1048	134	T1112C	136	T1143	135
T1009	132	T1048C	134	T1113	136	T1143C	135
T1009C	132	T1049	134	T1113C	136	T1144	135
T1010	132	T1049C	134	T1114	136	T1144C	135
T1010C	132	T1050	134	T1114C	136	T1145	134
T1021	137	T1050C	134	T1115	136	T1145C	134
T1021C	137	T1051	134	T1115C	136	T1146	134
T1022	137	T1051C	134	T1116	136	T1146C	134
T1022C	137	T1052	134	T1116C	136	T1147	134
T1023	137	T1052C	134	T1117	136	T1147C	134
T1023C	137	T1053	134	T1117C	136	T1150	138
T1027	133	T1053C	134	T1118	136	T1150C	138
T1027C	133	T1056	133	T1118C	136	T1151	138
T1028	133	T1056C	133	T1119	134	T1151C	138
T1028C	133	T1057	133	T1119C	134	T1152	138
T1029	133	T1057C	133	T1120	137	T1152C	138
T1029C	133	T1058	133	T1120C	137	T1153	138
T1030	135	T1058C	133	T1121	30,137	T1153C	138
T1030C	135	T1059	133	T1121C	137	T1164	138
T1031	135	T1059C	133	T1122	30,136	T1164C	138
T1031C	135	T1061	133	T1122C	136	T1165	138
T1032	135	T1061C	133	T1123	30,136	T1165C	138
T1032C	135	T1062	133	T1123C	136	T1166	138
T1033	135	T1062C	133	T1124	30,136	T1166C	138
T1033C	135	T1064	133	T1124C	136	T1167	138
T1034	135	T1064C	133	T1125	30,136	T1167C	138
T1034C	135	T1065	133	T1125C	136	T1168	138
T1035	135	T1065C	133	T1129	133	T1168L	138
T1035C	135	T1102	132	T1129C	133	T1169	138
T1036	135	T1102C	132	T1130	133	T1169L	138
T1036C	135	T1103	132	T1130C	133	T1179	138
T1037	135	T1103C	132	T1131	135	T1186	138
T1037C	135	T1104	133	T1131C	135	T1187	138
T1038	135	T1104C	133	T1133	135	T1188	138
T1038C	135	T1105	132	T1133C	135	T1191	139
T1039	135	T1105C	132	T1134	135	T1192	139
T1039C	135	T1106	133	T1134C	135	T1193	139
T1040	135	T1106C	133	T1135	135	T1196	139
T1040C	135	T1107	132	T1135C	135	T1197	139
T1042	134	T1107C	132	T1136	135	T2001	132
T1042C	134	T1108	137	T1136C	135	T2001C	132
T1043	134	T1108C	137	T1137	135	T2002	132

Part No.	Page	Part No.	Page	Part No.	Page
T2002C	132	TCW50	86	VG640T	81
T2003	132	TCW75	86	VG64S	82
T2003C	132	TD68	15	VG65	83
T2004	132	TD69	15	VG66	83
T2004C	132	TD72	15	VGC	81
T2033	135	TD73	15	VI2404	179
T2033C	135	TH10025	180	VI3460	155
T2065	135	TH2001B	164	VLCEL	106
T2065C	135	TH2046C	188	VLPAPER	106
T2066	135	TH4150	180	VLS CABLE	106
T2066C	135	TH7274	164	VLSK	106
T2067	134	TH9973	164	VLT PROBE	106
T2067C	134	THA2	123	VLT4115	106
T2068	134	THC120	118	VLT412	106
T2068C	134	THP2	115	VLT4230	106
T2070	138	TPC8000	110	VLTH PROBE	106
T2070C	138	TPFDA	118	VLTH115	106
T2111	134	TPMP2	14	VLTH12	106
T2111C	134	TPMPU	14	VLTH230	106
T2112	134	TR10	45	VLWPCASE	106
T2112C	134	UET120	175	VPR	106
T301025	167	UET240	175	WV0026	187
T301225	167	UFC1	124	WV0027	187
T301425	167	UHS120	44	WV0142G	187
T301625	167	UHS24	44	WV0312J	187
T301825	167	ULV200	126	WV0314K	187
T45	32	UPRO21	48	WV1	187
TA2	121	UPRO41	48	WV10032	181
TA22	121	UPRO81	48	WV10033	181
TA2-220	121	UR041	47	WV10051	181
TA2-220C	121	UR081	47	WV1450	181
TA22-220EU	121	URCO210	47	WV1460	181
TA2C	121	URCO210RC	47	WV2790	181
TA33	120	URCO410	47	WV2790	181
TA44	120	URCO410RC	47	WV8046	181
TA6	121	URCO810	47	WV8047	181
TA6-220	121	URO810RC	47	WV8179	181
TA6-220C	121	URSC10	48	ZIPEZ	44
TA6C	121	URSC20	48		
TA7	122	USBS	105		
TA7C	122	UV12K	153		
TAP4	122	UV12K	153		
TAP4-220	122	UW1	129		
TAP4C-220	122	VDL1000	114		
TB123A	126	VG60	82		
TC103	129	VG61	82		
TC2	128	VG64	82		
TCW100	86	VG640	81		
TCW25	86	VG640D	81		



This year we launched our brand new website at [www.supco.com](http://www.supco.com). This new site has a full search feature which allows visitors to search any product we carry by part number, product category or name. For each part you will find a detailed description, photo, specifications, applications, cross reference list, accessories and have the ability to download any printed materials pertaining to that specific part. In addition to products, visitors will also have the ability to search for distributors and sales reps near them, track their order, read current press releases, download our product catalogs and get updated on upcoming tradeshow and events. For any questions please feel free to contact us and we will be happy to assist you.

**SEALED UNIT PARTS CO., INC.**

PO Box 21, 2230 Landmark Place • Allenwood, NJ 08720 USA  
1-800-333-9125 • [www.supco.com](http://www.supco.com) • [orders@supco.com](mailto:orders@supco.com)



THE RIGHT CHOICE

**PRODUCING HIGH QUALITY, INNOVATIVE  
PRODUCTS AT AFFORDABLE PRICES**

**SEALED UNIT PARTS CO., INC.**  
PO Box 21, 2230 Landmark Place  
Allenwood, NJ 08720 USA  
[www.supco.com](http://www.supco.com)

The background of the lower half of the page is a stylized globe with a grid of latitude and longitude lines. The colors are primarily blue and orange. The Supco logo is overlaid on the globe. The logo consists of the word "Supco" in a white, cursive font, with a registered trademark symbol (®) to its upper right. Below the logo, the tagline "THE RIGHT CHOICE" is written in a white, sans-serif font.

**Supco**®  
THE RIGHT CHOICE

**SEALED UNIT PARTS CO., INC.**  
PO Box 21, 2230 Landmark Place • Allenwood, NJ 08720 USA  
1-800-333-9125 • [www.supco.com](http://www.supco.com) • [orders@supco.com](mailto:orders@supco.com)

**F546**