

ALLTEMP 

Heating Catalogue 2023

Swivel Brackets



Unit Heater Swivel Brackets

The Quick-Sling® line of unit heater swivel brackets are uniquely designed to provide fast and easy installation of most all ceiling mounted unit heaters. The innovative swivel design allows for 360° rotation for setting the perfect air flow direction prior to hard piping the unit. Multiple ceiling mounting options adapt to various installation applications.

Swivel "U" Mount with "H" or "I" Bracket

Item ID	Description
QSWI1000	Quick-Swivel "U" Mount with H Bracket. Holds up to 200 lbs.
QSWI2000	Quick-Swivel "U" Mount with I Bracket. Holds up to 200 lbs.



QSWI1000 Illustrated

Swivel Flush Mount with "H" Bracket

Item ID	Description
QSWI3000	Quick-Swivel Flush Mount with H Bracket. Holds up to 200 lbs.
QSWI3001	Swivel for Concealed Ducted AH Hangers & BC Cont. 36" Spreader Bar
QSWI3002	Swivel for Concealed Ducted AH Hangers & BC Cont. 17" Spreader Bar
QSWI4000	Quick-Swivel Flush Mount with I Bracket. Holds up to 200 lbs.
QSWI4001	Quick-Swivel Flush Mount with I Bracket. Holds up to 240 lbs.



QSWI3000 Illustrated

Flush Mount - Heavy Duty

Item ID	Description
QSWI5001	Quick Swivel Heavy Duty Flush Mount with I Bracket, 34 in. Holds up to 400lbs.
QSWI5002	Quick Swivel Heavy Duty Flush Mount with I Bracket, 52 in. Holds up to 400lbs.
QSWI5003	Quick Swivel Heavy Duty Flush Mount with Large H Bracket. Holds up to 400lbs.



QSWI5001 Illustrated

Branch Circuit Controller Swivel Flush Mount with 2 "I" Brackets

Item ID	Description
QSWI6000	Swivel for Concealed Ducted AH Hangers & BC Cont. Holds up to 400lbs.



QSWI6000 Illustrated

Mounting Blocks



Furnace Mounting Blocks

The DiversiTech® furnace mounting block FB-1 is a base support for furnaces. The furnace block raises the furnace approximately 2 inches and includes an anti vibration pad to reduce noise and vibration. Each furnace block can support over 500 pounds. Its unique wedge shape and integrated lip around top edge insure quick and accurate placement on each corner of the furnace. Easy peel and stick attachment method, no tools needed.

Item ID	Description
FB-1	Furnace Mounting Block, 72/Case



Ductless Mini Split Stands



Mini-Split Stands

Our Quick-Sling® Mini-Split Stands provide a safe, stable platform to mount your unit on. It keeps unit elevated above lawn mowers, weed whackers, pets, snow, and flooding. The elevated height allows for ease of installation, maintenance and service. Now available in Stainless Steel.

Item ID	Description
QSMS1201	Mini-Split Stand Wide - 12", Power Coated Steel
QSMS1801	Mini-Split Stand Wide - 18", Power Coated Steel



QSMS1201 Illustrated



QSMS1801 Illustrated

Drain Guns



SWOOSH® Drain Guns

The SWOOSH® Drain Gun is designed to blow out drain lines instantly. New larger 20 gram SWOOSH CO2 cartridges deliver 800 PSI of oil free air to clear the line, with 25% more capacity. Each unit comes equipped with a tapered fitting to work on 3/8in. – 3/4in. drain openings. Flexible hose assembly maneuvers through cabinets, coils and hard to reach drains. Reduces labor costs and time on service calls.

SWOOSH® Drain Gun Big Shot

Item ID	Description
SG-1	20G SWOOSH Drain Gun Big Shot
SGC-12	20G SWOOSH Drain Gun Cartridge, Pack of 12



Drain Gun Portable Drain Cleaning Tool

Clears condensate drains with a SWOOSH®!

A lightweight (3 oz.) portable tool designed to blow out drain lines instantly. SWOOSH® CO² cartridges deliver 800 PSI of oil free air to clear the line. Each unit comes equipped with a tapered fitting to work on 3/8in. – 3/4in. drain openings. Flexible hose assembly maneuvers through cabinets, coils and hard to reach drains. Cartridges are environmentally safe and recyclable. No need for air or nitrogen tanks. Reduces labor costs and time on service calls.

Item ID	Description
GG-1	Drain Gun
GGC-12	Drain Gun Cartridge, Pack of 12



Smoke Emitters

Cartridge Type Smoke Emitter

Item ID	Type	Burning Time (seconds)	Cartridge/Pack	Smoke Emitted (Cu. ft.)	Wight/Cartridge
61-S210-25	Splintax	20	25 matches/Pk	20	0.35 oz.



61-S210-25 Illustrated

Pen Type Smoke Emitters

Item ID	Description
61-S220	Contains 1 pen with 6/pk replacement wicks. 6 wicks provide up to 3 hours of continuous smoke, or 360 individual 30 second tests.
61-S221	6 pack of replacement wicks in plastic case for 61-S220 smoke pen.



61-S220 Illustrated

61-S221 Illustrated

Smoke Bottles

Item ID	Description
61-S101	10 Smoke bottles. Each bottle can be used for 24 hours after ampule has been broken.

Note: The smoke generated by smoke bottles is corrosive.



61-S101 Illustrated



Powder-Puffers

Item ID	Description
61-S201	10 Powder-Puffers

61-S201 Illustrated

Heat Shields

The Insurance Pad™

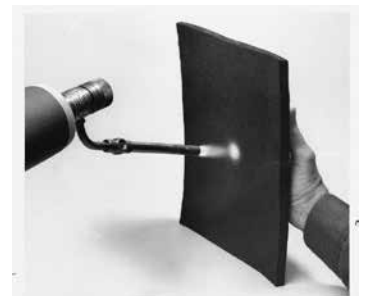
The Insurance Pad is the ultimate heat shield. Use wet or dry where ever higher temperature protection is required, up to 2500°F. The Insurance Pad is a fibrous felt heat shield with the safest specs in the industry. Repeated use of the product actually increases its heat resistance.

Applications

- Ideal for use with propane, MAPP gas, acetylene/ air and higher temperature torches.

Item ID	Description
61-71036	6" x 9"
61-71038	9" x 12"

Heat Resistant to 2500°F

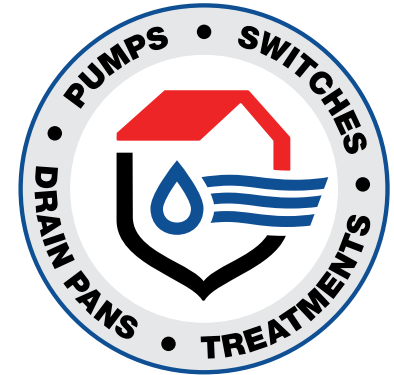


Helping You Select the Right Condensate Management System

We make condensate management easy with useful resources at your fingertips. We offer quality products, and helpful resources to answer your questions. Understanding how to optimally install a condensate management system with proper checks and balances is made even easier with descriptive infographics. You will find that our website and Technical Support Team are valuable resources.

Water damage is a key homeowner worry. Why chance it?

asurityhvacr.com



YOUR COMPLETE SYSTEM FOR CONDENSATE MANAGEMENT



Techs Helping Techs

We take our responsibility to answer your questions seriously, which is why we have trained HVAC/R technicians providing you support. Techs who have dealt with the real-life situations that you deal with every day are here to help you every step of the way whether it be helping select the right product, answering installation questions, or troubleshooting.

For Technical Support: (800) 995-2222

Condensate Pumps



Pumps are often the heart of a complete condensate management system. With simple installation, high durability, and long-term reliability, they effortlessly pump water wherever it needs to go. Every pump is designed to help you get the job done right regardless of the application.

Condensate Pump Ultra

Asurity® ULTRACP-22 series pumps beat the industry standard of 20' lift height by 2 feet and come with innovative features such as: translucent tank for easy & fast inspection, vibration dampening feet & motor mounts, metal mounting tabs, four inlet holes (and 3 poly covers for the unused), LED indicators, float switch and duckbill-style check valve, and detailed installation instructions. Two 1/4in. quick connect terminals provide the installer fast and easy connections to the built-in overflow switch to shut-down the system and prevent flooding, an important safety feature.

Asurity® - Your Complete System for Condensate Management.

- Translucent Tank for Easy & Fast Inspection
- Removable Check Valve for Easy Cleaning
- LED Indicators Confirm Pump Status
- Built-in Safety Overflow Switch
- Handles Condensate up to 160° F

Item ID	Description
ULTRACP-22	Condensate Pump, 120V, 60Hz, 22' Lift
ULTRACP-22-230	Condensate Pump, 230V, 60Hz, 22' Lift



ULTRACP-22 Illustrated

Specialty ClearVue™ Condensate Pumps

- Translucent Tank for Easy & Fast Inspection
- Removable Check Valve for Easy Cleaning
- LED Indicators Confirm Pump Status
- Built-in Safety Overflow Switch
- Handles Condensate up to 160° F

Item ID	Description
ULTRACP-22T	Condensate Pump, 120V, 60Hz, 22' Lift, 20' Clear Vinyl 3/8" Tubing
ULTRACP-22T-230	Condensate Pump, 230V, 60Hz, 22' Lift, 20' Clear Vinyl 3/8" Tubing



ULTRACP-22T Illustrated

Condensate Pumps



Standard Condensate Pumps

- LED Indicators Confirm Pump Status
- Built-in Safety Overflow Switch
- Handles Condensate up to 160° F
- Sturdy Metal Hang Tabs

Item ID	Description
CP-22	Condensate Pump, 120V, 60Hz, 22' Lift
CP-22-230	Condensate Pump, 230V, 60Hz, 22' Lift
CP-22T	Condensate Pump, 120V, 60Hz, 22' Lift, 20' Clear Vinly 3/8" Tubing
CP-22-230T	Condensate Pump, 230V, 60Hz, 22' Lift, 20' Clear Vinly 3/8" Tubing



CP-22 Illustrated

General Purpose Condensate Pumps

More compact than the CP-22, it's designed to lift to a maximum of 16 feet. The CP-16 shares many of the great features of the CP-22, including hang tabs, four inlet holes, float switch, overflow switch, and a check valve. UL Listed File Numbers E253155 and E258186.

Item ID	Description
CP-16	Condensate Pump, 120V, 60Hz, 16' Lift
CP-16-230	Condensate Pump, 230V, 60Hz, 16' Lift



CP-16 Illustrated

Specialty Condensate Pumps - Acid & High Temperature Applications

- Handles Acidic and Non-Acidic Condensate up to 190° F
- Stationary PVC Pipe Inlets for Easy Tank Access
- LED Indicators Confirm Pump Status
- Built-In Safety Overflow Switch
- Remove Check Valve Without Tools for Easy Cleaning

Item ID	Description
FP-22	Furnace Condensate Pump, 120V, 60Hz, 22' Lift
FP-22-230	Furnace Condensate Pump, 230V, 60Hz, 22' Lift



FP-22 Illustrated

Specialty ClearVue™ Condensate Pumps

- Translucent Tank for Easy & Fast Inspection
- Variable Speed for Quieter Operation
- Senses Clog & Engages Pulse Mode for Cleaning
- Built-In Safety Overflow Switch with Alarm & Run Contacts
- LED Indicators & Audible Alarm Confirm Pump Status
- Floatless Sensor Technology

Item ID	Description
IQP-120	ClearVue Condensate Pump, 120V, 60Hz, 22' Lift
IQP-120T	ClearVue Condensate Pump, 120V, 60Hz, 22' Lift, 20' Clear Vinyl 3/8" Tubing



IQP-120 Illustrated

Ductless Condensate Pumps



Low Profile Specialty Condensate Pumps Standard Applications

- Reduced Height for Restricted Spaces
- LED Indicators Confirm Pump Status
- Built-in Safety Overflow Switch
- Handles Condensate up to 160° F
- Sturdy Metal Hang Tabs



CP-22LP
Illustrated

Item ID	Description
CP-22LP	Low Profile Condensate Pump, 120V, 60Hz, 22' Lift
CP-22LP-230	Low Profile Condensate Pump, 230V, 60Hz, 22' Lift
CP-22LP-P	Low Profile Condensate Pump, 120V, 60Hz, 22' Lift, Plenum Rated
CP-22LP-230-P	Low Profile Condensate Pump, 230V, 60Hz, 22' Lift, Plenum Rated



CP-22LP-P
Illustrated

Pro Condensate Pumps Standard Applications

- Handles Condensate up to 160° F
- Built-in Safety Overflow Switch
- Sturdy Metal Hang Tabs

Item ID	Description
PROCP-16*	Pro Series Condensate Pump, 120V, 60Hz, 16' Lift
PROCP-16-230*	Pro Series Condensate Pump, 230V, 60Hz, 16' Lift
PROCP-22S	Pro Series Condensate Pump, 120V, 60Hz, 22' Lift
PROCP-22S-230	Pro Series Condensate Pump, 230V, 60Hz, 22' Lift
PROCP-22ST	Pro Series Condensate Pump, 120V, 60Hz, 22' Lift, 20' Clear Vinyl 3/8" Tubing
PROCP-22ST-230	Pro Series Condensate Pump, 230V, 60Hz, 22' Lift, 20' Clear Vinyl 3/8" Tubing

*Note: Without Built-in Safety Overflow Switch



PROCP-16
Illustrated



20' Clear Vinyl 3/8" Tubing only included with
PROCP-22ST
PROCP-22ST-230

Pro Condensate Pumps Acidic, Max Temperature & High Lift/Flow Applications

- Handles Acidic and Non-Acidic Condensate up to 212° F
- Large 1-Gallon Tank Instantly Reduces Temperature of Boiler & Steam Humidifier Discharge
- Flow Rate up to 190 Gallons Per Hour
- Quarter-Turn Removable Check Valve
- Built-In Safety Overflow Switch

Item ID	Description
PROCP-46	Pro Series Condensate Pump, 120V, 60Hz, 49' Lift
PROCP-46-230	Pro Series Condensate Pump, 230V, 60Hz, 49' Lift



PROCP-46
Illustrated

Ductless Condensate Pumps



Ductless Condensate Pumps Standard Applications

- Quiet Operation (20.2 Decibels)
- Suction Lift 6.5'
- For Equipment up to 36K BTU/h
- Built-in Safety Overflow SwWitch with Alarm & Run Contacts
- For Wall Mounts & Ceiling Cassettes
- Includes Installation Accessories



Item ID	Description
CP-M115	Ductless Condensate Pump, 115V, 60Hz, 24' Lift
CP-M230	Ductless Condensate Pump, 230V, 60Hz, 24' Lift

ClearVue™ Mini Ductless Condensate Pump Standard Applications

- Variable Speed for Silent Operation (19.0 Decibels)
- Suction Lift 6.5'
- For Equipment up to 120K BTU/h
- Built-in Safety Overflow Switch with Alarm & Run Contacts
- LED Indicators Confirm Pump Status
- Includes Installation Accessories
- Floatless Sensor Technology



Item ID	Description
CVMINI	ClearVue Mini Ductless Condensate Pump, 120-240V, 60Hz, 35' Lift

ClearVue™ Mini Clear Vinyl Tubing

Item ID	Description
7-CVMINITUBE	3/16in. ID ClearView CVT, 100ft



Undermount Ductless Condensate Pump Standard Applications

- Undermount Pump for Ductless System
- Ultra Quiet (21dBA)
- Removable Reservoir for Easy Maintenance
- Built-in Safety Overflow Switch
- Max Unit Output 54,000 BTU/h, 16kW



Item ID	Description
QUIETMINI-M	Undermount Ductless Condensate Pump, 115-230V, 60Hz, 26' Lift

Ductless Condensate Pumps



Internal Mini-Split Condensate Pump

- Max discharge head 26 ft
- Universal voltage - 115 – 230V 60Hz
- Built-In Safety Overflow Switch
- Flexible installation options. Fits inside line set covers or inside cassette
- Self-priming



Item ID	Description
QUIETMINI-I	Internal Mini-split Condensate Pump, 115-250V 60Hz

Drain Pans



Our drain pans are engineered to provide that extra level of confidence. We offer standard plastic and metal pans made with rolled edges for durability, ribbed bottoms for rigidity, and reinforced corners for strength; while our specialty high rise drain pans feature risers for additional height.

These drain pans are the backbone of our complete condensate system.

Specialty Plastic Drain Pans

CP-PAN Condensate Pump Pan provides extra redundancy needed in a condensate management system to prevent catastrophic water damage. While best practice is to place a condensate pump in the secondary drain pan, some situations occur where that is not possible. Now you don't have to compromise. The Asurity Condensate Pump Pan is perfectly sized to fit most condensate pumps and is designed specifically with room for a safety overflow switch, such as Asurity CS-3, to help minimize the possibility of water damage due to condensate overflow.

- Captures Pump Overflow for Extra Safety Layer
- Universal Fit for Most Condensate Tank Pumps
- Provides Space for CS-3 Safety Switch to Prevent System Overflow
- No Seams, No Rust, No Leakage, Providing Long Term Operation



Item ID	Description
CP-PAN	Condensate Pump Pan

Drain Pans



Plastic Drain Pans

Plastic Drain Pan are used to collect condensate from cooling and evaporator coils in locations where damage to any building component could occur as a result of overflow from the equipment drain pan or stoppage of the condensate drain piping. Drain line outlet on pan's long side. Includes 3/4 in. PVC fittings.

- Rolled Edges, Ribbed Bottom, Reinforced Corners
- PVC Fittings Included
- No Seams, No Rust, No Leakage



Complies with Southern Building Code

Item ID	Description
6-1838L	Plastic Drain Pan, 18x38L, Pack of 5
6-1838S	Plastic Drain Pan, 18x38S, Pack of 5
6-2424L	Plastic Drain Pan, 24x24L, Pack of 5
6-2626L	Plastic Drain Pan, 26x26L, Pack of 5
6-2739L	Plastic Drain Pan, 27x39L, Pack of 5
6-2748L	Plastic Drain Pan, 27x48L, Pack of 5
6-2763L	Plastic Drain Pan, 27x63L, Pack of 5
6-3030L	Plastic Drain Pan, 30x30L, Pack of 5
6-3050L	Plastic Drain Pan, 30x50L, Pack of 5
6-3060L	Plastic Drain Pan, 30x60LF, Pack of 5
6-3060S	Plastic Drain Pan, 30x60 S , Pack of 5
6-3263L	Plastic Drain Pan, 32x63L, Pack of 5
6-3263L-F	Plastic Drain Pan, 32x63LF, Pack of 5
6-3636L	Plastic Drain Pan, 36x36L, Pack of 5
6-3660L	Plastic Drain Pan, 36x60L, Pack of 5
6-3660S	Plastic Drain Pan, 36x60S, Pack of 5

High Rise Drain Pans

HR Drain Pan Kits allows placement of air handler above the pan lip without the need for separate, cumbersome mounting blocks. With a molded-in network of risers to give a 5 inch lift; positioned to accept a wide variety of air handler sizes. Includes a Condensate Cop float switch, 6 EVA anti-vibration pads, and 1 3/4in. PVC male adapter.

- Position AV Pads Where You Want Them
- Full 5" Rise from Bottom of Pan
- Heavy Reinforcement Throughout
- Water Flows Towards Sides
- Installation Kit Provided
(Condensate Safety Overflow Switch, Anti-Vibration Pads, Fitting)



Meets Requirements for Florida Building Code (307.23 Auxiliary and Secondary Drain Systems)

Item ID	Description
6-HK2748	HR Drain Pan Kit 27x48, Pack of 5
6-HK2748-1	HR Drain Pan Kit 27x48, Pack of 1
6-HK2766	HR Drain Pan Kit 27x66, Pack of 5
6-HK2766-1	HR Drain Pan Kit 27x66, Pack of 1
6-HK3050	HR Drain Pan Kit 30x60, Pack of 5
6-HK3050-1	HR Drain Pan Kit 30x60, Pack of 1
6-HK3060	HR Drain Pan Kit 30x60, Pack of 5
6-HK3060-1	HR Drain Pan Kit 30x60, Pack of 1

Drain Pans



HEAVY DUTY High Rise Pans

HDHR Drain Pan Kits are a thicker, tougher version of our regular High Rise Pans. Each pan includes an installation kit with one CS1200 float switch, six EVA anti-vibration pads and one 3/4inches PVC male adapter.

- Full 4.25" Rise from Bottom of Pan
- Heavy Reinforcement Throughout
- Suitable for Hanging Applications
- Water Flows Towards Sides
- Installation Kit Provided
(Condensate Safety Overflow Switch, Anti-Vibration Pads, Fitting)

Item ID	Description
6-HK3050HD	HDHR Drain Pan Kit 30x50, Pack of 5
6-HK3060HD	HDHR Drain Pan Kit 30x60, Pack of 5
6-HK3070HD	HDHR Drain Pan Kit 30x70, Pack of 5



Furnace Pan

Furnace Drain Pan Kits are designed specifically for furnace installations. One-piece construction provides strength and durability. Includes Installation Kit with a CS1200 float switch, eight HPR-6 risers, and a 6-1 3/4in. PVC male adapter.

- Heavy Duty Construction
- Installation Kit Provided
(Condensate Safety Overflow Switch, Heat Pump Risers, Fitting)

Item ID	Description
6-HK3364FUR	Furnace Drain Pan Kit 33x64, Pack of 1
6-HK3378FUR	Furnace Drain Pan Kit 33x78, Pack of 1



Seamless Metal Drain Pan

Metal Drain Pan, 27x48, 5PK is the ultimate in drain pan design, tailored for easy distribution and installation. With seamless one piece construction, these metal drain pans are designed with two optional drain locations. Fittings are packaged with the pan. Fully nestable for easy storage, each pack includes 5 pans.

- Single-Piece Design
- Rolled Edge
- Two Outlets
- Fittings Included

Item ID	Description
6-M2748	Metal Drain Pan, 27x48, Pack of 5
6-M2763	Metal Drain Pan, 27x63, Pack of 5
6-M3030	Metal Drain Pan, 30x30, Pack of 5
6-M3050	Metal Drain Pan, 30x50, Pack of 5
6-M3060	Metal Drain Pan, 30x60, Pack of 5
6-M3263	Metal Drain Pan, 32x63, Pack of 5



Switches



Our switches are the brains of the operation. Designed to detect problems and shut the entire system off in case of water overflow or a clog in the condensate drain line, our switches add another layer of protection.

- Flood Switch
- Primary Drain Pan Switches
- Inline Switches
- Secondary Drain Pan Switches

Wet Switch® Flood Detector

Wet Switch Flood Detector is designed to prevent flooding, damage to carpets, walls, furniture, and ceilings. Turns system off when detecting moisture due to condensate or drain leaks. Includes a built-in test and reset button. One or two drops is all it takes to turn system off, alerting homeowner or service person to potential moisture problems.

- Turns Off with as Few as 1-2 Drops of Water Detection
- LED Indicators
- Connect Multiple Switches to Expand Protection Area
- Flexible Placement Options



Item ID	Description
WS-1	Wet Switch Flood Detector Plenum Rated

Dual Voltage Flood Detector

Wet Switch Dual Voltage Flood Detector has 12-Volt DC connections for installation into building automation systems and will transmit alarm signals to building maintenance if a flood is detected. Flood detector can also connect to a 24-Volt AC installation allowing integration with all HVAC systems, and will shut down the HVAC system if a flood is detected. Reset by simply drying the absorbent pad with a paper towel and pressing the reset switch. Connect multiple switches to expand protection area and connect to multiple pieces of equipment simultaneously.

- 12 Volt: Integrates into Building Automation Systems and Transmits Alarm Signal with as few as 1-2 Drops of Water Detection
- 24 Volt: Works with All HVAC Systems



Item ID	Description
WS-2DV	Dual Voltage Flood Detector Plenum Rated

BG-101 Condensate Safety Overflow Switch

The Asurity® BG-101 protects the HVAC circuit by eliminating intermittent condensate tripping with latching snap action. The switch attaches to the side of secondary drain pan, clamps in place for a secure hold, and can be adjusted for the deepest pans on the market. Once the latch mechanism is triggered, the power to your air handler will be interrupted, and the system will shut down. The BG-101 will stay latched and the system will remain off, even if the water has receded, until manually reset. This eliminates any intermittent condensate tripping, minimizing wear on systems and making diagnoses easier.

- Prevents Short Cycling that can lead to equipment damage
- Less Intermittent or False Tripping
- Float Latches When Tripped
- Variable Height Feature
- For Metal & Plastic Drain Pans



Item ID	Description
BG-101	Condensate Safety Overflow Switch Plenum Rated

Switches



Latching Float Switch for Primary Pan

The Asurity® BG-301+ is a primary drain pan switch with a proprietary water reservoir and clear status window design that checks and measures the waterlevel in your pan at several stages.

Product ID	Description
BG-301+T	Latching Switch-Elbow+T
BG-302P+T	Latching Switch-Elbow Plenum Rated

- Magnetic latching mechanism eliminates intermittent condensate tripping
- The system will remain off, even if the water has receded, until manually reset



BG-301+T

Condensate Safety Overflow Switch

CC-1 Safety Overflow Pan Switch is a unique clamp-on float switch intended for HVAC drain pan installation (both plastic and metal pans). Large over-clamping area fits easily over the edge of all types of drain pans; separate float/probe assembly accommodates drain pans with sloped sides. Magnetically actuated switch opens when rising water presents a potential flooding condition.

- Position Anywhere Along Drain Pan
- Adjustable Activation Height - Minimum 1.5"
- Sensor Assembly Swivels to Accommodate Drain Pans with Sloped Sides
- Clamps Easily Over the Edge of All Drain Pan Types, Including Formed Plastic and Galvanized Sheet Metal

Item ID	Description
CC-1	Safety Overflow Pan Switch



Condensate Safety Overflow Switch

CS1200 AC Shutoff Switch is a fast installing, reliable, condensate overflow detection float switch. It features a unique universal pan mount design to assure accurate detection in metal or plastic secondary drain pans.

- Position Anywhere Along Drain Pan
- Clamps Easily Over the Edge of All Secondary Drain Pan Types, Including Formed Plastic & Galvanized Sheet Metal
- Translucent Design for Easy & Fast Inspection
- LED Indicator Illuminates when Switch is Activated
- For Standard Rated Installations in Secondary Drain Pans

Item ID	Description
CS1200	AC Shutoff Switch



Condensate Safety Overflow Switch

SOS-1 Safety Overflow Switch detects clogs in condensate drain lines. By locating the switch away from the normal flow, it can be used to detect drain line overflows, responding by opening the circuit to the compressor contactor. When not detecting water, the SOS is normally closed and allows normal air conditioner operation.

- Fits Over 3/4" Standard Plastic Pipe without Cutting Drain Line
- Float Free Design, Ideal for Drier Environments
- Switch Orientation Adjusts Sensitivity
- Includes Easy to Attach Primary Drain Pan Fitting
- For Standard Rated Installations in Primary or Auxiliary Lines

Item ID	Description
SOS-1	Safety Overflow Switch



Switches



Condensate Safety Overflow Switch

Pipe-Mounted Tee Switch is simple to install and service, and extremely reliable. As water level in the drain pipe rises due to a clogged air conditioning condensate drain, the switch shuts off the system, preventing water from overflowing and causing damage to doors, walls and ceilings. The durable, precise magnetic reed switch will not rust, operating smoothly every time.

- LED Illuminates When Condensate Line is Blocked
- Built-In Protection Against Power Surges Provides Increased Reliability
- Three Installation Configurations for Increased Flexibility
- For Standard & Plenum Rated Installations in Primary or Auxiliary Lines



Item ID	Description		
CS-1	Pipe-Mounted Tee Switch	Plenum Rated	
CS-1-BULK50	Pipe-Mounted Tee Switch (Bulk)	Plenum Rated	

Condensate Safety Overflow Switch

Pipe-Mounted Elbow Switch is simple to install, easy to service and extremely reliable. As water level in the auxiliary fitting of the drain pan rises due to a clogged air conditioning condensate drain, the switch shuts off the system, thus preventing water from overflowing. The durable, precise magnetic reed switch will not rust, operating smoothly every time.

- LED Illuminates When Condensate Line is Blocked
- Built-In Protection Against Power Surges Provides Increased Reliability
- For Standard & Plenum Rated Installations in Auxiliary Lines



Item ID	Description		
CS-2	Pipe-Mounted Elbow Switch	Plenum Rated	
CS-2-BULK50	Pipe-Mounted Elbow Switch (Bulk)	Plenum Rated	

Condensate Safety Overflow Switch

Drain Pan Clip Switch is easy to install anywhere on the drain pan. After clipping the CS-3 anywhere along the drain pan wall, the stainless steel clip adapts to multiple pan thicknesses. Uses a magnetic red switch for condensate overflow protection. For standard rated installations in primary or secondary drain pans.

- Adjustable Activation Height
- Position Anywhere Along the Drain Pan
- For Standard Rated Installations in Primary or Secondary Drain Pans



Item ID	Description	
CS-3	Drain Pan Clip Switch	
CS-3-BULK50	Drain Pan Clip Switch (Bulk)	

Installation Components



A variety of drain trap kits, some with switches, to meet different install requirements.



U Trap



Cleaning Brush



Float Switch

A/C Easy Tee

A/C Easy Tee is a simple and effective condensate drain service port that makes it easy to comply with IMC 307.2.5. Never cut condensate lines again. Flush blockages using nitrogen, water or a shop vac without valves or moving parts that can fail. The A/C Easy Tee gives you a solid connection to the drain line so you can get the line cleaned out correctly, the first time. This will help avoid nuisance callbacks, saving you precious time and money.

- Quickly Clear Condensate Lines
- Never Cut Condensate Lines Again
- Complies with Code 307.2.5



Item ID	Description
ET75	A/C Easy Tee Cleanout Port

A/C Easy Tee Service Tool Set

The Service Tool Kit allows the technician to close off backflow creating full discharge of water or nitrogen to clean out the drain line. It can also be used with a wet/dry vac to suction dirt, debris, and gunk out of a primary drain pan.

- Quickly Clear Condensate Lines
- Never Cut Condensate Lines Again
- Complies with Code 307.2.5

Item ID	Description
ST75	A/C Easy Tee Service Tool Set

Waterless Trap

WTRAP 3/4 in. Waterless Trap allows condensate to drain from HVAC equipment, while preventing air from entering or escaping the equipment. Eliminates the geyser effect caused with standard P traps. The WTRAP operates dry except when condensate is being produced, and will not freeze. For use on residential and light commercial HVAC equipment only. Not for use as a sanitary trap.

- Prevents Unwanted Air Leakage from Condensate Line
- Will Not Freeze or Dry Out
- Eliminates Sludge Buildup
- For Negative Pressure Applications



Item ID	Description
WTRAP	3/4" Waterless Trap

Installation Components

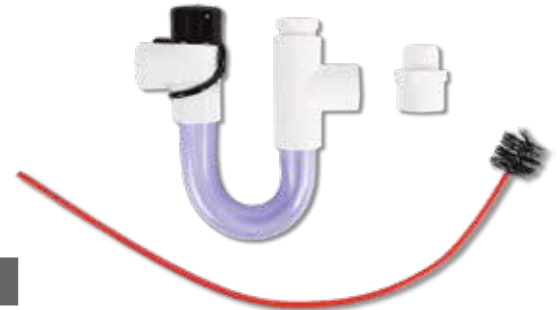


3/4 in. Clear U Drain Trap Kits contains everything required for a fast and complete installation. Clear PVC trap assures blockages are easily visible, heading off potential problems before they become severe. Ideal for condensate drain lines. Includes a 3/4 in. U trap with a 3 in. drop, and a 3/4 in. adapter. Asurity® Drain Trap Kits are available in multiple fitting styles.

Drain Trap Kit

U Trap, Cleaning Brush

- Easy Installation and Troubleshooting
- Schedule 40 PVC Fittings
- Cleanout Tee
- Fits 3/4" PVC; 1" Drop

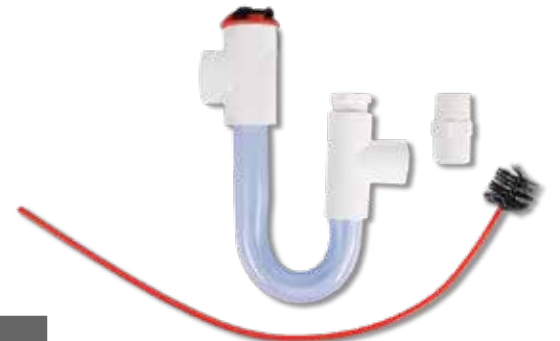


Item ID	Description	
DTK113	3/4 in. Clear U Drain Trap Kit	■
DTK113B	3/4 in. Clear U Drain Trap Kit w/Brush	■ ■

Drain Trap Kit With Safety Overflow Switch

U Trap, Cleaning Brush, Float Switch

- Easy Installation and Troubleshooting
- Schedule 40 PVC Fittings
- Cleanout Tee
- Fits 3/4" PVC; 2.25" Drop

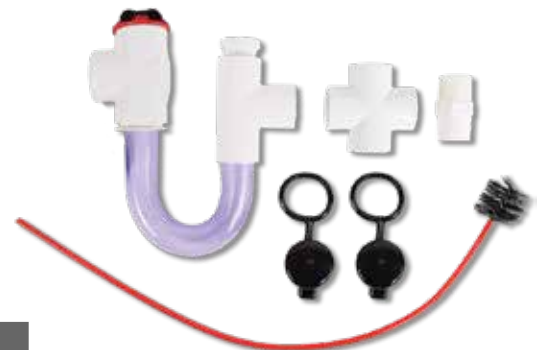


Item ID	Description	
DTK205	3/4 in. Deep U Drain Trap Kit w/Overflow Switch	■ ■ ■

Drain Trap Kit With Safety Overflow Switch

U Trap, Cleaning Brush, Float Switch, Cross

- Easy Installation and Troubleshooting
- Schedule 40 PVC Fittings
- Cleanout Tee
- Fits 3/4" PVC; 2.25" Drop



Item ID	Description	
DTK207	3/4 in. Std. w/Float+ Drain Trap Kit	■ ■ ■

Installation Components



Drain Trap Kit With Safety Overflow Switch

U Trap, Cleaning Brush, Float Switch

- Easy Installation and Troubleshooting
- Schedule 40 PVC Fittings
- Cleanout Tee
- Fits 3/4" PVC; 1" Drop



Item ID	Description
DTK210	3/4 in. Std.w/Float Drain Trap Kit

Drain Line Tubing



For applications ranging from air conditioning and refrigeration condensate drains, condensate pump discharge lines to humidifier overflow lines.

Clear Vinyl Tubing

Clear vinyl hose applications include: air conditioning and refrigeration condensate drains, condensate pump discharge lines and humidifier overflows.

Item ID	Description
7-10	1" ID Clear Vinyl Tubing – 100' section
7-12	1/2" ID Clear Vinyl Tubing – 100' section
7-14	1/4" ID Clear Vinyl Tubing – 100' section
7-34	3/4" ID Clear Vinyl Tubing – 100' section
7-38	3/8" ID Clear Vinyl Tubing – 100' section
7-58	5/8" ID Clear Vinyl Tubing – 100' section
7-78	7/8" ID Clear Vinyl Tubing – 100' section



7-14
Illustrated

Gorilla Tube™ Clear Vinyl Tubing

Applications include: air conditioning and refrigeration condensate drains, condensate pump discharge lines, and humidifier overflows. Several sizes from 1/4" to 1" diameter. Non-toxic clear vinyl chloride. Select Gorilla Tube™ over standard clear vinyl tube because:

- Extra rigid design resists crimping and kinking due to durometer value of 80 (Shore A) and thicker wall
- Maximum service temperature 140°F (60°C)

Item ID	Description
7-10P	1", 1.000" I.D., 1.215" O.D., .108 wall thickness
7-12P	1/2", .500" I.D., .631" O.D., .066 wall thickness
7-14P	1/4", .250" I.D., .360" O.D., .055 wall thickness
7-34P	3/4", .750" I.D., .913" O.D., .082 wall thickness
7-38P	3/8", .375" I.D., .495" O.D., .060 wall thickness
7-58P	5/8", .625" I.D., .771" O.D., .073 wall thickness
7-78P	7/8", .875" I.D., 1.050" O.D., .088 wall thickness



7-14P
Illustrated

Pan Treatments & Disinfectant



Pro-Treat[®] Condensate Pan Treatment

Condensate Drain Pan Treatment controls odors and eliminates drain pan overflows and the resulting water damage. 100 tablet jar. (Initial application: 2 tablets; ongoing maintenance: 1 tablet per month). Pro-Treat pan treatment is available in several sizes to assure season-long, trouble-free condensate drain pan performance.



Item ID	Description
PROTREAT-152	12 King Size Tablets, 1 Tablet - 3 Tons/3Mo.
PROTREAT-161	100 Tablets, 2 Tablet - 3 Tons/Mo.
PROTREAT-200	200 Tablets, 2 Tablet - 3 Tons/Mo.
PROTREAT-217	200 Thin Tablets, 3 Tablet - 3 Tons/Mo.
PROTREAT-350**	100 Tablets

Notes: **Industrial Use Only.

Pro-Treat[®] Condensate Pan Treatment

Pro-Treat Strip, 1-2 Ton kills odor-causing bacteria, lasts up to 6 months. (10 strips/pack for 1 to 2 ton equipment.) Use in primary drain pan of cooling equipment including air conditioners and refrigerators. Controls foul-smelling odors caused by mildew, fungi, bacteria, algae, and slime. For use in hotels, schools, colleges, hospitals, nursing homes, airports, and many other locations.

Item ID	Description
PS-01	For Equipment From 1 to 2 Tons, 10 Applications
PS-03	For Equipment From 3 to 5 Tons, 6 Applications
PS-07	For Equipment From 7 to 12 Tons, 2 Applications
PS-20	For Equipment From 10 to 25 Tons, 1 Application
PS-40	For Equipment From 40 to 50 Tons, 1 Application

EPA Registered



Each Pan Strip is a 6-Month Treatment

Flow-Plus[®] Condensate Pan Treatment

Drain Pan Treatment has a unique polymer formula to maintain condensate flow and prevent drain pan overflow. 200 mini-tablet jar for use with 1/3 to 3 ton equipment. No residue, no waste, non-clogging - with a long-term activated release, environmentally safe, non-toxic, and non-corrosive. Available in several sizes to meet specific equipment tonnage requirements.

Item ID	Description
FLOW-PLUS-200	200 Mini Tabs, For 1/3 to 3 Ton Units
FLOW-PLUS-25	25 Mini Tabs, For 1/2 to 3 Ton Units
FLOW-PLUS-6	Light Tonnage, For 3 to 5 Ton Units
FLOW-PLUS-10	Medium Tonnage, For 5 to 20 Ton Units
FLOW-PLUS-125	High Tonnage, For 20 to 50 Ton Units
FLOW-PLUS-CP	6 Pump Treatment Tablets
SCM-185-8	Flow-Plus [®] Polymer Pan Treatment, (1) - 8lb Tub



Pan Treatments & Disinfectant



Horizontal Condensate Neutralizer

Neutralizer Cartridge, Wall Mount neutralizes condensate from natural gas or propane condensing boilers and furnaces. Low profile is suitable for drains near the floor; can be mounted horizontally or vertically. Prevents environmental harm, and drain and sewer corrosion. Maintains bacteria at a neutral level in septic systems. Includes neutralizing media.

- Suitable for 400,000 BTU/h at 93% Efficiency
- Prevents Acidic Condensate from Corroding Drains and Sewer Systems
- Helps Maintain a Neutral Environment for Bacteria in Septic Systems
- Suitable for Use on All Types of Natural Gas and Propane Appliances
- Includes Initial Charge of Neutralization Media



Item ID	Description
CNH-4K	Horizontal Neutralizer Cartridge

Vertical Condensate Neutralizer

Neutralizer Cartridge, Vertical Mount is a wall-mount cartridge designed for vertical installation that neutralizes condensate from natural gas or propane condensing boilers and furnaces. Prevents environmental harm, and drain and sewer corrosion. Maintains bacteria at a neutral level in septic systems. Includes neutralizing media.

- Has the Same Features as Horizontal Condensate Neutralizer
- Float System Indicates if Unit has Become Plugged
- Integral Bypass Feature Prevents Condensate Backflow into Appliance
- 3/4" FNTF Inlet and Outlet Connections
- Includes Initial Charge of Neutralization Media



Item ID	Description
CNV-4K	Vertical Neutralizer Cartridge

Neutralization Tank

Neutralizer Tank, Low Profile neutralizes condensate from natural gas or propane condensing boilers and furnaces. Low profile is suitable for drains located near the floor. Prevents environmental harm, and drain and sewer corrosion. Maintains bacteria at a neutral level in septic systems. Includes neutralizing media.

- Suitable for 3 Million BTU/h at 93% Efficiency
- Prevents Acidic Condensate from Corroding Drains and Sewer Systems
- Helps Maintain a Neutral Environment for Bacteria in Septic Systems
- Suitable for Use on All Types of Natural Gas and Propane Appliances



Item ID	Description
CNT-3M	Low Profile Neutralization Tank

Neutralization Media

Prevents Acidic Condensate from Corroding Drains and Sewer Systems

Replacement For

CNM-4K	CNV-4K CNH-4K CNHK-4K
CNM-BULK	CNV-4K CNH-4K CNHK-4K
CNM-3M	CNT-3M

Coil Cleaners



Triple-D®

Triple-D® is a universal, medium-duty coil cleaner. It's low foaming, alkaline detergent is metal safe and fin friendly, and is microchannel and mini-split safe. Use this coil cleaner indoor or outdoor to degrease and deodorize condensers and evaporators.

- Ultimate medium-duty coil cleaner for condensers & evaporators
- Indoor & outdoor low-foaming alkaline detergent
- Metal safe & fin friendly
- Economical: 1 gallon makes 7 gallons of coil cleaner
- NSF approved
- More convenience to choose from with NEW packaging options:
4 times concentrate quart & handy 1 shot 4 oz. bottle

Item ID	Description
TRIPLE-D	Triple-D® – 1 gallon concentrate
TRIPLE-D-32	Triple-D® – 32 oz. bottle – concentrate
TRIPLE-D-AER	Triple-D® – 19 oz. Aerosol
TRIPLE-D-AER-6	Triple-D® – 19 oz. Aerosol
TRIPLE-D-RTU	Triple-D® – 1 quart trigger sprayer – pre-diluted
TRIPLE-D-1SHOT	Coil Cleaner, Triple-D 1 Shot 4oz
TRIPLE-D-4X	Coil Cleaner, Triple-D, 4x Concentrated 32oz



Pro-Green™

Pro-Green™ Coil Cleaner, 1 gal. is a no-rinse, mild alkaline coil cleaner designed for air-cooled condensers, evaporators, electronic and permanent filters, fan blades, grilles, mini-split and microchannel applications. Pro-Green cleans deposits on coils and rids condensate pans of slime.

- No-rinse mild alkaline
- Non-fuming for indoor use
- Aluminum safe for microchannel and mini-splits
- Non-toxic, non-corrosive
- Economical: 1 gal. makes 4 gallons of coil cleaner
- NSF approved
- More convenience to choose from with NEW packaging options:
4 times concentrate quart & handy 1 shot 4 oz. bottle

Item ID	Description
PRO-GREEN	Pro-Green™ No Rinse (non-toxic) – 1 gallon container
PRO-GREEN-5	Pro-Green™ No Rinse (non-toxic) – 5 gallon pail
PRO-GREEN-AER	Pro-Green™ Foaming Concentrate (non-acid) – Aerosol
PRO-GREEN-1SHOT	Coil Cleaner, Pro-Green 1 Shot 4oz
PRO-GREEN-4X	Coil Cleaner, Pro-Green, 4x Concentrated 32oz



Coil Cleaners

MasterCare

Pro-Blue™

Pro-Blue™ is a heavy duty foaming alkaline-based solution designed for condensers that penetrates dirt, grime and oxide deposits while degreasing resulting in clean and brightened coils. Pro-Blue is biodegradable, NSF approved, and available in numerous packaging configurations.

- Heavy-duty foaming outdoor coil cleaner
- Brightens coils
- Penetrates dirt, grease & grime
- Great for small condensers
- Economical: 1 gallon makes 4 gallons of coil cleaner
- NSF approved
- More convenience to choose from with NEW packaging options:
4 times concentrate quart & handy 1 shot 4 oz. bottle.

Item ID	Description
PRO-BLUE	Pro-Blue™ Foaming Concentrate (non-acid) – 1 gallon container
PRO-BLUE-AER	Pro-Blue™ Foaming Concentrate (non-acid) – Aerosol
PRO-BLUE-1SHOT	Coil Cleaner, Pro-Blue 1 Shot 4oz
PRO-BLUE-4X	Coil Cleaner, Pro-Blue, 4x Concentrated 32oz



Pro-Red+™

Pro-Red+™ is a fast acting alkaline coil cleaning solution that foams and lifts away stubborn deposits including tarnish and corrosion. Its non-acid formula is as effective as conventional cleaners without the use of hydrofluoric acid. The vigorous foaming action eliminates the need for prolonged soaking (three to five minutes), steam cleaning, or scrubbing coils. It will not emit corrosive fumes or rust ferrous metals. Pro-Red+ brightens, removes condensate “gunk,” dirt, grime, and oxide deposits while degreasing. It is ideal for small and large condensers.

- Foaming alkaline detergent
- Lifts away grime
- Corrosion-inhibiting formula
- Great for condensers
- Economical: 1 gallon makes 4 gallons of coil cleaner
- NSF approved
- More convenience to choose from with NEW packaging options:
4 times concentrate quart & handy 1 shot 4 oz. bottle.

Item ID	Description
PRO-RED+	Pro-Red Plus™ Cleaner and Brightener (non-acid) – 1 gallon container
PRO-RED+AER	Pro-Red+ Aerosol
PRO-RED-1SHOT	Coil Cleaner, Pro-Red 1 Shot 4oz
PRO-RED-4X	Coil Cleaner, Pro-Red, 4x Concentrated 32oz



Coil Cleaners



Pro-Yellow™

Pro-Yellow™ is a powerful heavy foaming alkaline coil cleaner that removes debris and targets large concentrations of dirt and grime. Pro-Yellow brightens, removes condensate "gunk," dirt, grime, and oxide deposits while degreasing. Pro-Yellow is ideal for small and large condensers and requires a soak time of three to five minutes.

- Aggressive cleaning agents & detergents for stubborn jobs
- Foaming alkaline cleaner
- Ideal for small & large condensers
- Brightens coils
- Penetrates dirt, grime & oxide deposits
- Economical: 1 gallon makes 3 gallons of coil cleaner
- NSF approved



PRO-YELLOW Illustrated

Item ID	Description
PRO-YELLOW	Pro-Yellow™ (non-toxic) – 1 gallon container
PRO-YELLOW-AER	Pro-Yellow Aerosol

Pro-Brown™

Pro-Brown™ is a heavy duty foaming alkaline coil cleaner that pulls out deeply embedded dirt removing greasy soils and oxidation. Pro-Brown brightens, removes condensate "gunk," dirt, grime, and oxide deposits while degreasing. Pro-Brown is ideal for small and large condensers and requires a soak time for four to six minutes.

- Powerful cleaning agents & detergents for outdoor jobs
- Foaming alkaline cleaner
- Ideal for aluminum heating & cooling coils
- Brightens coils
- Penetrates dirt, grime & oxide deposits
- Economical: 1 gallon makes 4 gallons of coil cleaner
- NSF approved



PRO-BROWN Illustrated

Item ID	Description
PRO-BROWN	Pro-Brown™ Foaming Coil Cleaner – 1 gallon container
PRO-BROWN-5	Pro-Brown™ Foaming Coil Cleaner – 5 gallon pail
PRO-BROWN-AER	Pro-Brown Aerosol

Leak Detection



Bubble-N-Trouble™

Bubble-N-Trouble™ Leak Detector, 1 gal. is non-corrosive, non-toxic, and biodegradable. Does not attack metal or interfere with brazing or soldering. Spray-on application allows easy access for hard to reach places. Tacking agent holds solution on test surface making Bubble-N-Trouble™ very economical. Also available in 32 oz. trigger spray bottle.

Item ID	Description
BNT-1	Bubble-N-Trouble™ Freeze Protected Spray-On Leak Detector



Soldering & Heat Sheilding

Solder Paste Flux

Clean fit solder paste flux is used in all industries and is a non-aggressive formula used to sweat copper and brass fittings. Not for electronic use unless so stated. The all purpose formula stays stiff in hot weather and stays soft and sticky, even in cold weather.

MILL-ROSE

Item ID	Description
61-71030	2 oz. (carded)
61-71031	Solder paste flux kit: includes 2 oz. flux, abrasive cloth, acid brush.



61-71030 Illustrated



Solder Paste Flux

Cool Gel Spray

Heat dissipating spray helps prevent heat damage to components and surrounding materials during soldering, brazing, and welding. It protects painted and finished surfaces from discoloration due to adjacent torch operations. This product also reduces the danger of fire to surrounding surfaces such as studs, drywall, and insulation. The unique non-staining gelled formula sticks to surfaces without dripping or running off and leaves no residue. Safe, nontoxic, and odorless spray liberally on adjacent surfaces needing protection. The spray pattern is adjustable from stream to mist. One quart spray bottles sold in cases of 12.

Item ID	Description
15-11509	Cool Gel Spray 12/Case



Bloc-It Paste

Heavy paste effectively absorbs surface heat and protects adjoining surfaces that may be damaged by excessive heat. Typically used to protect rubber, plastic, prevent metal distortion, painted and finished surfaces during soldering, brazing or welding. Safe to use, Bloc-It is nontoxic, harmless to skin, odorless, and does not contain asbestos. Wipe off with cloth or wash with water, Bloc-It will not leave stains. 10 oz. tubes sold in cases of 24.

Item ID	Description
15-11509	Bloc-It Heat Absorbing Paste - 10oz 12/Case



Spray Nine Cleaners**Multi-Purpose / Degreaser / Disinfectant****Spray Nine - The First & Still The Best!**

Spray Nine cleans hard surfaces such as stainless steel, plastic, tile, rubber, vinyl, fiberglass, porcelain and formica with "spray on, wipe off" ease.

Digs Out Tough Soils Fast!

Enriched with a powerful germicidal, Spray Nine can be used to disinfect and deodorize hospitals, nursing homes, schools, and other institutions where housekeeping is of prime importance. Also controls mold and mildew while destroying bacterial odors.

30 second disinfecting time*!

When used as directed, Spray Nine will disinfect hard non-porous surfaces such as walls, floors, tables, chairs and countertops. Spray Nine kills many bacteria and destroys powerful odors. Used as a hospital grade disinfectant, Spray Nine has been registered by Health and Welfare Canada to kill HIV-1 virus (associated with AIDS), Salmonella, Staphylococci, and Pseudomonas on inanimate surfaces in just 30 seconds. Used regularly, Spray Nine greatly reduces the risk of cross infection.

* Most disinfectant products require a 10 minute contact time to kill germs.



Item ID	Description	Package
15-C26822	650 ml pump bottle	12/ctn
15-26832	946 ml spray bottle	12/ctn
15-26804	4 L jug	4/ctn

**Spray Nine Industrial****The In-process Cleaning & Degreasing Solution!**

No other product removes really tough industrial soils as quickly and effectively from manufacturing equipment, engines and machinery to countertops, floors and even washrooms as Spray Nine Industrial. The ready to use formula saves time, labour and money by effectively serving as a all in one cleaner.

Item ID	Description	Package
15-13532	946 ml spray bottle	12/ctn



Penetrating Oil & Lubricants



Break•Away Fast Penetrating Oil

Brake•Away is a pure oil-based product that penetrates faster and lubricates longer. It leaves a thicker, longer lasting film vs. light duty solvent-based water displacement formulas. Brake•Away is famous for completing the cycle of lubrication and reducing the coefficient of friction on hot or cold moving parts. Whether it be freeing frozen parts, lubricating moving components or protecting tools and equipment from rust or corrosion, Brake•Away's fast penetrating oil is your anywhere, anytime solution. Contains no ozone depleting CFC's. (pin point applicator straw included).



Item ID	Description	Package
15-C10	369g aerosol can style	12/ctn

Silicone Spray

Synthetic Polymer Lube - The Heavy Duty, Industrial Grade Lubricant!

Silicone Spray's industrial grade formula is an extra heavy-duty concentrate of high quality silicone for maximum performance. Silicone Spray lubricates mechanical parts, conditions rubber, waterproofs and protects against rust or corrosion. Silicone is a stain-free synthetic polymer lubricant that virtually dries to the touch. It reduces friction and lubricates without petroleum oil or grease. Contains no ozone depleting CFC's. (pin point applicator straw included).



Item ID	Description	Package
15-C33	450 ml aerosol can style	12/ctn

Ball Valves

Fireplace Forged Gas Ball Valves

- Brass ball valves
- Red wing handle
- 600 WOG



Brass Indoor	Plated Outdoor	Description
06-FGV38	06-FGV38P	3/8" FNPT × 3/8" FNPT, 5/Case
06-FGV12	06-FGV12P	1/2" FNPT × 1/2" FNPT, 5/Case
-	06-FGV34P	3/4" FNPT × 3/4" FNPT, 5/Case
-	06-FGV1P	1" FNPT × 1" FNPT, 2/Case
-	06-FGV114P	1¼" FNPT × 1¼" FNPT, 2/Case
06-FGV112	06-FGV112P	1½" FNPT × 1½" FNPT, 2/Case



Appliance Forged Gas Ball Valves

- Brass ball valves
- Red wing handle
- 600 WOG



Item ID	Description
06-GWH12	1/2" FNPT × 1/2" FNPT, 3/8" port, 10/Case
06-GWH34	3/4" FNPT × 3/4" FNPT, 1/2" port, 10/Case

Fireplace Forged Gas Ball Valves

- Brass ball valves
- Red wing handle
- 600 WOG



Item ID	Description
06-FP1238	1/2" FNPT × 3/8" Male flare, 10/Case
06-FP1212	1/2" FNPT × 1/2" Male flare, 10/Case

Appliance Forged Gas Ball Valves

- Brass ball valves
- Yellow flat head
- 600 WOG



Item ID	Description
06-FHGV34	3/4" FNPT × 3/4" FNPT, 1/2" port, 12/Case

Water Valves

Brass Wided Ball Valves

- Full Port
- Female sweat connection
- 600 WOG
- Green lever handle



Brass Indoor	Description
06-SWV12	1/2" Sweat × 1/2" Sweat, 5/Case

Gas Connectors



DiversiTech Gas Connector 1/2"

Combining flexibility, durability, and functionality, DiversiTech stainless steel gas connectors are CSA design certified and 100% leak tested for quality and security. DiversiTech gas connectors are durable and reliable to give you everything you need. Available in a variety of sizes and lengths.

Item ID	Description
D20-3132-18	18" long, 1/2" OD x 3/8" ID, M x F, 12/Case
D20-3132-24	24" long, 1/2" OD x 3/8" ID, M x F, 12/Case
D20-3132-36	36" long, 1/2" OD x 3/8" ID, M x F, 12/Case
D20-3132-48	48" long, 1/2" OD x 3/8" ID, M x F, 12/Case



D20-3132-24
Illustrated

DiversiTech Gas Connector 5/8"

Combining flexibility, durability, and functionality, DiversiTech stainless steel gas connectors are CSA design certified and 100% leak tested for quality and security. DiversiTech gas connectors are durable and reliable to give you everything you need. Available in a variety of sizes and lengths.

Item ID	Description
D30-3131-24	24" long, 5/8" OD x 1/2" ID, M x M, 12/Case
D30-3131-36	36" long, 5/8" OD x 1/2" ID, M x M, 12/Case
D30-3131-48	48" long, 5/8" OD x 1/2" ID, M x M, 12/Case
D30-3132-18	18" long, 5/8" OD x 1/2" ID, M x F, 12/Case
D30-3132-24	24" long, 5/8" OD x 1/2" ID, M x F, 12/Case
D30-3132-36	36" long, 5/8" OD x 1/2" ID, M x F, 12/Case
D30-3132-48	48" long, 5/8" OD x 1/2" ID, M x F, 12/Case



D30-3131-36
Illustrated

Epoxy Coated Gas Connectors

Yellow coated gas connectors include an epoxy coating for added durability and extra protection from corrosion, chemical stains from common household products, and plumbing repairs.

Item ID	Description
DC20-3131-18	Gas Connector coated – 18" long, 1/2" OD x 3/8" ID. M x F, 12/Case
DC20-3131-24	Gas Connector coated – 24" long, 1/2" OD x 3/8" ID. M x F, 12/Case
DC20-3131-36	Gas Connector coated – 36" long, 1/2" OD x 3/8" ID. M x F, 12/Case
DC20-3131-48	Gas Connector coated – 48" long, 1/2" OD x 3/8" ID. M x F, 12/Case
DC20-3132-18	Gas Connector coated – 18" long, 1/2" OD x 3/8" ID. M x F, 12/Case
DC20-3132-24	Gas Connector coated – 24" long, 1/2" OD x 3/8" ID. M x F, 12/Case
DC20-3132-36	Gas Connector coated – 36" long, 1/2" OD x 3/8" ID. M x F, 12/Case
DC20-3132-48	Gas Connector coated – 48" long, 1/2" OD x 3/8" ID. M x F, 12/Case
DC30-3131-18	Gas Connector coated – 18" long, 5/8" OD x 1/2" ID. M x M, 12/Case
DC30-3131-24	Gas Connector coated – 24" long, 5/8" OD x 1/2" ID. M x M, 12/Case
DC30-3131-36	Gas Connector coated – 36" long, 5/8" OD x 1/2" ID. M x M, 12/Case
DC30-3131-48	Gas Connector coated – 48" long, 5/8" OD x 1/2" ID. M x M, 12/Case
DC30-3132-18	Gas Connector coated – 18" long, 5/8" OD x 1/2" ID. M x F, 12/Case
DC30-3132-24	Gas Connector coated – 24" long, 5/8" OD x 1/2" ID. M x F, 12/Case
DC30-3132-36	Gas Connector coated – 36" long, 5/8" OD x 1/2" ID. M x F, 12/Case
DC30-3132-48	Gas Connector coated – 48" long, 5/8" OD x 1/2" ID. M x F, 12/Case



DC30-3132-18
Illustrated

Flue Caps



Flue Caps

PVC Flue Caps are an affordable way to protect today's high efficiency furnaces from dirt, moisture and other debris. It protects high efficiency furnaces and reduces draft inducer motor rust. The Universal flue cap fits 1.5", 2" and 3" PVC Pipe. It helps to eliminate pressure switch service calls, is resistant to UV radiation and oxidative degradation and is CSA approved for use in 90% AFUE heating applications.

Item ID	Description
EC-1	E Capp Flue Cap, 12/Case



High Heat Spray Paint



High Heat Spray Paint

Ultra high temperature coating formulated to resist temperatures up to 1300 degrees F. It's great for use on boilers, furnaces, steam pipes, chimney collars, compressors and engine manifolds. Meets most recent VOC legislation and is currently compliant.

Item ID	Description
799-040	High Heat Spray Paint – Aluminum, 6/Case
799-041	High Heat Spray Paint – Black, 6/Case



Slugs & Cords



Wraptite Slugs & Cords

Sealing slugs & cord are soft, permanently pliable, water-resistant sealants having a wide variety of applications. The product has the unique quality of retaining the same consistency throughout its application range of -7°C to 60°C (20°F to 140°F). Non- asbestos and non-hardening, remains flexible to -7°C (20°F).

Sealing slugs & cords are used widely in the air conditioning and refrigeration industries to seal around outer cases, behind hinges and under breaker strips. They can be used to seal out air or moisture around utility panels, cables, ducts, window frames and metal joints. This product adheres to metal, wood, glass, plastic and most clean surfaces to provide an effective barrier against water, moisture, dirt and dust. It is non-staining, non-bleeding, odorless and can be painted.

Item ID	Description
84-PC-30	3/8" x 25' Cord
84-PS-30	2 lb. Slug
84-PS30-B	50 lb. Bulk Slug



Tapes



Wraptite Rubberized Cork Insulation Tape

Formulated to provide insulation and to prevent condensation on hot or cool pipes, fittings and tubing used in heating, air conditioning, refrigeration and plumbing applications. Cork Insulation Tape adheres well to most clean, dry surfaces and to itself, making it possible to apply more than one layer without adding fasteners or adhesives.

It is sufficiently soft and pliable enabling it to be molded around most fittings or connections. The material retains its flexibility and adhesion after prolonged exposure to UV and over a service temperature range of -29°C to 88°C (-20°F to 190°F). Cork Insulation Tape is black in colour and has a grainy, rubber-like consistency which is non-toxic and non-asbestos.



Item ID	Description
84-PT-30	1/8" x 2" x 30' Roll

Wraptite Foam Insulation Tape

Foam Insulation Tape is designed to seal, insulate and isolate vibration in air conditioning and refrigeration applications. The soft, flexible, closed cell sponge tape with paper covered self-adhesive backing seals out air and moisture while reducing heat loss or transfer. Cold water pipes, valves, chilled water and refrigeration lines can be wrapped to prevent sweating or condensation while hot water pipes and pipe heaters can be wrapped to insulate against heat loss.

Easily applied by hand, Wraptite Foam Insulation Tape adheres well to most clean, dry surfaces and to itself, making it possible to apply more than one layer. The formulated operating temperature of Wraptite Foam Insulation Tapes is between -34°C to 82°C (-30°F to 180°F) with the ability to intermittently tolerate temperature of 98°C (210°F).



Item ID	Description
84-FT-30	1/8" x 2" x 30' Roll

Stick-E-Tape

Self-adhesive aluminum tape with temperature range of -40degree F to 200 degree F. Easily painted. Excellent vapor barrier; effective UV and water shield over urethane foam. Preferred duct and pipe wrap.



Item ID	Description
50302	AFT-701-2 – 2" x 50' Roll, 24/Case

Aluminum Foil Tape

Prevents heating and cooling losses. Blocks odors and moisture. Easy to handle. Use for HVAC and refrigeration systems. 35 degree F to plus 260 degree F working temperatures. 3-5 year shelf life. Made in USA.



Item ID	Description
640-AF2	2" Aluminum Foil Tape – 50 yds. 24/Case
640-AF25	2-1/2" Aluminum Foil Tape – 50 yds. 20/Case

Tapes



Foil Scrim Kraft Tape

Non tearable, diamond patterned backing with an aggressive rubber based adhesive system for consistently dependable performance. Made in the USA.



Item ID	Description
640-FSK2	Foil Scrim Kraft Tape – 2" – 50 Yards. 24/Case
640-FSK3	Foil Scrim Kraft Tape – 3" – 50 Yards. 16/Case

Cloth Duct Tapes

High tack, excellent strength. Superior performance in sealing air handling systems. Heavy cloth content for easier tearing and additional strength. Made in the USA.



Item ID	Description
PC-622-S	2" x 60 Yards – Premium Grade – Silver, 24/Case
PC-622-B	2" x 60 Yards – Premium Grade – Black, 24/Case
PC-609-S	2" x 60 Yards – Industrial Grade – Silver, 24/Case
PC-609-B	2" x 60 Yards – Industrial Grade – Black, 24/Case
PC-600-S	2" x 60 Yards – Contractor Grade – Silver, 24/Case
PC-600-B	2" x 60 Yards – Contractor Grade – Silver, 24/Case
PC-857	2" x 60 Yards – Metallized UL181B-FX Flex Duct Tape, 24/Case

Flex Duct Tape

Specially designed to meet new UL181B FX code for flex duct. Higher adhesion and tack than traditional cloth duct tapes. Conformable, hand tearable foil; 3 mil thickness. 2 in. x 120 yds. Code identification printed on the tape. Acrylic adhesive for superior performance in extreme environments. (35°F to 260°F)



Item ID	Description
640-FD2S	Flex Duct Tape - Silver - 2", 24/Case
640-FD2B	Flex Duct Tape - Black - 2", 24/Case
640-FD3S	Flex Duct Tape - Silver - 3", 16/Case

UL Listed Foil Tape

Unique acrylic adhesive for airtight bonds on joints and seams of fiberglass duct systems. Flexible, easy to use. Meets or exceeds performance standard AFLS 100 73 and UL 181 A P.



Item ID	Description
640-UL25	UL 181 Listed Foil Tape – 2-1/2" – 60 Yards, 16/Case
640-UL3	UL 181 Listed Foil Tape – 3" – 60 Yards, 16/Case

Duct Straps



Duct Strap – Woven Polypropylene

Webbed duct strap possessing high tensile and abrasion resistance. This can be used for flex duct as it is easy to cut and staple to joists. The product is chemical resistant and tested to meet UL Standard 2043.



Item ID	Description
710-100	1-3/4" x 100 Yards – Black, 24/Case
710-101	1-3/4" x 100 Yards – Silver, 24/Case
710-102	3" x 100 Yards – Black, 8/Case
710-103	3" x 100 Yards – Silver, 8/Case

Duct Strap – Metallic – Roll

Galvanized duct strap in a convenient cardboard dispenser is not only easy to drill or nail, but also solid strapping. Plenum rated.



Item ID	Description
710-001	26 Gauge – 1" x 100'
710-002	30 Gauge – 1" x 100'
710-003	30 Gauge – 1-1/2" x 100'
710-004	26 Gauge – 1-1/2" x 100'
710-005	22 Gauge – 1" x 100'

Silicone

- NSF Approved • 100% Silicone • 100% RTV

NuFlex® 302 General Purpose

302 (GP) General Purpose is available in multiple colours. The ideal multiple purpose silicone sealant for all weather applications.



Item ID	Description
83-30280	Clear 302 GP Squeeze Tube 83ml/2.8oz, 24/Case
83-30283	Black 302 GP Squeeze Tube 83ml/2.8oz, 24/Case
83-30201	White 302 GP Cartridge 300ml/10.15oz, 12/Case
83-30200	Clear 302 GP Cartridge 300ml/10.15oz, 12/Case
83-30202	Aluminium 302 GP Cartridge 300ml/10.15oz, 12/Case
83-30203	Black 302 GP Cartridge 300ml/10.15oz, 12/Case

NuFlex® 302 High Temperature

302 (HT) High Temperature withstands temperatures of 260°C(500°F) constant and 316°C(600°F) intermittent. An ideal silicone for extreme temperature applications.

Item ID	Description
83-30289	Red 302 HT Squeeze Tube 83ml/2.8oz, 24/Case
83-30293	Black 302 HT Squeeze Tube 83ml/2.8oz, 24/Case
83-30209	Red 302 HT Cartridge 300ml/10.15oz, 12/Case
83-30213	Black 302 HT Cartridge 300ml/10.15oz, 12/Case

Caulking Guns

113 Series

Economy grade
310ml/10.15oz
Clean out tool on barrel.



15-CG000113

138 Series

Professional grade
310ml/10.15oz
Clean out tool on barrel.



15-CG000138

Aluminum Pulleys

Blower Pulleys

Item ID	Bore	Diameter
67-650*		5"
67-660		6"
67-670		7"
67-680	3/4"	8"
67-690		9"
67-610		10"
67-612		12"
67-870		7"
67-880	1"	8"
67-890		9"
67-810		10"



67-660
Illustrated

Variable Speed Pulleys

Item ID	Bore	Diameter
67-4325		3 1/4"
67-4350	1/2"	3 1/2"
67-4375		3 3/4"
67-4400		4"
67-5325		3 1/4"
67-5350	5/8"	3 1/2"
67-5400		4"



67-4325
Illustrated

Cast aluminum pulley mfg'd to OEM specs

Note: * 5" Pulley is solid.

Bearings

Ball Bearings

Bearings complete with collar.

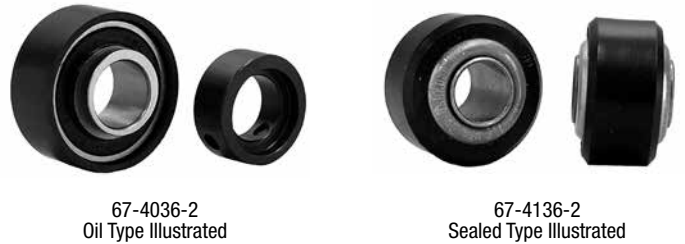
Item ID	Bore	OD	Cross Reference
67-4336-1	3/4"	1 13/16"	LRCR
67-4336-2			(2) Bearings & (2) Collars
67-4346-1	1"	2 1/4"	RCR



Sleeve Bearing Packs

Kits include 2 bearings & 2 rubber sleeves.

Item ID	Bore	OD	Type	Cross Reference
67-4036-2	3/4"	1 25/32"	Oil	Delhi
67-4135-2	5/8"	1 7/8"		Lau
67-4136-2	3/4"	1 13/16"	Sealed	Delhi
67-4137-2		Lau & Lennox		
67-4138-2		Torin		
67-4147-2	1"	2 1/2"		Lau & Lennox
67-4148-2			Torin	



Bearings & Sleeves

Item ID	Bore	Type
67-4136-B	3/4"	Sealed Bearing
67-4136-R		Rubber Sleeve



Thrust Collar Packs

Item ID	Description
67-2164	2) 5/8" collars & washers
67-2165	2) 3/4" collars & washers



Cushioned Pillow Blocks

Item ID	Description	Industry No	Bearing Shaft Size
535-BB1	Bronze Bearing Pillow Block	NAH8A	1/2"



Shafts

Shafts

- Sized to bearing manufacturers specifications
- Slabbed on pulley end
- Rust protected
- Individually wrapped
- Protective end caps
- Part number and size listed on every shaft



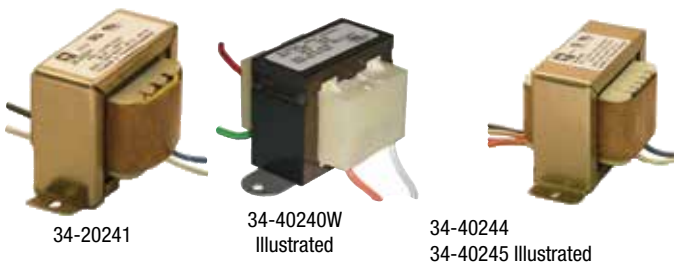
Item ID	Diameter	Length	Cross Reference
67-61400		14"	8-5-245C, 2100159
67-61600		16"	8-6-23608, WW15X36, 2100162, 2100163, 2100198
67-61610	3/4"	16 5/8"	8-5-240C, G10, G110, 2100011, 2100161
67-61920		19 1/8"	G12, 2100168
67-62000		20"	M90-256, RS620
67-62400		24"	8-5-243C
67-63600		36"	

Control Transformers

Control transformers are designed for use in 2.5, 12 or 24 volt alternating current (AC) control systems, including air conditioning circuits, thermostats, gas valves, relays and or other applications that do not exceed the listed ratings. These transformers can be used to replace any transformers of the same primary voltage and equal or smaller VA ratings.

- Compact superior design • Individually boxed with instructions • Includes necessary mounting hardware • Complete cross-reference

SPECIALLY DESIGNED FOR LOW VOLTAGE CONTROL APPLICATIONS IN THE INDUSTRIAL HEATING & COOLING INDUSTRY!

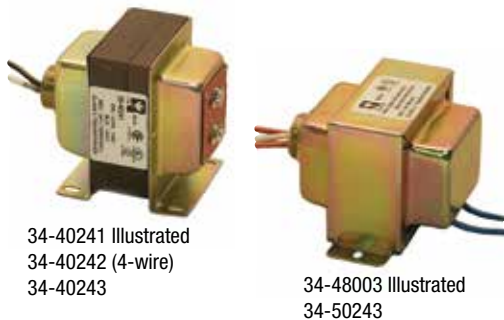


Foot Mount

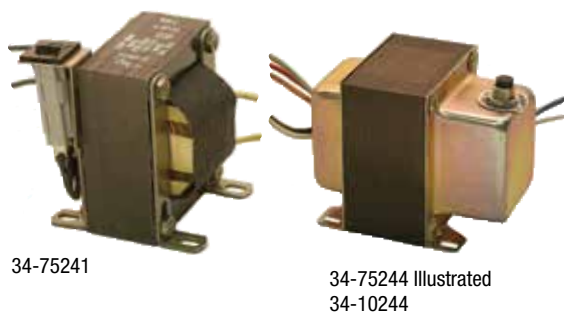
Item ID	VA	Primary Voltage	Secondary Voltage	Secondary Connections
34-20241	20	120	24	Wire
34-40240W	40	240	24	Wire
34-50254	50	575	24	QC

Multi Mount (Foot, Plate, Conduit)

- 34-52C6 mounting plate, (2) screws & (2) wire connectors included.



Item ID	VA	Primary Voltage	Secondary Voltage	Secondary Connections
34-40242	40	208/ 240 / 277	24	Screw
34-50243	50	120/ 208/ 240	24	Wire



Foot Mount

Heavy Duty (c/w Circuit Breaker)

Item ID	VA	Primary Voltage	Secondary Voltage	Secondary Connections
34-75241	75	120	24	Wire
34-10244	96	120/ 240/ 277/ 480	24	Wire



Transformers



Class II Foot Mount Transformers

- Packard transformers replace models with equal or lower VA rating
- Foot mount
- Class II transformers



Item ID	Primary Voltage	VA Rating	Secondary Rating	Mounting Option	Connection	Cross Reference
PF12416	120	10	16	Foot	Wire Lead / Term	UET 10A
PF24200	120	20	24	Foot	Wire Lead / Term	Williams Furnace 24200
34-40245	120/208/240	20	24	Foot	Wire Lead	"Jard 2031F , UET 114"
34-40244	120	40	24	Foot	Wire Lead	Jard 4011F
PF40115	120	40	24	Bracket	1/4" QC Term.	Goodman 013M00140S
PF113	120	40	24	Foot	Wire Lead/Term	90-113 Fan Center Transformer
PF12406	120	40	24	Foot	Wire Lead	46-24124-06
PF40224	208/240	40	24	Foot	Terminals	Goodman 013M00138S
PF22440	208/240	40	24	Foot	Wire Lead	Jard 4021F
PF137	208/240	40	24	Foot	Wire Lead	First Company E137
PF90501	208/240	40	24	Foot	1/4" QC Term.	46-101905-01
PF105	120/208/240	40	24	Foot	Wire Lead	UET 105
PF4031VM	120/208/240	40	24	Foot	Wire Lead	Jard 4031VM, Rheem 46-24124-06
PF42440	120/208/240	40	24	Foot	Wire Lead	Jard 4031F, UET 115
PF40310EM	120/208/240	40	24	Foot	Terminals	Jard 40310EM, Rheem 46-101905-01
PF32440	120/208/240	40	24/12/2.5	Foot	Wire Lead	Jard 4032F, UET 101

Transformers



Class II Foot Mount Transformers

- Packard transformers replace models with equal or lower VA rating
- Foot mount
- Class II transformers



Item ID	Primary Voltage	VA Rating	Secondary Rating	Mounting Option	Connection	Cross Reference
PF32440 ¹	120/208/240	40	24/12/2.5	Foot	Wire Lead	Jard 4032F, UET 101
PF27440	277	40	24	Foot	Wire Lead	Jard 40271F
PF12450 ²	120	50	24	Foot	Wire Lead	Rheem 46-102856-02
PF85602	120	50	24	Foot	Wire Lead	46-102856-02
PF40350	120/208/240	50	24	Foot	Wire Lead	Jard 5031F
PF42450 ³	120/208/240/480	50	24	Foot	Wire Lead	Jard 5041C
PF52460 ³	120/208/240	60	24	Foot	Wire Lead	Jard 6041C, UET 160
PF52475F ¹	120/208/240/480	75	24	Foot	Wire Lead	Jard 7541M, UET 175
34-75244 ³	120/208/240/480	75	24	Foot	Wire Lead	Jard 7541C, UET 179R
34-75254 ³	120/208/240/575	75	24	Foot	Wire Lead	Mars 50375
PF524100 ³	120/208/240/480	100	24	Foot	Wire Lead	Jard 10041C

Notes: ¹ Built-in fuse included. ² Includes an Internal 2.5 Amp, 250V, Slow Blow Fuse. ³ Equipped with a circuit breaker.

Transformers



Class II Multi-Mount Transformers

- Packard transformers replace models with equal or lower VA rating
- Multi-mount transformers
- 4 1/4" x 4 1/4" mounting plate included
- 1/2" conduit hub for electrical knockout mounting
- Class II transformers



Item ID	Primary Voltage	VA Rating	Secondary Rating	Mounting Option	Connection	Cross Reference
PM12040	120	40	24	Plate	Wire Lead/Term.	Universal Replacement
34-40241	120	40	24	Multi	Screw	Jard 4011M, UET 112
PM32440 ⁻¹	120/240	40	24	Multi	Wire Lead	Jard 4021M, UET 113
34-40243	120/208/240	40	24	Multi	Screw	Jard 4031M
PM43440 ⁻¹	120/208/240	40	24/12/2.5	Multi	Wire Lead	UET 111
34-48003	120/208/240	48	24/12/2.5	Multi	Wire Lead	Universal Replacement
PM44450 ⁻¹	120/208/240	50	24	Multi	Wire Lead/Term.	Jard 5031M, UET 150
PM43450	120/208/240	50	24/12/2.5	Multi	Wire Lead	Jard 5032M
PM7541MCB ⁻³	120/208/240/480	75	24	Multi	Wire Lead	Jard 7541MCB
PM10048P	208/240/480	100	24/120	Multi	Wire Lead	Jard 10048P

Notes: ⁻¹ Built-in fuse included. ⁻³ Equipped with a circuit breaker.

Definite Purpose Magnetic Contactors - Economy



1 Pole with Shunt & 2 Pole Models

- 1.5 pole (1 pole with shunt) 30 & 40 amp to 2 pole 20, 25, 30 & 40 amp.
- Features lug, spade terminals and protective covers
- Compact size
- Universal galvanized mounting plates
- ARI 780/790 standards
- Brass/copper terminals
- Quick connect and screw terminals on coil
- Snap on auxiliary contacts available
- cURus approved



Item ID	Poles	FLA	Coil Voltage 50/60	Locked Rotor Amps			Resistive Amps.	Termination	Furnas #
				240V	480V	600V			
DP-1P30A24	1.5	30	24	180	150	120	40	Box Lug	45EG10AJA
DP-1P30A120	1.5	30	120	180	150	120	40	Screw Type	45EG10AFA
DP-1P30A240	1.5	30	208/240	180	150	120	40		45EG10AGA
DP-1P40A24	1.5	40	24	240	200	160	50	Box Lug	45GG10AJAL, 45FG10AJA, 45GG10AJA
DP-1P40A120	1.5	40	120	240	200	160	50		45GG10AFAL, 45FG10AFA, 45GG10AFA
DP-1P40A240	1.5	40	208/240	240	200	160	50		45GG10AGAL, 45FG10AGA, 45GG10AGA
DP-2P20A24	2	20	24	120	100	80	30	Box Lug	45CG20AJ
DP-2P20A120	2	20	120	120	100	80	30		45CG20AF
DP-2P25A24	2	25	24	150	125	100	35	Box Lug	45DG20AJ
DP-2P25A120	2	25	120	150	125	100	35		45DG20AF
DP-2P25A240	2	25	208/240	150	125	100	35		45DG20AG
DP-2P30A24	2	30	24	180	150	120	40	Box Lug	45EG20AJ
DP-2P30A120	2	30	120	180	150	120	40		45EG20AF
DP-2P30A240	2	30	208/240	180	150	120	40		45EG20AG
DP-2P40A24	2	40	24	240	200	160	50	Box Lug	45GG20AJL
DP-2P40A120	2	40	120	240	200	160	50		45GG20AFL
DP-2P40A240	2	40	208/240	240	200	160	50		45GG20AGL

Definite Purpose Magnetic Contactors - Economy



3 Pole Models

- 3 pole 20, 25, 30, 40, 50 & 60 amp
- Totally enclosed
- Features lug, spade terminals and protective covers
- Compact size
- Universal galvanized mounting plates
- ARI 780/790 standards
- Brass/copper terminals
- Quick connect and screw terminals on coil
- Snap on auxiliary contacts available
- cURus approved



Item ID	Poles	FLA	Coil Voltage 50/60	Locked Rotor Amps			Resistive Amps.	Termination	Furnas #
				240V	480V	600V			
DP-3P20A24	3	20	24	120	100	80	30		-
DP-3P20A120	3	20	120	120	100	80	30	Box Lug	-
DP-3P20A240	3	20	208/240	120	100	80	30		-
DP-3P25A120	3	25	120	150	125	100	35	Box Lug	-
DP-3P30A24	3	30	24	180	150	120	40		42BF35AJ
DP-3P30A120	3	30	120	180	150	120	40	Box Lug	42BF35AF
DP-3P30A240	3	30	208/240	180	150	120	40		42BF35AG
DP-3P40A24	3	40	24	240	200	160	50		42CF35AJ
DP-3P40A120	3	40	120	240	200	160	50	Box Lug	42CF35AF
DP-3P40A240	3	40	208/240	240	200	160	50		42CF35AG
DP-3P50A24	3	50	24	300	250	200	65		42DF35AJ
DP-3P50A120	3	50	120	300	250	200	65	Box Lug	42DF35AF
DP-3P50A240	3	50	208/240	300	250	200	65		42DF35AG
DP-3P60A24	3	60	24	360	300	240	75		42EF35AJ
DP-3P60A120	3	60	120	360	300	240	75	Box Lug	42EF35AF
DP-3P60A240	3	60	208/240	360	300	240	75		42EF35AG
DP-3P75A24	3	75	24	450	375	300	90		42FE35AJ106
DP-3P75A120	3	75	120	450	375	300	90	Box Lug	42FE35AF106
DP-3P75A240	3	75	208/240	450	375	300	90		42FE35AG106
DP-3P90A120	3	90	120	540	450	360	120		42GE35AF106
DP-3P90A240	3	90	208/240	540	450	360	120	Box Lug	42GE35AG106

Definite Purpose Magnetic Contactors - Economy



4 Pole Models

- 4 pole 20, 25, 30 & 40 amp
- Totally enclosed
- Features lug, spade terminals and protective covers
- Compact size
- Universal galvanized mounting plates
- ARI 780/790 standards
- Push to test button
- Brass/copper terminals
- Quick connect and screw terminals on coil
- Snap on auxiliary contacts available
- cURus approved



Item ID	Poles	FLA	Coil Voltage 50/60	Locked Rotor Amps			Resistive Amps.	Termination	Furnas #
				240V	480V	600V			
DP-4P20A24	4	20	24	120	100	80	30	Box Lug	-
DP-4P20A120	4	20	120	120	100	80	30		-
DP-4P25A120	4	25	120	150	125	100	35	Box Lug	-
DP-4P30A24	4	30	24	180	150	120	40	Screw Type	42BF25AJ
DP-4P30A120	4	30	120	180	150	120	40	Box Lug	42BF25AF
DP-4P30A240	4	30	208/240	180	150	120	40		42BF25AG
DP-4P40A24	4	40	24	240	200	160	50	Box Lug	42CF25AJ
DP-4P40A120	4	40	120	240	200	160	50		42CF25AF
DP-4P40A240	4	40	208/240	240	200	160	50		42CF25AG

Auxiliary Switches



- Auxilliary switches for 3 & 4 pole 30 - 90 amp "DP" series contactors
- Compact size
- cURus approved



DP-AS1



DP-AS2



DP-AS3



DP-AS4



DP-AS5



DP-AS6



DP-AS7



DP-AS9



DP-AS10

Switch Size	Item ID	Cont. Amps	Voltage Rating	Description	Connection
3 Pole, 20-60 Amp 4 Pole 30-60 Amp	DP-AS3	10	600	2 x SPST, N.O. & N.C.	Quick
	DP-AS6	10	600	2 x SPST, N.O. & N.C.	Screw
	DP-AS7	10	300	SPDT, N.O. & N.C.	Quick
	DP-AS1	10	600	SPST, N.O.	Quick
	DP-AS4	10	600	SPST, N.O.	Screw
	DP-AS2	10	600	SPST, N.C.	Quick
	DP-AS5	10	600	SPST, N.C.	Screw
3 Pole, 50-60 Amp	DP-AS10	10	300	SPDT, N.O. & N.C.	Quick
3 Pole, 75-90 Amp	DP-AS9	10	300	SPDT, N.O. & N.C.	Quick

General Purpose Fan Relays



25-90290
Illustrated

Contact Rating

- 125/250 VAC

FLA	LRA	Inductive Amps	Resistive Amps
8	18	8 Amp Continuous	16 Amp Continuous

Specifications

- Temperature Range: -20°C (-4°F) to 40°C (104°F).
- Mechanical Life: 1,000,000 operations.
- Electrical Life: 100,000 operations (@ 16amp 240VAC Res.)
- Operate Time (typical): 25 ms at nominal coil voltage.
- Release Time (typical): 25 ms at nominal coil voltage.
- Dielectric Strength (at sea level for 1 min.):
 - 2500 Vrms coil to contact.
 - 1000 Vrms between open contacts.
- Coil Frequency: 50/60 Hz.
- Coil Insulation: Class A (105°C / 221°F).
- Coil Duty Cycle: Continuous.
- Terminals: ¼" quick-connects.
- Contact Material: Silver cerium
- Enclosure: Phenolic.

Features

- Designed for switching single or two speed fan motor, relays, solenoids, resistive loads in cooling, heating or general purpose switching applications.
- Replace WR/ Essex/ RBM & Mars type 84 models
 - Totally enclosed compact design.
 - Quiet & reliable operations.
 - UL & cUR (file E44211)
 - Universal mounting bracket.

2-Pole HVAC Standard Duty Relays

Coil Voltage	Item ID SPST	Item ID SPDT	Coil Resistance DC OHMS ±10%	Nominal Current MA	Nominal VA Sealed	Inrush VA
24	25-90290	25-90293	90	146		
120	25-90291	25-90294	2,000	29	3.5	4
240	25-90292	25-90295	7,200	15		

Totally Enclosed Fan Relays - Heavy Duty



25-90380
Illustrated

Specifications

- Temperature Range: -20°C (-4°F) to 40°C (104°F).
- Mechanical Life: 1,000,000 operations.
- Electrical Life: 100,000 operations (@ 25amp 277VAC Res.)
- Operate Time (typical): 25 ms at nominal coil voltage.
- Release Time (typical): 25 ms at nominal coil voltage.
- Dielectric Strength (at sea level for 1 min.):
 - 2500 Vrms coil to contact.
 - 1000 Vrms between open contacts.
- Coil Frequency: 50/60 Hz.
- Coil Insulation: Class A (105°C / 221°F).
- Coil Duty Cycle: Continuous.
- Terminals: ¼" quick-connects.
- Contact Material: Silver cadmium oxide.
- Enclosure: Phenolic.

Features

- Designed for cooling, heating or general purpose switching equipment operating heavier loads.
- Replace WR/ Essex/ RBM & Mars type 184 models
 - Totally enclosed compact design.
 - Quiet & reliable operations.
 - Universal mounting bracket
 - UL & cUR (file E44211)
 - SPST, SPDT & SPNO/SPNC models.

Heavy Duty Relays

Coil Voltage	SPST Item ID	SPDT Item ID	SPNO-SPNC* Item ID	Coil Resistance DC OHMS ±10%	Nominal Current MA	Nominal VA Sealed	Inrush VA
24	25-90360	25-90370	25-90380	77	167		
120	25-90362	25-90372	25-90382	2,000	33	4	4
240	-	25-90374	25-90384	7,200	17		

*Isolated Contacts

Contact Rating

VAC	Amps	FLA	LRA	Inductive Amps	Resistive Amps
125VAC		14	84	14 Amp Continuous	25 Amp
250VAC	25	8	48	8 Amp Continuous	Continuous
277VAC		7	42	7 Amp Continuous	@ 277 VAC

Totally Enclosed Relay - 2 Pole HVAC Switching Relays



25-90340
Illustrated

Specifications

- Temperature Range: -40°C (-40°F) to 54°C (130°F).
- Mechanical Life: 750,000 operations.
- Electrical Life: 100,000 operations.
- Coil Frequency: 50/60 Hz.
- Coil Insulation: Class B.
- Coil Duty Cycle: Continuous.
- Terminals: ¼" quick-connects.
- Contact Material: Silver cadmium oxide.
- Enclosure: Phenolic.
- Dimensions 2.13" x 1.88" x 2.25".

Features

- Intended for many applications in air conditioning, refrigeration, heating and general purpose switching.
- Cross Reference Honeywell, White-Rodgers/RBM & Mars (cross reference in packaging)
 - Semi-enclosed compact design.
 - Quiet & reliable operations.
 - Universal mounting bracket
 - Molded terminal numbers and circuit diagram on top of relay.
 - UL & cUR (file E44211).
 - 2 Pole DT mode

Heavy Duty Relays

Coil Voltage	DPDT Item ID	Terminals 1,2,3.	Terminals 4,5,6.	Resistance DC OHMS ±10%	Nominal Current MA	Nominal VA Sealed Max.	Inrush VA Max.	Cross Reference		
								WR/ RBM	Honeywell	Mars
24	25-90340			15	334			90-340	R4222B1082	90340
120	25-90341	Power	Power	400	66	8	21.5	90-341	R4222B1090	90341
240	25-90342			1415	38			90-342	R4222D1013	90342

Contact Rating

VAC	Amps General Use	HP	LRA	FLA
125V	15	3/4	82.8	13.8
208V			45.6	7.6
250V			41.4	6.9
277V			-	36.0

Heat Sequencers



Features

- Solid State PTC Heaters
- Quick-Connect Terminals
- Shock & Vibration Resistant
- Mounts in any position
- Contact Ratings - to 25 Amps at 120 or 240 Volts, and 12.5A at 480 Volts
- Full-Load Rated Auxilliary Contacts
- Standard Operating Ambience Between -50°F (-45.5°C) and 165°F (73.8°C)

Applications

- Electric Furnaces
- Baseboard Heaters
- Duct Heaters
- Suspension Heaters
- Recreational vehicle blower and element control
- Heat pump blower and heating element control
- Motor speed switching in air conditioning (high speed) / heating systems handle combination motor and heater element loading in the heater function
- Control circuits requiring definite sequence on both start up and shut down

Part #	Timings	Switches	Timings (seconds) - On					Timings (seconds) - Off				
			M1-M2	M3-M4	M5-M6	M7-M8	M9-M10	M1-M2	M3-M4	M5-M6	M7-M8	M9-M10
HS-24A34-21	1	1	1-20					1-60				
HS-24A34-22	1	1	15-45					1-30				
HS-24A34-23	1	1	25-60					15-45				
HS-24A34-24	1	1	30-90					1-40				
HS-24A34-25	1	1	30-90					1-30				
HS-24A34-26	2	2	1-20	30-90				40-90	1-30			
HS-24A34-27	3	1	1-160					1-160				
HS-24A34-29	1	1	15-35					25-55				
HS-24A34-36	2	2	1-20	30-90				45-110	1-30			
HS-24A34-37	3	1	1-110					1-110				

Notes

- M1-M2 and M3-M4 are always the first switches to turn on and the last to turn off. All other switches are random on and random off.
- ON TIME - Elapsed time to make contacts after heater is energized
- OFF TIME - Elapsed time to make contacts after heater is de-energized
- OFF timings determined after PTC heater has been electrified for a total of 5 minutes
- Standard Timings determined at 25°C. Timings at temperatures above or below 25° will vary

Heater Pole

24 Vac 0.18A (anticipator)
 0.75A Max Inrush
 0.16 to 0.20 amps Steady State
 Ambient Rating: - 50° to 160°F

VAC	Resistive (non-inductive)		Motor Ratings (inductive)		Pilot Duty
	Watts	Amps	Full Load	Locked Rotor	
120	3000	25.0	10.0A	60.0A	125VA
240	6000	25.0	5.0A	30.0A	125VA

Combined Load Ratings

(all models):
 30A @ 240 VAC - Total: 23 A non-inductive
 + 7 FLA/42 LRA Inductive
 Life at rated current: 100,000 cycles



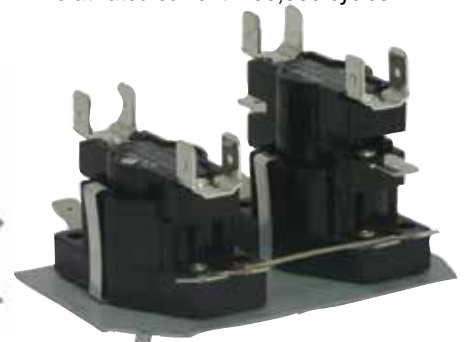
HS-24A34-21, 22, 23, 24, 25



HS-24A34-29



HS-24A34-26, 27, 36



HS-24A34-37









Flame Sensors

Packard Flame Sensors











- For use with Spark ignition, Flame sensing and Hot Surface Ignition (H.S.I.) systems
- High quality alumina ceramic insulator

High temperature Kanthal® flame rod material that can withstand 1800° F

- Flame rod can be trimmed down to match the application
- cURus approved

Item ID	Description	Replacement	
PFS013	<ul style="list-style-type: none"> • Teflon insulated (250°C rating) lead wire. • Used on these Bryant & Carrier models: 355MAV, 345MAV, 340MAV, 350MAV, 373LAV, 58MXA, 58MVP, and 58MCA 	Carrier 340MAV Carrier 345MAV Carrier 350MAV Carrier 355MAV Carrier LH33WZ514 Carrier LH33WZ516 Carrier LH680013	
PFS014	<ul style="list-style-type: none"> • Teflon insulated (250°C rating) lead wire. • 45 Degree. • For use with Carrier LH33ZS004 igniter. • Used on these Bryant & Carrier models: 330AAV, 330IAV, 338BAV, 333IAV, 398AAV, 58DHC, 58DXC, 58PAV, 58SSC, 58SXC, 58TUA and 58WAV 	6-62442-18179-4 Carrier LH680012 Carrier LH33WZ511 Carrier LH680014 Carrier LH33WZ515	
PFS401	<ul style="list-style-type: none"> • Teflon insulated (250°C rating) lead wire. • Single screw, plated steel mounting bracket. • Single rod. • 30 inch lead with a female connection. • Probe length 3 inch. 	31380679	
PFS010	<ul style="list-style-type: none"> • Single rod. • 1/4" male connection. • Overall length 3-3/4" • Probe length 2-1/2" • Single screw. • Plated steel mounting bracket. 	Goodman/Amana/Janitrol 20488501 B1172606 Goodman 0130F00010	
FA-AIC71075	<ul style="list-style-type: none"> • Single rod. • Single screw. • Probe length 2" • 18 1/2" lead length. • Female connection. 	GSW 71075	
PFS027	<ul style="list-style-type: none"> • Termination 1/4" male quick connect. • Single screw. • Plated steel mounting bracket. 	ICP/Heil Quaker 1172827 90 Degree. Single screw, plated steel mounting bracket. Termination 1/4" male quick connect.	
PFS802	<ul style="list-style-type: none"> • Single screw, plated steel mounting bracket. • Single rod. • 1/4 inch male connection. • Probe length 3 inch. 	ICP 1380687 York 025-27773-700	
PFS029	<ul style="list-style-type: none"> • Single screw, plated steel mounting bracket. • Termination 1/4" male quick connect. 	Lennox 52W29	

Flame Sensors

Item ID	Description	Replacement	
PFS043	<ul style="list-style-type: none"> • 90 Degree. • Single screw, plated steel mounting bracket. • Termination 1/4" male quick connect. 	Lennox 69W43	
PFS087	<ul style="list-style-type: none"> • Single screw, plate steel mounting bracket. • Termination 1/4" male quick connect. 	Lennox 98M87	
PFS214	<ul style="list-style-type: none"> • 90 Degree. • Termination 1/4" male quick connect. 	Lennox 51M14	
PFS097	<ul style="list-style-type: none"> • 90 Degree • Single screw, plated steel mounting bracket. • Termination 1/4" male quick connect. 	Lennox/Ducane 28M97	
PFS081	<ul style="list-style-type: none"> • 90 Degree. • Length of mounting flange to sensor tip 2-1/4" • Termination 1/4" male quick connect • Length of sensor offset 3-1/4" • Bracket included 	Lennox 40L81	
PFS301	<ul style="list-style-type: none"> • 90 Degree. • Length - mounting flange to sensor tip: 2 1/2" • Length - sensor offset: 1 9/16" • Angle - sensor offset: 90 degree. • Termination: 1/4" male quick connect. 	Rheem 62-23543-C	
PFS114	<ul style="list-style-type: none"> • 75 Degree. • Single screw, plated steel mounting bracket. • Termination 1/4" male quick connect. 	Trane SEN01114	
FA-AICPSEHW1	<ul style="list-style-type: none"> • Single rod. • Single screw. • 3" probe length. • 30" lead length. • Female connection. 	White Rodgers 760-401	
PFS053	<ul style="list-style-type: none"> • Single screw plated steel mounting bracket. • Single rod • 1/4" male connection 	York S1-SCP-9007053	
PFS700	<ul style="list-style-type: none"> • Single screw, plated steel mounting bracket. • Single rod. • Probe length 4 inch. • Can be mounted remotely on multiple burners or adjacent to igniter on other applications. • For use with spark ignition and flame sensing. • High quality alumina ceramic insulator. • High temperature kanthal flame rod material that can withstand 1800 °F 	Coleman 025-30788-700 York 025-25434-700 York 025-30788-700	

Universal And Specialty Silicon Nitride Hot Surface Igniter Kits

Features

- Silicon Nitride has high fracture toughness and chemical resistance abilities and can be handled with the greasiest of hands
- For furnaces, boilers, pool and water heaters

Item ID	Description	Replacement			
IG80V	<ul style="list-style-type: none"> • 80 Volt/120 watts • Universal Round Nitride Igniter Kit 	Amana 11111701	Trane IGN00033		
		HS100117A	Trane IGN00117		
		Trane B340970P01	Trane IGN059		
		Trane IGN00104	CARIGN00117		
		Trane IGN033	Thermo Products 768A-143		
		CAR768A845	Trane IGN00059		
IG1000N	<ul style="list-style-type: none"> • 120 Volt • Universal round glo-stix 	Lennox 41K5601	Trane IGN014		
		Honeywell Q3200U1000\$	Honeywell Q3200U1000\$		
		Norton 201D	Norton 201J		
		Norton 201L	Norton 201M		
		Norton 201R	Norton 201W		
		Norton 271	Norton 271D		
		Norton 271N	Norton 271NM		
		Norton 271Q	Norton 271Y		
		IG1100N	<ul style="list-style-type: none"> • Universal Round Nitride Igniter Kit • Durable Silicon Nitride Element 		IGN-2-6P
IG4000N	<ul style="list-style-type: none"> • Universal Replacement for numerous OEM Models • Durable Silicon Nitride Element 		IGN-1R		



Round Silicon Nitride Igniters











Features

- Round
- Made of durable Silicon Nitride
- OEM direct replacements





Item ID	Description	Replacement	
IG1401N	<ul style="list-style-type: none"> • Gasket included • 5.5" Leads with connector • 120 Volt 	Amana 10041601	
		Starlite 11120-100-1401	
		Amanda D99182	
		Trianco-Heatermaker	
		2600-359	
		Amana B1336102	
IG0004N	<ul style="list-style-type: none"> • 120 Volt 		Carrier
IG1409N	<ul style="list-style-type: none"> • 5.5" Leads with connector • 120 Volt 	Carrier LH33ZS001	Trane IGN26
		Carrier LH33ZS004	Carrier LH33ZS003
		Synder General 1380680	Synder General 1380672
		Carrier LH33ZS002	Weil McLain 511-330-139
		Duncane 20015201	
IG1402N	<ul style="list-style-type: none"> • 19" Leads with wire nuts • 120 Volt 	Amana 10755002	Trane 340039P01, IGN23
		DMO 20834/26789	Clare C-238/C-242
		Rheem 62-22441-01	Goodman B11726-06
		Armstrong 38322B001	Williamson 09050
		Dornback 271W	



Round Silicon Nitride Igniters

Item ID	Description	Replacement		
IG1412N	<ul style="list-style-type: none"> • 5.5" Leads with connector • 120 Volt 	Goodman B1401009 Norton 271NM Heil Quaker 1009604 ICP 1009604		
IG1414N	<ul style="list-style-type: none"> • 5.5" Leads with connector • Includes brackets and wire nuts • 120 Volts 	767A-384 Norton MB457025 Norton 271NM Goodman B14010-15S		
IG9500	<ul style="list-style-type: none"> • 24 Volts 	Honeywell Q3450		
IG0001	<ul style="list-style-type: none"> • Includes mini igniter, flat mounting plate, screw, instruction sheet and adapter harness; Manufactured using silicon nitride • 120 Volt 	Goodman 023K00000S Goodman B1401015S Goodman B1401018S		
IG1121N	<ul style="list-style-type: none"> • 5.5" Leads with connector • Mounting bracket included • 120 Volt 	Goodman B1401015 Modine 5H075032B		
IG1114N	<ul style="list-style-type: none"> • UniFlat Hot Surf. Igniter Kit 	Nordyne		
IG1408N	<ul style="list-style-type: none"> • 5.5" Leads with connector • 120 Volt 	Amana 340039P01 Rheem 62-2242-01 Lennox 98P78 Rheem 62-2268-92 Rheem 62-22868-93	Trane IGN-0034 Trane B340039P01 Starlite 11120-100-1408 Whirlpool 99794328	
IG1411N	<ul style="list-style-type: none"> • Includes bracket & connector • 120 Volt 	Norton 271N Rheem 62-22868-82		
IG00145N	<ul style="list-style-type: none"> • 80 Volt • Round, Silicon Nitride design 	Trane IGN00104		
IG00152N	<ul style="list-style-type: none"> • 120 Volt • Round, Silicon Nitride design 	Trane IGN00146		




Round Silicon Nitride Igniters

Item ID	Description	Replacement	
IG1403N	<ul style="list-style-type: none"> • 5.5" Leads with wire nuts • 120 Volt 	Amana B138196P01 Trane B138196P01 Weil McLain 511-330-193 Raypak 600915 Trane IGN26 Synder General 1380654 Trane IGN30	
IG1410N	<ul style="list-style-type: none"> • 5.5" Leads with connector • 120 Volt 	Amana B144676P01 Trane B144676P01	
IG3033N	<ul style="list-style-type: none"> • Durable Silicon Nitride Element • Replacement for numerous Trane Models 	Trane	
IG1405N	<ul style="list-style-type: none"> • 5.5" Leads with wire nuts • 120 Volt 	Heil Quaker 1001344 York 025-29043-000 York 025-27766-00 York 025-27774-000	

Silicon Carbide Igniters

Features



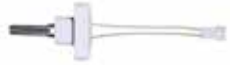






- Silicon Carbide Igniters
- OEM Cross References

Item ID	Description	Replacement																	
IG1100	<ul style="list-style-type: none"> • Includes brackets, screw and wire nuts • 120 Volt • Universal round carbide igniter 	<table border="0"> <tr> <td>Robertshaw/Uniline</td> <td>White-Rodgers</td> </tr> <tr> <td>41-238 41-242</td> <td>767A-301 767A-372 767A-371</td> </tr> <tr> <td>41-402 41-403</td> <td>767A-310 767A-303</td> </tr> <tr> <td>41-404 41-405</td> <td>767A-350 767A-311</td> </tr> <tr> <td>41-407 41-408</td> <td>767A-354 767A-353</td> </tr> <tr> <td>41-409 41-408</td> <td>767A-361 767A-357</td> </tr> <tr> <td>41-1090 41-410</td> <td>7671-365 767A-364</td> </tr> <tr> <td>41-414</td> <td>767A-370 767A-366</td> </tr> </table>	Robertshaw/Uniline	White-Rodgers	41-238 41-242	767A-301 767A-372 767A-371	41-402 41-403	767A-310 767A-303	41-404 41-405	767A-350 767A-311	41-407 41-408	767A-354 767A-353	41-409 41-408	767A-361 767A-357	41-1090 41-410	7671-365 767A-364	41-414	767A-370 767A-366	
Robertshaw/Uniline	White-Rodgers																		
41-238 41-242	767A-301 767A-372 767A-371																		
41-402 41-403	767A-310 767A-303																		
41-404 41-405	767A-350 767A-311																		
41-407 41-408	767A-354 767A-353																		
41-409 41-408	767A-361 767A-357																		
41-1090 41-410	7671-365 767A-364																		
41-414	767A-370 767A-366																		
IG4000	<ul style="list-style-type: none"> • Includes brackets, screw and wire nuts • 120 Volt Direct Replacement for hundreds of OEM Igniters	<table border="0"> <tr> <td>Robertshaw/Uniline</td> <td>White Rodgers</td> </tr> <tr> <td>41-238 41-1090</td> <td>767A-301 767A-370 767A-364</td> </tr> <tr> <td>41-402 41-403</td> <td>767A-310 767A-372 767A-366</td> </tr> <tr> <td>41-404 41-405</td> <td>767A-350 767A-303 767A-371</td> </tr> <tr> <td>41-407 41-408</td> <td>767A-354 767A-311</td> </tr> <tr> <td>41-409 41-410</td> <td>767A-361 767A-353</td> </tr> <tr> <td>41-412 41-414</td> <td>767A-365 767A-357</td> </tr> </table>	Robertshaw/Uniline	White Rodgers	41-238 41-1090	767A-301 767A-370 767A-364	41-402 41-403	767A-310 767A-372 767A-366	41-404 41-405	767A-350 767A-303 767A-371	41-407 41-408	767A-354 767A-311	41-409 41-410	767A-361 767A-353	41-412 41-414	767A-365 767A-357			
Robertshaw/Uniline	White Rodgers																		
41-238 41-1090	767A-301 767A-370 767A-364																		
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41-407 41-408	767A-354 767A-311																		
41-409 41-410	767A-361 767A-353																		
41-412 41-414	767A-365 767A-357																		
FA-SN402	<ul style="list-style-type: none"> • Universal Flat Mini Silicone 																		











Silicon Carbide Igniters

Item ID	Description	Replacement	
IG1401	<ul style="list-style-type: none"> Gasket included 5.5" Leads with connector 120 Volt 	Amana 10041601 Starlite 11120-100-1401 Amanda B1336102 Trianco-Heatermaker 2600- 359 Amanda D99182	
IG1409	<ul style="list-style-type: none"> 5.5" Leads with connector 120 Volt 	Carrier LH33ZS001 Carrier LH33ZS004 Snyder General 1380680 Carrier LH33ZS002 Ducane 20015201 Trane IGN26	Carrier LH33ZS003 Snyder General 1380672 Weil McLain 511-330-139 
FA-FC051	<ul style="list-style-type: none"> Round Igniter Replaces Clare C238-1 		
IG1121	<ul style="list-style-type: none"> 5.5" Leads with connector Mouting bracket included 120 Volt 	Goodman B1401015 Modine 5H075032B	
IG1412	<ul style="list-style-type: none"> 5.5" Leads with connector 120 Volt 	Goodman B1401009 Norton 271NM Heil Quaker 1009604 ICP 1009604	
IG1414	<ul style="list-style-type: none"> 5.5" Leads with connector Includes brackets and wire nuts 120 Volt 	767A-384 Norton MB457025 Goodman B14010-15S Norton 271NM	
FA-0230K00001	<ul style="list-style-type: none"> Includes conversion late and adapter plug 	Goodman 0120K00001	
FA-DS015	<ul style="list-style-type: none"> 25" leads with sleeving, complete with harness, shield attached 	GSW 63994	

Silicon Carbide Igniters

Item ID	Description	Replacement	
IG-1106	<ul style="list-style-type: none"> Hot Surface Igniters Attached shield 20" leads with sleeving and connector 	GSW/John Woods/Giant Water Heater - 86483, 71082, 5260001425 Norton - 271R	
IG2300	<ul style="list-style-type: none"> 24" Leads with 1/4" quick connects Gasket included 120 Volt 	Laars RW2002300	
IG0286	<ul style="list-style-type: none"> 5.5" Leads with connector Gasket included 120 Volt 	Laars 2400-286	
IG1114	<ul style="list-style-type: none"> An exact replacement kit for Nordyne series G6 (and earlier models G3, G4, G5) and M2 furnaces The kit includes complete installation instructions along with an adapter bracket and screws for G3RC, G4 (all), G5 (all), G3RA, G6 (all) and M2 (all) Nordyne furnaces 120 Volts 	Nordyne 632354 Nordyne 903758 Nordyne 632363 Nordyne 903597	
IG1402	<ul style="list-style-type: none"> 19" Leads with wire nuts 120 Volt 	Amana 10755002 DMO 20834/26789 IGN23 Williamson 09050 Armstrong 38322	
IG1404	<ul style="list-style-type: none"> 5" Leads with connector 120 Volt 	Norton 271M Weil McLain MB478265 Rheem 1096048 White Rodgers 767A382 Robertshaw 41-404	
IG1411	<ul style="list-style-type: none"> Includes brackets & connector 120 Volt 	Norton 271N Rheem 62-22868-82	
FA-DS014	<ul style="list-style-type: none"> 15" leads, complete with harness, shield attached 	Rheem AP12553	
IG1403	<ul style="list-style-type: none"> 5.5" Leads us with wire nuts 120 Volt 	Amana B138196P01 Trane B138196P01 Weil McLain 511-330-193 Raypak 600915 Trane IGN26 Snyder General 1380654 Trane IGN30	

Silicon Carbide Igniters

Item ID	Description	Replacement	
IG1407	<ul style="list-style-type: none"> • 5.5" Leads with connector • 120 Volt 	Trane B144676P02	
IG1408	<ul style="list-style-type: none"> • 5.5" Leads with connector • 120 Volt 	Amana 340039P01 Rheem 62-2268-93 Trane B340039P01 Lennox 98P78 Rheem 62-22868-92 Trane IGN-0034 Rheem 62-2241-01 Starlite 11120-100-1408 Whirlpool 99794328	
IG1410	<ul style="list-style-type: none"> • 5.5" Leads with connector • 120 Volt 	Amana B144676P01 Trane B144676P01	
IG3033	<ul style="list-style-type: none"> • Used on many Trane package models beginning with YCD15, YCD17 and YCD18 • Includes igniter, gasket, clip, mounting screws and installation instructions • 120 Volt 	Trane KIT03033	
IG0148	<ul style="list-style-type: none"> • For Weil McLain AHE, GV, and HE II Boilers • 5.5" leads with connector • 120 Volts 	Weil McLain 511330148	
IG0184	<ul style="list-style-type: none"> • For Weil McLain HE and VHE Boilers • 5" Leads with connector • 120 Volts • Wire nuts and bracket included 	Weil McLain 511330184 Norton 201N	
IG1406	<ul style="list-style-type: none"> • 11" leads with wire connectors 	Weil McLain	
FA-FC046	<ul style="list-style-type: none"> • 5.5" leads with connector, 2 wire nuts 	York 025-32626-000	
FA-DS016	<ul style="list-style-type: none"> • 5.5" leads, complete with harness 	York 025-32625-000	
IG1405	<ul style="list-style-type: none"> • 5.5" Leads with wire nuts • 120 Volt 	Heil Quaker 1148145 York 025-29043-000 Heil Quaker 1001344 York 025-27774-000 York 025-27766-00	

Thermostats



Plenum Thermostats

- Opens when furnace plenum area temperature is too high
- Shuts furnace down until the temperature returns to normal



PHL501
Illustrated

Item ID	Close Temp. °F	Open Temp. °F	Thermodisc	Cross Reference					
				Carrier	Bryant	Goodman	Rheem	Trane	York
PHL501	130	170	L170-40 SPST	P331-2203	HH12ZA174A HH127A176A		47-21711-06		025-29041-007
PHL502	150	180	L180-30 SPST		HH12ZA178A	B1370001			
PHL503	150	190	L190-40 SPST	P331-2205	HH12ZA189 HH12ZB190 HH12ZA193A		47-21711-03		025-29041-012
PHL504	200	240	L240-40 SPST	P331-2217	HH12ZA240 HH12ZA252A				
PHL505	100	140	L140-40 SPST		HH12ZB140				
PHL506	130	170	L170-40 SPST		HH12ZB170			SWT1258	
PHL507	110	140	L140-30 SPST		HH12ZA140				025-29041-005
PHL508	170	190	L150-20 SPST	P331-2005	HH12ZB190 HH12ZA193 HH12ZA189	B1370913		SWT1260	
PHL509	210	240	L240-30 SPST	P331-2217	HH12ZB240 HH12ZA252 HH12ZA240	B1370903			
PHL510	210	150	L150-20 SPST		HH12ZB150				
PHL511	140	160	L160-20 SPST		HH12ZB160				025-29041-004
PHL512	150	170	L170-20 SPST		HH12ZB170				
PHL513	130	170	L170-40 SPST						
PHL514	104	180	L180-40 SPST		HH12ZB180				025-29031-711
PHL515	160	200	L200-40 SPST		HH12ZB200 HH12ZA199 HH12ZA201				025-29041-006
PHL516	170	210	L210-40 SPST		HH12ZB210			SWT1263	
PHL517	180	220	L220-50 SPST	48NHT042	HH12ZB220 HH12ZA219 HH12ZA223			SWT1273	
PHL518	210	250	L250-40 SPST	P331-2208	HH12ZB250 HH12ZA251	B1370012S		SWT1261 SWT1272	
PHL519	125	155	L155-30 SPST			B1370006			

Thermostats



Fixed Temperature Thermostats

- The 78-SC055 to 78-SC075S series of thermostats are low cost single set point thermostats intended for temporary heating or cooling to allow drywall to dry during construction. Can also be used for low ambient cut-off switch.
- Rugged utility thermostat for temporary applications.
- deal for new or ongoing construction areas.
- Five fixed set point models to choose from (55°, 60°, 65°, 70°, 75°F).
- Hardwired.

**"Dry Out"
Thermostats**

Specifications

Electrical Rating

- 24 Volt AC (18-30 VAC)
- 2 Amp Maximum

Temperature Control Range

- Accuracy ±5°F 55°, 60°, 65°, 70°, 75°F

Applications

Ideal for warehouses & new home construction!

Item ID	Description
78-ACH045	2 Wire Fixed Thermostat 45° Cool
78-ACH055	2 Wire Fixed Thermostat 55° Cool
78-ACH060	2 Wire Fixed Thermostat 60° Heat
78-ACH065	2 Wire Fixed Thermostat 65° Heat
78-ACH070	2 Wire Fixed Thermostat 70° Heat
78-ACH075	2 Wire Fixed Thermostat 75° Cool



78-SC075
Illustrated



78-SC075S
Illustrated

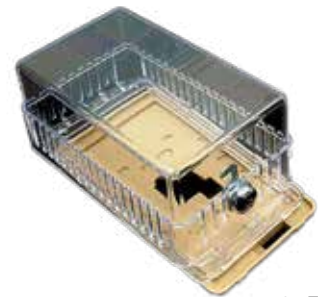
Thermostat Guards



Plastic Thermostat Guards

Use to prevent tampering with thermostats. The covers are clear, allowing complete viewing of the thermostat and current settings. Furnished complete with ring and/or solid base. Includes vent holes for easy airflow across the thermostat. Lockable with universal key. Internal dimensional clearance/sizing for thermostats as noted.)

Item ID	Description	T-Stat Clearance	Cross Reference
585-TG	Clear Plastic w/Two Bases	8-1/4" x 4-1/2" x 3-1/4"	Beko BTG-UK2 Bramec 13012 Mars 70220
585-TG1	Clear Plastic w/Two Bases	5-3/4" x 3-1/2" x 2-3/4"	Beko BTG-RK Bramec 13016 Mars 70210
585-TG2	Clear Plastic w/Two Bases	4-3/4" x 4-1/4" x 2-3/4"	Beko BTG-K Bramec 13008 Mars 70205
585-TG5	Clear Plastic w/Solid Base	3-1/2" x 3-1/4" x 2-1/4"	Beko BTG-EK Bramec 13004 Mars 70201
585-TG6	Clear Plastic w/Two Bases	6-1/4" x 3-3/4" x 1-3/4"	Beko BTG-DK Bramec 13018 Mars 70217
585-F336	Key for Thermostat Guard		



585-TG1
Illustrated

Thermostat Guards



Metal Thermostat Guards

Metal thermostat guards are used to prevent tampering with thermostats. The covers are steel, giving complete tamper protection of the thermostat, and physical impact protection. Great for warehouse and industrial locations. Furnished complete with ring and/or solid base as noted. Includes vent holes for easy airflow across the thermostat. Lockable with universal key. Internal dimensional clearance/sizing for thermostats as noted.

Item ID	Description	T-Stat Clearance	Cross Reference
585-TG3	Beige Steel w/Solid Base	6" x 4" x 3"	
585-TG4	Beige Steel w/Ring Base	6" x 4" x 3"	
585-TG7	Beige Steel w/Solid Base	5-1/2" x 3-1/2" x 2-3/4"	
585-TG8	Beige Steel w/Ring Base	5" x 3" x 2-3/4"	Beko BTG-54VLW Bramec 13001 Mars 70216
585-TG9	Beige Steel w/Two Bases	6" x 4" x 3"	



585-TG4 Illustrated

Metal Thermostat Guards

- Durable metal guards
- Horizontal and vertical mounting
- Heavy duty lock and key
- Comes with complete mounting hardware
- Colour - off white cover with off white base



Item ID	Base	Inside Dimensions	Cross Reference
77-MG3	Ring	5.31" x 4.31" x 3.00"	BTG-KWM, KMRT
	Solid	5.62" x 5.12" x 2.87"	BTG-KM, KMST
77-MG12S	Solid	6.37" x 4.25" x 3.00"	BTG-54VL, F29-0255

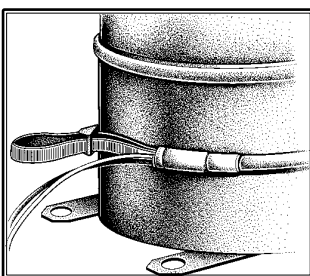
Crankcase Heaters



Crankcase Compressor Heaters

- When a refrigeration compressor shuts down or enters a long-off cycle, liquid refrigerant migrates into its crankcase oil. Lubrication decreases and crankcase burnout can occur when operation resumes.
- Energy efficient, self-regulating design automatically varies output to maintain adequate oil temperature while permitting wrapping and crossover without burnout.
- Handles compressors up to 5 Hp, 120 or 240 volt applications.
- Fits all crankcases with circumferences smaller than 49".

"Compressor Burnout Protection!"



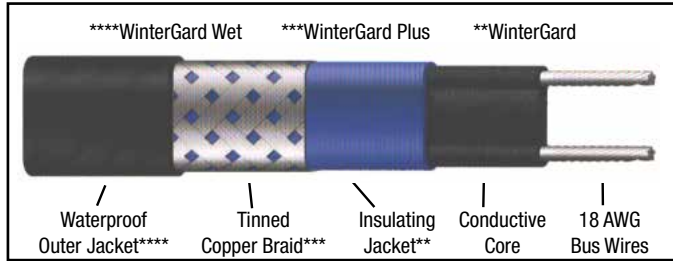
Item ID	Volts	Output @ -18°C (0°F)	Output @ 16°C (60°F)	Weight
75-HCCH1	120	60W	35W	0.5 lbs
75-HCCH2	240			0.5lbs

Heat Cable

Self Regulating Heat Cable

"Self Regulating" Heating Tape

- Easy installation
- Won't burn out
- Won't overheat
- OK to overlap
- OK to insulate
- OK for plastic
- No thermostat required
- Cut to desired length
- Higher efficiency
- UL & CSA approved



WinterGard Heating Cable

- Economical solution for residential/ commercial pipes up to 2" diameter and circuit length up to 250'.
- Dry applications only.
- Tough - steel braided.



WinterGard Plus Heating Cable

- Designed for more demanding residential/ commercial with larger plastic or metal pipes with diameters up to 8" and circuit lengths up to 250'.
- Dry applications only.
- Tough - steel braided.

Applications

- Ideal freeze protection for pipes in unheated attics, basements and garages.
- Use it for intake and drain lines, water meters, outside pipes and taps.

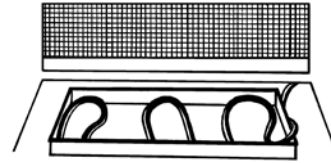


WinterGard Wet Heating Cable

- The answer for freeze protection in wet or high moisture residential/ commercial locations such as drain lines with larger plastic or metal pipes. Suitable for pipe diameters up to 8" and circuit lengths up to 1000'.
- Wet or dry applications.
- Tough - steel braided & waterproof outer jacket.

Applications

- Ideal for residential & commercial buildings.
- Use it to freeze protect water service & fire protection systems.
- Roof & gutter de-icing.



Keep Wet Areas From Freezing
With WinterGard Wet for tracing air conditioner drain pans to prevent freezing or gut tracing freezer drain lines to prevent backup problems.

Protect Pipes
With WinterGard or WinterGard Plus for freeze protection of short & small diameter piping. Pre-cut lengths or custom cut lengths.

120V

- Blue Cable - Steel Braid

Item ID	Watts/ft	Power	Length	Weight
75-H611050	6	120V	50' Box	3.0 lbs.
75-H611100*	6	120V	100' Truck Pack	9.0 lbs.
75-H611250	6	120V	250' Reel	17.0 lbs.

* 100' Truck Packs include (2) 75-H900, (1) 75-H903 & (1) 75-H910.

240V

- Red Cable - Steel Braid

Item ID	Watts/ft	Power	Length	Weight
75-H621050	6	240V	50' Box	3.0 lbs.
75-H621100*	6	240V	100' Truck Pack	9.0 lbs.
75-H621250	6	240V	250' Reel	17.0 lbs.

* 100' Truck Packs include (2) 75-H900, (1) 75-H903 & (1) 75-H910.

120V

- Blue Cable - Steel Braid - Black Jacket

Item ID	Watts/ft	Power	Length	Weight
75-H622050	6	240V	50' Box	4.0 lbs.
75-H622100*	6	240V	100' Truck Pack	10.0 lbs.
75-H622250	6	240V	250' Reel	20.0 lbs.
75-H622500	6	240V	500' Reel	43.0 lbs.
75-H6221000	6	240V	1000' Reel	77.0 lbs.

240V

- Red Cable - Steel Braid - Black Jacket

Item ID	Watts/ft	Power	Length	Weight
75-H622050	6	240V	50' Box	4.0 lbs.
75-H622100*	6	240V	100' Truck Pack	10.0 lbs.
75-H622250	6	240V	250' Reel	20.0 lbs.
75-H622500	6	240V	500' Reel	43.0 lbs.
75-H6221000	6	240V	1000' Reel	77.0 lbs.

* 100' Truck Packs include (2) 75-H900, (1) 75-H903 & (1) 75-H910.

Heat Cable

Self Regulating Heat Cable



Gardian Pre-assembled Heating Cable Kits

- Perfect for residential or commercial small applications with short pipe runs up to 100', 2" diameter.
- Rugged copper braid provides abrasion and damage protection.
- 120V (30" power cord & plug) 240V (hardwired).



120V

Item ID	Watts/ft	Power	Length	Weight
75-W51-6P	5	120V	6' Kit	1.0 lbs.
75-W51-12P	5	120V	12' Kit	1.3 lbs.
75-W51-18P	5	120V	18' Kit	1.6 lbs.
75-W51-24P	5	120V	24' Kit	2.0 lbs.
75-W51-75P	5	120V	75' Kit	5.4 lbs.
75-W51-100P	5	120V	100' Kit	6.9 lbs.

240V

Item ID	Watts/ft	Power	Length	Weight
75-W52-6L	5	240V	6' Kit	1.0 lbs.
75-W52-12L	5	240V	12' Kit	1.3 lbs.

Accessories - Self Regulating Heat Cable



Item ID	Description	Weight
75-H900	Power connection kit.	0.5 lbs.
75-H903	Fiberglass application tape & "Electric traced" labels.	0.3 lbs.
75-H908	Plug-in Power connection kit.	1.0 lbs.
75-H910	Splice & tee kit.	0.3 lbs.
75-FGK-P-RS	Original termination kit.	0.3 lbs.
75-H912	Gel-filled end seal kit (2 ea.)	0.3 lbs.
75-H913	Roof clips (10 ea.)	1.0 lbs.
75-H915	Downspout hanger bracket.	0.5 lbs.
75-AMC-F5	Fixed point thermostat 5°C (40°F).	1.5 lbs.
75-TC-3	2 receptacle thermo cube thermostatically controlled outlet (120V, 15 amp). - ON @ 2°C (35°F), OFF @ 7°C (45°F).	1.0 lbs.

In-Line Air Duct Booster Fans

Air Duct Booster

Designed to be installed at any angle in the branch duct of under-ventilated rooms to increase either hot or cool air flow supply. One year limited warranty.



Control Options

- | | |
|---|--|
| Manual Control <ul style="list-style-type: none"> • 115V Source - continuous operation • 115V Switch - manual ON/ OFF ctrl | Automatic Control <ul style="list-style-type: none"> • Wire to furnace fan • Wire to fan switch • Wire to a sail switch • Wire to a pressure switch • Wire to thermostat |
|---|--|

Standard Air Duct Boosters - Corded



Item ID	Description	Max Boosted CFM	Free Air CFM	Watts	Amps	dBA	Blade	Housing Length
T9-DB204C	4" Round	80	40	30	0.30	52	Polycarbonate	6"
T9-DB205C	5" Round	225	140	30	0.35	51	Polycarbonate	6"
T9-DB200C	6" Round	250	160	30	0.35	50	Polycarbonate	-
T9-DB206C	6" Round	250	160	30	0.35	50	Polycarbonate	6"
T9-DB208C	8" Round	500	210	60	0.75	54	Polycarbonate	8"
T9-DB210C	10" Round	650	300	120	1.50	55	Aluminium	8"



T9-DB205C Illustrated

Two Speed Air Duct Boosters



Item ID	Description	Max Boosted CFM	Free Air CFM	Watts	Amps	dBA	Blade
T9-DB10-2	10" Round 2 Speed	650/900	300/460	135	1.70	56/59	Aluminium



T9-DB10-2 Illustrated

Furnace Whip Kit

DiversiTech's furnace whip assembly offers a quick and easy solution for furnace installations and replacements. Each pre-assembled kit comes with a pre-wired GFCI outlet and switch and 8 feet of flexible metallic conduit between the GFCI outlet and the electrical box for flexible placement during installs. Mounting hardware and electrical accessories are also included for an all in one solution. Save time and resources with the FKM-12-8GFCI from DiversiTech

- Pre-Assembled for Quick and Easy Installation
- 8ft Conduit for Flexible Placement
- GFCI Protected Outlet
- Pre-Wired Switch for Easy Accessory Wiring
- Mounting and Installation Hardware Included



Additional assembly contents:



- 3 x EMT 1-hole straps
- 3 x EMT connectors
- 6 - Yellow wire connectors
- 3 - Pre-wired #12 thhn conductors

Item ID	Description
FKM-12-8GFCI	8' Furnace whip kit

Head Pressure Controls





Dual ON/ OFF Delays Control Fan

Item ID	Features & Applications	Specifications	Cross Reference
 24-ICM325HNVC-LF 120-600VAC	<ul style="list-style-type: none"> • Integral heat pump bypass circuitry allows electronic bypass of speed control. • Eliminates overshoots common to on/off and pressure switch controls. • Helps prevent evaporator freeze-ups, low pressure cut-outs and liquid-slugged compressors in low ambient conditions. • One model covers 120 to 480 VAC. • Features hard start (adj. 1 to 5 sec.), low speed cut-off (adj.), high temperature bypass, isolated 24 VAC supply. • Controls up to 3 refrigerant circuits. • Typical application: heat pumps. • 4.5" x 3" x 1.75". 	Input <ul style="list-style-type: none"> • Control: 18-30 VAC. • Frequency: 50/ 60 Hz. 1.8 VA max. • Line input: 120-600 VAC. Output <ul style="list-style-type: none"> • Max: 10 amps. • Min: 100 mA. 	One ICM model Cross Reference: Ranco E31 Series Johnson Controls P66 ACT FM2000 Hoffman 800 800A 800AA 814-50 816-10
 24-ICM326HN 120 or 208/ 240 VAC	<ul style="list-style-type: none"> • Built-in transformer eliminates cost, reduces installation time and simplifies wiring. • Helps prevent evaporator freeze-ups, low pressure cut-outs and liquid-slugged compressors in low ambient conditions. • Features hard start, low temperature cut-off, high temperature bypass. • 4.5" x 3" x 2". • Typical application: ideal for heat pumps, line voltage air conditioning and refrigeration. 	24-ICM326H <ul style="list-style-type: none"> • Control: 120 or 208/ 240 VAC. 24-ICM327H <ul style="list-style-type: none"> • Control: 480 VAC. • Frequency: 50/ 60 Hz. Output current: <ul style="list-style-type: none"> • Max: 10 amps. • Min: 100 mA. 	Ranco E31 Series Johnson Controls P66 Hoffman 800 800A 800AA 814-50 816-10

Fan Coil Relay Controls




Item ID	Features and Applications	Specifications
 24-ICM6100	<ul style="list-style-type: none"> • Fan safety alarm circuit • Outputs provided ensure that a DDC controller can determine the root cause of a shutdown • Dip switch to bypass inputs not in use • Ideal for Air Handling Unit safety shutdown • 2.75" mounting track provided 	Input: 24VAC; 50-60Hz (4A max) Output: Relay outputs (6): 2A @ 24 VAC/DC per output Master Relay 24VAC (2): 1.5A @ 24 VAC per output Master Relay Dry Contacts: 10A @ 250 VAC Alarm Status: Green LED ON = Activated Red LED ON = Not activated Cross Reference: Functional devices: RIBMNLB-6
 24-ICM6201	<ul style="list-style-type: none"> • Ability to operate line voltage 3 speed fan motor with low voltage controls • Ability to operate line voltage electric heating element with low voltage controls • Compatible with 4-pipe, 2 pipe, aquastat auto-changeover, and heat pump • 20 VA 24 VAC power supply • Suitable for 1/8 HP motors Screw terminal receptacles mounts with standard 3" track	Input: Transformer Primary (L1 & L2): 115VAC; 50-60Hz Hi, Med, Low (8,7,6): Nominal 17mA @ 24 VAC Inputs 1,2,3,4,5, Auqa Heat & Cool: 1.5A @ 250 VAC Output: Transformer Secondary: 24 VAC; 20 VA Relay outputs H, M, L: 1/8 HP @115 VAC, 10A @ 240VAC resistive max HTR Output: 30A @ 240 VAC resistive Heat & Cool Valves: 1.5A @ 250 VAC Cross Reference: Honeywell W6380B, BSR/Xactone FC/H1

Fan Blower Controls








Post Purge Control

Continues to run the fan at the end of the heating/cooling cycle, thereby purging the ducts of residual air and increasing system efficiency.

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM253</p>	<ul style="list-style-type: none"> UL 873 recognition for compressor applications Post-purge fan delay timer Interrogation delay eliminates nuisance trips due to thermostat bounce/tampering 	Voltage: 18-30VAC 1 Amp Max 40 mA Min. 10 Amp Inrush Adjustable time delay 12-390 seconds Dimensions: 2" x 3"	Field Controls: 46144700 Gemline: 1C216 Mars: 32393







Direct OEM Replacement Parts

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM270</p>	<ul style="list-style-type: none"> Dual function fan delay timer Controls the circulating fan in a heat pump, A/C and forced air systems OFF delay purges ducts of residual air ON delay allows air to reach the proper comfort level prior to energizing the fan 	Voltage Range: 18-30 VAC Contact Ratings: Heat/cool speed N.O.: 20 amps @ 240 VAC N.C.: 10 amps @ 240 VAC Time Delays: Blower ON delay: 30 Seconds Blower OFF delay: 90, 120, 150, 180 seconds	Evcon: 2702-300 Rheem: 47-22827-01 47-22827-81/82/83 47-22828-01/02 Robertshaw: 695-003
 <p>24-ICM271</p>	<ul style="list-style-type: none"> Reliable solid state fan blower Specifically designed to replace popular gas furnace centers Pin selectable blower delays High power, relay output Dual function fan delay timer Controls the circulating fan in heat pump, A/C and forced air systems OFF delay purges ducts for residual air ON delay allows air to reach the proper comfort level prior to energizing the fan 	Voltage Range: 18-30 VAC Contact Ratings: N.O.: 20 amps N.C.: 10 amps Time Delays: Heat ON delay: 75 Seconds Heat OFF delay: 105 seconds Cool OFF delay: 90 seconds	Carrier: 302075-3 CES0110017 CES0110018 HH84AA010 HH84AA011 HH84AA012 HH84AA013/020 P771-7002 Robertshaw: 695-100
 <p>24-ICM273</p>	<ul style="list-style-type: none"> Solid state output Silent operation, "no clicking" Controls the circulating fan in heat pump A/C and forced air systems OFF delay purges ducts of residual air 	Voltage Range: 18-30 VAC Output: 2 amps @ 240 VAC Time Delays: Blower OFF delay: 60 seconds	EMI: 240000-969
 <p>24-ICM274</p>	<ul style="list-style-type: none"> Microprocessor-based fan blower control Built in humidity relay Manually adjustable post-purge off delay from 60-240 seconds Electronic air cleaner output 	Voltage Range: 18-30 VAC Contact Ratings: Y out: 1.5 amps Fan: 2 amps Elec. Heat Relay: 30 amps @ 240 VAC Time Delays: Blower OFF delay: 60-240 seconds	EMI: 240-1764
 <p>24-ICM275</p>	<ul style="list-style-type: none"> Heavy duty heat relay Purges ducts of residual air Integral short cycle protection 	Voltage Range: 18-30 VAC Contact Ratings: High: 20 amps @ 240 VAC Low: 10 amps @ 240 VAC Time Delays: Heat ON delay: 60 Seconds Heat OFF delay: 60-240 seconds Cool OFF delay: 90 seconds	Carrier: HH84AA001, HH84AA003 HH84AA005, H84AA009 HH84AA014, H84AA015 HH84AA021 Robertshaw: 695-101

Fan Blower Controls





Direct OEM Replacement Parts

Item ID	Features and Applications	Specifications	Cross Reference
 24-ICM277	<ul style="list-style-type: none"> • Microprocessor based fan blower • For circulating fan in heat pump, A/C and forced air systems 	<p>Voltage Range: 18-30 VAC Contact Ratings: Heat/cool speed N.O.: 20 amps N.C.: 10 amps Time Delays: Blower ON delay: 7 Seconds Blower OFF delay: 65 seconds</p>	Goodman: B1370735S
 24-ICM280	<ul style="list-style-type: none"> • Low cost, Cross Reference board for Goodman, Janitrol, TI, White-Rodgers and UTEC • Microprocessor based design for precise timing • Functions with all 24 VAC thermostats • For 80+ and 90+ applications • UL recognized 	<p>Voltage Range: Line (98 to 132 VAC) @ 60Hz Cool Blower: 10A, 2 HP, 240 VAC Heat: 5A, 240 VAC Inducer Motor: 4A, FLA-8.0 LRA @ 120 VAC Gas Valve: 1.5A @ 30 VAC Heat Blower on Delay: 30 seconds Heat Blower Off Delays: 90, 120 and 150 sec Cool Blower on Delay: 5 seconds Cool Blower Off Delay: 60 seconds</p>	Goodman: B1809906/08/10/13/13S UTEC:1012-933D Texas Instruments: 41F-5 White-Rodgers: 50T35-730/743
 24-ICM281	<ul style="list-style-type: none"> • Low cost, Cross Reference board for Carrier CES011005700/01/02 • Controls gas valve, ignitor, blower motor, inducer, humidifier and air cleaner • Microprocessor-based for precise timing • Functions with all 24 VAC thermostats • Designed for 100% gas shutoff in case of ignition failure • Twinning compatible with another ICM281 board 	<p>Voltage Range: Line (98 to 132 VAC) @ 60Hz Cool Blower: 10A, 2 HP, 240 VAC Heat: 5A, 1/2 HP, 240 VAC Inducer Motor: 4A, FLA-8.0 LRA @ 120 VAC Gas Valve: 1.5A @ 30 VAC Heat Blower on Delay: 40 seconds Heat Blower Off Delays: 90, 135, 180, and 225 seconds Fan (Low) On/Off: 1-second Cool Blower on Delay: 5 seconds Cool Blower Off Delay: 90 seconds</p>	Carrier: CES0110057-00/01/02
 24-ICM282A	<ul style="list-style-type: none"> • Low cost, Cross Reference for Carrier HK-42FZ004/007/008/009/011/013/016 • Controls gas valve, ignitor, blower motor, inducer, humidifier and air cleaner • Microprocessor-based • Designed for 100% gas shutoff in case of ignition failure • Twinning compatible with another ICM282 board • Diagnostic fault codes (blinking LED) to aid in troubleshooting 	<p>Voltage Range: Line (98 to 132 VAC) @ 60Hz Cool Blower: 10A, 2 HP, 240 VAC Heat: 5A, 1/2 HP, 240 VAC Inducer Motor: 4A, FLA-8.0 LRA @ 120 VAC Gas Valve: 1.5A @ 30 VAC Heat Blower On: 60 seconds Heat Blower Off: 90, 120, 150, and 180 sec Fan (Heat) On/Off: 1-second Cool On: 2 seconds Cool Off: 90 seconds with jumper JW2 uncut; 5 seconds with jumper JW2 cut</p>	Carrier: HK-42FZ004/007/008/009/011/013/016
 24-ICM288	<ul style="list-style-type: none"> • Microprocessor-based design • Monitors pressure, roll-out and limit switches • Controls gas valve, inducer draft motor, circulating blower and hot surface ignitor • Reverse polarity detection • Twinning compatible with other ICM288 control boards • Diagnostic LEDs for testing/troubleshooting 	<p>Voltage Range: Line 98-132 VAC @ 60Hz Ignitor: 5A, 120 VAC Cool Blower: 10A, 2HP, 240 VAC Heat: 5A, 1/2 HP, 250 VAC Inducer Blower: 4A, 120 VAC Gas Valve: 1A, 24 VAC Humidifier Motor: 0.5A, 24 VAC Electronic Air Cleaner: 1A, 120 VAC</p>	Rheem 62-24084-82
 24-ICM289	<ul style="list-style-type: none"> • Low cost, Cross Reference board for Lenox • Controls inducer fan motor, blower fan and monitors limit switches. • Microprocessor based design • Functions with all 24 VAC thermostats 	<p>Voltage Range: Line (98 to 132 VAC) @ 60 Hz Cool Blower: 20A @ 120 VAC Heat Blower: 20A @ 120 VAC Inducer Motor: 5A @ 120 VAC Cool Blower On Delay: 1 second Cool Blower Off Delay: 1 second Heat Blower On Delay: 45 seconds Heat Blower Off Delay: 90, 150, 210, 270 seconds</p>	Lennox: 45K98, 45K48, 68H08, 65K29, G20, G23, G26, 023, 0F23, 0HR, BCC1, BCC2, BCC3

Fan Blower Controls






Direct OEM Replacement Parts

Item ID	Features and Applications	Specifications	Cross Reference
 <p data-bbox="235 1071 349 1102">24-ICM291</p>	<ul style="list-style-type: none"> • Direct Spark Ignition (DSI) control board • Microprocessor-based • Controls combustion, blower and indoor motor; spark ignitor and the gas valve • Monitors timing, trial for ignition and lockout • 100% lockout safety feature • Compatible with LP or natural gas • Status LED for fault codes to aid in troubleshooting 	<p>Control Voltage: 24 VAC (18-30 VAC), 60Hz Line Voltage: 208/230 VAC, 60Hz Power Consumption: 03A plus gas valve current @ 24 VAC Operating Temperature: -40°C(-40°F) to 75°C(176°F)</p> <p><u>Timing:</u> Pre-purge: 45 seconds Trial for Ignition: 5+2 seconds Retry Period: every 20 seconds for 15 minutes Lockout: manual reset Post-purge: 45 seconds</p> <p><u>Inputs:</u> Power: RT and C Thermostat Interface: R, W and G Safety Switches: RS, LS and CS Combustion Motor Hall Effect Sensor Flame Sensing</p> <p><u>Outputs:</u> Spark Gas Valve: GV Combustion Motor: BM Indoor Fan Motor: IFO</p> <p><u>LED Indicators:</u> Red LED: Steady ON - Normal operation Flashing - Fault codes</p>	<p>Carrier: LH33WP003/3A</p>
 <p data-bbox="235 1921 349 1955">24-ICM292</p>	<ul style="list-style-type: none"> • Direct Spark Ignition (DSI) control board • Microprocessor-based • Controls Induced Draft and indoor blower motors; humidifier output, spark ignitor and gas valve • Monitors timing, trial for ignition and lockout • 100% lockout safety feature • Compatible with LP or natural gas • Status LED for fault codes to aid in troubleshooting 	<p>Control Voltage: 24 VAC (18-30 VAC), 60Hz Line Voltage: 115/23 VAC, 60Hz Power Consumption: 03A plus gas valve current @ 24 VAC Operating Temperature: -40°C(-40°F) to 75°C(176°F)</p> <p><u>Timing:</u> Pre-purge: 20 seconds Trial for Ignition: 6.5 seconds Number of Trials: 4 (2+2, 3 minutes apart) Lockout: 1 Hour Post-purge: dip switch selectable 90, 120, 160, 180 seconds apart</p> <p><u>Inputs:</u> Power: SEC and COM Thermostat Interface: R, W, Y and G Safety Switches: Limit and Vent Combustion Motor Hall Effect Sensor Flame Sensing</p> <p><u>Outputs:</u> Spark Gas Valve: GV Induced Draft Motor Multi speed indoor blower motor Humidifier</p> <p><u>LED Indicators:</u> PWR(green): Steady ON - power to the board OK(green): Steady ON - no fault Flashing - fault code Flame(yellow): Steady On - flame sensed, flashing two times -flame out of sequence</p>	<p>Rheem: 62-24140-04</p>

Fan Blower Controls







Direct OEM Replacement Parts

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM292A</p>	<ul style="list-style-type: none"> • Direct Spark Ignition (DSI) control board • Microprocessor-based • Controls Induced Draft and indoor blower motors; humidifier output, spark ignitor and gas valve • Monitors timing, trial for ignition and lockout • 100% lockout safety feature • Compatible with LP or natural gas • Status LED for fault codes to aid in troubleshooting 	<p>Voltage: 24 VAC (18-30 VAC), 60 Hz Voltage: 115 VAC, 60 Hz Power consumption: 0.3A plus gas valve current at 24 VAC Operating temperature: -40°F to 176°F (-40°C to 75°C)</p> <p><u>Timing:</u> Pre-purge: 30 seconds Trial for ignition: 7 seconds Lockout: 1 hour Power: 24 VAC and COM Post-purge: 90, 120, 160 and 180 seconds</p> <p><u>Inputs:</u> Thermostat interface: R, W, Y and G Retries: 2 groups of 2, 30 seconds delay within the group and 3 minutes delay between groups System switches: Vent pressure and limit switches (main and over-temperature switches in series)</p> <p><u>LED indicators:</u> Power, green LED: PWR Status, green LED: OK Flame status, yellow LED: FLAME</p>	<p>Rheem: 62-24140-04</p>
 <p>24-ICM2804</p>	<ul style="list-style-type: none"> • Low cost form, fit and functional replacement for Carrier: CES0110074-01 • Microprocessor-based • Controls vent motor and blower control • Monitors limit switch, pressure switch and gas valve • 100% lockout safety feature • Compatible with LP or Natural Gas • Status LED for fault codes to aid in troubleshooting 	<p><u>Electrical:</u> Line Voltage Range: 98-132 VAC @ 60Hz Cool Blower: 20A, 2 HP, 240 VAC Heat: 10A, 240 VAC Inducer Motor: 4A FLA, 8A LRA @ 120 VAC</p> <p><u>Timing:</u> Inducer Pre-Purge Time: 1 second Heat Blower On Delay: 45 seconds Heat Blower Off Delays: 120 or 180 second Cool Blower On Delay: 1 second Cool Blower Off Delay: 1 second</p>	<p>Carrier: CES0110074-00, CES0110074-01</p>
 <p>24-ICM2805A</p>	<ul style="list-style-type: none"> • Low cost form, fit and functional OEM replacement control board for Nordyne: 903106-Kit • For use with G3, G4, G5, G6, M2 and M3 furnace modules • Controls gas valve, inducer draft motor, circulating blower and hot surface ignitor • Monitors timing, trial for ignition, flame sensing, lockout, plus pressure, rollout and limit switches • Microprocessor-based precision • Twinning compatible with another ICM2805A furnace control • Diagnostic LEDs aid in testing and troubleshooting 	<p>Line Voltage Range: 120/240 VAC @ 60 Hz Ignitor: 5A, 120 VAC Cool Blower: 10A, 2HP, 240 VAC Heat: 5A, 1/2 HP, 250 VAC Inducer Blower: 4A, 120 VAC Gas Valve: 1A, 24 VAC Humidifier Motor: 0.5A, 24 VAC Electronic Air Cleaner: 1A, 120 VAC</p>	<p>Nordyne: 903106-Kit</p>

Furnace, Fan & Ignition Replacement Controls





Replacement Controls

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM283</p>	<ul style="list-style-type: none"> • Low cost replacement HSI control for Honeywell, Robertshaw and White Rodgers • Single/Dual rod sensing capabilities <p>For gas fired furnaces, boilers and other heating appliances</p> <ul style="list-style-type: none"> • Switch selectable lockout times, ignition trials • Works with both Natural and LP systems • Diagnostic LED to aid in troubleshooting 	<p>Input Voltage: 120 & 24 VAC, 60Hz HSI: 120V, 5A max Valve: 24V, 2A max Total: 24V Load = 0.4 + valve load Pre-purge Time: 32 seconds Trial Time: 4 or 7 sec (switch selectable) Ignition Trials to Lockout: 1 or 3 (switch selectable) Flame Sense: Single rod or dual rod Gas Type: Natural or LP</p>	<p>HONEYWELL: S8910U-1000 ROBERTSHAW: HS780 WHITE-RODGERS: 50 E47 50F47</p>
 <p>24-ICM2810</p>	<ul style="list-style-type: none"> • Low cost, Goodman replacement board • Microprocessor-based precision • Controls inducer and blower fan motors, hot surface igniter, and gas valve • Monitors timing, trial for ignition, flame sensing, pressure switches, limit switches • Designed for 100% gas shutoff in case of ignition failure • Reverse polarity protection • Compatible with 24 VAC standard thermostat • Twinning compatible with another ICM2810 control board • Compatible with LP or natural gas • Provides diagnostic LED to aid in testing/troubleshooting 	<p>Pre-purge Time: 15 seconds Igniter Warm Up Time: 18 seconds Post-Purge Time: 15 seconds Total Trials for Ignition: 3 (auto rest after 1 hour) Heat Blower On: 30 seconds Heat Blower Off: Selectable 90/120/150/180 seconds Fan (Heat) On/Off Delay: 1 second Cool On: 5 seconds Cool Off: 45 seconds</p>	<p>PCBBF136 PCBBF140</p>
 <p>24-ICM2811</p>	<ul style="list-style-type: none"> • Controls the gas valve, inducer draft motor, circulating blower and hot surface ignitor • Monitors system pressure and limit switches • Microprocessor based precision • Twinning compatible with another ICM2811 Control Board • Diagnostic LEDs aid in testing and troubleshooting 	<p><u>Electrical</u> Electrical Rating @ 77°F (25°C) Input Voltage: 18-30 VAC 50/60 Hz maximum Igniter Current: 6.0 amp @ 120 VAC 50/60 Hz (resistive) Inducer Relay: 2.2 FLA-3.5 LRA @ 120 VAC Blower Relay: 14.5 FLA-25.0 LRA @ 120 VAC (2spd-H/C) Gas Valve Relay: 1.5 amp @ 25 VAC 50/60 Hz 0.6 pf</p> <p><u>Environmental</u> Operating Temp Range: -40° to 176°F (-40° to 80°C) Humidity Range: 5 to 95% relative humidity (non-condensing)</p>	<p>PCBBF110/S PCBBF123/S 0130F00005/S PCBBF112/S B18099-26/S</p>
 <p>24-ICM287</p>	<ul style="list-style-type: none"> • Low cost form, fit and functional replacement board for Goodman B18099-04 • Controls inducer and blower control • Microprocessor-based • Designed for 100% gas shutoff in case of ignition failure • Monitors timing and gas valve 	<p>Line Voltage Range: 120 VAC @ 60Hz Control Voltage: 24 VAC @ 60Hz Cool Blower: 30A resistive @ 120 VAC Heat Blower: 10A resistive @ 120 VAC Inducer Blower: 10A resistive @ 120 VAC</p>	<p>B18099-04</p>

Furnace, Fan & Ignition Replacement Controls






Replacement Controls

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM2902</p>	<ul style="list-style-type: none"> • Intermittent pilot gas ignition control • For use with intermittent pilot boilers, furnaces and other heating appliances • Microprocessor-based precision • Monitors timing, trial for ignition, flame sensing and lockout • Remote flame sensing • 100% lockout safety feature • Works with both Natural and LP gas systems • Status LED for fault codes to aid in troubleshooting 	<p>Control Voltage: Line 24V (18-30 VAC), 50/60Hz Anticipator Setting: 0.3A plus valve load @ 24VAC Prepurge: 15 seconds Trial for Ignition: 85 seconds Lockout: 60 minutes Flame Failure Response Time: 2 seconds LED: See product label for error codes</p>	<p>LENNOX: 30W33 JOHNSONCONTROLS: G776 (63K2401, 41K8701, 69J3601) ROBERTSHAW: 735L (18G91) 745 (95H04)</p>
 <p>24-ICM2909</p>	<ul style="list-style-type: none"> • Direct Spark Ignition (DSI) control board • Microprocessor-based • Monitors timing, trial for ignition, system switches, flame sensing and lockout • 100% lockout safety feature • Compatible with LP or Natural Gas • LED indication for status and fault codes to aid in troubleshooting 	<p><u>Inputs</u> Line voltage: 208-230 VAC, 50/60 Hz Control voltage: 18-30 VAC, 50/60 Hz System switches: Vent pressure, limit and MRLC (Manual Reset Limit Control)</p> <p><u>Outputs</u> Heat N.C.: 16FLA/30 LRA @ 277 VAC, 30K @ 85°C Cool N.O.: 15FLA/36 LRA @ 277 VAC, 100K @ 85°C Inducer: 9.8FLA/58.8LRA, 1/2HP @ 120 VAC, 6K @ 75°C Gas valve: 2.3 A PILOT DUTY @ 240 VAC, 6K @ 75°C</p> <p><u>Heat Operation Timing</u> Pre-purge: 3 seconds Heat blower ON delay: 30 seconds Post-purge: 5 seconds Heat blower OFF delay: 90 seconds Ignition trial: 7 seconds Inter-purge (retrial): 15 seconds Ignition activation period: 5 seconds Flame establishing period: 2 seconds Flame failure response time: 0.8 seconds (maximum)</p> <p><u>Cooling Operation</u> Cool blower On delay: 1 second Cool blower Off delay: 30 seconds</p> <p><u>Lockout Timing</u> Auto reset lockout: 60 minutes</p> <p><u>Environmental</u> Operating temperature: -40°F to 175°F (-40°C to 80°C) Storage temperature: -40°F to 185°F (-40°C to 85°C) Humidity: 5% – 95% R.H. (non-condensing) at +55°C</p>	<p>62-23599-01 62-23599-02 62-23599-03 62-23599-04 62-23599-05</p>

Furnace, Fan & Ignition Replacement Controls






Replacement Controls

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM6502</p>	<ul style="list-style-type: none"> • Power interruption protection for the compressor • Random Start delay • 6-minute anti-short cycle timer protects compressor from rapid short cycling • Two stages of heating (compressor & auxiliary back up heat) • Low outdoor ambient compressor lockout (cooling/heating) • Steady state cooling • Low indoor coil temperature cooling shut down • Low outdoor coil defrost lockout (defrost mode) • Low indoor room ambient (RS) auxiliary heat mode • Front Desk shut down switch input • Speed up test mode reduces timing for field testing of the board 	<p>Input L1 & L2: 240 VAC system power connections Control Voltage: 24VAC G: Fan W1/Y: Heat/Cool – Stage 1 W2: Auxiliary Heat – Stage 2 O: Reversing Valve FD: Front Desk Switch RS: Indoor Room Sensor Indoor: Indoor Coil Sensor Outdoor: Outdoor Coil Sensor Cooling Lockout: Outdoor Ambient Sensor</p> <p>Output Compressor, K5, K6: 10 FLA @240 Vac Low Speed Evap. Fan, K9: 2FLA @240 Vac High Speed Evap. Fan, K11: 2FLA @240 Vac Auxiliary Heat Stage 1, K1, K2: 21A Resistive @240 VAC Auxiliary Heat Stage 2, K3, K4: 21A Resistive @240VAC Reversing Valve, K8: 24 Vac 5VA Condenser Fan, K7: 24 Vac 1A Pilot Duty Thermostat Outputs: R (24 Vac) • Com</p>	<p>CB1205 CB1026</p>
 <p>24-ICM2911</p>	<ul style="list-style-type: none"> • Microprocessor-based • Monitors system timing, trial for ignition, system switches, flame sensing and lockout • 100% lockout safety feature monitors for repeated over-temperature faults or flame losses and disables the heat operation for safety • Continuously monitors the gas valve output to verify the gas valve does not turn on or off incorrectly • Compatible with LP or natural gas • LED indication for status and fault codes to aid in troubleshooting • Twinning feature allows two furnace boards to be controlled with a single thermostat • Field test mode 	<p>Input Line voltage: 120 VAC Control voltage: 18 – 30 VAC Frequency: 50/60 Hz</p> <p>Output Spark ignition: 12kV O.C.V., 60 Hz Heat blower: 15 FLA/30 LRA @ 277 VAC Inducer fan: 1/2 HP, 9.8FLA/58.8LRA @ 120 VAC Gas valve: 2.3A Pilot Duty @ 240 VAC</p> <p>Environmental Operating temperature: -40°F to 149°F (-40°C to 65°C)</p>	<p>5H9749</p>
 <p>24-ICM2904</p>	<ul style="list-style-type: none"> • Intermittent pilot gas ignition control module For use with intermittent pilot boilers, furnaces and other heating appliances • Microprocessor-based • Remote flame sensing • Compatible with LP or natural gas • Brown out monitoring 	<p>Control Voltage: 18-30 VAC Frequency: 50/60 Hz Pilot Valve: 2A @ 24 VAC Main Gas Valve: 2A @ 24 VAC Current Draw: 100mA maximum Pre-Purge Delay: 0 seconds Operating Temperature: -40°F to 167°F, -40°C to 75°C Humidity: 5%-95% R.H. (non-condensing) at +55°C</p>	<p>257009</p>

Furnace, Fan & Ignition Replacement Controls






Replacement Controls

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM2905</p>	<ul style="list-style-type: none"> • Intermittent pilot gas ignition control module • For use with intermittent pilot boilers, furnaces and other heating appliances • Microprocessor-based • Monitors timing, trial for ignition, flame sensing and lockout • Remote flame sensing • 2 minute trial for ignition • 60 minute lock out if pilot flame is not sensed in 2 minutes • Compatible with LP or natural gas • Damper control input 	<p>Control Voltage: 18-30 VAC Frequency: 50/60 Hz Humidity: 5%-95% R.H. (non-condensing) at +55°C Operating Temperature: -40°F to 165°F, -40°C to 75°C Pilot Valve: 2A @ 24 VAC Main Gas Valve: 2A @ 24 VAC Current Draw: 100 mA maximum Pre-Purge Delay: 0 seconds Trial for ignition: 2 minutes Lock Out Time: 60 minutes</p>	<p>257010</p>
 <p>24-ICM2906</p>	<ul style="list-style-type: none"> • Direct Spark Ignition (DSI) control board • Cooling and heating fan outputs • Microprocessor-based • Controls inducer motor, blower motor, air cleaner (if equipped), spark igniter & gas valve • Monitors timing, trial for ignition, system switches, flame sensing and lockout • Compatible with LP or natural gas • LED indication for status and fault codes to aid in troubleshooting 	<p>Control Voltage: 18-30 VAC Line Voltage: 120 VAC Frequency: 60 Hz Inducer Blower Output: Type: Relay Rating: 1/6 HP @ 125 VAC Gas Valves: Type: Relay Rating: 1A @ 24 VAC Heat Blower Output: Type: Relay Rating: 1/4 HP @ 125 VAC Cool Blower Output: Type: Relay Rating: 1 HP @ 125 VAC Operating Temperature: -40°F to 165°F (-40°C to 74°C) Dimensions: 14.5" x 5"</p>	<p>195573</p>
 <p>24-ICM2907</p>	<ul style="list-style-type: none"> • Direct Spark Ignition (DSI) control board • Microprocessor-based • Controls inducer motor, blower motor, air cleaner (if equipped), spark igniter & gas valve • Monitors timing, trial for ignition, system switches, flame sensing and lockout • Compatible with LP or natural gas • LED indication for status and fault codes to aid in troubleshooting 	<p>Control Voltage: 18-30 VAC Line Voltage: 120 VAC Frequency: 60 Hz Inducer Blower Output Type: Relay, Rating: 1/6 HP @ 125 VAC Gas Valves Output Type: Relay, Rating: 1A @ 24 VAC Main Blower Output Type: Relay, Rating: 1/4 HP @ 125 VAC Operating Temperature: -40°F to 165°F (-40°C to 74°C) Dimensions: 14.5" x 5"</p>	<p>195265</p>

Fan Blower Controls






Direct OEM Replacement Parts

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM2807</p>	<ul style="list-style-type: none"> • Controls gas valve, ignitor, blower motor, inducer, humidifier and air cleaner • Microprocessor-based precision • Designed for 100% gas shutoff in case of ignition failure • Twinning compatible with another ICM2807 control • Reverse polarity protection • Secondary brownout voltage protection • Compatible with 24 VAC standard thermostat • Continuous Blower Speed Jumper • Limit Switch Lockout Time • Limit Switch Lockout After Power Interruption • Self-Diagnostics • Provides diagnostic 	<p>Ambient Temperature - Operating: -40°F to 176°F - Humidity: 5% to 95% R.H. (non-condensing) @ +55°F</p> <p>Voltage Range: Line (98 to 132 VAC) @ 60Hz Ignitor: 5A @ 120 VAC Cool Blower: 10 HP, 120 VAC Low Heat: 5A, 1/2 HP, 120 VAC High Heat: 10A, 1 HP, 120 VAC Inducer Motor: 4A, FLA-8.0 LRA @ 120 VAC Gas Valve: 1.5A @ 30 VAC EAC: 1A@120 VAC Humidifier: 0.5A & 24 VAC</p>	<p>Carrier: HK42FZ005, HK42FZ010, HK42FZ015, HK42FZ017</p>
 <p>24-ICM2808</p>	<ul style="list-style-type: none"> • The ICM2808 is a low cost fit, form and functional replacement for the York S1-331-03010000 and S1-331-02956000 furnace control boards. • Controls gas valve, Ignitor, blower motor, Inducer, humidifier, and air cleaner. • Microprocessor-based precision • Designed for 100% gas shutoff in case of ignition failure • Twinning compatible with another ICM2808 control • Reverse polarity protection • Secondary brownout voltage protection • Compatible with 24 VAC standard thermostat • Provides dual-color diagnostic LED to aid in troubleshooting 	<p><u>Electrical Ratings</u> Voltage Range: Line (98 to 132VAC) @ 60Hz Control Voltage Range: 18-30VAC @ 60Hz Relay Outputs: Meets or exceeds O.E.M. board</p> <p><u>Timing:</u> Heat Blower On Delay: 30 seconds Heat Blower Off Delay: 90-180 seconds</p> <p><u>Environmental</u> Ambient Temperature: - Operating: -40°F to 176°F - Storage: -40°F to 185°F Humidity: 5% to 95% R.H. (non-condensing) @ +55°F</p>	<p>York: S1-331-03010000, S1-331-02956000</p>
 <p>24-ICM2812-KIT</p>	<ul style="list-style-type: none"> • The ICM2812-KIT is a universal replacement board that comes packaged with a series of cable harnesses that make it a replacement for the White-Rodgers 50M56U-843 and more than 150 competitive part numbers. See the full cross reference information in the Cross Reference section below. • Hot Surface Ignition (HSI) control board • Microprocessor-based • Monitors timing, trial for ignition, system switches, flame sensing and lockout. • 100% lockout safety feature • Compatible with LP or Natural Gas • LED indication for status and fault codes to aid in troubleshooting 	<p><u>Electrical:</u> Control voltage: 24 VAC (18-30 VAC) Line voltage: 120 VAC Operating temperature: -40° to 175°F (-40° to 80°C) HSI Hot Surface Ignitor: 6 amp @ 120 VAC Gas Valve: 1.5 amp @ 24 VAC Inducer draft motor: 2.2 FLA @120 VAC Blower motor: 14.5 FLA @ 120 VAC</p> <p><u>Environmental:</u> Operating Temp Range: -40° to 176°F (-40° to 80°C) Humidity Range: 5 to 95% relative humidity (non-condensing)</p>	<p>White-Rodgers: Universal 50M56U-843, and 150+ other models from Goodman, Carrier, Lennox, York, Trane, White Rodgers, Whirlpool, Nordyne and more</p>

Furnace, Fan & Ignition Replacement Controls





Replacement Controls

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM2910</p>	<ul style="list-style-type: none"> • Direct Spark Ignition (DSI) control modules • Microprocessor-based • Controls spark ignitor and gas valve • Monitors timing, trial for ignition, flame sensing and lockout • Compatible with LP or natural gas • Redundant Gas valve design conforms to ANSI Z21.20 • Conforms to UL STDs 60730-1 and 60730-2-5. • Certified to CSA STD E60730-1 and CSA STD • C22.2#60730-2-5 	<p>Control Voltage: 102-138 VAC Flame Current: 1uA minimum Current Draw: 50mA maximum Gas Valve: 1.5A@120 VAC Flame Failure Response Time: 0.8 seconds maximum Operating temperature: -40°F to 175°F (-40°C to 80°C) Dimensions: 5.23"L x 2.53"W x 1.86"H Mounting: Surface mount using (2) #8 screws</p>	<p>35-725200-005 35-725201-007 35-725201-501 35-725201-505 35-725205-015 35-725205-017 35-725205-021 35-725205-115 35-725205-521 35-725206-515 35-725405-013</p>
 <p>24-ICM2913</p>	<ul style="list-style-type: none"> • Controls blower motors, gas valve, & spark ignitor in sequence • Protects against short cycling • Selectable Heat/Cool blower off-delay time • Flash codes from the onboard LED indicate specific problems for easier troubleshooting • Repeated ignition failures or flame losses will disable heat operation for safety 	<p>Line voltage: 230 VAC Line frequency: 50/60 Hz Control voltage: 18-30 VAC Circulator blower: 10 FLA, 30 LRA @ 240 VAC Inducer blower: 0.7 FLA, 1.5 LRA @ 240 VAC Combined gas valve load: 1.5 A @ 24 VAC Minimum flame signal threshold: 0.75 uA</p>	<p>D674711P01</p>
 <p>24-ICM2914</p>	<ul style="list-style-type: none"> • Controls blower motors, gas valve, & spark ignitor in sequence • Protects against short cycling • Selectable Heat/Cool blower off-delay time • Flash codes from the onboard LED indicate specific problems for easier troubleshooting • Repeated ignition failures or flame losses will disable heat operation for safety 	<p>Line voltage: 460 VAC Line frequency: 50/60 Hz Control voltage: 18-30 VAC Circulating blower: 4FLA @ 277 VAC Hi-efficiency blower: 10 mA @ 24 VAC Inducer blower: 10 mA @ 24 VAC Combined gas valve load: 1.5 A @ 24 VAC Minimum flame signal threshold: 0.75 uA</p>	<p>D674712P01</p>

Furnace, Fan & Ignition Replacement Controls





Replacement Controls

Item ID	Features and Applications	Specifications	Cross Reference
 <p data-bbox="228 1041 362 1066">24-ICM2915</p>	<ul data-bbox="467 617 885 842" style="list-style-type: none"> • Controls blower motors, gas valve, & spark ignitor in sequence • Protects against short cycling • Selectable Heat/Cool blower off-delay time • Flash codes from the onboard LED indicate specific problems for easier troubleshooting • Repeated ignition failures or flame losses will disable heat operation for safety • 2-stage low heat and high heat 	<p data-bbox="898 632 1239 831"> Line voltage: 230 VAC Line frequency: 50/60 Hz Control voltage: 18-30 VAC Circulating blower: 4 FLA @ 277 VAC Hi-efficiency blower: 10mA @ 24 VAC Inducer blower: 0.7 FLA, 1.5 LRA @ 24 VAC Combined gas valve load: 1.5A @ 24 VAC Minimum flame signal threshold: 0.75 uA </p>	<p data-bbox="1382 716 1482 741">D674713P01</p>
 <p data-bbox="228 1745 362 1770">24-ICM2916</p>	<ul data-bbox="467 1320 885 1524" style="list-style-type: none"> • Controls blower motors, gas valve, & spark ignitor in sequence • Protects against short cycling • Selectable Heat/Cool blower off-delay time • Flash codes from the onboard LED indicate specific problems for easier troubleshooting • Repeated ignition failures or flame losses will disable heat operation for safety 	<p data-bbox="898 1320 1227 1524"> Line voltage: 230 VAC Line frequency: 50/60 Hz Control voltage: 18-30 VAC Circulating blower: 4FLA @ 277 VAC Hi-efficiency blower: 10 mA @ 24 VAC Inducer blower: 0.7 FLA, 1.5 LRA @ 240 V Combined gas valve load: 1.5 A @ 24 VAC Minimum flame signal threshold: 0.75 uA </p>	<p data-bbox="1382 1409 1482 1434">D674712P02</p>

Fan Blower Controls



Direct OEM Replacement Parts

Item ID	Features and Applications	Specifications	Cross Reference
 <p data-bbox="178 976 316 997">24-ICM2813</p>	<p data-bbox="418 472 836 756">The ICM2813 is a form, fit, and functional replacement for the Lennox SureLight(r) Series Boards and White Rodgers equivalent. The ICM2813 automated gas ignition control board monitors the ignition sequence including the inducer, pressure switch, hot surface igniter, gas valve, flame sense, and circulating blower while maintaining full safety circuit monitoring including the high limit switch, roll out switch and auxiliary limit switch circuits. Onboard diagnostics will indicate when a fault condition exists.</p> <ul data-bbox="418 787 836 934" style="list-style-type: none"> • Controls the gas valve, inducer draft motor, circulating blower and hot surface ignitor • Monitors system pressure and limit switches • Microprocessor based precision • Diagnostic LEDs aid in testing and trouble shooting 	<p data-bbox="849 514 1258 745">Electrical: Electrical Rating @ 77°F (25°C) Input Voltage: 18-30 VAC 50/60 Hz maximum Igniter Current: 2.0 amp @ 80 VAC 50/60 Hz (resistive) Inducer Relay: 2.2 FLA–3.5 LRA @ 120 VAC Blower Relay: 14.5 FLA–25.0 LRA @ 120 VAC (2spd–H/C) Gas Valve Relay: 1.5 amp @ 25 VAC 50/60 Hz 0.6 pf</p> <p data-bbox="849 766 1258 892">Environmental: Operating Temp Range: -40° to 176°F (-40° to 80°C) Humidity Range: 5 to 95% relative humidity (non-condensing)</p>	<p data-bbox="1297 493 1485 714">Lennox: 10M9301, 12L6901, 32M8801, 56L8401, 24L8501, 63K8901, 97L4801, 100925-01, 100925-03, 17W9201, 23W5101, 30W2501, 69M0801, 69M1501, 83M00</p> <p data-bbox="1297 735 1485 903">White-Rodgers: 50A65-120, 50A65-121, 50A62-120, 50A62-121, 50A62-820, 21D83M-843, 50A66-122, 50A66-123</p>
 <p data-bbox="178 1669 316 1690">24-ICM6501</p>	<p data-bbox="418 1081 836 1228">The ICM6501 air handler control board operates with hot water heating systems. When the thermostat calls for Heat, the control will energize the Water Pump, Valve and Boiler. The blower will energize at the selected speed after 90 seconds to allow the coil to preheat.</p> <ul data-bbox="418 1249 836 1617" style="list-style-type: none"> • Controls the water pump, valve, fan and boiler in a hot water heating system • Jumper selectable high and low speed fan speed selection for 2 speed blower operations • Integral fan delays for both heating and standard fan operation • Monitors safety switches including the pressure switch and freeze protection switch • Test mode feature for system diagnostic purposes • LED status Light to aid in diagnosing power issues 	<p data-bbox="849 1218 1258 1344">Voltage: 24 VAC, 120/240 VAC, 50/60 Hz Valve: 24 VAC, 50/60 Hz, 5A HI/LO blower: 120/240 VAC, 50/60 Hz, 9.8 FLA Water pump: 120/240 VAC, 50/60 Hz, 1.5 FLA Boiler: 24 VAC, 50/60 Hz, 5A</p> <p data-bbox="849 1365 1258 1491">Timing: Fan ON delay: 0 seconds Fan OFF delay: 45 seconds Heat fan ON delay: 90 seconds Heat fan OFF delay: 20 seconds</p>	<p data-bbox="1297 1312 1485 1365">ClimaTek/ First Company: CB201</p>

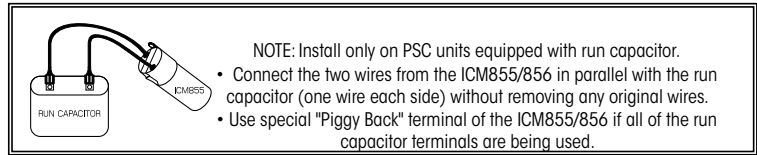
RapidStart® Motor Starters



Standard Hard Start Kits

Applications

- Low voltage situations.
- Tight or hard starting compressors.
- Use on any single phase A/C & refrigeration unit.



Item ID	Features & Applications		Specifications	Cross Reference
24- ICM855	<ul style="list-style-type: none"> • PTC - Positive Temperature Coefficient technology. • For PSC units with existing run capacitor only! • OEM approved. • Quick recycling. 	<ul style="list-style-type: none"> • Self-adjusting to voltage fluctuations. • Easy to install, 2 wires (clips or screws). • Boosts starting torque. • Most economical. 	<ul style="list-style-type: none"> • Voltage: 115 to 288 VAC. • Range: 1/2 to 10 HP • Recommended 1.5HP 	A-1: WXS-5 MARS: 32701, 35701 Supco: SPP-5 Wagner/DiversiTech: DST-5
24-ICM856				<ul style="list-style-type: none"> • Voltage: 115 to 288 VAC. • Range: 1/2 to 10 HP • Recommended 2.5HP
24-ICM857	For single-phase commercial and domestic capillary refrigeration systems and freezers	Pre-wired for fast installation <ul style="list-style-type: none"> • Overload: 12A • 145-175 mfd 	<ul style="list-style-type: none"> • Voltage: 120 to 180VAC. • Range: 1/12HP to 1/5HP 	MARS: 32481 Supco: RC0810
24-ICM858	For single-phase commercial and domestic capillary refrigeration systems and freezers	Pre-wired for fast installation <ul style="list-style-type: none"> • Overload: 22A • 243-292 mfd 	<ul style="list-style-type: none"> • Voltage: 120 to 180VAC. • Range: 1/4HP to 1/3HP 	MARS: 32741 Supco: RC0410
24-ICM859	For single-phase commercial and domestic capillary refrigeration systems and freezers	Pre-wired for fast installation <ul style="list-style-type: none"> • Overload: 30A • 243-292 mfd 	<ul style="list-style-type: none"> • Voltage: 120 to 180VAC. • Range: 1/3HP to 1/2HP 	Supco: RC0210

Current Sensing Hard Start Kits

By monitoring the compressor "current" upon start-up, RapidStart® is able to engage the hard start capacitor for precisely the correct amount of time, ensuring maximum starting torque without the risk of supplying too much current into the start winding. A timed safety circuit is provided in the event the motor fails to start within 2 seconds. Current sensing hard start precisely increases starting torque.



Item ID	Features & Applications		Specifications	Cross Reference		
24-ICM803	<ul style="list-style-type: none"> • Operates from 95 to 288 VAC. • Max input voltage: 502 VAC. • Patented current sensing circuitry. • Self-adjusting to voltage fluctuation. 	<ul style="list-style-type: none"> • Easy to install, 2 wires. • OEM approved. • Solid-state circuitry. • Boosts starting torque. • Disengages upon start. 	<ul style="list-style-type: none"> • Ideally suited for 1/2 thru 3 Hp. • 88 to 106 Mfd. capacitor. 	Supco	Kickstart	
24-ICM805						<ul style="list-style-type: none"> • Ideally suited for 2 thru 5 Hp. • 145 to 175 Mfd. capacitor.
24-ICM810			<ul style="list-style-type: none"> • Ideally suited for 3 1/2 thru 10 Hp. • 243 to 292 Mfd. capacitor. 			

RapidStart® Motor Starters



Voltage Sensing Hard Start Kits

ICM's differential voltage sensing products employ patented circuitry which monitors differential compressor auxiliary voltage, determines the state of the motor and precisely engages and disengages the start capacitor. A timed safety circuit is provided in the event the motor fails to start within 2 seconds.




Part #	Features & Applications	Specifications	Cross Reference	
24-ICM850	<ul style="list-style-type: none"> Increases starting torque up to 500%. Ensures precise starts. Reduces inventory. Not affected by ambient temperature. 	<ul style="list-style-type: none"> Voltage: 90 to 277 VAC. Max input voltage: 390 VAC. Recommended range: Up to 1 1/2 Hp applications. 	<ul style="list-style-type: none"> Oper. Temp. Range: -40°C to +65°C 43 to 52 Mfd 330 V Capacitor. 	<ul style="list-style-type: none"> Supco: SPP-5 Mars: 32701 A-1: WXS-5
24-ICM866U	<ul style="list-style-type: none"> Recycles instantly (less than one sec.). Multi-voltage operation... either 115 or 240 VAC motors. Fuse protection. Not effected by voltage or current fluctuations. 	<ul style="list-style-type: none"> Multi-voltage operation – 115 or 230 VAC motors 145-175 µF @ 330V 	<ul style="list-style-type: none"> Recommended Range: 1/12 to 5HP application UL Recognized 	Supco: SPP5, SPP6, SPP5E, SPP6E, SPP7E, SPP8E, SPP9E, SPP10E Kickstart: KS1, TO-5, KS8 5-2-1: CSR-U1, CSR-U2, CSR-U3 Watsco: WSX1 MARS: 32708, SS1, SS5, 32703, 32704, 32701, 32702 Diversitech: DST-5, DST-6

Surge Protectors




Single Phase Surge Protective Device

Designed to protect valuable single-phase equipment by dissipating momentary voltage spikes and transient power surges. motors, electronics, air conditioners, appliances, refrigeration systems, and more. Suitable for use on a circuit capable of delivering not more than 10,000 rms symmetrical amps, 240 volts maximum, when protected by a circuit breaker rated 15-60 amps maximum and 120 volts minimum.

Item ID	Features and Applications	Specifications	Cross Reference
 24-ICM517	Single-phase Surge Protection UL Listed, Type 2 device Low cost, rugged, reliable, SPD NEMA Type 3R Enclosure Lifetime Limited Protection Warranty	Service Voltage: 120/240 volt, single phase Maximum Surge Current: 100,000 Amps Maximum Energy Dissipation: 1,020 Joules Installation Point: Electrical Panel Service Disconnect AC Protection Modes: L-L, L-N, L-G, N-G Conduit Connection: 3/4"	SUPCO: SCM Plus, SCM150 Intermatic: AG3000

Split Phase Surge Protective Device

The ICM518 is a UL Listed Type 1&2 Whole Home Surge Protective Device for 240 VAC Split Phase configuration. When a surge occurs, the ICM518 will absorb the surge up to the limits expressed in the specifications section of this guide. The ICM518 incorporates thermal protection on the surge elements (TMOV's) which allows for safe disabling of the surge protector when a surge exceeds the thermal limits of the device.



Item ID	Features and Applications	Specifications	Cross Reference
 24-ICM518	240 VAC split surge protective device Easy 3-wire installation 3/4" conduit connection Green LED indicator tells whether the device is operational Low cost, high performance Rugged and reliable UL Listed Type 1 or Type 2 SPD NEMA Type 4X watertight enclosure for indoor/outdoor use	Service voltage: Split Phase 240 VAC Short Circuit Current Rating (SCCR): 200 kA Nominal discharge current (In): 20kA Maximum Surge Current: 100,000 amps SPD type: Type 1 (Can also be used in Type 2 applications) Surge protection technology: TFMov Protection mode: L1-L2, L1-N, L2-N Maximum Continuous Operation Voltage (MCOV): L-L: 300VAC L-N: 150VAC Input power frequency: 50/60Hz	ASCO: 420120S Eaton: SP1-240S, SP2-240S ERICO (Critec): TDX50C240 Generac: G0073000 Intermatic: AG2401C3, IG1200RC3, IG1240RC3, IG3240RC3 Leviton: 55240-ASA MARS: 83905 Siemens: TPS3A

Surge Protectors



3-Phase Surge Protective Devices


The ICM530'S are a series of Type 1 and Type 2 three-phase surge protective devices for three-phase Delta, three-phase Wye, or Delta High-leg configurations. When a surge occurs, the ICM three-phase surge protective device will absorb the surge up to the specified limitations of the device. ICM incorporates superior thermally protected metal oxide varistor technology into the three-phase surge suppressors, which allows for safe disabling of the surge elements when a surge exceeds the thermal limits of the device.

Item ID	Features and Applications	Specifications	Cross Reference
 24-ICM530	NEMA Type 4X watertight plastic enclosure for outdoor and indoor installation Green LED indicates surge protection present Easily connects to electrical panel or disconnect for indoor and outdoor applications UL Listed Type 1 or Type 2 SPD	Service voltage (3-Phase): 240 VAC Delta or 120/208 VAC Wye Short Circuit Current Rating (SCCR): 200 kA Nominal discharge current (In): 20kA Maximum Surge Current: 150,000 amps Protection mode: 3 for Delta configuration 6 for Wye configuration (neutral tied to ground) Maximum Continuous Operation Voltage (MCOV): L-L: 300 VAC L-N: (for Wye configuration only): 150 VAC VPR: Delta L-L: 1200 VAC Wye L-L: 1200 VAC Wye L-N: 700 VAC SPD type: Type 1 (can also be used in Type 2 applications) Surge protection technology: TFMOV Input power frequency: 50/60 Hz	ABB: OVRHLDxx-120 ASCO: 420120Y, 420240D Eaton: SP1-208Y, SP1-240D, SP2-208Y, SP2-240D ERICO (Critec): TDX50C120/208, TDX50C120/240D Intermatic: AG2083C3, L5F13Y1DG1 Leviton: 55208-ASA Siemens: TPS3D, TPS3C Square D: SDSA2040, SDSA2040D
 24-ICM531	NEMA Type 4X watertight plastic enclosure for outdoor and indoor installation Green LED indicates surge protection present Easily connects to electrical panel or disconnect for indoor and outdoor applications UL Listed Type 1 or Type 2 SPD	Service voltage (3-Phase): 480 VAC Delta or 277/480 VAC Wye Short Circuit Current Rating (SCCR): 200 kA Nominal discharge current (In): 20kA Maximum Surge Current: 150,000 amps Protection mode: 3 for Delta configuration 6 for Wye configuration (neutral tied to ground) Maximum Continuous Operation Voltage (MCOV): L-L: 700 VAC L-N: (for Wye configuration only): 350 VAC VPR: Delta L-L: 2500 VAC Wye L-L: 2500 VAC Wye L-N: 1200 VAC SPD type: Type 1 (can also be used in Type 2 applications) Surge protection technology: TFMOV Input power frequency: 50/60 Hz	ABB: OVRHLDxx-277 ASCO: 420277Y, 420480D Eaton: SP1-480Y, SP1-480D, SP2-480Y, SP2-480D ERICO (Critec): TDX50C277/480 Intermatic: AG4803C3, L5F13Y2DG1 Leviton: 55480-ASA Siemens: TPS3E, TPS3F Square D: SDSA2040, SDSA2040D
 24-ICM532	NEMA Type 4X watertight plastic enclosure for outdoor and indoor installation Green LED indicates surge protection present Easily connects to electrical panel or disconnect for indoor and outdoor applications UL Listed Type 1 or Type 2 SPD	Service voltage (3-Phase): 600 VAC Delta or 347/600 VAC Wye Short Circuit Current Rating (SCCR): 200 kA Nominal discharge current (In): 20kA Maximum Surge Current: 150,000 amps Protection mode: 3 for Delta configuration 6 for Wye configuration (neutral tied to ground) Maximum Continuous Operation Voltage (MCOV): L-L: 920 VAC L-N: (for Wye configuration only): 460 VAC VPR: Delta L-L: 2500 VAC Wye L-L: 2500 VAC Wye L-N: 1500 VAC SPD type: Type 1 (can also be used in Type 2 applications) Surge protection technology: TFMOV Input power frequency: 50/60 Hz	ASCO: 420347Y, 420600D Eaton: SP1-600Y, SP1-600D, SP2-600Y ERICO (Critec): TDX50C347/600 Intermatic: AG6503, L5F13Y3DG1 Siemens: TPS3L, TPS3G Square D: SDSA3650, SDSA3650D

Surge Protectors






3-Phase Surge Protective Devices

Item ID	Features and Applications	Specifications	Cross Reference
 24-ICM533	<p>NEMA Type 4X watertight plastic enclosure for outdoor and indoor installation</p> <p>Green LED indicates surge protection present</p> <p>Easily connects to electrical panel or disconnect for indoor and outdoor applications</p> <p>UL Listed Type 1 or Type 2 SPD</p>	<p>Service voltage (3-Phase): 120/240 VAC Delta High-Leg</p> <p>Short Circuit Current Rating (SCCR): 200 kA</p> <p>Maximum Surge Current: 150,000 amps</p> <p>Nominal discharge current (In): 20kA</p> <p>Protection mode: 3 for Delta configuration</p> <p>Maximum Continuous Operation Voltage (MCOV):</p> <p>L-L: 300 VAC</p> <p>H-L: 450 VAC</p> <p>L-N: 150 VAC</p> <p>H-N: 300 VAC</p> <p>VPR:</p> <p>L-L: 1200 VAC</p> <p>H-L: 1500 VAC</p> <p>L-N: 700 VAC</p> <p>H-N: 900 VAC</p> <p>SPD type: Type 1 (can also be used in Type 2 applications)</p> <p>Surge protection technology: TFMOV</p> <p>Input power frequency: 50/60 Hz</p>	<p>ASCO: 420240H</p> <p>Eaton: SPD050240H1</p> <p>Intermatic: AG2403C3, L5F13D1DG1</p> <p>Siemens: TPS3B</p> <p>Square D: SDSA2040D</p>

Ignition Controls







Gas Ignition Controls

Item ID	Features and Applications	Specifications	Cross Reference
 24-ICM283	<p>Hot Surface Ignition (HSI) Module</p> <p>Single/Dual rod sensing capabilities</p> <p>For gas fired furnaces, boilers and other heating appliances</p> <p>Switch selectable lockout times</p> <p>Works with both Natural & LP gas systems</p> <p>Diagnostic LED to aid in troubleshooting</p>	<p>Input Voltage: 120 & 24 VAC, 60Hz</p> <ul style="list-style-type: none"> - HSI: 120V, 5A max - Valve: 24V, 2A max - Total: 24V Load = 0.4 + valve load <p>Pre-purge time: 32 seconds</p> <p>Trial time: 4 or 7 seconds (switch selectable)</p> <p>Ignition trials to lockout: 1 or 3 (switch selectable)</p> <p>Flame sense: single rod or dual rod</p> <p>Gas type: Natural or LP</p>	<p>Honeywell: S8910U-1000</p> <p>Robertshaw: H5780</p> <p>White Rodgers: 50E47, 50F47</p>
 24-ICM2901	<p>For use with intermittent pilot boilers, furnaces and other heating appliances</p> <p>Microprocessor-based precision</p> <p>Monitors timing, trial for ignition, roll out switch, flame sensing and lockout</p> <p>Remote flame sensing</p> <p>100% lockout safety feature</p> <p>Compatible w/ LP or natural gas</p>	<p>Voltage: 24 VAC (18-30 VAC), 50/60 Hz</p> <p>Anticipator setting: 0.3A plus valve load @ 24 VAC</p> <p>Prepurge: None</p> <p>Trial for ignition: 85 seconds</p> <p>Flame failure response time: 0.5 seconds</p> <p>Retry: None</p> <p>Relative humidity: 0% - 95% non-condensing</p> <p>Operating temperature:</p> <ul style="list-style-type: none"> Min. ambient temperature rating is -40°F (-40°C) Max. ambient rating when used with 2.0A main valve is 160°F (71°C) <p>Relative humidity: 0% to 95% non-condensing</p>	<ul style="list-style-type: none"> • ICM: 294 • Johnson Controls: G770RJA-1 • York: 025-27762-700 and comparable ignition controls.
 24-ICM2904	<p>Intermittent pilot gas ignition control module</p> <p>For use with intermittent pilot boilers, furnaces and other heating appliances</p> <p>Microprocessor-based</p> <p>Remote flame sensing</p> <p>Compatible with LP or natural gas</p>	<p>Voltage: 18-30 VAC, 50/60 Hz</p> <p>Pilot valve: 2A @ 24 VAC</p> <p>Main gas valve: 2A @ 24 VAC</p> <p>Current draw: 100mA maximum</p> <p>Pre-purge delay: 0 seconds</p> <p>Operating temp.: -40°F to 167°F</p> <p>Humidity: 5%-95% R.H. (non-condensing) @ +55°C</p>	<p>Reznor: 257009</p> <p>United TCH: 1003-638A</p>

Ignition Controls



Gas Ignition Controls

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM2905</p>	<p>Intermittent pilot gas ignition control module For use with intermittent pilot boilers, furnaces and other heating appliances Microprocessor-based. Monitor timing, trial for ignition, flame sensing & lockout Remote flame sensing 2 min. trial for ignition 60 minute lock out if pilot flame is not sensed in 2 minutes Compatible with LP or natural gas Damper control input</p>	<p>Voltage: 18-30 VAC Frequency: 50/60 Hz Humidity: 5%-95% R.H. (non-condensing) @ +55°C Operating temp.: -40°F to 167°F Pilot valve: 2A @ 24 VAC Main gas valve: 2A @ 24 VAC Current draw: 100 mA maximum Pre-purge delay: 0 seconds Trial for ignition: 2 minutes Lock out time: 60 minutes</p>	<p>Reznor: 257010 United TCH: 1003-514</p>
 <p>24-ICM2906</p>	<p>Direct Spark Ignition (DSI) control board Cooling and heating fan outputs Microprocessor-based Controls inducer & blower motor, air cleaner (if equipped), spark ignitor & Gas valve Monitors timing, trial for ignition, system switches, flame sensing and lockout Compatible with LP or natural gas LED indication for status and fault codes to aid in troubleshooting</p>	<p>Voltage: 18-30 VAC Frequency: 60 Hz Inducer blower type: Relay Rating: 1/6 HP @125 VAC Gas valves type: Relay Rating: 1A @ 24 VAC Heat blower type: Relay Rating: 1/4 HP @125 VAC Cool blower type: Relay Rating: 1 HP @125 VAC Operating Temp: -40°F to 165°F</p>	<p>Reznor: 195573 United TCH:1097-211</p>
 <p>24-ICM2907</p>	<p>Direct Spark Ignition (DSI) control board Microprocessor-based Controls inducer & blower motor, air cleaner (if equipped), spark ignitor & gas valve Monitors timing, trial for ignition, system switches, flame sensing and lockout Compatible with LP or natural gas LED indication for status and fault codes to aid in troubleshooting</p>	<p>Voltage: 18-30 VAC Frequency: 60 Hz Inducer blower type: Relay Rating: 1/6 HP @125 VAC Blower type: Relay Rating: 1/4 HP @125 VAC Gas valves type: Relay Rating: 1A @ 24 VAC Operating temp: -40°F to 165°F</p>	<p>Reznor: 195265 United TCH: 1097-210</p>
 <p>24-ICM2909</p>	<p>Direct Spark Ignition (DSI) control board Microprocessor-based Monitors timing, trial for ignition, system switches, flame sensing and lockout 100% lockout safety feature Compatible with LP or Natural Gas LED indication for status and fault codes to aid in troubleshooting</p>	<p>Inputs: Line voltage: 208-230 VAC, 50/60 Hz Control voltage: 18-30 VAC, 50/60 Hz System switches: Vent pressure, limit and MRLC (Manual Reset Limit Control) Outputs: Heat N.C.: 16FLA/30 LRA @ 277 VAC, 30K @ 85°C Cool N.O.: 15FLA/36 LRA @ 277 VAC, 100K @ 85°C Inducer: 9.8FLA/58.8LRA, 1/2HP @ 120 VAC, 6K @ 75°C Gas valve: 2.3 A PILOT DUTY @ 240 VAC, 6K @ 75°C Heat Operation Timing: Pre-purge: 3 seconds Heat blower ON delay: 30 seconds Post-purge: 5 seconds Heat blower OFF delay: 90 seconds Ignition trial: 7 seconds Inter-purge (retrial): 15 seconds Ignition activation period: 5 seconds Flame establishing period: 2 seconds Flame failure response time: 0.8 seconds (maximum) Cooling Operation: Cool blower On delay: 1 second Cool blower Off delay: 30 seconds Lockout Timing: Auto reset lockout: 60 minutes Environmental: Operating temperature: -40°F to 175°F (-40°C to 80°C) Storage temperature: -40°F to 185°F (-40°C to 85°C) Humidity: 5% – 95% R.H. (non-condensing) at +55°C</p>	<p>Rheem: 62-23599-01, 62-23599-02, 62-23599-03, 62-23599-04, 62-23599-05</p>

Ignition Controls



Gas Ignition Controls

The ICM2910 consists of a series of 11 Fenwal OEM Replacement DSI Controls. When the thermostat initiates a "Call for Heat", the ICM2910 will perform a hardware check. After the hardware check, the ICM2910 will start a pre-purge where applicable. Once the pre-purge has ended, the spark source and the gas valve relay are energized simultaneously for the duration of the trial for ignition period. A flame rectification circuit confirms the presence of the flame. Upon flame detection, the spark source is turned off. If flame is not sensed, the control will turn off the spark source and gas valve and start an inter-purge where applicable before the next trial for ignition. If flame is not detected after the trial(s) for ignition, the control will enter a hard lockout. To clear the hard lockout, remove the input voltage to the control or recycle the thermostat's heat call.


- Direct Spark Ignition (DSI) control modules
- Microprocessor-based
- Controls spark ignitor and gas valve
- Monitors timing, trial for ignition, flame sensing and lockout
- Compatible with LP or natural gas
- Redundant Gas valve design conforms to ANSI Z21.20
- Conforms to UL STDs 60730-1 and 60730-2-5.
- Certified to CSA STD E60730-1 and CSA STD C22.2#60730-2-5

Specifications

- Control Voltage: 102-138 VAC
- Flame Current: 1uA minimum
- Current Draw: 50mA maximum
- Gas Valve: 1.5A@120 VAC
- Flame Failure Response Time: 0.8 seconds maximum
- Operating temperature: -40°F to 175°F (-40°C to 80°C)
- Dimensions: 5.23"L x 2.53"W x 1.86"H
- Mounting: Surface mount using (2) #8 screws



Item ID	Cross Reference Fenwal Item ID	# Ignition Trials	Pre-Purge Time	Inter-Purge	Trial for Ignition Time
24-ICM2910-200-005	35-725200-005	1	None	None	10s
24-ICM2910-201-007	35-725200-007	1	None	None	15s
24-ICM2910-201-501	35-725201-501	1	5s	None	4s
24-CM2910-201-505	35-725201-505	1	5s	None	10s
24-ICM2910-205-015	35-725205-015	3	None	15s	10s
24-ICM2910-205-017	35-725205-017	3	None	15s	15s
24-ICM2910-205-021	35-725205-021	3	None	25s	4s
24-ICM2910-205-115	35-725205-115	3	15s	15s	10s
24-ICM2910-205-521	35-725205-521	3	5s	25s	4s
24-ICM2910-206-515	35-725206-515	3	5s	15s	10s
24-ICM2910-405-013	* 35-725405-013	3	None	15s	7s

Item ID	Features and Applications	Specifications	Cross Reference
 24-ICM2911	Microprocessor-based Monitors system timing, trial for ignition, system switches, flame sensing and lockout 100% lockout safety feature monitors for repeated over-temperature faults or flame losses and disables the heat operation for safety Continuously monitors the gas valve output to verify the gas valve does not turn on or off incorrectly Compatible with LP or natural gas LED indication for status and fault codes to aid in troubleshooting Twinning feature allows two furnace boards to be controlled with a single thermostat Field test mode	Input: Line voltage: 120 VAC Control voltage: 18 – 30 VAC Frequency: 50/60 Hz Output: Spark ignition: 12kV O.C.V., 60Hz Heat blower: 15 FLA/30 LRA @ 277 VAC Inducer fan: 1/2 HP, 9.8FLA/58.8LRA @120 VAC Gas valve: 2.3A Pilot Duty @ 240 VAC Environmental: Operating temperature: -40°F to 149°F (-40°C to 65°C)	Modine Spark Ignition Control: 5H79749

Oil Primary Controls



1500 Series

ICM's Intermittent Ignition Oil Primary Control is ideal for residential oilfired burners used in boilers, forced air furnaces, water heaters and other oil burning appliances where pre/post-purge is not a safety requirement. It uses a C554A Cadmium Sulfide (cad cell) Flame Detector to monitor the burner flame.

In the event of flame failure or flame loss, the control will shut the system down. In the event of a lockout, pressing and holding in the red external reset button for three seconds will manually reset the safety switch. (For added safety, the button press is activated upon release to ensure that the button can not be permanently held in).

A status indicator LED on the control board indicates the function of the control and can be used to aid in testing and/or troubleshooting the control. To initiate a manual lockout of the system, press and hold the reset button when the status LED is off. There is a slight delay before the heat call is implemented. This is to verify the call is valid.

- Controls oil burner, oil valve (if desired) and the ignition transformer in response to a call for heat
- Solid state flame sensing circuit
- LED on terminal strip indicates system lockout
- Enclosed safety switch with external reset button
- Mounts on standard 4 x 4 in. junction box; select models may be mounted directly on burner housing
- C554A Cadmium sulfide flame detector and 24 VAC thermostat required
- Form, fit and functional replacement for popular competitive models

Specifications

- Ignition Type: Intermittent
- Timing, safety switch: 15, 30 or 45 seconds
- Mounting bracket: For mounting on a standard 4" X 4" junction box or direct mounting on burner housing
- Elec. rating, contacts (full load): 7.4 A @ 120 VAC; 3.7 A @ 240 VAC
- Elec. rating, contacts (locked rotor): 44.4 A @ 120 VAC; 22.2 A @ 240 VAC
- Temperature range: -30°F to +130°F (-34°C to +55°C)
- Approvals: Underwriters Laboratories Inc







Oil Primary Control - Intermittent Ignition

Item ID	Safety Timing	Cross Reference
24-ICM1501	15 Sec	Honeywell: R8184G4066, R8184G1161, R8184G1294
24-ICM1502	30 Sec	Honeywell: R8184G4074, R8184G1179, R8184G1302, R8184G4033
24-ICM1503	45 Sec	Carlin: 48245 - Tempstar/Heil: 1147017 - White Rodgers: 668-401 Honeywell: R8184G4009, R8184G1138, R8184G1427, R8184G4025

Ignition Controls



Gas Ignition Controls

Item ID	Features and Applications	Specifications	Cross Reference
 <p>24-ICM2913-16</p>	<p>Direct Spark Ignition (DSI) control board Microprocessor-based Monitors system timing, trial for ignition, system switches, flame sensing and lockout 100% lockout safety feature monitors for repeated over-temperature faults or flame losses and disables the heat operation for safety Continuously monitors the gas valve output Compatible with LP or natural gas LED indication for status and fault codes to aid in troubleshooting On board fuse</p>	<p>Voltage: 230 VAC Control voltage: 18 – 30 VAC Frequency: 50/60 Hz</p>	<p>Trane Spark Ignition Control: D674711P01</p>
 <p>24-ICM2918</p>	<p>Universal intermittent pilot gas ignition control Provides ignition sequence, flame monitoring and safety shutoff for single/dual rod intermittent pilot control applications For gas fired furnaces, boilers and other heating applications Switch selectable pre-purge and ignition trials with permanent lock Works with or without vent damper connected Works with both natural gas and LP gas systems</p>	<p>Voltage: 18-30 VAC @ 50/60 Hz Trial for ignition: 15 or 90 seconds (switch settable) Operating temperature: -40°F to 165°F (-40°C to 74°C) Relative humidity: 5% - 95% (non-condensing) at +55°C Pre-purge time: 0 sec or 30 sec (switch settable) Green status LED: System status and error codes Yellow flame LED: Flame presence and flame strength</p>	<p>Honeywell: S8610U (and compatible Camstat, Fenwall, HSC, Johnson Controls, Robertshaw and White-Rodgers models).</p>
 <p>24-ICM6700</p>	<p>Direct Spark Ignition (DSI) control board. Monitors timing, Trial for ignition, flame sensing and lockout Status LED for fault codes to aid in troubleshooting Microprocessor-based precision Designed for 100% gas shutoff in the case of ignition failure</p>	<p>Voltage: 12 VDC Current draw: 100mA maximum Gas valve: N.O.: 0.5A @ 12 VDC Inducer blower: 3.7A @ 12 VDC Trial for ignition: 7 seconds ON delay: 15 seconds OFF delay: 90 seconds</p>	<p>Suburban: 521099 Fenwal: 06-236879-002</p>
 <p>24-ICM6701</p>	<p>Direct Spark Ignition (DSI) control board Monitors timing, Trial for ignition, flame sensing and lockout Microprocessor-based precision Designed for 100% gas shutoff in the case of ignition failure</p>	<p>Voltage: 12 VDC Current draw: 100mA maximum Gas valve: N.O.: 0.5A @ 12 VDC Trial for ignition: 7 seconds ON delay: 15 seconds</p>	<p>Suburban: 35-525900-113, 520814</p>

Specialty Products

Universal Air Switch

The NS2 Switch has a glass-filled polycarbonate housing containing a sensing diaphragm and an integral snap-acting switch with three male 90° quick-connect terminals. The switch can be actuated by a pressure or vacuum air flow or the differential between two air flows. The field adjustable set point range of this switch is 0.10"w.c. to 10.0"w.c. Using the switch accessories contained in this kit, the NS2 switch can be applied to a wide variety of residential and light commercial HVAC applications.



Specifications

- Operating Range - .10"w.c. to 10"w.c.
- Max Pressure Rating - 14"w.c.
- Mounting - vertical or custom angle
- Operating Temp. - -40°C to 88°C
- Sample Line Connections - Black positive, Gray negative
- Sample Medium - Air and by-products of combustion that will not degrade silicone or polycarbonate
- Product Life - 100,000 Cycles

Kit Includes:

- (1) FIELD ADJUSTABLE NS2-0000-00 SWITCH
- (1) BLACK SET POINT ADJUSTMENT SCREW
- (1) HEXAGON KEY WRENCH
- (5) COLOUR-CODED SPRINGS
- (4) COLOUR-CODED ORIFICES
- (1) HALF STRAP MOUNTING BRACKET
- (1) ANGLE BRACKET
- (1) MOUNTING SCREW FOR OPTIONAL BRACKETS
- (2) #6-3/8 MOUNTING SCREW FOR OPTIONAL BRACKETS

Item ID	Description
AS-NS2-0000-03	Air Switch

Universal Humidifier Solenoid

Introducing the first universal solenoid replacement. This one unit will replace over 32 different direct OEM solenoids in the field. Just wrench in the appropriate fittings on the inlet and outlet, and even change water flow from left to right to right to left. Cross Reference many Aprilaire, General, Honeywell, Skuttle, and many other models for a fraction of the



Kit Includes:

- SOLENOID
- 1/4" COMPRESSION x 18" MPT WITH FILTER SCREEN
- 3/16" BARB x 1/8" MPT
- 1/8" MPT x 1/4" COMPRESSION
- 1/8" MPT x 5/16" COMPRESSION
- 1/4" INSERT (FOR PLASTIC TUBE)
- 1/4" DELRIN SLEEVE (FOR PLASTIC TUBE)

Cross Reference

Aprilaire - #4040
 General - #990-53
 Honeywell - #32001639-002
 Skuttle - #A01-0814-148

Item ID	Description
71-UHS24	Universal Humidifier Solenoid

Li'L Popper

Li'L Popper control circuit breaker saves the technician dozens of blown fuses while he diagnoses control circuit failures. Simply plug the leads in to the ATC fuse receptacle on the board, and manually reset the Li'L Popper each time the breaker blows. Has a quick setting thermal cut out. Self adhering backing allows the contractor to leave the unit on the job site overnight if he is out of fuses. Free counter display by request. Alligator clip versions are available.

Item ID	Description
12-POP3	3 Amp control board circuit breaker
12-POP5	5 Amp control board circuit breaker



In-Line Air Duct Booster Fans

Features

- High Volume & Pressure
- Installs In Any Position
- Ball Bearings Are Permanently Sealed & Lubricated
- Backwards Inclined Blades
- Vibration Absorbing Material
- Class B TP Auto Reset
- UB Protected / Flame Retardant - Thermal Plastic Resin
- 140°F(60°C) Maximum Air Stream Temperature

Applications

- Ventilation
- Exhaust
- In-Line Boosting
- Radon Mitigation
- Dryer Vent Boosting

**5 YEAR
LIMITED
Warranty**

Serious Air Power With Quiet Operation



Accessories

- Speed Control
- Power Cord
- Auto Switch
- Duct Mufflers

Item ID	Amps	Watts	Duct Dia.	Volts	Hz	CFM
T9-TF106	1.00	70	6"	115	60	409

Duct Muffler

The DuctMuffler™ reduces noise traveling through ductwork. Sound reduction for composite noise averages 9dBA to 20dBA.

Item ID	Diameter	Length
T9-DM106	6"	24"
T9-DM112	12"	36"



**IN-LINE NOISE MUFFLER™
DUCTMUFFLER™**

Building Code Compliant, Meets NFPA standards 90A And 90 B. UL® Listed Acoustic Liner, Class 1 Air Duct

Air Duct Booster

Features electrical junction box for UL and code compliant electrical connection. An efficient way to increase air circulation, keep room temperatures consistent, and lower heating and cooling costs. Metal construction, powerful no-maintenance motors and a one-use thermal fuse mean these fans will be up to the task for years. Straightforward installation into any 120V system with detailed instructions, templates, and diagrams. Available in many sizes. A great way to give slow vents a boost. Conforms to UL STD 507, Certified to CSA STD C22.2 #113

Item ID	Diameter	CFM	Watts
625-AF6	6"	240	37
625-AF8	8"	420	37
625-AF10	10"	650	35
625-AF12	12"	975	65
625-AF14	14"	1350	65



626-AF8
Illustrated

Skeleton Motors



Skeleton Motors & Fan kits

- Mechanically Reversible
- Shaded Pole
- Sleeve Bearing
- 60 Hertz



T1-R617



T1-R3670



T1-R670



T1-R673



T1-R635



T1-R684



T1-R3670 Kit Components



T1-R670 Kit Components



T1-R673 Kit Components

- Applications**
- Electric Htrs.
 - Range Hoods
 - Exhaust Fans
 - Ventilators
 - Vending Machines

Item ID	Amps	Volts	RPM	HP	Stack	Rotation	Shaft	Features	Cross References
T1-R617	0.23	208/230	3300	1/285	0.40	CCWOSE	1.1"x.1811"	C-ring groove, Cord & spade terminal	CHROM. 04-290-004,12657004, 12657005,ELECTROHOME SM607
T1-R3670	.40/.25	120/240	3300	1/150	0.63	CCWOSE	1.5"x3/16"	KIT-Cord & plug c/w two fan blades & mounting kit	600, 602, 700, 702, 710, EM670, EM672, 14001, 14005
T1-R670	0.53	115	3300	1/140	0.65	CCWOSE	1.3"x3/16"	KIT-Cord & plug c/w two fan blades & mounting kit	65670,14001,600,700,710, EM-670,SM-670
T1-R673	.77/.48	115	2/3300	1/110	0.63	CCWOSE	1.25"x3/16"	KIT-Wire leads, two speed, c/w two fan blades & mounting kit	4673, 14007, 65673, AM-673, J673 K673, SM-673
T1-R684	1.20	120	3300	1/70	0.80	CCWOSE	2.1"x7/32"	Cord & plug	NUVENT 2000A, D90CB 2584SP WR. WHISPER FAN

3.3" Heating Motors



• Sleeve bearing unless indicated otherwise

Item ID	HP	Volts	Amps	Spd/ RPM	Rot.	Type	Body	Shaft	Features	Cross Reference
06-R401	1/165	115	0.35	1/1600	CCWOSE	SP/ TE	2.09"	1/4"×1.5"	Conduit Sleeve, Bare Wire Leads	Enterprise Fdry., SM401, 76401
06-R215	1/115	240	0.22	1/1200	CCWOSE	SP/ TE	2.25"	5/16"×2.25"	Triangular Brk.Front	Electric Unit Htrs. Chromalox 01513005, Thermolec.
R2-R410	1/100	120	0.35	1/1550	CWLE	SP/ Open	2.79"	5/16"×2.0"	L.K.Fitting-Int.Fan Bare Wire Leads	Enterprise Fdry. 379135, SM410, 76410
06-R210	1/50	230	0.40	1/1550	CCWLE	SP/ TE	2.19"	1/4"×1.5"	Bare Wire Leads	Caloritech, SM210,217, 76210, SS210, CGE, 12519-002
06-R217	1/35	240	0.50	1/1450	CWOSE	SP/ TE	2.50"	1/4"×1.20"	Studs Front & Rear	Chromalox 02188001,2, 76217, FPE L82116A4,5
06-R212	1/30	115	0.55	1/1550	CCWLE	SP/ TE	2.60"	5/16"×3.5"	Ball Bearing, Triangular Brk.	Chromalox 01513002,3,10,11,16, SM212, 76212 SS212, 7173-0951
R2-R480	1/30	208/ 240	0.80	1/1500	CCWLE	SP/ Open	4.20"	3/8"×2.4"	4 Ears Each End, Ins. Spade Term.	Chromalox/Westcan Unit Heaters Westcan A2001B
06-R213	1/25	115	1.40	1/1550	CCWOSE	SP/ TE	2.95"	5/16"×1.8"	Triangular Brkt./ Box	Trane, Lincoln, Chromalox, SM213, SM302, 76213, SS213
R2-R303	1/25	115	1.40	1/1550	CCWLE	SP/ Open	3.84"	5/16"×3.3"	Ball Bearing, Triangular Brkt/ Int.Fan, Bare Wire Leads	Trane Unit Htr. 75270010, SM303, 76303, SS303
R3-R316	1/20	115	1.36	1/1550	CCWOSE	SP/ Open	2.77"	5/16"×1.37"	Ball Bearing, 30" Wire Leads 7" Grnd., Stud Mounting	Air 2000 HRV

3.3" Heating Motors



• Sleeve bearing unless indicated otherwise

Item ID	HP	Volts	Amps	Spd/ RPM	Rot.	Type	Body	Shaft	Features	Cross Reference
R2-R462	1/17	120	1.2/1.0	3/1660	CWLE	PSC/ Open	4.00"	3.5"×3/8"×3.5"	2 Side Studs	Venmar HRV 02101
R3-R373	1/15	115	0.90	1/1400	CCWOSE	PSC/ TE	4.40"	3/8"×3.3"	Plug 4/250 Cap Inc.	Dayton Greenhouse Fan, 7190-1004
R3-R348	1/15	115	1.1	2/1550 /1300	CCWOSE	PSC/ TE	4.10"	3/8"×3.4"	3 Ears/ Cap Inc. Pin & Ins. Spade Terms. Ring Term. Grnd.	Vanee HRV M1703
O1-R465	1/15	115	2.2	3/1550	CCW	SP/ Open	4.0"	2.3"×5/16"×2.3"	Internal Fan Pin Terms. Ring term. Grnd.	Nutech-Lifebreath 23202, Elmira stoves, 2868513152
US-R90671	1/15	115/208-230	1.1/2.1	1/1550	CWOSE	SP/ Open	5.00"	2.24"×5/16"	Mechanical Duty Removable Studs Resilient Rings Ball Bearing	671, 81671
US-R90672	1/15	115/208-230	1.1/2.1	1/1550	CCWOSE	SP/ Open	5.00"	2.24"×5/16"	Mechanical Duty Removable Studs Resilient Rings Ball Bearing	672, 81672
R2-R438	1/14	115	1.05/.85	2/1600	CWOSE	PSC/ Open	4.25"	5/16"×1.50"	3 Ears Mnt.	Venmar HRV 01038
R3-R366	1/7	120	1.7	3/1630	CWLE	PSC/ Open	4.75"	3.0"×3/8"×3.0"	2 Side Studs	Venmar HRV 02100
R2-R422	1/6	120	2.9	3/1690	CWOSE	PSC/ Open	4.90"	3/8"×2.0"	3 Ears	Venmar HRV 02209

Ventilation Motors & Fan Kits



Motor ID	Blower ID	HP	Amps	Spd/ RPM	CFM	Shaft	Bracket Part #	Blower Part #	Dia.	Width	Bore	Rot.	Cross Reference
T1-R630	R7-RB20	1/185	0.76	1/1500	60	1.90"×7/32"	92-A8600	93-A7105	5"	1 1/8"	7/32"	CW	013005, EB50
O6-R260	R7-RB22	1/80	0.65	1/1500	75	1.10"×5/16"	92-A8602	66-A508202	5 1/16"	2"	5/16"	CW	B60, 013012, EB60, 4099
O6-R262	R7-RB24 R7-RB25	1/40	1.00	1/1550	116 125	1.50"×5/16"	92-A8602	66-A508216	5 1/16"	2 5/32"	5/16"	CW	B100, K100, 013011, 4105
O6-R264	R7-RB26	1/60	0.95	1/1100	141	1.85"×5/16"	92-A8604	66-A610215	6 1/16"	2 5/32"	5/16"	CW	QK100, 013020
O6-R265	-	1/75	0.65	1/1400	115	1.62"×5/16"	-	-	-	-	-	-	QB100
O6-R266	R7-RB28	1/20	1.65	1/1550	201	1.40"×5/16"	92-A8604	66-A610215	6 1/16"	2 5/32"	5/16"	CW	BK100, 013024, 4115
M3-R2603	R7-RB30	1/23	1.30	1/1550	268	2.20"×1/2"	92-A8606	66-A610220	6 1/16"	2 5/32"	1/2"	CW	DK260, DB200, 75003, 013041, 013040, 4143
M3-R2604	-	1/10	2.65	1/1550	300	2.20"×1/2"	-	-	-	-	-	-	DB300, 013062, 013042

Penn Ventilation Motors



Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot	Body	Frame	Bearing	Cap	Shaft	Cross Reference
M4-R3206	1/40	115	1.1	SP	1/1050	CCWOSE	3.00"	5.0"	Ball	-	2.25"×3/8"	D340, Z-6 Model
R3-R343	1/40	115	1.3/0.6	SP	2/1550 /1050	CCWOSE	2.28"	3.3"	Sleeve	-	5.75"×3/8"	JA2M414-T, 56343-0
M4-R3975	1/20	115	2.3	SP	1/1045	CCWOSE	3.00"	5.0"	Sleeve	-	2.25"×3/8"	D1036, 7151-2139, S88-916, Z-8 Model
R3-R374	1/12	115	1.1/.73	PSC	2/1550 /1300	CCWOSE	2.90"	3.3"	Sleeve	10/370	3.1"×3/8"	JE2H7057-T, 63746-0
M4-R3747	1/7 1/11 1/25	115	2.5/2.1 /1.6	PSC	3/1500 /1300 /1050	CCWOSE	4.25"	5.0"	Sleeve	5/370	2.5"×1/2"	DE2F7085-T, 63747-0
M4-R3748	1/6 1/12 1/20	115	2.1/1.9 /1.4	PSC	3/1550 /1300 /1050	CCWOSE	4.25"	5.0"	Sleeve	10/370	2.6"×1/2"	DE2F7088-T, 63748-0
R3-R346	.4	115	3.6/2.5	PSC	2/1550 /1050	CCWOSE	4.50"	3.3"	Sleeve	12.5/370	5.3"×3/8"	JE2K007-T, 56346-0

Direct Drive Motors



5.0" Direct Drive Motors



Cross Reference For:

- Coleman
- Carrier
- Lennox
- York

Item ID	HP	Volts	Amps	Cap.	Spd/RPM	Rotation	Body	Bearing	Shaft	Cross Reference
UE-98	1/12	115	5.1	-	3/1050	CWSE	3.8"	Sleeve	5.08" × 1/2"	Fasco D178, D356, UE98
M4-R2385	1/5	115	6.5	-	3/1050	CCWOSE	4.0"	Sleeve	5.5" × 1/2"	Fasco D158, UE385, 90
M4-R2390	1/5	115	3.2	7.5/370	3/1075	Rev	3.9"	Sleeve	5.5" × 1/2"	UE390, York 24-22489-000, Bohn 5002L, 5003F
M4-R2391	1/5	208/230	1.3	7.5/370	3/1075	Rev	3.9"	Sleeve	5.5" × 1/2"	Fasco D262, D1016, UE391, 515
M4-R2395	1/4	115	4.9	5/370	3/1075	Rev	4.1"	Sleeve	3.1" × 1/2"	Fasco D150

5.5" Direct Drive Motor



Features

- 48 Frame
- 5.5" Diameter
- Open Enclosure
- Mounting: Stud, Strap & Base (Resilient Rings)
- 60 Hz
- Sleeve Bearing
- Shaft: 1/2" × 6.0"
- Reversible
- Permanent Split Capacitor (P.S.C.)
- 60" Coloured Electrical Leads
- Insulation Class B
- Thermally Protected

**24 Month
Warranty**



48 Frame - 4 Speed - Multi-HP - Direct Drive

Item ID	HP	Volts	Amps	Cap.	Spd/RPM	Rotation	A Dim.	Bearing	Shaft
DD-1314	1/3	115	6.0	7.5/370	4/1075	Rev	4.40"	Sleeve	1/2"×6"

Cross Reference

Rotom	HP	Voltage	AO Smith	Carrier	Coleman	Emerson	Lennox	ICP	GE	Marathon	Rotom
	1/3			HC41SE117							
DD-1314	1/4	115	DL1026	HC41SE121	1486-236P	11864	P-8-7505	1009045	3583		R43583
	1/6		DL1036	P257 8583		1863	32663	1008415	3585	X003	R43585
	1/7			P257 8585		1864	LFM13				

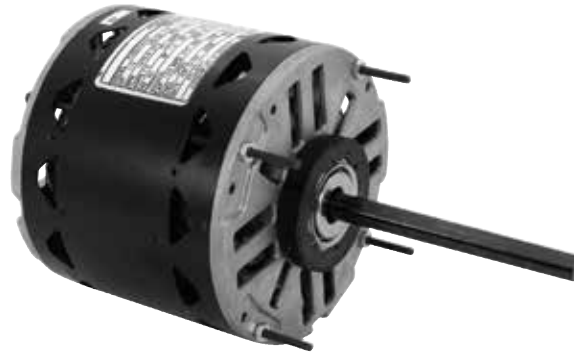
Direct Drive Motors



5.5" Direct Drive Replacement Motors

Features

- Less Inventory Required!
- Versatile!
- Time Saver!
- Energy Efficient
- Different Capacitor/Speed Combos
- Designed for 370V Cap
- Reversible Rotation
- Resilient Rings
- Extended Thru Bolts
- Automatic Protector
- Class B Insulation
- Continuous Duty-Over Air
- Mounts by Belly Band, Thru Bolts, or Shell Holes
- Rheem Mounting Holes in Shell
- 60 Hz



**Open Drip Proof
40°C Ambient**



Item ID	HP	Spd	RPM	Volts	Amps	Capacitor (370V)	Bearing	Leads	Dia	Shaft
R6-R43600	1/2	All	1075	115	7.0	5 mfd 7.5*	Sleeve	26"	4.86"	1/2"×5"
	1/3	All			6.7					
	1/4	Lo, Med-Lo, Med-Hi			4.4					
	1/5	Lo, Med-Lo			3.2					
R6-R43601	1/6	Lo	1075	208-230	2.4	5 mfd 7.5*	Sleeve	26"	4.86"	1/2"×5"
	1/2	All			3.9					
	1/3	All			3.6					
	1/4	Lo, Med-Lo, Med-Hi			2.5					
R6-R43602	1/5	Lo, Med-Lo	1075	115	1.8	5 mfd 7.5*	Ball	38"	4.86"	1/2"×5 1/2"
	1/6	Lo			1.3					
	3/4	All			9.1					
	1/2	All			6.8					
R6-R43603	1/3	All	1075	208-230	5.5	5 mfd 7.5*	Ball	38"	4.86"	1/2"×5 1/2"
	1/4	Lo, Med-Lo, Med-Hi			3.0					
	1/5	Lo, Med-Lo			2.3					
	3/4	All			3.9					
R6-R43604	1/2	All	825	208-230	3.6	7.5 mfd	Sleeve	36"	5.24"	1/2"×5 1/2"
	1/3	All			3.0					
	1/4	Lo, Med-Lo, Med-Hi			2.3					
	1/5	Lo, Med-Lo			2.0					
R6-R43604	1/3	All	825	208-230	2.1	7.5 mfd	Sleeve	36"	5.24"	1/2"×5 1/2"
	1/4	Lo, Med-Lo, Med-Hi			1.7					
	1/6	Lo, Med-Lo			1.0					
	1/8	Lo			0.9					

* Motor is approximately 10% stronger and has higher starting torque for 1/6, 1/5, 1/4 and 1/3 HP rating with the 7.5 mfd 370VAC capacitor.

Cross Reference

Rotom	Emerson	Genteq	Fasco	Marathon	A.O. Smith
R6-R43600	5460	3463	D2835	X077	FDL6001A
R6-R43601	5461	3464	D833	X073	FD6000A
R6-R43602	5470	3466	D2834	X074	FDL6002A
R6-R43603	5471	3467	D2833	X075	FD6001A
R6-R43604	5469	-	-	-	FD6002A

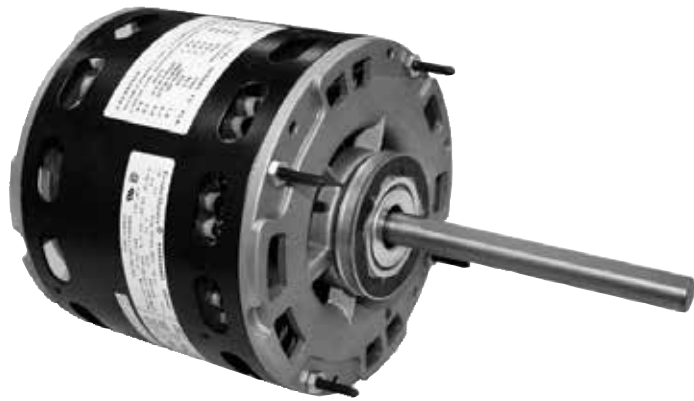
Direct Drive Motors

TruckStock™

5.5" Direct Drive Motors

Features

- Economical TruckStock Option!
- Less Inventory Required!
- Versatile!
- Time Saver!
- Easy Installations!
- Energy Efficient
- Different Capacitor/Speed Combos
- Designed for 370V Cap
- Reversible Rotation
- Extended Thru Bolts
- Automatic Protector
- Class B Insulation
- Continuous Duty-Over Air
- Mounts by Belly Band, Thru Bolts or Shell Holes
- Rheem Mounting Holes in Shell
- 60 Hz



Direct Drive

Item ID	HP	Spd	RPM	Volts	Amps	Cap	Bearing	Leads	Body	Shaft
R6-R43463	1/2-1/6	Four	1075	115	7.0	10/370, 7.5/370, 5/370	Sleeve	38"	4.86"	1/2"×5"
R6-R43464	1/2-1/6	Four	1075	208-230	3.9	10/370, 7.5/370, 5/370	Sleeve	38"	4.86"	1/2"×5"
R6-R43466	3/4-1/5	Four	1075	115	9.1	10/370, 7.5/370, 5/370	Sleeve	38"	4.86"	1/2"×5"
R6-R43467	3/4-1/5	Four	1075	208-230	3.9	10/370, 7.5/370, 5/370	Sleeve	38"	4.86"	1/2"×5"

Cross Reference

Rotom	AO Smith	Emerson	Genteq	Fasco	Marathon	DiversiTech	Smart	Carrier	Carrier	York
R6-R43463	EM3463	5460	3463	D2835	X077	WG840463	SE3463	P257-E5460	T257-3463	S1-FHM3463
R6-R43464	EM3464	5461	3464	D833	X073	WG840464	SE3464	P257-E5461	T257-3464	S1-FHM3464
R6-R43466	EM3466	5470	3466	D2834	X074	WG840466	SE3466	P257-E5470	T257-3466	S1-FHM3466
R6-R43467	EM3467	5471	3467	D2833	X075	WG840467	SE3467	P257-E5471	T257-3467	S1-FHM3467

Direct Drive Motors

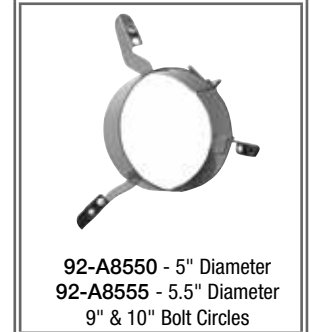


Direct Drive Motors

**40°C Ambient
24 Month
Warranty**

Features

- 48Y Frame
- 5.5" Diameter
- Open Enclosure
- Mounting: Stud, Strap & Base (Resilient Rings)
- 60 Hz
- Sleeve Bearing
- Shaft: 4.0" x 1/2"
- Reversible
- Permanent Split Capacitor (PSC)
- 40°C Ambient
- Insulation Class B
- Thermally Protected



115 & 208/230 Volts, 3 Speed, 1075 RPM, Reversible Rotation

Item ID	HP	Volts	Amps	Cap.	Spd/RPM	Rotation	Body	Bearing	Shaft
DD-3583	1/4	115	4.40	5/370	3/1075	Rev	4.15"	Sleeve	1/2" x 4.0"
DD-3584	1/4	208/230	2.20	5/370	3/1075	Rev	4.15"	Sleeve	1/2" x 4.0"
DD-3585	1/3	115	6.00	5/370	3/1075	Rev	4.40"	Sleeve	1/2" x 4.0"
DD-3586	1/3	208/230	2.90	5/370	3/1075	Rev	4.40"	Sleeve	1/2" x 4.0"
DD-3587	1/2	115	10.2	10/370	3/1075	Rev	5.40"	Sleeve	1/2" x 4.0"
DD-3588	1/2	208/230	5.00	10/370	3/1075	Rev	5.40"	Sleeve	1/2" x 4.0"
DD-3589	3/4	115	11.30	15/370	3/1075	Rev	5.48"	Sleeve	1/2" x 4.0"
DD-3590	3/4	208/230	5.40	10/370	3/1075	Rev	5.48"	Sleeve	1/2" x 4.0"
43595	1	115	9.70	20/370	3/1075	Rev	5-7/8"	Ball	1/2 x 6-1/2
43596	1	208-230	4.4-5.4	20/370	3/1075	Rev	5-7/8"	Ball	1/2 x 6-1/2

Capacitor Not Included

Cross Reference

Rotom	AO Smith	AO Smith	Emerson	Genteq	Fasco	Marathon	Packard	DiversiTech	Smart	Carrier	Carrier	York	UE	Rotom
DD-3583	EM3583	DL1026	1863	3583	D721	X000	43583	WG840583	SE3583	P257-8583	P257-3583	S1-FHM3583	533	R43583
DD-3584	EM3584	D1026	1971	3584	D725	X001	43584	WG840584	SE3584	P257-8584	P257-3584	S1-FHM3584	530	R43584
DD-3585	EM3585	DL1036	1864	3585	D727	X002	43585	WG840585	SE3585	P257-8585	P257-3585	S1-FHM3585	532	R43585
DD-3586	EM3586	D1036	1972	3586	D923	X003	43586	WG840586	SE3586	P257-8586	P257-3586	S1-FHM3586	529	R43586
DD-3587	EM3587	DL1056	1865	3587	D701	X004	43587	WG840587	SE3587	P257-8587	P257-3587	S1-FHM3587	531	R43587
DD-3588	EM3588	D1056	1973	3588	D703	X005	43588	WG840588	SE3588	P257-8588	P257-3588	S1-FHM3588	528	R43588
DD-3589	EM3589	DL1076	8904	3589	D728	X009	43589	WG840589	SE3589	P257-8589	P257-3589	S1-FHM3589	678	R43589
DD-3590	EM3590	D1076	8905	3590	D729	X010	43590	WG840590	SE3590	P257-8590	P257-3590	S1-FHM3590	679	R43590
43595			8906	3595										
43596			8907	3596										

Direct Drive Motors



5.5" Flex Mount Direct Drive Motors

Features

- 48Y Frame
- 5.5" Diameter
- Open Enclosure
- Mounting: Flex
- 60 Hz
- Ball Bearing
- Shaft: 1/2" x 6"
- Reversible
- Permanent Split Capacitor (PSC)
- 60" Coloured Electrical Leads
- 45°C (113°F) Ambient
- Insulation Class B
- Thermally Protected

9" & 10" Bolt
Circle

24 Month
Warranty



DD-035
Illustrated

115 & 208/230 Volts, 4 Speed, 1075 RPM, Reversible Rotation

Item ID	HP	Volts	Amps	Cap.	A Dim.	Bearing	Shaft
DD-034	1/4	115	3.4	5/370	3.84"	Ball	1/2" x 6"
DD-044		208/230	1.8/2.0	5/370	4.00"	Ball	1/2" x 6"
DD-035	1/3	115	5.0	10/370	4.50"	Ball	1/2" x 6"
DD-045		208/230	1.75/1.93	5/450	4.30"	Ball	1/2" x 6"
DD-036	1/2	115	7.6	10/370	4.85"	Ball	1/2" x 6"
DD-046		208/230	3.3/4.0	10/370	4.79"	Ball	1/2" x 6"

Cross Reference

Capacitor Not Included

Rotom	AO Smith	Fasco	GE	Marathon	UE	Rotom
DD-034	FML1026	D1730	3783	X034	752	R42034, R42419
DD-044	-	D1733	3784	-	-	R42449
DD-035	FML1036	D1731	3785	X035	753, 947	R42035, R42319
DD-045	FM1036	D1734	3786	-	-	R42349
DD-036	FML1056	D1732	3787	X036	754	R42036, R42219
DD-046	FM1056	D1735	3788	-	-	R42249

Direct Drive Motors



5 5/8" Torsion Flex Direct Drive Motors

Features

- 48Y Frame
- Open Enclosure
- 60 Hz
- Single Phase
- Electronically Reversible
- Permanent Split Capacitor (PSC)
- Automatic Overload
- Continuous Air Over
- Energy Efficient



Item ID	HP	Volts	Amps	Type	Spd/RPM	Cap.	Rot.	Bearing	Shaft	Cross Reference
43782	1/6	115	2.50	PSC	3/1075	5/370	Rev	Sleeve	1/2" x 5"	3782
43783	1/4	115	3.60	PSC	4/1075	5/370	Rev	Sleeve	1/2" x 6"	3783
43784	1/4	208-230	1.80-2.00	PSC	4/1075	5/370	Rev	Sleeve	1/2" x 6"	3784
43785	1/3	115	4.80	PSC	4/1075	10/370	Rev	Sleeve	1/2" x 6"	3785, 9377
43786	1/3	208-230	2.30-2.60	PSC	4/1075	10/370	Rev	Sleeve	1/2" x 6"	3786
43787	1/2	115	8.00	PSC	4/1075	10/370	Rev	Sleeve	1/2" x 6"	3787
43788	1/2	208-230	3.30-4.00	PSC	4/1075	10/370	Rev	Sleeve	1/2" x 6"	3788
43789	3/4	115	9.00	PSC	3/1075	15/370	Rev	Sleeve	1/2" x 5"	3789
43790	3/4	208-230	4.50	PSC	3/1075	10/370	Rev	Sleeve	1/2" x 5"	3790



5 5/8" Multi-Horsepower Direct Drive Motors

Features

- 48Y Frame
- Open Enclosure
- 60 Hz
- Single Phase
- Electronically Reversible
- Permanent Split Capacitor (PSC)
- Automatic Overload
- Continuous Duty, Air Over
- Mounting rings, thru bolts and holes in shell
- Multiple capacitor/speed combinations
- Class B insulation



Item ID	HP	Volts	Amps	Type	Spd/RPM	Rot.	Bearing	Encl.	Cross Reference
45460	1/2-1/3-1/4-1/5-1/6	115	5.80-5.10-3.50-3.20-2.20	PSC	3/1075	Rev	Sleeve	Open	Emerson 5460 Rheem 51-23012-41
45461	1/2-1/3-1/4-1/5-1/6	208-230	2.90-2.50-1.80-1.40-1.30	PSC	4/1075	Rev	Sleeve	Open	Emerson 5461 Rheem 51-23022-41
45470	3/4-1/2-1/3-1/4-1/5	115	9.10-6.50-5.50-4.00-2.30	PSC	4/1075	Rev	Sleeve	Open	Emerson 5470 Rheem 51-23017-41
45471	3/4-1/2-1/3-1/4-1/5	208-230	4.60-3.30-3.40-2.30-1.70	PSC	4/1075	Rev	Sleeve	Open	Emerson 5471 Rheem 51-21898-01

Direct Drive Motors

EC MAX[®]

Electronically Commutated Direct Drive Motors

Features

- High Efficiency ECM: Up to 80% Efficient
- Cross Reference either PSC or X13 model of equivalent HP
- Dual Voltage Design: Replace 115 or 230V with one motor
- Wiring harness and simple installation guide included
- Rotation Sensing Technology
- Automatically selects rotation upon first start up
- 45" wiring harness
- Easy to install
- Internal MOV (Metal Oxide Varistors) surge protector

Item ID	HP	Volts	Amps	RPM	Hertz	Shaft
46013	1/3	115/230	5.0/3.0	1075	60/50	1/2"x 5"
46012	1/2	115/230	6.7/4.0	1075	60/50	1/2"x 5"
46034	3/4	115/230	8.2/4.9	1075	60/50	1/2"x 5"
46001	1	115/230	11.0/6.7	1075	60/50	1/2"x 5"



Evergreen[®] VS Motors and User Interface



Evergreen VS

The Evergreen[®] VS motor and Evergreen VS user interface are designed to replace Genteq[®] constant airflow (variable speed) ECM indoor blower motors. The Evergreen VS product line is designed specifically to replace GE[®] models 2.0 and 2.5, and Genteq models 2.3, 3.0 and Eon[®] motors (including models formerly branded GE or GE ECM by Regal Beloit).

Applications

The Evergreen VS motor is designed for use in the following types of HVAC systems:

- Furnace, air handler and package units
- Fossil fuel, electric strip heat, A/C, heat pump and geothermal units
- When replacing 2.0, 2.3 or Eon[®] motors, Evergreen VS motors can only be used in single stage or two stage HVAC systems
- When replacing 2.5 and 3.0 motors, Evergreen VS motors can be used in single stage, multi-stage, modulating and communicating HVAC systems

Features

- Pre-programmed
- Plug-n-play
- Dual voltage
- Dual rotation
- Truck stock
- Two year warranty*
- Complete calls same day including after hours calls
- Reduce time on call using part on truck
- Built by same manufacturer as original motor
- Maintains system performance and efficiency

Item ID	HP	Volts	Amps	RPM	Rot	Shaft
FA-6503V	1/3	120/240	5.0/2.8	1050	Rev	0.5"x 5"
FA-6505V	1/2	120/240	7.7/4.3	1050	Rev	0.5"x 5"
FA-6507V	3/4	120/240	10.1/6.1	1050	Rev	0.5"x 5"
FA-6510V	1	120/240	12.8/7.4	1050	Rev	0.5"x 5"



Item ID	Description
FA-5K010V	2 Gen Evergreen VS User Interface

The Evergreen VS motor and User Interface (5K010) are used together to replace the Genteq model 2.3 or Eon motor. All wires and harnesses provided.

Fan Coil Motors



ECM Fan Coil Motors

Features

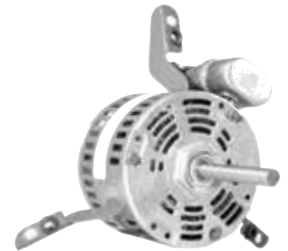
- Drop-in replacement • Brushless DC • 3 Speeds • 5 1/8" Diameter • 54" lead length
- ECM with internal control • Long life ball bearings • Rotors are isolated from shaft to reduce motor vibration • Saves an average of 69% on energy usage • Runs cooler

Item ID	HP	Volts	Rot.	Amps	RPM Range	Shaft	Frame
M4-R2189	1/10	120	CWOSE	1.6	3/1100,900,700	9.3" x 1/2" x 9.3"	5.0"



Tempspec Replacement Fan Coil Motors

9" or 10" Bolt Circle



Item ID	HP	Volts	Amps	Type	Cap	Spd/ RPM	Rot.	Body	Frame	Bearing	Shaft	Cross Reference
M4-R799	1/8	115	2.10	PSC	5/370	5/1000	CCWOSE	3.87"	5.0"	Ball	5.0" x 1/2"	L350, L450, L600, DA3E200, DA3F100, DA3G142
UE-799	1/8	115	2.60	PSC	5/370	5/1000	CWSE	3.5"	5.0"	Ball	5.0" x 1/2"	L350, L450, L600, UE DA3E200, DA3F100, DA3G142

Fan Coil Motors

Heating & Air Conditioning • High Rise Apartment • Condominium • Hotel
 ONE MOTOR DOES ALL THREE! Bedroom, Living Room, Common Area.

DD-030 Cross Reference: 5KCP39DGV279S

Item ID	HP	Amps	Cap	Spd/ RPM	Body	Frame	Shaft
DD-030	1/6	2.6	Inc.	5/950	3.98"	48	1/2" x 4.5"

WHITE: COMMON LINE
 COMMON AREA
 BLACK: 1000RPM
 YELLOW: 900RPM
 BLUE: 800RPM
 LIVING ROOM
 YELLOW: 900RPM
 BLUE: 800RPM
 ORANGE: 700RPM
 BEDROOM
 BLUE: 800RPM
 ORANGE: 700RPM
 RED: 600RPM

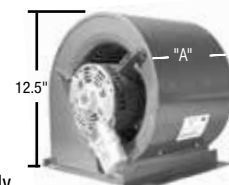
Wiring Diagram

Cross Reference For:
 • Climetec
 • Snyder-General
 • Tempspec
 • Unilux

Fan Coil Blowers

Heating & Air Conditioning • High Rise Apartment • Condominium • Hotel

Item ID	Motors Used	CFM	"A" Dim.
66-RFC300	UE-799	300	6.75"
66-RFC400	DD-030, UE-799	400	8.25"
66-RFC600	DD-030	600	9.00"



Motors Sold Separately

Unit Heater Motors



4.0" Unit Heater Motor

Features

- 115 Volt • CCWLE

Item ID	HP	Amps	RPM	Shaft	Cross Reference
M3-R2614	1/12	2.25	1550	2.5" x 3/8"	C16230



5.0" Unit Heater Motors

Features

- 115 Volt • Totally Enclosed

Fig. A
Lennox
ICP
Keeprite

Item ID	Fig.	HP	Spd/ RPM	Amps	Rot.	Type	Cross Reference
M4-R6920	A	1/15	1/1050	3.40	CCWOSE	SP	P8-6920, 54028, A0516, A2160, E62788, E62862, E62A15
T2-R2360	B	1/15	1/1050	3.30	CCWOSE	SP	45330,45331,45332,D143
T2-R2380	C	1/8	1/1075	2.60	CCWOSE	PSC	170-45888, 55681, 9775, 380, D260



Fig. B
Reznor



Fig. C
Robbins & Myers
Reznor

5.5" Unit Heater Motors - Dual Voltage

Item ID	HP	Volts	Amps	RPM	Rot.	A Dim.	Bearing	Shaft
UE-730A	1/6	115/208/230	2.1/1.1	1140	Rev	6.0"	Ball	1/2" x 5"
UE-731A	1/4	115/208/230	3.1/1.6	1140	Rev	6.25"	Ball	1/2" x 5"
UE-732A	1/3	115/208/230	3.3/1.7	1140	Rev	6.5"	Ball	1/2" x 5"
UE-733A	1/2	115/208/230	5.6/2.8	1140	Rev	7.25"	Ball	1/2" x 5"

Capacitor Included



5.5" Unit Heater Motors

Features

- 48 Frame
- Totally Enclosed
- Mounting: 4 Stud Pattern
- 60 Hz
- Permanent Split Capacitor
- 60°C Ambient
- Insulation Class B
- Thermally Protected



Item ID	HP	Volts	Amps	Cap.	Spd/ RPM	Rot.	A Dim.	Bearing	Shaft
UH-9034	1/6	115	2.4	5/370	1/1075	Rev	4.52"	Ball	1/2" x 3.4"
UH-9035	1/4	115	4.1	5/370	1/1075	Rev	4.52"	Ball	1/2" x 3.4"
UH-9036	1/3	115	5.0	7.5/370	1/1075	Rev	4.52"	Ball	1/2" x 3.4"

Capacitor Included



Cross Reference

Rotom	AO Smith	Emerson	Fasco	GE	Marathon	UE
UH-9034	UH1016, US1016, US1016NB	9034	D834	3206	X302, X306	177, 749
UH-9035	UH1026, US1026, US1026NB	9035	D734	3208	X303, X307	566, 734, 750
UH-9036	UH1036, US1036, US1036NB	9036	D732	3212	X304, X308	183, 751

Belted Fan Motors

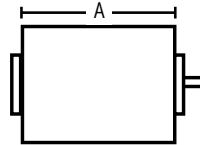


Belted Fan - One Speed

**24 Month
Warranty**

Features

- 48 Frame
- 5.5" Diameter
- Open Drip Proof
- Resilient Ring & Base Included
- 60 Hz
- Sleeve Bearing
- Shaft: 1/2" x 1.5" W/ Flat
- Reversible
- Split Phase
- 45°C (113°F) Ambient
- Insulation Class B
- Thermally Protected



BF-4701
Illustrated

Item ID	HP	Volts	Amps	S.F.	Spd/RPM	Rot.	A Dim.	Bearing	Shaft
BF-4701	1/4	115/208-240	4.6/2.3	1.35	1/1725	Rev	6.25"	Sleeve	1/2" x 1.5"
BF-4706	1/3	115-230	6.0/3.0	1.35	1/1725	Rev	6.25"	Sleeve	1/2" x 1.5"
BF-4708	1/2	115	7.2	1.25	1/1725	Rev	6.25"	Sleeve	1/2" x 1.5"

Cross Reference

Rotom	AO Smith	Emerson	Fasco	GE	Marathon	UE	Rotom
BF-4701	GF2024	840CV	D6002	4701, H701	D127, B206, B303	-	R840
BF-4706	GF2034	841CV	-	4706, H711	D143, B207	-	R841
BF-4708	GF2054	1542C	-	4708	D162, B208	-	R1542

48/56 Frame, Split Phase Belt Drive Fan and Blower Motors



Features

- 48/56 Frame
- 5 5/8" Diameter
- Open Drip Proof Enclosure
- Ball Bearing
- Resilient Base has 48 and 56 Frame Mounting Holes
- 60 Hz
- Split Phase
- Automatic Overload
- Single Speed
- Full Service Factor Ratings
- 40°C Ambient
- Continuous Duty
- Insulation Class B
- Thermally Protected



45013D
Illustrated

Item ID	HP	Volts	Amps	S.F.	Spd/RPM	Rot.	Bearing	Shaft Dim.	Length Less Shaft	Cross Reference
45016	1/6	115	3.60	1.35	1/1725	Rev	Sleeve	1/2" x 1-7/8"	7-1/2"	US Motors 3615
45014D	1/4	115/208-230	4.60/2.20-2.10	1.35	1/1725	Rev	Ball	1/2" x 1-7/8"	6.75"	Marathon B303
45013D	1/3	115/208-230	6.60/3.40-3.10	1.35	1/1725	Rev	Ball	1/2" x 1-7/8"	6.75"	Marathon B305
45012D	1/2	115/208-230	7.60/3.70-3.80	1.25	1/1725	Rev	Ball	1/2" x 1-7/8"	8.58"	Marathon B307
45230D	3/4	115/208-230	11.60/5.90-5.80	1.25	1/1725	Rev	Ball	5/8" x 1-7/8"	10.55"	Marathon 56S17D2060

Oil Burner Motors



Features

- 48M and 48N Flange Mounting
- Open & Totally Enclosed
- External Reversing Switch (most models)
- Sleeve Bearing
- Manual Reset Overload



Split Phase, 60Hz, Shaded Pole

Item ID	HP	Volts	Amps	Service Factor	Spd/ RPM	Rot.	Body	Frame	Bearing	Shaft	Features
T4-R6102	1/8	115	2.12	1.0	1/1725	Rev	5.22"	48N	Sleeve	1.82" x 1/2"	20" Leads
T4-R4782	1/8	115	2.5	1.0	1/1725	Rev	5.22"	48N	Sleeve	1.82" x 1/2"	20" Leads, open shaft end bracket, rotation switch.
T4-R2097	1/8	115	2.8	1.0	1/3450	Rev	5.93"	48N	Sleeve	1.88" x 1/2"	20" Leads, open shaft end bracket, rotation switch.
T4-R3083	1/7	115	2.8	1.0	1/3450	Rev	5.47"	48M	Sleeve	1.82" x 1/2"	15" Leads, rotation switch.
T4-R5866	1/7	115	2.5	1.0	1/3450	CCWOSE	5.47"	48M	Sleeve	1.82" x 1/2"	15" Leads, open shaft end brkt
T4-R3202	1/7	115	2.9	1.0	1/3450	CWOSE	5.97"	48M	Sleeve	1.82" x 1/2"	Beckett 21805U, 10.5" Leads, open shaft end bracket
T4-R3250	1/6	115	3.2	1.0	1/1725	Rev	5.72"	48N	Sleeve	1.82" x 1/2"	20" Leads
T4-R3252	1/6	115	3.2	1.0	1/1725	Rev	5.72"	48N	Sleeve	1.82" x 1/2"	20" Leads, open shaft end bracket, rotation switch.
T4-R3251	1/6	115	2.7	1.0	1/3450	Rev	5.97"	48M	Sleeve	1.82" x 1/2"	20" Leads, rotation switch.
T4-R3579	1/4	115	3.7	1.0	1/1725	Rev	6.72"	48N	Sleeve	1.82" x 1/2"	20" Leads, rotation switch.
T4-R3234	1/3	115	4.3	1.0	1/1725	Rev	6.72"	48N	Sleeve	1.82" x 1/2"	20" Leads, open shaft end bracket.
T4-R2303	1/3	115	4.3	1.0	1/1725	Rev	9.22"	48N	Sleeve	1.88" x 1/2"	Terminal board
T4-R3268	1/3	115/230	4.2/2.1	1.0	1/3450	Rev	6.72"	48N	Sleeve	1.82" x 1/2"	12.25" Leads, open shaft end brkt.
T4-R4788	1/3	115/230	5.2/2.6	1.35	1/3450	Rev	9.91"	48N	Sleeve	1.88" x 1/2"	Cap start, open shaft end bracket, terminal board
T4-R3267	1/2	115/230	6.2/3.1	1.0	1/3450	Rev	6.72"	48N	Sleeve	1.82" x 1/2"	12.25" Leads, 50/60Hz, open shaft end bracket.
T4-R3105	1/2	115/230	7.3/3.7	1.25	1/3450	Rev	10.41"	48N	Sleeve	1.88" x 1/2"	Cap start, terminal board, open dripproof
T4-R3172	3/4	115/208-230	10/5	1.0	1/3450	Rev	8.75"	48CZ	Ball	2.06" x 5/8"	Cap start, terminal board, open constr. 5/8" keyed shaft

PSC Oil Burner Motor - Direct Beckett Replacement - 21805U



PSC, 60Hz

Item ID	HP	Volts	Amps	Service Factor	Spd/ RPM	Rot.	Body	Frame	Bearing	Shaft	Comments
T4-R21805U	1/7	115	1.7	1.0	1/3450	CWOSE	4.50	48M	Ball	1.88" x 1/2"	PSC, open drip proof, automatic protector

Circulator & Booster Pump Motors

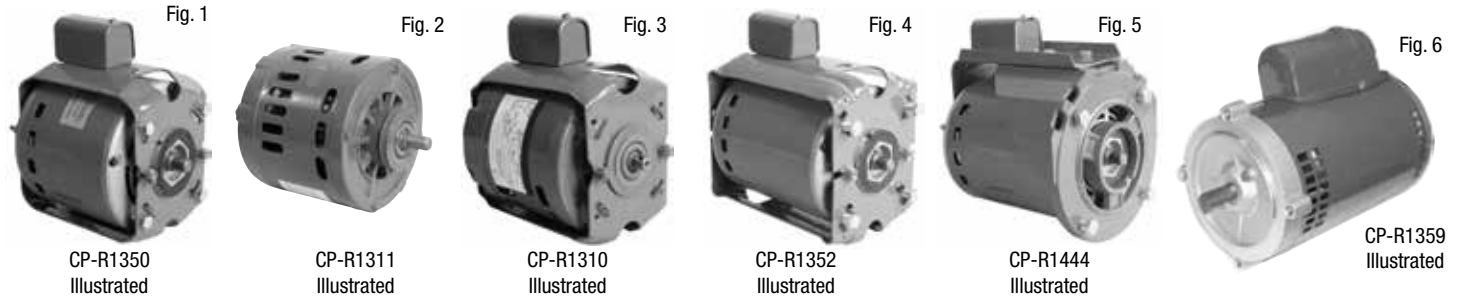


Armstrong / B&G Cross Reference

Single Shaft • Single Speed • 1725 RPM

115/230/460/575 Volts • Resilient Rings for Base Mount Models • Open Construction • Reversible

Typical Applications : Hot Water Boiler & Booster Pumps



Item ID	HP	Volts	Fig.	Bearing	Cross Reference
CP-R1459	1/20	115/208/230	8	Ball	811757-001, 111044
CP-R1350	1/12	115	1	Ball	805316-010, 831000-61, 111034
CP-R1311	1/8	115	2	Sleeve	Taco Replacement
CP-R1310	1/6	115	3	Sleeve	OBG2004
CP-R1351	1/6	115	1	Ball	817025-005, 111061
CP-R1352	1/4	115	4	Ball	817025-001, 831001-061, 111031
CP-R1354	1/4	115	4	Ball	817025-007, 831002-061, 111040
CP-R1444	1/3	115	5	Ball	816141-001
CP-R1356	1/3	115	4	Ball	817025-013, 831003-061, 111042
CP-R1446	1/2	115	5	Ball	816141-002
CP-R1359	1/2	115/208/230	6	Ball	831009-061, 111044
CP-R1362	3/4	115/208/230	6	Ball	831010-062, 111047
CP-R1370	3/4	208/230/460	7	Ball	831012-083, 111049
CP-R1372	1	575	7	Ball	811757-006, 111049-5
CP-R1472	1	575	9	Ball	811757-005, 024, 027, 111049-5
CP-R1363	1	115/230	6	Ball	816676-062, 111050
CP-R1371	1	208/230/460	7	Ball	816675-069, 169090
CP-R1373	1	575	7	Ball	816676-068, 169090-5
CP-R1463	1	115/230	8	Ball	811757-007, 028, 031, 111050
CP-R1471	1	208/230/460	9	Ball	811757-008, 169090
CP-R1473	1	575	9	Ball	811757-009, 028, 031, 169090-5
CP-R1375	1	575	7	Ball	816685-068, 196092-5



Pump Couplers

Easy Links - Spirolink



Item ID	Specification	Description
T6-10010	1/2" x 1/2"	1/2 to 1/3 HP Easy Link
T6-10010SL	1/2" x 1/2"	Spirolink
T6-10023	1/2" x 1/2" or 1/2" x 5/8"	1/2 to 3/4 HP Easy Link
T6-10023SL	1/2" x 1/2" or 1/2" x 5/8"	Spirolink
T6-10034SL	1/2" x 5/8" or 5/8" x 5/8"	Spirolink
T6-10045SL	1/2" x 5/8" or 5/8" x 5/8"	Taco

Flue Exhaust Motors



Item ID	HP	Spd/ RPM	Amps	Volts	Rot	Shaft	Body	Type	Cross Reference
82521	1/100	1/1550	0.70	115	CCWSE	1-1/4"x1/4"	2-1/16"	SP	23388, 23405
FM-RFM623	1/40	1/1500	0.80	115	CWSE	2.5"x5/16"	5.60"	SP	D9623, S59-485
82121	1/33	1/3000	1.10	115	CCWLE	2-1/8"x5/16"	3.75"	SP	JA1M086, P251-2916
FM-RFM454	1/30	1/3000	1.50	115	CCWSE	2.5"x1/4"	6.25"	SP	D454 W/ 5/16" Shaft Adapter
FM-RFM890	1/25	1/3200	0.70	208/230	CCWSE	2.3"x5/16"	3.29"	SP	Lennox 98G8901, 7121-7091
82180	1/20	1/3300	1.54	115	CCWLE	2-1/8"x5/16"	3 5/8"	SP	JA1P053, P251-2307
FM-RFM11*	1/20	1/3200	1.80	115	CCWSE	1.5"x5/16"	3.60"	SP	Clare Bros. M045
FM-RFM653	1/20	1/3430	1.00	230/460	CWSE	2.3"x1/4"	5.90"	SP	Carrier, York, Keeprite U653 Fasco 7131-0506, 5/16 Bushing
FM-RFM462	1/16	1/3450	0.30	460	CWSE	3.3"x5/16"	4.80"	PSC/INC	ICP 1171347, Carrier HC30GB460
82520	1/15	1/3000	1.00/2.00	115/230	CWSE	2"x1/4"	6.00"	SP	HC24AU600, HC24AU600B, HC24A0701, HC24AU231, HC24AU701, HC30GU208A, HC30GU209A, HC680001
FM-RFM230	1/12	1/3200	0.60	230	Rev.Plug	2.5"x1/4"	7.00"	PSC/INC	024-24115-020, 714
FM-RFM460	1/10	1/3200	0.30	208/230 /460	Rev	2.5"x1/4"	7.00"	PSC/INC	YVFM450, Fasco D1171 York 024-24115-700
FM-RFM78	1/9	1/3200	0.65/ 1.30	115/230	Rev	3.3"x5/16"	4.10"	PSC/INC	RFM7&8, Reznor 43846-115V, 43424-208/230V

* Note: Without Centrifugal Switch

Cooling Fan Kits

Item ID	Rotation	Kits Description
92-FMK	CW	<ul style="list-style-type: none"> • 1 3/4" Diameter. • 5/16" Hub I.D. with 1/4" adapter. • (4) Spacers, (4) 10/32 & (4) 8/32 nuts.

92-FMK1
Illustrated



Direct Drive Blowers

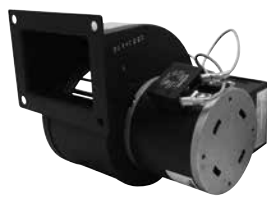


Item ID	CFM	Spd/RPM	Volts	Amps	Rot	Type	Encl	Bearing	Cross Reference
R7-RB440	50	1/3080	115	0.25	CWOSE	PSC	Open	Ball	Grainger 1TDN7, 4C440
R7-RB663	60	1/3000	115	0.60	CCWOSE	SP	TE	Sleeve	AO Smith 9444
R7-RB661	60	1/3000	115	0.50	CCWOSE	SP	Open	Ball	AO SMITH 9461, FASCO 50747-D500
R7-RB60	60	1/3200	115	0.60/0.80	CCWSE	SP	Open	Sleeve	AO SMITH 9470, FASCO 50747-D401
R7-RB665	65	1/3200	115	0.74	CCWOSE	PSC	Open	Sleeve	AO SMITH 9462, FASCO 50748-D500, GRAINGER 4C443
R7-RB33	73	1/2800	120	0.60	CWOSE	PSC	Open	Ball	Newmac 204001 EB3 w/ Variable Spd Switch
R7-RB70	75	1/3000	115	0.59	CCWOSE	SP	Open	Sleeve	AO Smith 989
R7-RB885	85	2/2800	115	0.65	CWOSE	SP	Open	Sleeve	AO SMITH 414
R7-RB90	90	1/3000	115	1.00	CWOSE	SP	Open	Sleeve	AO SMITH 13
R7-RB991	90	1/3000	115	1.00	CWOSE	SP	Open	Sleeve	AO SMITH 383
R7-RB4	100	1/3220	115	0.34	CWOSE	PSC	TE	Ball	Franklin 76012, 80042, Electrohome EB4
R7-RB3	100	1/3220	115	0.34	CWOSE	PSC	TE	Ball	Fasco B24220
R7-RB54	100	1/3420	115	0.43	CWOSE	PSC	TE	Ball	Easy Radiant
R7-RB120	120	1/3200	115	0.72	CWOSE	SP	Open	Sleeve	AO Smith 9445
R7-RB141	140	1/2860	115	1.10	CCWOSE	SP	Open	Sleeve	AO Smith 9492, Fasco 50752-D500, GRAINGER 4C442

Direct Drive Blowers



R7-RB142



R7-RB446



R7-RB155



R7-RB165



R7-RB312



R7-RB265



R7-RB447



R7-RB938



R7-RB465



R7-RB495



R7-RB500

Item ID	CFM	Spd/RPM	Volts	Amps	Rot.	Type	Encl	Bearing	Cross Reference
R7-RB142	140	1/3000	208/240	0.50	CCWOSE	SP	Open	Sleeve	AO Smith 9493, Fasco 50752-D230, Grainger 2C915
R7-RB446	146	1/3120	115	0.75	CCWOSE	PSC	Open	Ball	Grainger 4C446, 1TDP7, Fasco 7021-3469, A166
R7-RB155	148	1/2480	115	0.75	CCWOSE	PSC	TE	Ball	Grainger 1TDR6, 4C006, Fasco 7021-4933
R7-RB165	165	1/3550	115	0.65	CCWOSE	PSC	Open	Ball	-
R7-RB312	222	1/2750	115	0.60	CCWOSE	PSC	TE	Ball	Grainger 1TDU8, 4C826, Fasco A212, 70219025
R7-RB265	273	1/1640	115	0.77	CCWOSE	PSC	Open	Ball	Franklin 80224, U.E.459, Fasco B45227
R7-RB447	273	1/1640	115	0.77	CCWOSE	PSC	Open	Ball	Grainger 4C447, 1TDR3
R7-RB938	287	1/3280	115	1.30	CCWOSE	PSC	Open	Ball	ProFab 814320, Aspen, Empyre, Fasco 70625938
R7-RB380	380	1/1420/ 1650	115	1.28/1.15	CCWOSE	PSC	Open	Ball	Grainger 4C444, 4C666, 4YJ31, 1TDR7, Century 9466
R7-RB465	465	1/1560	115	1.30	CWOSE	PSC	Open	Ball	Franklin 80546, U.E.460, Fasco B45267, Grainger 4C448
R7-RB495	495	1/1570	115	3.80	CCWOSE	SP	Open	Sleeve	AO Smith 9465
R7-RB500	500	2/1550	115	3.50	CCWOSE	SP	Open	Sleeve	AO Smith 9491, Fasco 50769-D500

Flange Mounting Dimensions Available on Page 120 & 121

Direct Drive Blowers



R7-RB445



R7-RB760



R7-RB965



R7-RB1000



R7-RB1600



M4-R2324



66426K



FB-RFB158



FB-RFB129

Item ID	CFM	Spd/RPM	Volts	Amps	Rot.	Type	Encl	Bearing	Cross Reference
R7-RB445	549	1/1430	115	2.20	CCWOSE	PSC	Open	Ball	Grainger 1TDT2, 4C445, 4YJ32
R7-RB760	797	2/1350	115	3.30	CWOSE	PSC	Open	Ball	A0 Smith 9459, Grainger 5C508
R7-RB965	965	1/1080	115	3.50	CCWOSE	PSC	Open	Ball	Grainger 1TDT5
R7-RB1000	1000	2/1100	115/230	4.00	CCWOSE	PSC	Open	Sleeve	A0 Smith 9477, Fasco A1000
R7-RB1600	1638	4/1085	115	6.90	CCWOSE	PSC	Open	Ball	Grainger 1XJX9

HRV Motors



Nutech

Item ID	HP	Volts	Amps	Type	Spd/RPM	Rot	Body	Frame	Bearing	Cap	Shaft	Cross Reference
M4-R2324	1/12	120	1.40	PSC	1/1550	CCWOSE	3.6"	5.0"	Ball	3/370	2.8"×3/8"×2.6"	Nubreath 23-204, GE5K-CP298G8560BS, Fasco 7185-0242

OEM Replacement Motors



Amana

Item ID	HP	Volts	Amps	Type	Spd/RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
66426K	1/30	208-230	0.65	SP	1/3000	CWLE	-	3.3"	Ball	-	-	35HWC, 36HWC, 48HWC, 60HWC, 66HWC, ACOMB605-1, R06428D426
FB-RFB158	1/25	115	0.7	PSC	1/3450	CCWOSE	6.4"	3.3"	Sleeve	4/250	-	Hi eff. Res., 9552099437, D98686-5, R0156744, 20000101, Fasco 7002-2407, 7021-8258, 7062-3151
FB-RFB129 ¹	1/20	115	1.95	SP	1/3480	CCWOSE	6.5"	3.3"	Sleeve	-	-	CUIC Mid eff., Res., 11009001, 11009002, Fasco 7021-9064, A129

OEM Replacement Motors



Armstrong

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
80280	1/50	208-230	0.55	SP	1/3000	CWLE	-	3.3"	Ball	-	-	322P859, 35035B1, 35HWC181, 36HW, 36HWC18A, 36HWC241, 66HWC301, 7021-10264, 60HWC30A, 66HW, 66HWC181, 66HWC18A, 66HWC241, 66HWC24A, 60HW, 60HWC181, 60HWC18A, 60HWC241, 60HWC24A, 60HWC301, 36HWC24A, 48HW, 48HWC181, 48HWC18A, 48HWC241, 48HWC24A
FB-RFB250	1/30	208/230	0.70	SP	1/3000	CWOSE	5.75"	3.3"	Ball	-	-	Rooftop, 42250-001, 7021-10126
66426K	1/30	208-230	0.65	SP	1/3000	CWLE	-	3.3"	Ball	-	-	R06428D426
FB-RFB425	1/23	115	1.4	SP	1/3000	CWOSE	5.8"	3.3"	Sleeve	-	-	Air Ease Mid eff. Ultra 80, Res. 40425-002
FB-RFB676	1/20	115	0.57	PSC	2/3300	CWOSE	5.9"	3.3"	Ball	5/370	-	100676-01, 7062-5720, 7062-6350
FB-RFB547 ²	1/20	115	1.80	SP	1/3400	CWOSE	5.8"	3.3"	Ball	-	-	Air Ease High eff. Ultra 90, 290, Res., 40404-003G-004, 40404-004, 2862-513-040, 367170004, 20190601, 7021-9625

Burnham

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
66056 ¹	1/15	115	0.48	PSC	1/3400	-	3.3"		Ball	INC	-	6116056, 8116227, 8116233

*Notes:
 1 - Comes with gasket
 2 - Comes with gaskets, mounting hardware

OEM Replacement Motors



Carrier (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
65123	1/40	115	1.55	SP	1/3000	CCWLE	2.54"	C-Frame	Ball	-	-	HC21ZE123A, HC21ZE123A, J238-150-15215AT
FB-RFB212 ¹	1/30	115	1.60	SP	1/3000	CCWOSE	6.30"	Skel	Ball	-	-	Bryant, Payne Mid Eff., Res. HC21ZE117-13, 318984-753, 818984753, 58SSE08Q-BC Series 130 Blw. Whl. - 66-A8664
65118	1/30	115	1.8/.60	SP	2/2800/ 2500	-	2.75"	C-Frame	Ball	-	0.18"x1.35"	HC21ZE116, HC21ZE118, HC-21ZE118B, J238-150-15315
FM-RFM653 ¹	1/20	230/460	1.0/.51	SP	1/3430/ 3000	CWOSE	5.9"	3.3"	Ball	-	2.3"×1/4"	Comm. Magnetek 653 Blw. Whl. - 66-A8655
66816	1/16	460	0.25	PSC	1/3450	-	-	3.3"	Ball	-	-	48SS400381, 48SS400607, 50DK406182
FM-RFM462 ³	1/16	460	0.30	PSC	1/3450	CWOSE	4.8"	3.3"	Ball	INC	3.3"×5/16"	HC30GB460, 48TJE 90/120/150 Comm. Roof Top Blw. Whl. - 66-A8660(4x1") 66-A8665(4x2")
66815	1/16	208-230	0.48	PSC	1/3450	-	6.71"	3.3"	Ball	4/370	-	1171314, 48SS400380, 48SS400606, 50DK406181, 50DK406815, HC30GB232
66649	1/16	208-230	0.48	PSC	1/3450	CCWSE	7.86"	3.3"	Ball	4/370	-	48GS400649, 48GS400106, HC30GB232
FB-RFB756	1/16	115	1.02	PSC	1/3190	CWOSE	-	3.3"	Ball	INC	-	320725-756, HC28CQ116, HC27CB115, 66756, 1179081, JE1D013N, 34VH22, K33HX-CW-1017, X83-386
FB-RFB757	1/16	115	1.16	PSC	1/3026	CWOSE	-	3.3"	Ball	INC	-	320725-757, 320725-754, 320725-761, HC27CB119, HC27CB116, 66757, 40LW03, X83-387

***Notes:**

- 1 - Comes with two (2) wiring harnesses
- 2 - Comes with 5/16" shaft adapter & Built-in centrifugal switch
- 3 - The rear magnetic centrifugal switch found on most replacements has been built into these Rotom models

OEM Replacement Motors



FB-RFB758



66755



65230



65570



66752



66763



66765



66762



66761



66753

Carrier (cont. from previous page)

Item ID	HP/ Watts	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Stack Size	Shaft	Cross Reference
FB-RFB758	1/15	115	1.45	PSC	1/3222	CWSE	-	3.3"	Ball	Inc	-	320725-758, 317292-753, 320725-755, 325269-701, 325270-761, HC28QC115, YDZ-050L22541-01, 115U77, X83-388
66755	40	115	0.86	PSC	1/3300	CWSE	-	-	Ball	-	-	309868755
65230	28	208-230	0.80	SP	1/3000	CWSE	-	C-Frame	Ball	-	-	48SS400626, HC24HE230, J238-150-15103
65570	25MHP	230	0.80	SP	1/3000	CWSE	3-5/8"	C-Frame	Ball	1-1/2" 1"x5/16"x1-7/8"	-	HC24HE230 , J238-15161, J238-15161
66752	25MHP	115	1.80	SP	1/3200	CWSE	-	C-Frame	Ball	-	-	310371-752, HC23UE121, P251-2916
66763	28MHP	115	1.32/0.39	SP	2/3000	CCWSE	-	-	Ball	-	-	326628-763
66765	25MHP	115	0.9/0.48	PSC	2/3000/ 1900	CWSE	-	-	Ball	-	-	326628-765
66762	16MHP	115	1.06/0.28	SP	2/3000	CWSE	-	-	Ball	-	-	326628-762
66761	8.2MHP	115	0.63/0.30	SP	2/3000	CWSE	-	-	Ball	-	-	326628-761
66753	-	115	1.70	SP	1/3200	CWSE	-	-	Ball	1.57"	-	318984-753

OEM Replacement Motors



FB-RFB570



FB-RFB450



FB-RFB52



65475



FB-RFB156



82052

Consolidated Industries

Item ID	CFM	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FB-RFB570	95	115	0.90	SP	1/3300	CCWOSE	6.20"	3.3"	Sleeve	-	-	UE JA1P082, 401570
FB-RFB450	105	115	1.41	SP	1/3300	CCWOSE	6.33"	3.3"	Sleeve	-	-	UE JA1P090, 401450

Clare

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FB-RFB52	1/20	115	0.58	PSC	1/3450	CCWOSE	7.85"	3.3"	Sleeve	INC	-	High Eff Universal Fit, Res: Clare V52 M053, HEG & HEHB 80A Series

Coleman

Item ID	HP	Volts	Amps	Type	RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
65475	1/150	115	0.40	SP	1/3315	CCWSE	2.36"	C-Frame	Ball	-	-	373-19801-820, 373-19801-821, 373-19801-820, 373-19801-821
FB-RFB156	1/35	115	1.10	SP	1/3000	CCWOSE	5.6"	3.3"	Sleeve	-	-	Roof Top Com: Evcon 2702-321, 7021-9404

Dunkirk

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
82052	1/50	115	1.00	SP	1/3000	-	7.62"	3.3"	Ball	-	-	43300510

OEM Replacement Motors



Fedders

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
82618	1/50	115/230	0.90/0.45	SP	1/3000	-	7.93"	3.3"	Ball	-	-	030-7059, 031-7059, 17-9-959-1, 30-7059

Goodman (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd/RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
66007	1/50	230	0.24	SP	1/3000	-	-	-	Ball	INC	-	0131G00007P, 0131G00007P, 0131G00007P, 0131G00093, 0131G00093S, 0131G00007S
66121	1/50	230	0.22	PSC	1/3000	CCWSE	-	3	Ball	-	-	0131M00121, 0131M00121P, 0131M00121S, 0131M00121SP
FB-RFB859	1/48	115	1.6	SP	1/3000	CWOSE	5.52"	Skel	Ball	-	-	66005, 7002-2307, 7002-2771, 7002-3219, 7058-0229, B1859005, A157, B40590-35, J238-112- 11128, J238-1128
FB-RFB405 ²	1/33	115	1.5	SP	1/3000	CWOSE	5.89"	Skel	Ball	-	-	66590, 7002-3036, A182, B4059000, J238-112-11195, J238-11195
66009	1/32	230	0.24	PSC	1/3000	-	-	-	Ball	-	-	0131G00009, 0131G00009P, 0131G00009S
66126	1/32	115	1.00	SP	2/3300/2600	-	-	-	Ball	-	-	0271F00126, 0271F00126P, 0271F00126S,
66959	1/30	208/230	0.6/56	SP	1/3000	-	-	-	Sleeve	-	-	B2959000S, B2959000, 7021-8656
FB-RFB276	1/30	115	1.4	SP	1/3000	CWOSE	5.44"	Skel	Ball	-	-	0131M00002P
66743	1/24	115	1.5	SP	1/3000	-	-	-	Sleeve	-	-	R0156743

*Notes:

1 - Built-in end switch

2 - Comes with gasket attached

OEM Replacement Motors



Goodman (cont. from previous page)

Item ID	HP/ Watts	Volts	Amps	Type	Spd/RPM	Rot.	Body	Frame	Bearing	Cap	Stack Size	Cross Reference
FB-RFB501	1/16	115	2.8	SP	1/3000	CW	OSE	5.00"	Skel	Ball	-	22307501, 071M00000, 7058-2108
FB-RFB483	1/8	115	1.8	SP	1/3200	CW	LE	5.33"	Skel	Ball	-	B4833000, B4833000S, A188, 7021-10958, 5KSB46GF0001
66202	56	115	1.13/0.56	PSC	2/3000	CC	WSE	-	-	Ball	-	0131M00003, 0131M00003P, 0131M00003PS, 0131M00003S, B4059002, B4059002S, B4059004, B4059004S, Y3L248B01
66003	30	115	0.92	PSC	1/3250	CC	WLE	6.67"	3.3"	Ball	-	098862-1, 0988621-1, 11009001, 11009002, 11009003, 7021-10272, 7021-7006, 7021-7259, 7021-9064, 7021-9259, 7021-9574, 7021-9924
48332	-	115	1.80/1.10	SP	2/3200/2800	-	5.50"	3.3"	Ball	-	1.25"	5KSB46GF0003, 5KSB46GF0003S, B483001, B483001S, B48330001, B4833001, B4833001S
66000	-	230	1.40	SP	1/3000	-	-	-	Ball	-	1.50"	0131G00000P, 0131G00000PS, 0131G00000S

Heil Quaker

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FB-RFB672	1/100	115	0.60	SP	1/3150	CC	WOSE	5.71"	3.3"	Sleeve	-	A064, 610672, X89-455

*Notes:

1 - Feature an internal fan, stainless steel shaft and built-in centrifugal switch

OEM Replacement Motors



ICP (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
66254	1/50	230	0.30	PSC	1/3000	CCWLE	6.35"	3.3"	Ball	-	-	1110008, 1085571, 1085571P, 7021-10048, 7021-10580, 119254-00
FB-RFB107 ²	1/33	230	0.3	PSC	2/3350 /2900	CWOSE	8.70"	3.3"	Sleeve	3/370	-	Keeprite PGB, PGA, PGD, GPD, RGMA Com: Keeprite 1097245, 15-20-30 Ton 1054268P, 1054268, HQ1054268FA
82148	1/30	208-230	0.16	PSC	1/3000	CCWSE	7.11"	3.3"	Ball	-	-	1014433, 1014529
FB-RFB433	1/25	115	1.87	SP	1/2700	CWOSE	6.00"	Skel	Ball	-	-	1014433, 1014529
FB-RFB242	1/25	115	1.3	SP	1/3200	CCWOSE	7.0"	3.3"	Sleeve	-	-	Keeprite, 702111099, B24220, CRC
FB-RFB350	1/25	115	0.8	PSC	1/3450	CWOSE	7.10"	3.3"	Ball	5/370	-	Keeprite CGJ, CGK High Eff. 50, 75, 100, 125 Res: 1011350 Hardware Connection Kit - FB-RFB350-1
FB-RFB145 ¹	1/25	115	0.7	PSC	1/3450	CWOSE	5.3"	3.3"	Ball	4/250	-	Keeprite, Heil, Comfortmaker NTGM High Effi. Res: 1009924, 1009518, 1010527, 1011412, 1164280, Airco, Tempstar
FB-RFB330	1/25	115	2.4	SP	3000	CCWOSE	5.54"	Skel	Ball	-	-	1172823, 330701-701, 329148-701, 1013915, 1172823
FB-RFB170	1/25	115	2.3	SP	1/3400	CWOSE	5.74"	3.3"	Ball	-	-	Res: 7021-10048, 7021-10580
FB-RFB825	1/20	115	.75	PSC	2/3000 /2000	CWOSE	4.40"	3.3"	Ball	6/370	-	70626158, 1172825
FB-RFB383	1/20	115	1.6	SP	1/3000	CCWOSE	6.50"	Skel	Ball	-	-	66833, 7021-7700, 7021-8735, 7021- 8736, 7021-9335, 7021-9918, 7021- 9744, 1708607, 1010238P, 1010324, 1013833, J238-13933

1 - Comes with two (2) gaskets, high temp. silicone, hardware & instructions

2 - Comes with gaskets

OEM Replacement Motors



ICP (cont. from previous page)

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FM-RFM462 ²	1/16	460	0.3	PSC	1/3450	CWOSE	4."	3.3"	Ball	4/370	3.3"x5/16"	HC30GB460, 48TJE 90/120/150 Com. Roof Top ICP 1171347 Blw. Whl. - 66-A8660(4x1") 66-A8665(4x2")
66420	1/16	208-230	0.46	PSC	1/2947	CCWSE	-	-	Ball	-	-	1178420
66421	1/15	208-230	0.68	PSC	1/3180	CCWSE	-	-	Ball	-	-	1178421
FB-RFB824	1/15	115	2.6	SP	1/3000	CWOSE	4.3"	3.3"	Ball	-	-	702112429, 1172824

Lennox (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Stack Size	Cap	Shaft	Cross Reference
FB-RFB390	1/65	115	0.7	SP	1/3000	CCWOSE	5.75"	3.3"	Sleeve	-	-	-	Res: 88J3901, 7021-9262, A219
FB-RFB401	1/60	120	1.3	SP	1/2800	CWOSE	5.96"	Skel	Ball	-	-	-	66401, 7021-1108, 7021- 9242, 7021-9311, 7021-9455, 7021-9640, 7021-9657, J238- 8171, 85L4901, 88K8401, 67M5401, 10K5101, 10K5301, 10K5301P, 27K5201, 27K5201P
FB-RFB495	1/30	115	1.4	SP	1/3000	CWOSE	5.30"	Skel	Ball	-	-	-	24W95, 31L5501
FB-RFB790	1/30	115	1.8	SP	1/3000	CCWOSE	6.00"	Skel	Ball	-	-	-	Res: 60M7901, 7058-0217, A207
FB-RFB810	1/30	115	1.8	SP	1/3000	CCWOSE	6.00"	Skel	Ball	-	-	-	Com: 60M8101, 7058-0322, A208
66300	1/25	120	0.5	PSC	1/3300	CWSE	-	-	Ball	-	-	-	20J89, 20J8901, 7021-8473, 76714300

***Notes:**

- 1 - Vent Restrictor Orifice Plates: 92-1008696 ICP 50 & 75, 92-1008699 ICP 100, 92-1160415 ICP 125, Comes with coupling, pins, O-rings and gaskets
- 2 - The rear magnetic centrifugal switch found on most replacements has been built into these Rotom models

OEM Replacement Motors



Lennox (cont. from previous page)

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Stack Size	Cap	Shaft	Cross Reference
FM-RFM890	1/25	208/230	0.7	SP	1/3200	CCWOSE	3.29"	3.3"	Ball	-	-	2.3"x5/16"	GCS3 Roof Top Com: Lennox 98G8901 Fasco 7121-7091 BLW.WHL - 66-A8677
FB-RFB547 ¹	1/20	115	1.8	SP	1/3400	CWOSE	5.8"	3.3"	Ball	-	-	1.1"x5/16"	G26 High Eff. Series Res: 68K21, Fasco 7021-9450
FB-RFB550	1/16	230	0.83	SP	1/3000	CCWOSE	5.50"	3.3"	Ball	-	-	-	Com: 25M5501, 7021-11231, A217
FB-RFB101 ²	1/12	208/230	0.5	PSC	1/3200	CCWOSE	8.80"	3.3"	Ball	-	3/370	-	GCS Roof Top Com: Lennox 23G8101, 135327, 074, 28G6601, Fasco 7062-1794, 7062-3577
FB-RFB701	1/10	208/230	0.6	PSC	1/3200	CCWOSE	6.50"	3.3"	Ball	-	4/370	-	Roof Top Com: Lennox 98G8701
82590	-	115	1.20	SP	1/3000	CWLE	6.92"	C-Frame	Sleeve	-	-	-	47H12, 47H1201
66093	-	120	0.43	SP	1/3000	-	-	C-Frame	Ball	5/8"	-	-	80C93
HB-RB130	-	115	0.86	-	1/2800	CCW	-	-	Ball	-	-	2.6"x9.4"	FBK-250, BL65X, D-400, D-500, D-600, D-800, B-500, B-600, B-800, MDT3328, MDR3328, Elite-2 Series, EDST-2, EDPF-2, EDCL-2, EDCR-2

Modine

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FB-RFB599	1/15	115	2.45	SP	1/3000	CWOSE	9.03"	3.3"	Sleeve	-	-	5H073598-001, 7021-9045, 7021-12659

Newmac

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Comments
R7-RB33 ³	1/25	120	0.60	PSC	1/2800	CWOSE	6.60"	3.3"	Ball	-	-	Oil & Wood Furnace 2040001

*Notes:

- 1 - Comes with gaskets and mounting hardware
- 2 - Comes with gasket. Built-in centrifugal switch
- 3 - Features a built-in variable speed control

OEM Replacement Motors



Nordyne, Frigidaire, Miller

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
65404	1/100	120	0.69	SP	1/3000	-	C-Frame		Ball	-	-	903404, M1MB056ABW
80270	1/50	115/230	0.90/0.45	SP	1/3000	CWLE	5.33"	3.3"	Ball	-	-	303875000
FM-RFM623	1/40	115	0.80	SP	1/1500	CWOSE	5.60"	3.3"	Sleeve	-	2.5" x 5/16"	D9623, S59-485
66567	1/33	115	0.43	PSC	1/3000	CCWSE	-	-	Ball	-	-	622567
66798	1/20	115	0.46	PSC	1/3400	-	-	-	Ball	-	-	622302, 622302

Olsen

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FB-RFB200 ⁻²	1/24	115	1.8	SP	1/3200	CCWOSE	6.60"	3.3"	Ball	-	-	HCS-2 High Eff. 60, 75, 81, 90 Right Hand Discharge Residential: 20082, 11051403
FB-RFB181 ⁻²	1/22	115	1.2	SP	1/3320	CWOSE	6.60"	Skel	Ball	-	-	Airco High Eff HCS-2 60, 75, 81, 90 Left Hand Discharge Res: 18102

Reznor

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FM-RFM78 ⁻²	1/9	115/230	1.3/0.65	PSC	1/3200	Rev	4.10"	3.3"	Ball	2/370	3.3" x 5/16"	Commercial: Reznor 43846 (115V), 43424 (208/230), FM-RFM7, FM-RFM8 BLW. WHL - 66-A8675

*Notes:

2 - Comes with three (3) brackets, fastening hardware, drain tubing & instructions.

OEM Replacement Motors



Rheem-Ruud

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Stack Size	Cap	Shaft	Cross Reference
FB-RFB139 ¹	1/50	115	0.95	SP	1/2970	CCWOSE	6.00"	3.3"	Sleeve	-	-	-	Hot Water Heater SP11608, Fasco 7062-7572
FB-RFB214 ²	1/50	115	1.1	SP	1/3000	CCWOSE	5.63"	3.3"	Sleeve	-	-	-	RGDE Mid Eff. Res: Fasco 70-214196-83, A079
66781	1/50	115	0.6	PSC	1/3000	CWLE	6.71"	3.3"	Ball	-	-	-	70-101087-81, 70-21496-83, 70-24157-03, 7021-11559
FB-RFB107 ²	1/33	230	0.3	PSC	2/3350 /2900	CWOSE	8.70"	3.3"	Sleeve	-	3/370	-	Roof Top, PGB, PGA, PGD, GPD, RGMA Com: Rheem-Ruud 1070770, 101070, 107701 15-20-30 Ton
82182 ²	1/30	460	0.35	SP	1/3300	CWSE	-	3.3"	Sleeve	-	-	-	70-23641-02, 70-23641-82
FB-RFB641	1/25	208/230	0.62	SP	1/3200	CWOSE	5.75"	3.3"	Ball	-	-	-	Com: 70-23641-81, 7021-9567, A241
FB-RFB206	1/20	115	0.85	PSC	2/3400 /2400	CWOSE	6.75"	3.3"	Sleeve	-	4/370	-	Residential: 70-24206-01, 7062-3925, A246
FB-RFB241 ⁴	1/20	115	1.7	SP	1/3400	CCWOSE	6.30"	Skel	Ball	-	-	-	Weather King RGP Mid Eff. Conquest 800 Res: Fasco 70-24157-03, 70-22838-02
66181 ²	25MHP	115	0.92	PSC	1/3000	CWSE	-	-	Ball	-	-	-	70-102691-81
21964K	-	208-230	0.25	SP	1/3000	CWSE	9.00"	C-Frame	Sleeve	3/4"	-	1-1/2"x1/4"	51-21964-11

***Notes:**

- 1 - Includes coupling, adapter horn, plug, screws & tubing
- 2 - Comes with gasket
- 3 - Includes two (2) gaskets & 90° brass fitting
- 4 - Comes with gasket mounted

OEM Replacement Motors



Roberts Gordon

Item ID	CFM	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
R7-RB3	100	115	0.34	PSC	1/3220	CW	6.00"	3.3"	Ball	INC	-	Gordon Ray BH Series, GRP 90709700

Skymark

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FB-RFB236	1/40	208/230	0.30	PSC	1/3000	CW	5.00"	3.3"	Ball	INC	-	7021-9136, MTR-136PK, A251

Trane (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
66362	1/100	115	1.0/0.35	SP	2/3000	CW	-	-	Sleeve	-	-	7021-8925, BLW00362
82057	1/40	115	1.00	SP	1/3000	CCW	5.53"	3.3"	Ball	-	-	
82253	1/35	208/240	0.6/0.5	SP	1/3000	CCW	6.31"	3.3"	Ball	-	-	21C729631P1, 4MH39, 7021-10286, 7021-7833, 7021-8928, BLW-451, BLW00451, C661452P01, X38080029010
66010	1/35	208/230	0.50	SP	1/3000	-	-	3.3"	Sleeve	-	-	21C729631P1, 7021-10286, 7021-7833, 7021-8928, BLW-451, BLW00451, C661452P01, X38080029010
FB-RFB337	1/30	120	1.3	SP	1/3100	CCW	6.00"	Skel	Ball	-	-	D330787P01, 7021-10281, A361, 7021-10291, 7021-8013, 7021-9055, J238-1344, J238-138-1344, 787P01, BLW473, D330809P01, 21D340125, 21D330673
UE-954	1/30	115	0.6	PSC	3/1100	CW	4.0"	5"	Sleeve	INC	8.5"×1/2"	MOT 1878, MOT 1875, X70500149-01-7, EM K48HX-BYH-954
UE-641	1/30	115	0.5	PSC	3/1075	CW	3.5"	5"	Sleeve	INC	8.5"×1/2"×9"	MOT 1876, CX70500133-01, UE DE3E152

OEM Replacement Motors



Trane (cont. from previous page)

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
UE-9608	1/20	115	0.6	PSC	3/1100	Rev	3.25"	5"	Sleeve	INC	9-7/8"X 1/2"	MOT 1875, X70500149-02, EM K48HXBH2955
UE-953	1/15	115	0.8	PSC	3/1100	CWOSE	3.25"	5"	Sleeve	INC	10.5"×1/2"×10.5"	MOT 1877, X70 500149-04-7, EM K48HXBJA-956
FB-RFB310	1/8	208/230	0.62	PSC	1/3500	CCWOSE	7.10"	3.3"	Ball	INC	-	7062-3972, A273, X38040310-01
UE-945	1/8	115	1.2	PSC	3/1500	CWOSE	4.0"	5"	Sleeve	Inc.	9"×1/2"×7.5"	MOT 1978, MOT 481, X70 500149-11-7, EM K48HXCKT-1419
UE-955	1/6	115	2.0	PSC	3/1500	CWOSE	4.0"	5"	Sleeve	6/370	10.5"×1/2"×10.5"	MOT 1979, MOT 482, X70 500149-12-7, EM K48HXCKS-1418
UE-642	1/4	277	1.1	PSC	3/1475	CWOSE	4.0"	5"	Sleeve	4/370	8"×1/2"×8"	MOT 689, X70500354, UE DE2G101
66311 ⁻²	19W	208/230	0.23/0.18	PSC	2/2800/ 1500	CCWSE	-	-	Ball	INC	-	BLW01311, D965130P01
66128 ⁻¹	17W	208/230	0.19	PSC	1/3000	CCWSE	-	-	Ball	INC	-	7021-7833, 7021-8928, BLW01310, D965128P01

Weil Mclain

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FB-RFB356 ⁻¹	1/12	115	2.8	SP	1/3250	CCWOSE	7.2"	3.3"	Sleeve	-	-	CG Series, 510-312-273, 381-356-499, 7021-10410
66312	1/8	115	1.80	PSC	1/3100	CWSE	-	-	Ball	INC	-	510-312-312

*Notes:

1 - Comes with gasket

2 - Comes with gasket and 2 speed molex plug

OEM Replacement Motors



York (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
82702	1/50	115	1.2	SP	1/3000	CCWSE	-	-	Sleeve	-	-	373-10337-702, 7021-8612, S1-37310337702
FB-RFB63	1/40	208/230	0.45	SP	1/3000	CWOSE	6.3"	3.3"	Ball	-	-	Roof Top, D8SA, D9SA Com: 026-22239-700, UE771, Fasco A063, U464E, 7021-4314
66067 ¹	1/35	115	1.13	SP	1/3000	CCWSE	-	-	Ball	-	-	326-32067-000
82999	1/30	208/230	0.64	SP	1/3200	CWSE	-	-	Sleeve	-	-	026-33999-001
FB-RFB154 ¹	1/30	115	1.2	SP	1/3000	CCWOSE	6.0"	3.3"	Sleeve	-	-	York Furnace P4-HUA012 Mid Eff. Blower N064000 Res: York 024-27519-000, Fasco 7021-9428, Luxaire
FB-RFB165 ¹	1/25	115	0.70	PSC	1/3450	CCWOSE	6.4"	3.3"	Sleeve	4/370	-	York Furnace P3-URB High Eff. Blower Res: York 024-25960-000, Coleman 2940391P, Fasco 7062-3958, A165, Luxaire

*Notes:

1 - Comes with gasket

2 - Comes with gasket. Built-in centrifugal switch

OEM Replacement Motors



FM-RFM653



FB-RFB654



FB-RFB655



FB-RFB225



FB-RFB227

York (cont. from previous page) (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FM-RFM653 ³	1/20	230/460	1.0/.51	SP	1/3000	CWOSE	5.9"	3.3"	Ball	-	2.3"×1/4"	York D1, D2, D3 Roof Top Unit Magnetek 653, Fasco D1174 BLW. WHL - 66-A8650
FB-RFB654 ²	1/15	230/460	1.2/.6	SP	1/3000	CWOSE	9.75"	3.3"	Ball	-	2.3"×1/4"	D1, D2 Roof Top Unit 3.5 To 5 Ton Com: 024-24115-017, 018, 020, 713, Fasco 7162-4547 BLW. WHL - 66-A8660(4"x1"x1/4")
FB-RFB655 ²	1/15	230/460	1.0/.51	SP	1/3000	CWOSE	11.1"	3.3"	Ball	-	2.3"×1/4"	York D3CG076N105-25D Roof Top 7.5-20 Ton Com: 024-24115-017, 018, 020, Fasco 7162-4547 BLW. WHL-66-A8665(4"x2"x5/16")
FB-RFB225	1/15	115	2.25	SP	1/3200	CCWOSE	6.50"	3.3"	Ball	-	-	A225, 7021-11577, 7021-11577S, 02434558000
FB-RFB227	1/15	115	0.7	PSC	1/3450	CCWOSE	6.65"	3.3"	Sleeve	4/370	-	7062-4708S, 024-27641-000, 17450, 7062-4708, 373-20717-001

***Notes:**

- 1 - Comes with gaskets
- 2 - Includes blower wheels, plates, hardware, cooling disk and built in centrifugal switch
- 3 - Built-in centrifugal switch
- 4 - Includes 66-A8666 & 66-A8667 blower wheels and built in centrifugal switch

OEM Replacement Motors



FB-RFB232



FM-RFM230



FB-RFB231



FM-RFM460



FM-RFM461

York (cont. from previous page)

Item ID	HP	Volts	Amps	Type	Spd/ RPM	Rot.	Body	Frame	Bearing	Cap	Shaft	Cross Reference
FB-RFB232 ⁻³	1/12	230	0.60	PSC	1/3200	Rev. Plug	7.0"	3.3"	Ball	4/370	2½"×¼"	York D1, D2 7.5 Ton Roof Top Unit Com: York 024-24115-714, 018 BLW. WHL - 66-A8665(4"x2"x5/16")
FM-RFM230 ⁻²	1/12	230	0.60	PSC	1/3200	Rev. Plug	7.0"	3.3"	Ball	4/370	2½"×¼"	York D1, D2 Roof Top Unit 024-24115-020, 714
FB-RFB231 ⁻³	1/12	230	0.60	PSC	1/3200	Rev. Plug	7.0"	3.3"	Ball	4/370	2½"×¼"	York D1, D2 5 Ton Roof Top Unit Com: York 024-24115-714, 018 BLW. WHL - 66-A8660(4"x1"x1/4")
FM-RFM460 ⁻²	1/10	208/230 460	0.30	PSC	1/3200	Rev	7.0"	3.3"	Ball	4/370	2½"×¼"	York D1, D2 Roof Top Unit 024-24115-012, 017, 700, 709, 713, Fasco D1171, YVFM450
FB-RFB461 ⁻⁴	1/10	460	0.30	PSC	1/3200	Rev. Plug	7.8"	3.3"	Ball	4/370	-	D1, D2, 7.5 Ton Roof Top Unit Com: 024-24115-017, 020, 713, Fasco 7162-4547 BLW. WHL - 66-A8660(4"x1"x1/4")

***Notes:**

- 1 - **DOES NOT** include 66-A8666 & 66-A8667 blower wheels and built in centrifugal switch.
- 2 - Comes with 5/16" shaft adapter. Built-in centrifugal switch
- 3 - Built-in centrifugal switch, mounting plate, blower wheel
- 4 - Built-in centrifugal switch

OEM Replacement Motors/Universal Blower Kits



Pellet Stove Gear Motors

- 115 Volt • Sleeve Bearing • Single Speed • Shaded Pole • CCW Rotation

Part #	Amps	RPM	Body	Shaft	Features	Cross Reference
HM-RGM450	0.25	1.0	3.2"	1.1"×3/8"	Spade terminals, Inc.'s 6 mtn. bolts 14 Watts Out	Enviro EF001
HM-RGM451	0.19	1.0	3.0"	1"×3/8"	Spade terminals, Inc.'s 6 mtn. bolts 1.5 Watts Out	Lennox Hearth 6216, Fasco V08038AA09
HM-RGM452	1.26	2.0	3.0"	1"×3/8"	Bare wire leads, Inc.'s 6 mtn. bolts	Canadian Comfort Industries, Fasco V07926AAD9
HM-RGM454	0.73	4.0	3.2"	1.1"×3/8"	Spade terminals, Inc.'s 6 mtn. bolts 35 Watts Out	
HM-RGM651	1.00	7.0	3.25"	1"×1/2"	Bare wire leads, Inc.'s 4 mtn. bolts & 2" dia. fan blade, 50 Watt	EMC6216, Fasco V07959ABD9

Replacements For:

Avalon, Austroflam, Breckwell, Enviro, Earth Stove, Fasco, Lennox, Merkle-Korff Ind., National Steel Crafters, Pellet Master, Travis Ind., Whitfield (Quest), Traditions & Profile Series Stoves.



HM-RGM451
illustrated



HM-RGM651
illustrated

OEM Replacement Motors - Fasco



Centrifugal Blowers

Item ID	CFM	Volts	Amps	Type	Speeds	RPM	Frame	Enclosure	Bearing	Cap	Comments
FA-50769-D230	500	230	1.6/1.0	SP	2	1525/1165	4.4"	Open	Sleeve	-	19" Stripped Ends
FA-50755-D500	160	115	1.0	SP	1	1500	3.3"	Open	Sleeve	-	7" Stripped Ends
FA-50752-D500	135	115	1.08	SP	1	3074	3.3"	Open	Sleeve	-	7" Stripped Ends
FA-50747-D500	60	115	0.5	SP	1	2950	3.3"	Open	Sleeve	-	19" Stripped Ends

Draft Inducer Blowers (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd.	RPM	Frame	Bearing	Cap	Comments
FA-A151	1/90	230	0.3	SP	1	2800	3.3"	Sleeve	-	25" Leads w/Spade Terminals
FA-A071	1/70	120	0.7	SP	1	3200	3.3"	Sleeve	-	72" Cord
FA-A197	1/70	33-110	1	3PH	1	1500-4700	3.3"	Ball	-	5" Leads w/Socket Terminal
FA-A083	1/60	230	0.8	SP	1	3000	3.3"	Ball	-	29" Leads w/ 1 Stripped, 1 Spade
FA-AIC605	1/60	120	1.0	SP	1	3000		Sleeve	-	
FA-A320	1/60	120	0.8	SP	1	3000	3.3"	Sleeve	-	36" Leads
FA-A148	1/50	208-230	0.5	SP	1	3000	3.3"	Sleeve	-	6.5-5.5" Leads
FA-A162	1/50	208/230	0.5	SP	1	3000	3.3"	Sleeve	-	(2) 33" & (1) 24" Leads w/Spade Terminals
FA-A164	1/50	120	0.8	SP	1	3000	3.3"	Sleeve	-	6" Leads w/Socket Terminal
FA-A140	1/50	115	1.4	SP	1	3400	3.3"	Sleeve	-	19" Leads w/Spade Terminals
FA-A131	1/50	115	1.1	SP	1	3000	3.3"	Sleeve	-	11" Lead w/Socket Terminals

OEM Replacement Motors - Fasco



Draft Inducer Blowers (cont. from previous page) (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd.	RPM	Frame	Bearing	Cap	Comments
FA-A132	1/50	115	1.1	SP	1	3000	3.3"	Sleeve	-	11" Lead w/Socket Terminals
FA-A090	1/50	115	1.1	SP	1	3000	3.3"	Sleeve	-	(1) 22" & (1) 33" Lead w/Stripped Ends
FA-A143	1/50	115	0.95	SP	1	3000	3.3"	Ball	-	6" Lead w/Pin Housing Terminal
FA-A144	1/40	208-230	0.5	SP	1	3000	3.3"	Sleeve	-	34" Leads w/Socket Terminals
FA-A081	1/40	230	0.45	SP	1	3000	3.3"	Ball	-	25" Leads w/Stripped Ends
FA-A269	1/35	208-230	0.58/0.60	SP	1	2500/3000	3.3"	Ball	-	5" Leads w/Socket Terminal
FA-A150	1/35	208-230	0.5	SP	1	3480	3.3"	Ball	-	24" Lead w/Stripped Leads
FA-A172	1/35	115	1.6	SP	1	3000	C-Frame	Ball	-	0.25 x .032 Male Terminals
FA-A178	1/30	115	1.8	SP	1	3400	3.3"	Ball	-	11.5" Leads w/Spade Terminals
FA-A155	1/30	115	1.4	SP	1	3000	3.3"	Ball	-	6" Leads w/Socket Terminal
FA-A070	1/25	115	2.35	SP	1	3400	3.3"	Ball	-	8" Leads w/ Pin Terminal Housing
FA-A213	1/25	115	2.1	SP	2	3200	3.3"	Ball	-	7" Leads w/Socket Terminals
FA-A166	1/25	115	1.50/1.37	SP	1	3160	3.3"	Sleeve	-	7" Leads w/Stripped Ends
FA-A134	1/25	115	1.5	SP	1	3060	3.3"	Ball	-	23" Leads w/Pin Terminals

OEM Replacement Motors - Fasco



Draft Inducer Blowers (cont. from previous page) (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd.	RPM	Frame	Bearing	Cap	Comments
FA-A206	1/25	115	1.5	SP	1	3000	3.3"	Sleeve	-	55" Leads w/(1) Spade Terminal & (1) Stripped End
FA-A196	1/25	115	1.35	SP	1	3200	3.3"	Sleeve	-	(1) 6" Lead w/Pin Housing Terminal & 1 10" Lead w/Spade Terminal
FA-A169	1/25	230	0.75	SP	1	3060	3.3"	Sleeve	-	13" Leads w/Spade terminals
FA-A165	1/25	115	0.7	PSC	1	3450	3.3"	Ball	INC	8" Leads w/Pin Terminal Housing
FA-A171	1/25	115	0.7	PSC	1	3450	3.3"	Ball	INC	7" Leads w/Spade terminals
FA-A227	1/25	115	0.7	PSC	1	3450	3.3"	Sleeve	INC	8" Leads w/Socket Terminal
FA-AIC18219M	1/24	115	1.8	SP	1	3200	-	Ball	-	
FA-A130	1/20	115	0.71	PSC	1	3450	3.3"	Sleeve	-	(1) 6" Lead w/Amp Pin Housing Terminal & (1) 5" Lead w/ Amp Terminal Pin
FA-A168	1/20	115	7	PSC	1	3450	3.3"	Ball	INC	43" Leads w/Spade terminals
FA-B45230	1/20	230	1.4/1.2	SP	2	1600	3.3"	Sleeve	-	20-18" Leads w/Strip
FA-AIC501	1/20	115	2.8	SP	1	3000	3.3"	Ball	-	
FA-A067	1/20	115	2.6	SP	1	3000	C-Frame	Ball	-	20" Leads Spade Terminals
FA-A204	1/20	115	1.8	SP	1	3400	3.3"	Ball	-	7" Leads w/Socket Terminals

OEM Replacement Motors - Fasco



Draft Inducer Blowers (cont. from previous page) (cont. next page)

Item ID	HP	Volts	Amps	Type	Spd.	RPM	Frame	Bearing	Cap	Comments
FA-A163	1/20	115	1.8	SP	1	3300	3.3"	Ball	-	7" Leads w/Socket Terminals
FA-A209	1/20	115	0.8	PSC	2	3200/2800	3.3"	Ball	INC	7" Leads w/Socket Terminals
FA-A136	1/20	115	0.75	PSC	1	3450	3.3"	Ball	-	10" Lead w/Socket Terminals
FA-A205	1/20	120	0.7	SP	1	3000	3.3"	Sleeve	-	37" Leads w/(1) Spade Terminal & (1) Stripped End
FA-A173	1/18	115	0.8	PSC	1	3450	3.3"	Ball	5/370	34" Lead w/Flag Terminal
FA-A217	1/16	230	0.83	SP	1	3000	3.3"	Ball	-	15" Leads w/Spade Terminals
FA-A195	1/16	115	1.75	SP	1	3400	3.3"	Ball	-	(1) 6" Lead w/Pin Housing Terminal & 1 10" Lead w/Spade Terminal
FA-A124	1/15	115	1.75	SP	1	3450	3.3"	Sleeve	-	13" Leads w/Socket Terminals
FA-A211	1/15	115	2.35	SP	1	3400	3.3"	Ball	-	7" Leads w/Socket Terminals
FA-A225	1/15	115	2.25	SP	1	3200	3.3"	Ball	-	8" Leads w/Socket Terminal
FA-A270	1/15	208-230	0.42/0.50	PSC	2	3350/2800	3.3"	Ball	INC	8.5" Leads w/Pin Terminal Housing
FA-A330	1/12	208-230	0.55	PSC	1	3200	3.3"	Ball	INC	21-19" Leads w/Pin Terminals, 7-5" Leads w/F Flag Terminals
FA-A234	1/12	208-230	0.5	PSC	1	3200	3.3"	Ball	INC	33" Leads w/Spade Terminals
FA-A078	-	230	1.4	SP	1	3000	C-Frame	Sleeve	-	37" Leads w/Spade Terminals

OEM Replacement Motors - Fasco



Draft Inducer Blowers (cont. from previous page)

Item ID	HP	Volts	Amps	Type	Spd.	RPM	Frame	Bearing	Cap	Comments
FA-A077	-	120	2.8	SP	1	3000	C-Frame	Sleeve	-	12" Leads w/ 1 Male AMP & 1 Female AMP Terminals
FA-A248	-	120	1.2	SP	1	3250	C-Frame	Sleeve	-	8" Leads w/Pin Terminal Housing
FA-A277	-	120	0.60/0.36	PSC	2	3300/2600	3.3"	Ball	INC	8" Leads w/Pin Terminal Housing
FA-A253	-	120	0.24/0.13	PSC	2	3300/2200	3.3"	Ball	INC	8" Leads w/Pin Terminal Housing
FA-A235	-	115	2.63	SP	1	3000	C-Frame	Sleeve	-	7" Leads w/Spade Terminals
FA-A249	-	115	2.35	SP	1	3400	3.3"	Ball	-	8" Leads w/Pin Terminal Housing
FA-A252	-	115	0.65/0.30	PSC	2	3200/2800	3.3"	Ball	INC	8" Leads w/Pin Terminal Housing
FA-A236	-	115	0.58/0.27	PSC	2	3300/2700	3.3"	Ball	INC	8" Leads w/Pin Terminal Housing
FA-A238	-	115	1.2	SP	1	2750	C-Frame	Sleeve	-	Male AMP Terminals
FA-A239	-	115	0.75	SP	1	2750	C-Frame	Sleeve	-	Male AMP Terminals
FA-A074	-	115	0.5	PSC	2	3300	3.3"	Ball	INC	8" Leads w/ Pin Terminal Housing
FA-A076	-	115	0.5	PSC	2	3200/2000	3.3"	Ball	INC	16" Leads w/ Pin Terminal Housing

Water Heater Blowers



FA-W3



FA-W4

Item ID	HP	Volts	Amps	Type	Speeds	RPM	Rot.	Frame	Bearing	Cap	Cross Reference
FA-W3	1/17	115	1.7	SP	1	3000	CW	3.3"	Ball	-	117524-00, 239-39785-00
FA-W4	1/20	115	1.8	SP	1	3400	CCW	3.3"	Sleeve	-	183381-000, 7021-10910, 7021-10195, 7021-10910

Blower Flange Dimensions



Part #	Type A				Type B			Type C						Type D				Type E			
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U
R7-RB3	4.60"	3.90"	3.50"	2.80"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB33	3.00"	2.30"	3.00"	2.30"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB34	4.5"	3.45"	4.0"	2.85"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB60	-	-	-	-	3.3"	2.77"	2.95"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB70	4.0"	3.38"	3.5"	2.88"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB120	-	-	-	-	4.0"	2.81"	2.33"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB141	-	-	-	-	-	-	-	-	-	-	-	-	-	5.13"	4.11"	4.00"	1.50"	-	-	-	-
R7-RB142	-	-	-	-	-	-	-	-	-	-	-	-	-	5.13"	4.11"	4.00"	1.50"	-	-	-	-
R7-RB155	4.0"	3.8"	4.0"	3.3"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB165	3.5"	2.9"	3.9"	3.37"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB265	5.5"	4.85"	5.0"	4.4"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB350	5.3"	4.7"	5.6"	5.0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB440	-	-	-	-	4.04"	2.81"	2.38"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB445	6.6"	6.0"	5.7"	5.0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB446	4.61"	3.96"	3.52"	2.87"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB447	6.6"	6.0"	5.7"	5.0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB465	-	-	-	-	-	-	-	9.43"	8.8"	4.4"	4.4"	5.0"	4.4"	-	-	-	-	-	-	-	-
R7-RB495	6.6"	6.0"	5.6"	5.0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB500	6.6"	6.0"	5.6"	5.0"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB661	-	-	-	-	3.3"	2.77"	2.36"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB665	-	-	-	-	3.3"	4.00"	2.33"	-	-	-	-	-	-	-	-	-	-	-	-	-	-
R7-RB760	-	-	-	-	-	-	-	9.33"	8.8"	4.4"	4.4"	5.63"	5.06"	-	-	-	-	-	-	-	-
R7-RB938	-	-	-	-	-	-	-	-	-	-	-	-	-	4.75"	4.12"	4.75"	1.50"	-	-	-	-
R7-RB991	3.00"	2.00"	3.00"	2.00"	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Diagrams on next page.

Blower Flange Dimensions

