



*Tecumseh*

# Electrical Service Parts Guidebook

Wholesale Distribution  
North America



*Tecumseh*

ELECTRICAL  
SERVICE PARTS  
GUIDE BOOK

Tecumseh Products Company  
Ann Arbor, Michigan 48108

# Contents

## General Service Safety Information

Introduction . . . . .	3
Trained Personnel Only . . . . .	3
Terminal Venting and Electrocutation . . . . .	4
Refrigerants and Other Chemicals . . . . .	7
Compressor Removal . . . . .	8
System Flushing, Purging, and Pressure Testing for Leaks . . . . .	9
System Charging . . . . .	11
Prevention of Water-Utilizing System Explosions . . . . .	12
Start Capacitor Overheating . . . . .	15
System Evacuation . . . . .	15
Follow the Labels . . . . .	15
Additional Information . . . . .	15
Serial Label Information . . . . .	16

## SAK-Solid State Start Assist Kits . . . . .

. . . . .	19
-----------	----

## SSR3-Solid State Relay . . . . .

. . . . .	21
-----------	----

## Start and Run Capacitor Ratings. . . . .

. . . . .	23
-----------	----

## Introduction to ESP Master Replacement Guide . . . . .

. . . . .	24
-----------	----

## ESP Master Replacement Guide . . . . .

. . . . .	25
-----------	----

## Introduction to Electrical Drawings . . . . .

. . . . .	62
-----------	----

## Trouble Shooting and Service Chart . . . . .

. . . . .	84
-----------	----

## Introduction

Tecumseh Products Company has prepared this guidebook to assist service personnel in safely working with refrigeration and air conditioning equipment that uses Tecumseh Products Company hermetic compressors. It is not designed to replace the training required for professional service personnel. It is also not intended to replace other information available from refrigeration and air conditioning equipment manufacturers.

## Trained Personnel Only

Servicing, repairing, and troubleshooting refrigeration and air conditioning systems should be done only by those with the necessary knowledge, training, and equipment.

### **WARNING**

Never service, repair, or troubleshoot unless you are qualified to perform these functions. Improper servicing can lead to serious injury or death from fire, electrical shock, or explosion.

# Terminal Venting and Electrocutation

Improperly servicing, repairing, or troubleshooting a compressor can lead to electrocution or fire due to terminal venting with ignition. Follow the precautions below to avoid serious injury or death from electrocution or terminal venting with ignition.

## Fire Hazard from Terminal Venting with Ignition

Oil and refrigerant can spray out of the compressor if one of the terminal pins is ejected from the hermetic terminal. This “terminal venting” can occur as a result of a ground fault (also known as a short circuit to ground) in the compressor. The oil and refrigerant spray from terminal venting can be ignited by electricity and produce flames that can lead to serious burns or death. See figures 1 through 3 for detail.

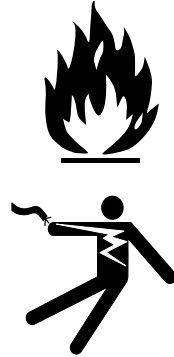


Figure 1



*Compressor with (1) protective terminal cover and (2) bale strap removed to show (3) hermetic terminal.*

Figure 2



*Close-up view of hermetic terminal showing individual terminal pins with power leads removed.*

Figure 3



*Close-up view of hermetic terminal after it has vented.*

## Terminal Venting and Electrocution Precautions

To reduce the risk of electrocution or serious burns or death from terminal venting with ignition:

*Be alert for sounds or arcing (sizzling, sputtering or popping) inside the compressor, IMMEDIATELY GET AWAY if you hear these sounds.*

*Disconnect ALL electrical power before removing the protective terminal cover.*

Make sure that all power legs are open. (NOTE: the system may have more than one power supply.)

*Never energize the system unless: 1) the protective terminal cover is securely fastened, and 2) the compressor is properly connected to ground.*

Figures 4 through 6 illustrate the different means of fastening protective terminal covers.

Figure 4



*Compressor with (1) protective terminal cover held in place by (2) metal bale strap.*

Figure 5



*Compressor with (1) protective terminal cover held in place by (2) nut.*

Figure 6



*Compressor with (1) snap-in protective terminal cover.*

*Never reset a breaker or replace a fuse without first checking for a ground fault (a short circuit to ground).*

An open fuse or tripped circuit breaker is a strong indication of a ground fault (also known as a short circuit to ground). Use only a megohmmeter (“megger”) or a Hi-Potential Ground tester (Hi-Pot) to check for a ground fault. A conventional ohmmeter will not reliably detect a ground fault under certain circumstances. See the Service Handbook for more information on checking for a ground fault. Also, always follow the megger or Hi-Pot manufacturer’s procedures and safety rules.

If a ground fault does exist, keep the power off. **WARNING!** *To avoid electric shock, electrocution, and terminal venting with ignition, do not energize a compressor that has a ground fault.* Mark and red tag the compressor to indicate that there is a ground fault. Do not reconnect the power leads. Tape and insulate each power lead separately.

*Disconnect power before servicing.*

Always disconnect power before servicing, unless it is required for a specific troubleshooting technique. In these situations, use extreme caution to avoid electrical shock.

## Refrigerants and Other Chemicals

Contact with refrigerant, mixtures of refrigerant and oil, or other chemicals can cause a variety of injuries including burns and frostbite. For example, if refrigerant contacts skin or eyes it can cause severe frostbite. Also, in the event of a compressor motor failure, some refrigerant and oil mixtures can be acidic and cause chemical burns.

To avoid injury, wear appropriate protective eyewear, gloves, and clothing when servicing an air conditioning or refrigeration system. Refer to your refrigerant supplier for more information.

If refrigerant or mixtures of refrigerant and oil come in contact with skin or eyes, flush the exposed area with water and get medical attention immediately.



# Compressor Removal

Failure to properly remove the compressor can result in serious injury or death from electrocution, fire, or sudden release of refrigerant and oil.

Follow these precautions when removing a compressor from a system:

## **Disconnect ALL electrical power.**

Disconnect all electrical power supplies to the system, making sure that all power legs are open. (NOTE: The system may have more than one power supply.)

## **Be sure refrigerant is recovered before removing compressor.**

Attempting to remove the compressor before removing all refrigerant from the system can cause a sudden release of refrigerant and oil.

Among other things, this can:

- Cause a variety of injuries including burns or frostbite.
- Cause a fire if a torch is used to disconnect tubing.
- Expose the service person to toxic gas.

To avoid serious injury or death, be sure to remove and recover all refrigerant before removing the compressor.

## **Use a tubing cutter, not a torch.**

Use a tubing cutter to remove the compressor.

A torch can cause even trace amounts of refrigerant to decompose and release toxic fumes. In addition, using a torch to remove the compressor can cause a fire. If you ignore this recommendation and use a torch, be prepared to extinguish a fire.



## System Flushing, Purging, and Pressure Testing for Leaks

Failure to properly flush, purge, or pressure test a system for leaks can result in serious injury or death from explosion, fire, or contact with acid-saturated refrigerant or oil mists.

Follow these precautions when flushing/purging a system or pressure testing a system for leaks:

**Use flushing products according to the manufacturer's instructions.**

**To purge a system, use only dry nitrogen.**

**When pressure testing for leaks, use only regulated dry nitrogen or dry nitrogen plus trace amounts of the serial label refrigerant.**

**When purging or pressure testing any refrigeration or air conditioning system for leaks, never use air, oxygen or acetylene.**

- Oxygen can explode on contact with oil.
- Acetylene can decompose and explode when exposed to pressures greater than approximately 15 psig.
- Combining an oxidizing gas, such as oxygen air, with an HCFC or HFC refrigerant under pressure can result in a fire or explosion.

**Use a pressure regulating valve and pressure gauges.**

Commercial cylinders of nitrogen contain pressures in excess of 2000 psig at 70°F. At pressures much lower than 2000 psig, compressors can explode and cause serious injury or death. To avoid overpressurizing the system, always use a pressure regulating valve on the nitrogen cylinder discharge (see Figure 7). The pressure regulator must be able to reduce the pressure down to 1 or 2 psig and maintain this pressure.

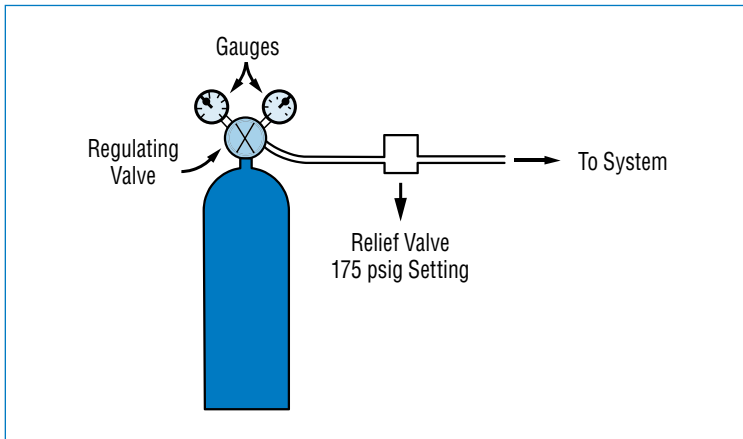
The regulating valve must be equipped with two pressure gauges:

- one gauge to measure cylinder pressure, and
- one gauge to measure discharge or downstream pressure.

### Use a pressure relief valve.

In addition to pressure regulating valve and pressure gauges, always install a pressure relief valve. This can also be a frangible disc type pressure relief device. This device should have a discharge port of at least  $\frac{1}{2}$ " MPT size. The valve or frangible disc device must be set to release at 175 psig (see Figure 7).

Figure 7



*Dry nitrogen cylinder with attached pressure regulating and relief valves and pressure gauges needed for pressure testing for leaks and purging.*

### Do not pressurize the system beyond 150 psig field leak test pressure.

When field testing a system for leaks, 150 psig is adequate test pressure.

### Disconnect nitrogen cylinder and evacuate the system before connecting the refrigerant container.

Disconnect the nitrogen cylinder and release the pressure in the system before connecting a refrigerant container to the system. The higher pressure gas in the system can explode the refrigerant container.

## System Charging

Failure to properly charge the system can result in serious injury or death from explosion or fire.

Follow these precautions when charging a system:

### **Do not operate the compressor without charge in the system.**

Operating the compressor without a charge in the system can damage the hermetic terminal. As always, to avoid serious injury or death from terminal venting with ignition, never energize the compressor unless the protective terminal cover is securely fastened.

### **Use proper refrigerant.**

Use only the compressor serial label refrigerant when charging the system. Using a different refrigerant can lead to excess system pressure and an explosion. Use of a refrigerant other than the serial label refrigerant voids the compressor warranty.

### **Do not overcharge a refrigeration or air conditioning system.**

Overcharging a refrigeration or air conditioning system can result in an explosion. To avoid serious injury or death, never overcharge the system. Always use proper charging techniques. Limit charge amounts to those specified on the system equipment serial label or in the original equipment manufacturer's service information.

Overcharging the system immerses the compressor motor, piston, connecting rods, and cylinders in liquid refrigerant. This creates a hydraulic block preventing the compressor from starting. The hydraulic block is also known as locked rotor.

Continued supply of electricity to the system causes heat to build in the compressor. This heat will eventually vaporize the refrigerant and rapidly increase system pressure. If, for any reason, the thermal protector fails to open the electrical circuit, system pressure can rise to high enough levels to cause a compressor housing explosion.

# Prevention of Water-Utilizing System Explosions

In certain water-utilizing refrigeration systems, water can leak into the refrigerant side of the system. This can lead to an explosion of system components, including but not limited to the compressor. If such an explosion occurs, the resulting blast can kill or seriously injure anyone in the vicinity.

## Systems at Risk of Explosion

Water-utilizing systems that have single-wall heat exchangers may present a risk of explosion. Such systems may include:

- water source heat pump/air conditioning systems, and
- water cooling systems, such as icemakers, water coolers, and juice dispensers.

Water-utilizing systems that have single-wall heat exchangers present a risk of explosion unless they have either:

- a high pressure cut-out which interrupts power to ALL leads to compressor, or
- an external pressure relief valve.

## How an Explosion Occurs

If the refrigerant tubing in the heat exchanger develops a leak, water can enter the refrigerant side of the system. Water entering the refrigerant side can come in contact with live electrical connections in the compressor causing a short circuit or a path to ground. When this occurs, extremely high temperatures can result. The heat build-up creates steam vapor that can cause excessive pressure throughout the entire system. This system pressure can lead to an explosion of the compressor or other system components.

## Service Procedures

In light of the risk of explosion, be especially alert for signs of water leaking into the refrigerant side of the system. Whenever servicing or troubleshooting a water-utilizing system, always check to see if it has either a pressure relief valve or a high pressure cut-out as previously described. If the system does not have at least one of these, DISCONNECT ALL ELECTRICAL POWER and look for indications that water has leaked into the refrigerant side of the system. These indications may include:

- Observation of a report of a blown fuse or tripped circuit breaker.
- Signs that water has leaked to the outside of the system.
- Reports that the system has made gurgling or percolating noises.
- A history of loss of refrigerant charge without a leak being found in the system. NOTE: Common leak detection methods will not detect a water-to-refrigerant leak in the system's heat exchanger(s).
- Observation of or a report of the compressor giving off an unusual amount of heat.

If ANY of these indications are present, do the following checks to determine if water has leaked into the refrigerant side:

### Step 1: Check for a Ground Fault (a short to ground)

Use only a megohmmeter ("megger") or a Hi-Potential Ground tester ("Hi-Pot") to check for a ground fault. A conventional ohmmeter will not reliably detect a ground fault under certain circumstances. See the Service Handbook for more information on checking for a ground fault. Also, always follow the megger or Hi-Pot manufacturer's procedures and safety rules.

- If a ground fault does not exist, go to Step 2.
- If a ground fault does exist, keep the power off.

**WARNING!** To avoid electric shock, electrocution, and terminal venting with ignition, do not energize a compressor that has a ground fault. Mark and red tag the compressor to indicate that there is a ground fault. Do not reconnect the power leads. Tape and insulate each power lead separately. Proceed to Step 2. Do not replace the compressor or energize the system before performing Step 2.

## Step 2: Check for Water in the System

Once the compressor is cool to the touch, open the system process valve slightly to see if any water comes out of the system. **WARNING!** *Opening the system process valve while the compressor is hot can cause severe burns from steam coming out of the valve.*

If ANY water comes out of the process valve, the entire system **must** be replaced. See “Replacing a Single-Wall Water-Utilizing System” below.

If water does not come out of the process valve, there is still a possibility that some water has leaked into the refrigerant side of the system. To address this possibility, determine if the system has a history of losing refrigerant charge without a leak being found or repaired.

If you find ANY indication of a history of losing refrigerant charge without detection of a leak, this is a sign that refrigerant has leaked in the water inside the heat exchanger. The entire system **must** be replaced. See “Replacing a Single-Wall Water-Utilizing System” below.

If you do not find any indication of a history of loss of charge without detection of a leak, you still need to install:

- a high pressure cut-out which interrupts power to ALL leads to the compressor, or
- an external pressure relief valve.

Also, if you found a ground fault in the compressor in Step 1, replace the compressor before applying power to the system.

## Replacing a Single-Wall Water-Utilizing System

When replacing a single-wall water-utilizing system, replace the system with one that has:

- a double-wall heat exchanger(s), or
- a high-pressure cut-out which interrupts power to ALL leads to the compressor, or
- an external pressure relief valve.

## Start Capacitor Overheating

An overheated start capacitor can burst and spray or splatter hot material which can cause burns. Applying voltage to a start capacitor for more than a few seconds can cause the capacitor to overheat.

Check capacitors with a capacitance meter, and never check a capacitor with the power on.

## System Evacuation

Never use a compressor to evacuate a system. Instead, use a high vacuum pump specifically designed for that purpose.

Never start the compressor while it is under deep vacuum. Always break a vacuum with refrigerant charge before energizing the compressor.

Failure to follow these instructions can damage the hermetic terminal. As always, to avoid serious injury or death from terminal venting with ignition, never energize the compressor unless the protective terminal cover is securely fastened.

## Follow the Labels

Tecumseh Products Company compressors have labels and markings with important information. For your safety and the safety of others, read the labels and markings on the product.

## Additional Information

For additional information, request a Tecumseh Service Handbook (call 1-800-211-3427), contact a Tecumseh Authorized Wholesale Distributor, or visit [www.tecumseh.com](http://www.tecumseh.com).

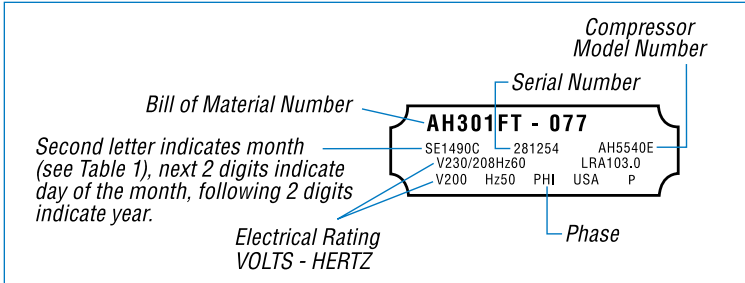


# Serial Label Information

The only source for complete compressor information is on the compressor serial label. On earlier compressors, the serial plate is usually spot welded on the upper housing of the compressor. For current compressors, the serial label is affixed in the same location. Both describe the characteristics of the compressor.

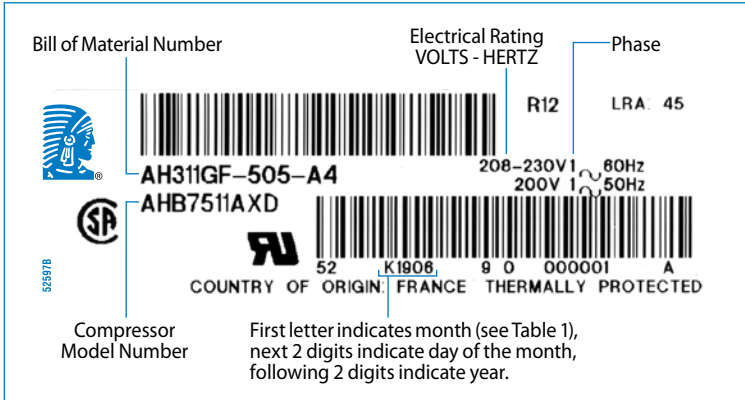
The months are identified in Table 1.

Figure 8



Example compressor serial plate

Figure 9



Example compressor serial label

**Table 1: Serial Label Month Identifiers**

A – January	D – April	G – July	K – October
B – February	E – May	H – August	L – November
C – March	F – June	J – September	M – December

Figure 10


*Manufacturing Code Date*

*Month = September*

OJO




*Year = 2000*

*The letter represents the month (see Table 1).  
The numbers represent the year.*

COMPRESSORS		THERMALLY PROTECTED		VOLTAGE		EVAP. RANGE (...F)	
NO.	R.L.A. E.A.	L.R.A. E.A.	PH.	60 HZ			
1	8.8	58.8	1	115	-10F TO +45F		
FANS:		HP.	PROTECTED THERMALLY	PH.	MIN. CIRCUIT AMPS	HI SIDE	LO SIDE
NO.	F.L.A. E.A.	35W		1	12.4	350	150
SER	OJ00066332		MAX. FUSE	MAX. CKT. BKR. (HACR. TYPE PERNEC.)	REFRIG.	OZ. CHARGE	
BM	2C234-9		20		R-22	14	
MOD	AKA9446EXAXC		<i>Tecumseh</i> ®		MADE IN USA	52994-1	
(1P)							

Example indoor condensing unit serial label

Figure 11

MODEL		<b>AVA2510ZXNHG</b>		REFRIGERANT	CHARGE
				<b>R404A</b>	(lbs)
SERIAL NO.		<b>16F291000123</b>		EVAP. TEMP RANGE (F)	COMP. DATE
				<b>-40F to 10F</b>	<b>C1510</b>
UNIT B. O. M.		VOLTAGE - HZ - PHASE		Max circuit breaker (HACR type per NEC) MAX FUSE SIZE (A)	
<b>2H2128 - 20</b>		<b>208 - 230V - 60HZ</b>		<b>35</b>	
COMPRESSOR MODEL		COMPRESSOR B. O. M.	VOLTAGE - HZ - PHASE	RLA	LRA
<b>AVA2490ZXN</b>		<b>AV195ET - 001 - P4</b>	<b>208 - 230V - 60HZ</b>	<b>11.4</b>	<b>106.6</b>
FAN MOTORS (S)	QTY	VOLTAGE - HZ - PHASE	FAN HORSEPOWER	FLRA	PROTECTION
	<b>1</b>		<b>50 Watts</b>	<b>.7</b>	<b>THERMALLY</b>
DESIGN PRESSURE (PSIG)		HI	LO	 <b>TECUMSEH PRODUCTS OF CANADA LIMITED</b> LONDON, ONTARIO, N5W 5S1	
		<b>450</b>	<b>181</b>		
REMOTE CONDENSER MIN PRESSURE (PSIG)					

First letter indicates month (see Table 1), next 2 digits indicate day of the month, following 2 digits indicate year.

Example outdoor condensing unit serial label

## ***Electrical Parts Program***

*While Tecumseh compressors are designed and manufactured to the most exacting standards, a small percentage will require service, primarily due to the normal wear of electrical component parts such as compressor motor relays and overloads.*

*Replacement relays and overloads must be accurately matched to the specific compressor involved in order to assure proper performance and prevent equipment failure.*

*The Tecumseh Electrical Parts Program together with the comprehensive Parts Guidebook are designed to assist the service engineer in obtaining correct Tecumseh parts for Tecumseh compressors regardless of the end product in which the compressor is installed.*

*Your Tecumseh Authorized Wholesaler Distributor has complete stock of these parts, detailed wiring diagrams, cross reference data and the know-how to help you.*

*Any part numbers removed from this cross reference is due to obsolescence of the part. This also means that no current replacement parts are available to replace the old numbers and their existence has outlasted the lifetime expectations of the product.*

## Tecumseh Start Assist Kit – SAK2

The solid state start assist is a popular method of improving the starting ability of a PSC compressor. Its low cost in comparison to a potential relay and start capacitor as well as the fact that **one rating works on all PSC compressors** are of prime interest.

We offer the following comments regarding the SAK2 Tecumseh start assist kit.

**What It Is:** A solid state device utilizing PTC material which when wired in parallel with the run capacitor of a PSC compressor, provides additional starting torque.

**How It Works:** The PTC material performs much the same function of a small start capacitor by momentarily increasing the motor start winding current. As the PTC material heats up, its resistance increases immediately to a point where it becomes essentially non-conductive and the compressor motor returns to PSC operation.

**Its Limitations:** The starting torque provided by SAK2 is equal to that provided by the specified relay and start capacitor for AE, AK, AJ, RG, and RK PSC models but may be somewhat less than that provided by the specified relay and start capacitor for AB, AH, AV, AG, AW, and CL models. For unusually severe problems, the specified relay and start capacitor may have to be used.

For additional information as well as installation and wiring procedures, please refer to the sample instruction sheet on the following page.

# Instruction Sheet

## Start Assist Kit – SAK2 and SAK4

**SAK2:** This kit includes a solid state start assist device, a mounting clip, and two wiring leads. It is to be used only with a PSC air conditioning or heat pump compressor in self-equalizing systems to provide increased starting ability when starting problems are encountered.

**SAK4:** This kit includes a solid state start assist device, a mounting clip, and two wiring leads. It is a required part for the AVD5558EXN Compressor.

### No SAK Kit is to be used:

- With PSC air conditioning or heat pump compressors in non-self equalizing systems.
- With compressors wired for capacitor type off-cycle heat.
- As a replacement for the specified relay and start capacitor on any capacitor start and run compressor in any type system.

### Notes:

This device requires a 3 minute cool-down period between starts. Should this kit fail to start the compressor due to unusually severe starting problems, remove kit and install optional relay and start capacitor specified in Electrical Service Parts Guidebook.

### Installing and Wiring:

1. Secure mounting clip over run capacitor lip and snap device into place.
2. Connect (reversible) terminals of leads to device.
3. Connect (piggyback) terminals to run capacitor. These terminals have provision for attaching additional leads needed if run capacitor has only two terminals.
4. Refer to Figure 12 for additional wiring information.

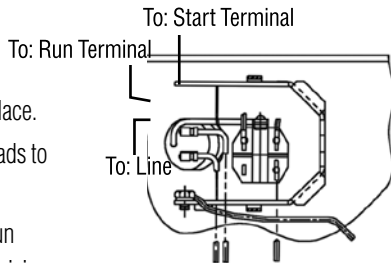


Figure 12

## Tecumseh Solid State Relay – SSR3

The SSR3 solid state relay may be used as a replacement for the current type on certain Tecumseh 115 volt RSIR compressors. Below and on the following page is information concerning the Tecumseh SSR3 relay.

### Instruction Sheet Solid State Relay – SSR3

This relay is intended to replace all current type push-on relays now specified for Tecumseh resistance start induction run (RSIR) compressors applied in household refrigerators and freezers. It is restricted to 115 volt operation.

#### It is not to be used

- to replace current type relays now specified for Tecumseh RSIR compressors applied in rapid-cycling systems such as water coolers, etc.
- to replace current or potential type relays on Tecumseh capacitor start induction run (CSIR) compressors; it cannot be used along with a start capacitor.

#### Note:

For the above applications refer to Electrical Service Parts Guidebook for proper relay selection.

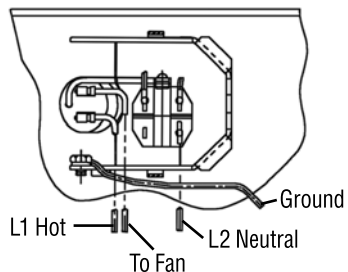
#### Caution:

This relay runs very hot during compressor operation. Temperatures in excess of 150°F (66°C) are not uncommon. Allow a cool down period after compressor shut down before attempting to handle or remove.

#### Installing and Wiring:

1. Disconnect power before removing protective cover.
2. Remove faulty relay and replace with SSR3.
3. Install and wire as shown in Figure 13.
4. If screw type relay termination is required, use adapter and screw provided.
5. Replace protective cover.

Figure 13



## Use of Solid State Relays

Tecumseh's position limiting the use of solid state relays to normal cycling 115 volt RSIR compressors is as follows:

- A. It must be realized that a solid state relay is actuated on a thermal basis through the use of a material designated PTC. This PTC material is of a given cold resistance. It heats up rapidly as power is supplied, becomes non-conductive, and effectively opens the start winding circuit.
- B. The usage of a CSIR compressor is generally one of intent in that high starting torque is needed in the application involved. Usually, this is because the compressor will be called upon to restart prior to complete pressure equalization (example, expansion valve systems). If a solid state relay is used on a CSIR compressor, the resistance added to the start winding circuit substantially reduced the starting torque. The result may be that the compressor will not start when required and will cycle on the overload for an undesirable length of time.
- C. Additionally, if a solid state relay is used on an RSIR compressor applied in a rapid-cycling system, again a no-start situation could result. This is due to the cool-down period required of the PTC material, usually 4 to 6 minutes. In effect, the relay may still be hot (non-conductive) when called upon, the start winding will not be energized and the compressor will not restart.

The preceding comments apply to the Tecumseh SSR3 as well as all other solid state relays on the market.

## Start and Run Capacitor Ratings

Start Cap P/N	MFD/Voltage
85626	21-25/250
85704	340-408/110
85PS110C76	243-292/110
85PS110C90	145-175/110
85PS110C91	189-227/110
85PS110C92	270-324/110
85PS125D59	378-440/125
85PS165C27	270-324/165
85PS165C77	378-440/165
85PS165C96	161-193/165
85PS165C98	233-280/165
85PS220D02	72-88/220
85PS250A58	196-236/250
85PS250B87	216-259/250
85PS250C30	72-88/250
85PS250D05	47-56/250
85PS250D06	53-64/250
85PS250D07	64-77/250
85PS250D09	88-108/250
85PS250D10	130-156/250
85PS250D19	124-149/250
85PS330C23	88-108/330
85PS330C84	196-236/330
85PS330D12	72-88/330
85PS330D14	108-130/330
85PS330D15	124-149/330
85PS330D16	130-156/330
85PS330D17	145-175/330
85PS330D18	176-216/330
85PS330D23	161-193/330
85PS330D65	21-25/330

Run Cap P/N	MFD/Voltage
85PR220F12	15/220
85PR240F37	35/240
85PR370E35	20/370
85PR370E36	15/370
85PR370E63	40/370
85PR370F17	35/370
85PR370F20	25/370
85PR370F21	45/370
85PR370F23	30/370
85PR440E65	45/440
85PR440E90	55/440
85PR440F18	35/440
85PR440F19	20/440
85PR440F22	25/440
85PR440F24	15/440
85PR440F27	30/440
85PR440F28	40/440
85PR440F90	65/440



# Introduction to ESP Master Replacement Guide

This Guide should be used if the model number, voltage and application of the compressor are known.

Attention should be given to any explanation of information covered under the “Remarks” column. Coding is as follows:

S/Cap Start Capacitor

R/Cap Run Capacitor

Opt. Optional

All voltage shown are 60 hertz and unless otherwise specified are single phase.

All 3450 RPM air conditioning compressors have PSC motors but can be operated CSR by adding the optional starting components. When PSC starting problems are encountered, either the specified relay and start capacitor or the SAK2 start assist may be used.

Certain refrigeration compressors may be serviced with either the specified current type relay or the SSR3 solid state relay.

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AB5513G, H	208-230/60/1	~	~	~	~	85PS330C23	85PR370E35	K71-19	INTERNAL	~
AB5515G, H	208-230/60/1	7.18	43	~	~	85PS330D65	85PR370E35	K71-19	INTERNAL	~
AB5515G, H	265/60/1	6.6	39.5	~	~	85PS330C23	85PR440F19	K71-19	INTERNAL	~
AB5517G, H	208-230/60/1	7.8	49	~	~	85PS330C23	85PR440F19	K71-19	INTERNAL	~
AB5517G, H	265/60/1	7.3	45	~	~	85PS330C23	85PR440F19	K71-19	INTERNAL	~
AB5519F, G, H	208-230/60/1	9	53	~	~	85PS250D09	85PR370F20	K71-19	INTERNAL	~
AB5519F, G, H	265/60/1	8.5	46	~	~	85PS330C23	85PR440F22	82964	INTERNAL	~
AB5520F, G, H	208-230/60/1	9.4	56	~	~	85PS250D09	85PR370F20	82965	INTERNAL	~
AB5520F, G	265/60/1	8.9	54	~	~	85PS330C23	85PR440F22	82964	INTERNAL	~
AB5522F, G, H	208-230/60/1	10.5	63	~	~	85PS250D09	85PR370F20	82965	INTERNAL	~
AB5522F, G	265/60/1	9.6	59.2	~	~	85PS330C23	85PR440F22	82964	INTERNAL	~
AB5524F, G, H	208-230/60/1	11	64	~	~	85PS250D09	85PR370F17	82965	INTERNAL	~
AB5524F, G	265/60/1	10.2	61	~	~	85PS330C23	85PR440F28	82964	INTERNAL	~
AB5527H	208-230/60/1	12.9	77	~	~	85PS330C23	85PR370F17	82965	INTERNAL	~
AB5528G, H	208-230/60/1	13.3	80	~	~	85PS250D09	85PR370F17	82965	INTERNAL	~
AB5528G	265/60/1	11.9	72	~	~	85PS330C23	85PR440F18	82966	INTERNAL	~
AB5530G, H	208-230/60/1	14	87	~	~	85PS330C23	85PR370F17	82965	INTERNAL	~
AEA0415EXA	115/60/1	3.7	28	12.33	1.55	~	~	82453	8300MRPK59	~
AEA0415ZXA	115/60/1	4	28	12.33	1.55	~	~	82453	8300MRTLJ36	Condenser Fan Required
AEA0415ZXD	208-230/60/1	2.8	21.8	32.28	4.23	~	~	82008EAJ54	83004TMN72	~
AEA0418AXA	115/60/1	4.3	28	13.5	1.6	~	~	8200EMBE47	K90-11	Condenser Fan Required
AEA0423AXA	115/60/1	6.7	40	17.27	0.96	~	~	820APRR12C06	8300MRTLJ37	Condenser Fan Required
AEA1316YXA	115/60/1	1.2	11.7	16.41	7.64	~	~	820RR12E91	83781	Static Condenser
AEA1320AXA	115/60/1	1.2	11.7	16.41	7.64	~	~	82418	83643	Static Condenser

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
AEA1320AXA	115/60/1	1	12.9	~	~	~	~	~	82418	83643	Static Condenser
AEA13261YXA	115/60/1	1.2	14	13.2	4.2	~	~	~	8200EMB492	8300MRPG06	Static Condenser
AEA1332AXA	115/60/1	1.4	13.9	15.72	5.15	~	~	~	82404	83643	~
AEA1332AXA	115/60/1	1.3	14	~	~	~	~	~	820RR12B99	83974	Static Condenser
AEA1332YXA	115/60/1	1.55	14.6	15.72	5.15	~	~	~	82404	83613	Static Condenser
AEA1336AXA	115/60/1	1.7	14.6	15.72	5.15	~	85PS110C91	~	82404	K90-01	~
AEA1336AXA	115/60/1	1.7	14.6	15.72	5.15	~	~	~	82404	83613	Static Condenser
AEA1338YXA	115/60/1	2.1	18	16.36	3.36	~	~	~	K71-05	K90-03	Condenser Fan Required
AEA1343AXA	115/60/1	2.3	18	16.36	3.36	~	85PS110C91	~	K71-05	K90-02	~
AEA1343AXA	115/60/1	1.75	18	12.5	3.5	~	~	~	K71-08	8300MRPJ91	Static Condenser
AEA1360AXA	115/60/1	2.5	22	9.18	2.69	~	85PS110C91	~	K71-08	K90-07	~
AEA1360AXA	115/60/1	2.15	22.1	~	~	~	~	~	~	8300MRPG15	~
AEA1360YXA	115/60/1	2.05	20.7	13.3	2.3	~	~	~	K71-08	K90-04	Static Condenser
AEA1380AXA	115/60/1	3.65	31	11.96	1.94	~	85PS110C91	~	82403	K90-07	~
AEA1380AXA	115/60/1	2.75	26.6	11.98	1.59	~	~	~	8209660J81	K90-08	~
AEA1380YXA	115/60/1	2.6	24	11.82	1.69	~	~	~	820RR12G21	8300MRPG97	Condenser Fan Required
AEA1410AXA	115/60/1	4.1	35	6.69	1.54	~	~	~	820RR12B11	K90-14	~
AEA1410YXA	115/60/1	3.2	28	12.33	1.55	~	~	~	82453	8300MRPH37	Condenser Fan Required
AEA1411AXA	115/60/1	3.8	32	10.45	1.27	~	~	~	8200EMBJ05	K90-09	~
AEA1411EXA	115/60/1	4.5	31	12.42	1.4	~	85PS110C76	~	~	K90-10	Condenser Fan Required
AEA1413AXA	115/60/1	4.6	35	6.69	1.54	~	~	~	K71-09	K90-10	~
AEA1413AXA	115/60/1	4.2	32	10.45	1.27	~	~	~	820RR12B11	8300MRTC13	~
AEA1413YXA	115/60/1	5	37.5	13.95	0.97	~	~	~	8200EMBJ05	K90-09	~
AEA1415EXA	115/60/1	5.2	39	15.22	0.87	~	85PS110C76	~	K71-10	8300MRTE48	Condenser Fan Required
									820RR12A76	K90-16	Condenser Fan Required

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AE2380ZA	115/60/1	4.4	30.2	6.59	1.36	85PS110C76	~	K71-12	K90-11	Condenser Fan Required
AE2410YA	115/60/1	5.6	40	5.94	1.1	85PS110C92	~	K71-01	K90-17	Condenser Fan Required
AE2411XA	115/60/1	4.4	30.2	6.59	1.36	85PS110C76	~	K71-12	K90-11	Condenser Fan Required
AE2411ZA	115/60/1	5.9	40	5.94	1.1	85PS165C27	~	K71-01	K90-15	Condenser Fan Required
AE2411ZD	208-230/60/1	2.5	20.9	20.4	3.9	85PS250C30	~	820RR12L30	8300MRPG95	Condenser Fan Required
AE2413AXA	115/60/1	4.8	30.2	6.59	1.36	85PS110C76	~	K71-12	K90-12	~
AE2413YA	115/60/1	5.9	40	5.94	1.1	85PS110C92	~	K71-01	K90-17	Condenser Fan Required
AE2415AAB	115/60/1	8.3	40	5.94	1.1	85PS110C92	~	K71-01	K90-17	Condenser Fan Required
AE2415AXD	208-230/60/1	3.1	20.5	20.4	3.9	85PS220D02	~	82427	8300MRPD92	Condenser Fan Required
AE3414APP	220-60-1	1.23	8.5	60.66	12.76	~	~	82407	83701	Condenser Fan Required
AE2416JXA	115/60/1	5.9	40	5.94	1.1	85PS165C27	~	K71-01	K90-15	Condenser Fan Required
AE3414AXA	115/60/1	2.9	18	16.36	3.36	85PS110C91	~	K71-05	K90-07	Condenser Fan Required
AE3414YXA	115/60/1	3.14	14.43	16.36	3.36	85PS110C91	~	K71-05	K90-07	Condenser Fan Required
AE3414YXP	220-60-1	1.6	8.5	60.66	12.76	~	~	8200EMBH66	8300MRPF31	Condenser Fan Required
AE3415ZA	115/60/1	3.3	22	9.18	2.69	~	~	K71-08	8300MRPE07	Condenser Fan Required
AE3417AXA	115/60/1	3.4	22	9.18	2.69	85PS110C91	~	K71-08	K90-07	Condenser Fan Required
AE3417YXA	115/60/1	3.4	22	9.18	2.69	85PS110C91	~	K71-08	K90-07	Condenser Fan Required
AE3417YXD	208-230/60/1	1.9	13.7	44.81	6.86	~	~	82415	K90-01	~
AE3425AXA	115/60/1	4.4	24	11.85	2.29	85PS110C91	~	82403	K90-08	Condenser Fan Required
AE3425AXA	115/60/1	4	26.6	~	~	~	~	82403	K90-07	Condenser Fan Required
AE3425YXA	115/60/1	4.4	24	11.85	2.29	85PS110C91	~	820RR12L01	K90-10	~
AE3425YXD	208-230/60/1	2.2	13.7	44.81	6.86	53-64/220	~	82415	8300MRAN60	~
AE3430AXA	115/60/1	5.4	28	12.24	1.83	85PS110C91	~	K71-09	K90-10	Condenser Fan Required
AE3430YXA	115/60/1	5.4	28	12.24	1.83	85PS110C91	~	K71-09	K90-10	Condenser Fan Required

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AEA3430YXU	100/60/1	5.7	36	9.71	1.03	~	~	82453	K90-15	Condenser Fan Required
AEA3440AXA	115/60/1	5.4	28	10.66	1.51	85FS110C91	~	K71-10	K90-16	Condenser Fan Required
AEBS440AXA	115/60/1	6.2	37.5	~	~	~	~	~	~	Condenser Fan Required
AEA3440YXA	115/60/1	6.9	35	10.66	1.51	85PS110C90	~	K71-10	K90-21	Condenser Fan Required
AEA3440YXD	208-230/60/1	3.6	21.8	32.28	4.23	~	~	K71-08	8300MRPM67	Condenser Fan Required
AEA3448AXA	115/60/1	8.7	40	16.13	0.98	~	~	820RR12C28	8300MRAJ87	Condenser Fan Required
AEA3448YXA	115/60/1	8.7	40	17.27	0.96	~	~	820RR12C28	8300MRAJ87	Condenser Fan Required
AEA4430AXA	115/60/1	5	29	5.05	1.83	85PS110C76	~	K71-09	K90-11	Condenser Fan Required
AEA4430AXD	208-230/60/1	2.8	14.4	14.75	5.63	53-64/220	~	82476	8300MRPB02	Condenser Fan Required
AEA4430YXA	115/60/1	5.3	29	5.05	1.83	85PS110C76	~	K71-09	K90-12	Condenser Fan Required
AEA4430YXD	208-230/60/1	2.8	14.4	14.75	5.63	85PS250D06	~	14949174	8300MRPM85	Condenser Fan Required
AEA4440AXA	115/60/1	6.8	32.7	10.6	1.27	85PS110C90	~	K71-10	K90-16	Condenser Fan Required
AEA4440AXD	208-230/60/1	3.6	16.8	26.67	4.8	85PS250D05	~	K71-08	8300MRPA97	Condenser Fan Required
AEA4440YXA	115/60/1	7.2	32.7	10.6	1.27	85PS110C90	~	K71-10	K90-16	Condenser Fan Required
AEA4440YXD	208-230/60/1	3.9	19	26.19	4.55	85PS250D05	~	K71-08	K90-08	Condenser Fan Required
AEA4448AXA	115/60/1	8.3	40	5.94	1.1	85PS110C92	~	K71-01	K90-19	Condenser Fan Required
AEA4448YXA	115/60/1	8.14	40	5.94	1.1	85PS110C92	~	K71-01	K90-22	Condenser Fan Required
AEA4448YXD	208-230/60/1	5.3	24.5	20.4	3.46	85PS250C30	~	820RR12L03	8300MRAN90	Condenser Fan Required
AEA5455EAXA	115/60/1	6.2	28	13.63	1.36	85PS330D65	85PR370E36	K71-19	83949	~
AEA5460EAXA	115/60/1	7	31	12.78	1.13	85626	85PR370E36	K71-19	K90-21	~
AEA5465EAXA	115/60/1	7.7	34	11.8	0.87	85626	85PR370E36	K71-19	8300MRAA06	~
AEA5465EYD	208-230/60/1	4	20	8.63	3.02	85PS330D65	85PR370E36	820ARR3B09	8300MRPC07	~
AEA5465EYV	265/60/1	3.32	16	11.98	4.5	85PS330D65	85PR440F24	820ARR3B85	8300MRPB68	~
AEA5470EAXA	115/60/1	8.3	38	11.73	0.83	85626	85PR370E36	K71-19	8300MRAA94	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
EA8458XA	115/60/1	5.2	24	13.31	1.56	~	85626	85PR370E36	K71-19	8300MRAC45	~
EA8467XA	115/60/1	6	34	~	~	~	85626	85PR370E36	K71-19	K90-10	~
EA8469XA	115/60/1	6.2	34	~	~	~	85626	85PR370E36	K71-19	K90-10	~
EA8475XA	115/60/1	7	34	12.44	1.02	~	85626	85PR370E36	K71-19	8300MRAB59	~
EA9415XA	115/60/1	4.3	29	5.05	1.83	~	85PS110C76	~	K71-09	K90-12	Condenser Fan Required
EA9415ZXA	115/60/1	4.5	29	5.05	1.83	~	85PS110C76	~	K71-09	K90-13	Condenser Fan Required
EA9419YXA	115/60/1	5.4	38	6.08	0.97	~	85PS165C27	~	K71-01	8300MRPE79	~
EA9422EXA	115/60/1	6.1	40	5.94	1.1	~	85PS165C27	~	K71-01	K90-15	Condenser Fan Required
EA9422EXD	208-230/60/1	3.2	20.5	20.4	3.9	~	85PS250C30	~	820RR12L30	8300MRAN11	~
EA9422ZXA	115/60/1	6.7	40	5.94	1.1	~	85PS165C27	~	K71-01	K90-21	Condenser Fan Required
EA9422ZXD	208-230/60/1	3.4	21	17.25	3.31	~	85PS250C30	~	820RR12L30	8300MRPP74	~
EA9423YXA	115/60/1	7.7	45	5.82	0.82	~	85PS110C92	~	K71-06	8300MRTE81	~
AGA4534XG	460/60/3	5.5	32	~	~	5.59	~	~	~	INTERNAL	~
AGA4534XN	208-230/60/1	17	90	2.52	0.687	~	85PS330D16	85PR440F28	K71-20	INTERNAL	~
AGA4534XT	200-230/60/3	10.4	60	~	~	1.63	~	~	~	INTERNAL	~
AGA4543XG	460/60/3	7	47	~	~	3.83	~	~	~	INTERNAL	~
AGA4543XN	208-230/60/1	22.5	115	2.358	0.479	~	85PS330D16	85PR440F28	K71-20	INTERNAL	~
AGA4543AXT	200-230/60/3	13.8	93	~	~	0.957	~	~	~	INTERNAL	~
AGC5546EXG	460/60/3	7	47	~	~	3.83	~	~	~	INTERNAL	~
AGA5546EXH	575/60/3	5.3	30	~	~	7.88	~	~	~	INTERNAL	~
AGA5546EXN	208-230/60/1	22.7	115	2.358	0.479	~	85PS330D16	85PR440F28	K71-20	INTERNAL	~
AGB5546EXN	208-230/60/1	20.8	130	~	~	~	85PS330D18	85PR370F17	K71-20	INTERNAL	2 R/Caps required
AGA5546EXT	200-230/60/3	13.5	93	~	~	0.957	~	~	~	INTERNAL	~
AGC5553EXG	460/60/3	7.8	54	~	~	2.88	~	~	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AGA553EXH	575/60/3	6	30	~	~	~	~	~	INTERNAL	~
AGA553EXN	208-230/60/1	26.2	132	2.05	0.395	~	85PR440E65	K71-20	INTERNAL	~
AGB553EXN	208-230/60/1	24.6	148	~	~	~	85PR370F17	K71-20	INTERNAL	2 R/Caps required
AGA553EXT	200-230/60/3	15.5	103	~	~	~	~	~	INTERNAL	~
AGB553EXT	200-230/60/3	15.1	137	~	~	~	~	~	INTERNAL	~
AGC5561EXG	460/60/3	9.5	62	~	~	~	~	~	INTERNAL	~
AGA5561EXH	575/60/3	7	39	~	~	~	~	~	INTERNAL	~
AGA5561EXN	208-230/60/1	30.5	165	1.673	0.359	~	85PS330D16	K71-20	INTERNAL	~
AGB5561EXN	208-230/60/1	27.8	180	~	~	~	85PR440E90	820ARR3C64	INTERNAL	2 R/Caps required
AGA5561EXT	200-230/60/3	18	126	~	~	~	~	~	INTERNAL	~
AGB5561EXT	200-230/60/3	18	158	~	~	~	~	~	INTERNAL	~
AGC5568EXG	460/60/3	10.6	75	~	~	~	~	~	INTERNAL	~
AGB5568EXH	575/60/3	7.7	49	~	~	~	~	~	INTERNAL	~
AGA5568EXN	208-230/60/1	34.5	179	1.61	0.253	~	85PS330D16	K71-20	INTERNAL	~
AGA5568EXT	200-230/60/3	20	135	~	~	~	~	~	INTERNAL	~
AGA5573EXG	460/60/3	11.8	79	~	~	~	~	~	INTERNAL	~
AGA5573EXH	575/60/3	9.4	62	~	~	~	~	~	INTERNAL	~
AGA5573EXT	200-230/60/3	22.2	165	~	~	~	~	~	INTERNAL	~
AGA9530ZG	460/60/3	7.5	62	~	~	~	~	~	INTERNAL	~
AGA9530ZLN	208-230/60/1	25	165	1.673	0.359	~	85PS330D18	K71-20	INTERNAL	~
AGA9530ZXT	200-230/60/3	16	126	~	~	~	~	~	INTERNAL	~
AGA9534ZG	460/60/3	8.3	75	~	~	~	~	~	INTERNAL	~
AGA9534ZLN	208-230/60/1	28	179	1.61	0.253	~	85PS330C84	K71-20	INTERNAL	~
AGA9534ZXT	200-230/60/3	17.1	135	~	~	~	~	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Line to Line					
AHA2435AXD	208-230/60/1	6.4	45	2.5	1.83	85PS250A58	~	K71-25	INTERNAL	Relay needs 91112 brkt.
AHA2445AXD	208-230/60/1	8.2	51	2.6	1.24	85PS250A58	~	K71-24	INTERNAL	Relay needs 91112 brkt.
AHA2445AXF	208-230/60/3	3.8	34	~	~	~	~	~	INTERNAL	~
AHA2445AXG	460/60/3	2.7	24	~	~	~	~	~	INTERNAL	~
AHA2465ZXB	230/60/1	10.7	75	3.59	0.65	85PS330C84	85PR370E35	K71-17	INTERNAL	~
AHA2465ZXF	208-230/60/3	6	47	~	~	~	~	~	INTERNAL	~
AHA2466AXD	208-230/60/1	9.7	71	3.95	0.68	85PS250A58	85PR370E35	K71-17	INTERNAL	~
AHA2466AXF	208-230/60/3	5.4	47	~	~	~	~	~	INTERNAL	~
AHA2466AXG	460/60/3	2.7	24	~	~	~	~	~	INTERNAL	~
AHA2480JXB	230/60/1	9.7	75	3.59	0.65	85PS250A58	85PR370E35	K71-17	INTERNAL	~
AHA2480JXF	208-230/60/3	5.6	47	~	~	~	~	~	INTERNAL	~
AH2490AT	208-230/60/1	8.2	51	~	~	85PS250A58	~	~	INTERNAL	~
AHA2490ZXD	208-230/60/1	14.2	103	2.08	0.52	85PS330D16	85PR440F18	8206409A50	INTERNAL	2 Relays and S/Caps required
AHA2490ZXF	208-230/60/3	8.1	65	~	~	~	~	~	INTERNAL	~
AHA2490ZYG	460/60/3	3.8	27	~	~	~	~	~	INTERNAL	~
AHA2511JXB	230/60/1	11.4	108	~	~	85PS250A58	85PR370F17	K71-17	INTERNAL	~
AHB2511JXD	208-230/60/1	11.4	94.8	2.41	0.53	85PS330D18	85PR370F20	820ARR3C44	INTERNAL	~
AHB2511JXF	208-230/60/3	7	65	~	~	~	~	~	INTERNAL	~
AHB2511JXG	460/60/3	3.8	27	~	~	~	~	~	INTERNAL	~
AH2513AT	208-230/60/1	9.7	71	~	~	85PS250A58	85PR370E35	K71-17	INTERNAL	2 ea req'd: Relays, S/Caps, and R/Caps
AHA4518AXD	208-230/60/1	10	45	3.65	1.27	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AHA4518AXF	208-230/60/3	6.2	34	~	~	~	~	~	INTERNAL	~
AHA4518AXG	460/60/3	3.6	24	~	~	~	~	~	INTERNAL	~
AHA4520EXD	208-230/60/1	10.0	51	3.74	1.04	85PS250D09	85PR370F17	K71-19	INTERNAL	~



Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AHA4520EXF	208-230/60/3	5	55.5	~	~	~	~	~	INTERNAL	~
AHA4520EXG	460/60/3	3.2	24	~	~	~	~	~	INTERNAL	~
AHA4522EXD	208-230/60/1	11	51	3.74	1.04	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AHA4522EXF	208-230/60/3	7	55.5	~	~	~	~	~	INTERNAL	~
AHA4524EXD	208-230/60/1	12.2	60	3.65	0.87	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AHA4524EXF	208-230/60/3	8	55.5	~	~	~	~	~	INTERNAL	~
AHA4524EXG	460/60/3	3.8	24	~	~	~	~	~	INTERNAL	~
AHA4525AXD	208-230/60/1	15	71	2.75	0.864	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AHA4525AXG	460/60/3	4.5	24	~	~	~	~	~	INTERNAL	~
AHA4531EXD	208-230/60/1	16.5	76	3.81	0.63	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AHA4531EXF	208-230/60/3	9.75	65	~	~	~	~	~	INTERNAL	~
AHA4531EXG	460/60/3	4.9	27	~	~	~	~	~	INTERNAL	~
AHA4540EXD	208-230/60/1	22.5	103	2.08	0.52	85PS330D16	85PR440F18	K71-20	INTERNAL	~
AHA4540EXF	208-230/60/3	12.5	72	~	~	~	~	~	INTERNAL	~
AHA4540EXG	460/60/3	6.2	35	~	~	~	~	~	INTERNAL	~
AHA4550AT	208-230/60/1	12	71	~	~	85PS250D09	85PR370F17	K71-19	INTERNAL	2 ea req'd: Relays, S/Caps, and R/Caps
AH5519E	208-230/60/1	11.5	50	4-7	5-9	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AH5520E,F	208-230/60/1	10	51	2-5	3-7	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AH5520E,F	265/60/1	11	60	~	~	85PS330C23	85PR440F18	K71-20	INTERNAL	~
AH5520E,F	200-230/60/3	6	51	~	~	~	~	~	INTERNAL	~
AH5522E,F	208-230/60/1	10.5	55	2-5	3-7	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AH5522E,F	265/60/1	11.5	65	2-7	4-7	85PS330C23	85PR440F18	K71-20	INTERNAL	~
AH5522E	200-230/60/3	6	51	~	~	~	~	~	INTERNAL	~
AH5524E,F	208-230/60/1	10.4	60	2-5	3-7	85PS250D09	85PR370F17	K71-19	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AH5524E, F	265/60/1	11.5	65	2-5	3-7	~	85PS330C23	85PR440F18	INTERNAL	~
AH5524E	200-230/60/3	6.5	60	~	~	1.63	~	~	INTERNAL	~
AHA5527EXD	208-230/60/1	14.4	71	1-5	2-6	~	85PS250D09	85PR370F17	INTERNAL	~
AH5527E, F	265/60/1	11.5	73	1-5	2-6	~	85PS330C23	85PR440F18	INTERNAL	~
AH5527E	200-230/60/3	7.6	63.4	~	~	1.28	~	~	INTERNAL	~
AH5530E, F	208-230/60/1	15	76	2-5	2-6	~	85PS250D09	85PR370F17	INTERNAL	~
AH5531E, F	208-230/60/1	16.5	76	2-5	2-6	~	85PS250D09	85PR370F17	INTERNAL	~
AH5531E, F	265/60/1	14.4	71	2-5	3-6	~	85PS330C23	85PR440F18	INTERNAL	~
AH5531E	200-230/60/3	8.2	63.4	~	~	1.28	~	~	INTERNAL	~
AH5533E	208-230/60/1	16.5	76	2-5	3-6	~	85PS250D09	85PR370F17	INTERNAL	~
AH5533E	265/60/1	14.4	71	~	~	~	85PS330C23	85PR440F18	INTERNAL	~
AH5534E	208-230/60/1	15.8	88	1-5	2-5	~	85PS250D09	85PR370F17	INTERNAL	~
AH5534E	200-230/60/3	9.7	65.1	~	~	1.58	~	~	INTERNAL	~
AH5534E	460/60/3	4.76	32.8	~	~	6.27	~	~	INTERNAL	~
AH5540E	208-230/60/1	22	103	1-5	1-5	~	85PS330D16	85PR440F18	INTERNAL	~
AH5540E	200-230/60/3	10.8	73.4	~	~	1.31	~	~	INTERNAL	~
AH5540E	460/60/3	5.3	37.7	~	~	5.25	~	~	INTERNAL	~
AHA7480AXD	208-230/60/1	6.5	41	4.28	1.8	~	85PS330D16	85PR370E36	INTERNAL	~
AHA7480AXF	208-230/60/3	4.2	34	~	~	2.78	~	~	INTERNAL	~
AHA7511AXD	208-230/60/1	9	41	4.28	1.8	~	85PS330D16	85PR370F20	INTERNAL	~
AHB7511AXD	208-230/60/1	8.6	45	3.65	1.27	~	85PS250D09	85PR370F17	INTERNAL	~
AHA7511AXF	208-230/60/3	5.7	34	~	~	2.78	~	~	INTERNAL	~
AHA7513ZXD	208-230/60/1	11.7	67.4	3.48	0.81	~	85PS330D15	85PR370F17	INTERNAL	~
AHA7513ZXF	208-230/60/3	7.75	55.5	~	~	1.57	~	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AHA7514AXD	208-230/60/1	10.4	60	3.48	0.8	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AHA7514AXF	208-230/60/3	7.3	55.5	~	1.57	~	~	~	INTERNAL	~
AHA7515JXB	230/60/1	11.5	60	3.65	0.87	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AHA7515JXF	208-230/60/3	7.5	55	~	1.57	~	~	~	INTERNAL	~
AHA7521ZXD	208-230/60/1	18.4	103	2.08	0.52	85PS330D16	85PR440F18	K71-20	INTERNAL	~
AHA7521ZXF	208-230/60/3	10.4	65	~	1.5	~	~	~	INTERNAL	~
AHA7524JXB	230/60/1	21	103	2.08	0.52	85PS330D16	85PR440F18	K71-20	INTERNAL	~
AHA7524ZXF	208-230/60/3	11	65	~	1.5	~	~	~	INTERNAL	~
AH8524E	208-230/60/1	9.7	57	~	~	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AH8526E	208-230/60/1	10.2	57	~	~	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AH8526E	265/60/1	9.2	50	~	~	85PS330C23	85PR440F18	K71-19	INTERNAL	~
AH8529E	208-230/60/1	11.2	57	~	~	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AH8529E	265/60/1	10	50	~	~	85PS330C23	85PR440F18	K71-19	INTERNAL	~
AH8532E	208-230/60/1	13	65	~	~	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AH8532E	265/60/1	11.3	61	~	~	85PS330C23	50/440	K71-20	INTERNAL	~
AH8538E	208-230/60/1	14.9	75	~	~	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AH8538E	265/60/1	12.8	70	~	~	85PS330C23	50/440	K71-20	INTERNAL	~
AH8539E	208-230/60/1	16.4	88	~	~	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AH8543E	208-230/60/1	17.1	88	~	~	85PS250D09	85PR370F17	K71-19	INTERNAL	~
AH8543E	265/60/1	14.8	76	~	~	85PS330C23	50/440	K71-20	INTERNAL	~
AH8548E	208-230/60/1	20.5	104	~	~	85PS330D16	85PR370F17	K71-20	INTERNAL	~
AH8548E	265/60/1	17.8	92	~	~	85PS330D16	50/440	K71-20	INTERNAL	~
AJ1416A	115/60/1	5.6	35	~	~	~	~	~	~	~
AJ1420E	115/60/1	6.4	48	~	~	~	~	~	~	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AJA1420EYA	115/60/1	6.4	48	6 - 10	6 - 9	85PS165C98	~	~	K90-31	~
AJA2416AXA	115/60/1	6.8	38.2	8.19	0.89	85PS165C96	~	K71-11	K90-17	~
AJ2416B	115/60/1	5.9	36	~	~	145-175/165	~	~	~	~
AJA2419YYA	115/60/1	6.8	68	3.06	0.48	85PS110C92	85PR370E36	K71-13	K90-30	~
AJA2419ZA	115/60/1	6.7	68	3.06	0.48	85FS110C92	85PR370E36	K71-13	K90-30	~
AJA2419ZXD	208-230/60/1	3	34	3.43	1.84	85FS330D23	85PR370E36	820ARR3B89	K90-09	~
AJA2424JXA	115/60/1	6.6	68	3.06	0.48	85PS110C92	85PR370E36	K71-13	8300CRL10	~
AJA2424JXD	208-230/60/1	3	34	3.43	1.84	161-193/250	85PR370E36	820ARR3B89	K90-09	~
AJA2425AXA	115/60/1	7.9	57	3.78	0.56	85PS165C27	~	K71-15	8300CSTH11	~
AJA2425AXD	208-230/60/1	4.3	30	13.4	1.93	85PS220D02	~	82488-1	K90-09	~
AJA2425ZXA	115/60/1	7.9	68.4	3.06	0.48	85PS165C27	85PR370E36	K71-18	K90-35	~
AJA2425ZXD	208-230/60/1	4.4	38.7	3.66	1.75	85FS330D23	85PR370E36	K71-16	K90-18	~
AJA2430JXA	115/60/1	8.9	57	3.78	0.56	85PS125D59	~	K71-02	8300CSTL02	~
AJA2432ZXA	115/60/1	8.4	67	0.6	3.7	85PS165C42	85PR370F23	K71-19	K90-29	~
AJB2433ZXA	115/60/1	10	67	2.52	0.46	85PS165C98	85PR370F23	K71-19	K90-29	~
AJB2433ZXD	208-230/60/1	4.8	37	8.14	1.61	85PS330C23	85PR370E36	K71-17	K90-20	~
AJB2444ZXD	208-230/60/1	6.5	55	4.1	1	85PS330D15	85PR370E35	820ARR3K15	K90-29	~
AJ4443A	115/60/1	~	~	~	~	145-175/165	~	~	~	~
AJA4461AXA	115/60/1	9.1	47	4.65	0.8	85PS165C98	~	K71-02	K90-34	Use K90-21 if 3/4" overload req'd
AJB4461AXA	115/60/1	9.5	45	8.28	0.764	85PS165C96	~	K71-02	8300MRTA19	~
AJA4461AXD	208-230/60/1	4.5	24	17.3	2.77	85PS250D07	~	82484-1	K90-11	~
AJB4461AXD	208-230/60/1	4.8	25	20.9	2.64	85PS250D06	~	82484	8300MRTA26	~
AJA4492AXA	115/60/1	13.7	69	2.9	0.446	85704	~	K71-14	K90-38	~
AJ4492A	208-230/60/1	7	41.8	9.99	1.48	85PS250D09	~	K71-11	K90-21	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
AJA4492AXD	208-230/60/1	7	41.8	9.99	1.48	~	85PS250D09	~	K71-11	K90-21	~
AJA4492YXA	115/60/1	13	69	2.9	0.446	~	85PS165C77	~	K71-14	K90-38	~
AJA4492YXD	208-230/60/1	7	41.8	9.99	1.48	~	85PS250D09	~	K71-11	K90-21	~
AJA4512AXD	208-230/60/1	7	41	6.57	1.47	~	85PS330C23	85PR370E36	K71-16	K90-24	~
AJA4512YXD	208-230/60/1	7	41	6.57	1.47	~	85PS330C23	85PR370E36	K71-16	K90-23	~
AJB5513EXA	115/60/1	14.9	70	~	~	~	85PS330D65	85PR370F20	~	8300CRAC08	~
AJB5513EXD	208-230/60/1	7.5	37.5	9.5	1.8	~	85626	17.5/370	K71-19	83927	~
AJB5515EXD	208-230/60/1	8.5	41	7.33	1.49	~	85626	85PR370E35	K71-19	K90-34	~
AJB5515EXV	265/60/1	7.4	42	8.59	1.69	~	85PS330D65	85PR440F19	K71-21	K90-31	~
AJA5517EXD	208-230/60/1	10.2	55	4.94	1.2	~	85PS330D65	85PR370E35	K71-19	K90-36	~
AJA5517EXV	265/60/1	9.2	52	6.13	1.29	~	85PS330D65	85PR440F19	K71-21	83726	~
AJA5518EXD	208-230/60/1	11.2	54	4.49	1.2	~	85626	85PR370F20	K71-19	83735	~
AJA5518EXV	265/60/1	8.8	47	5.77	1.37	~	85PS330D65	85PR440F27	K71-21	K90-34	~
AJA5519EXD	208-230/60/1	11.6	57	4.49	1.2	~	85PS330D65	85PR370F20	K71-19	K90-39	~
AJA5519EXV	265/60/1	10	55	6.13	1.29	~	85PS330D65	85PR440F22	K71-21	K90-36	~
AJ05519EXD	208-230/60/1	11.6	57	5.14	1.17	~	85PS330D65	85PR370F20	K71-19	K90-39	~
AJA6435AXA	115/60/1	8.2	38.2	8.5	0.8	~	88-108/165	~	K71-11	83918	~
AJA7441AXA	115/60/1	8.8	49.5	2.83	0.675	~	85PS125D59	~	K71-02	K90-33	~
AJA7441AXD	208-230/60/1	5	29	6.28	2.25	~	85PS250D19	~	820ARR2A29	K90-13	~
AJA7455ZXA	115/60/1	11.2	65	2.88	0.55	~	340-408/165	85PR370E36	820ARR3H88	INTERNAL	~
AJA7455ZXD	208-230/60/1	5.1	34	3.74	1.96	~	161-193/250	85PR370E36	K71-16	INTERNAL	~
AJB7461JXA	115/60/1	11.2	65	2.76	0.55	~	340-408/165	85PR370E36	820ARR3H88	INTERNAL	~
AJB7461JXD	208-230/60/1	5.15	34	3.55	1.96	~	85PS330D23	85PR370E36	K71-16	INTERNAL	~
AJA7461YXA	115/60/1	10.1	68	3.06	0.48	~	85PS110C92	85PR370E36	K71-13	K90-38	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
AJA7461YYD	208-230/60/1	6.4	46	6.33	1.34	~	85PS330C23	~	K71-11	K90-18	~
AJ7465K	115/60/1	~	~	~	~	~	85PS110C92	85PR370E36	820ARR3A17	K90-38	~
AJA7465AXA	115/60/1	11.6	68	3.06	0.48	~	85PS110C92	85PR370E36	K71-13	K90-38	~
AJB7465AXD	208-230/60/1	7	46	6.61	1.34	~	85PS330C23	~	K71-02	K90-18	~
AJA7490ZXD	208-230/60/1	6.9	40.6	2.74	1.52	~	85PS330C23	85PR370F21	K71-16	K90-24	~
AJA7494ZXD	208-230/60/1	8.9	54	2.55	1.08	~	85PS250B87	85PR370F20	K71-16	INTERNAL	~
AJB7510JXD	208-230/60/1	8.8	54	2.55	1.08	~	85PS250B87	85PR370F20	820ARR3B61	INTERNAL	~
AJA8520EYD	208-230/60/1	7.8	40.6	2.82	1.43	~	85PS330D65	85PR370F21	820ARR3B16	K90-24	~
AJD8520EXV	265/60/1	6.2	34	2.46	2.02	~	85PS330D65	85PR370E63	820ARR3B16	INTERNAL	~
AJA9484EYD	208-230/60/1	6.9	54	2.71	1.23	~	85PS250B87	85PR370F20	K71-16	K90-35	~
AKA2415ZXA	115/60/1	4.9	30	3.43	1.05	~	85PS330D14	85PR370F17	820ARR3K52	8300MSTH07	~
AKA2415ZXD	208-230/60/1	2.3	20	4.66	3.67	~	85PS330D14	85PR370E35	820ARR3K53	8300MRPT82	~
AKA2419ZXD	208-230/60/1	2.6	20	7.46	3.34	~	85PS330D12	85PR370E36	K71-16	8300RBC181	~
AKA2425ZXA	115/60/1	6.3	40	3.24	0.797	~	85PS330D80	85PR370F17	820ARR3K42	8300MRIT42	~
AKA2425ZXD	208-230/60/1	3.2	27	3.43	3.04	~	85PS330D14	85PR370F20	82759	8300RBC181	~
AKA4460YYA	115/60/1	9.5	48	4.6	0.66	~	85PS165C96	~	K71-02	K90-35	Use K90-23 if 3/4" overload req'd
AKA4460YYD	208-230/60/1	8.4	23	6.23	2.75	~	85PS330D12	~	K71-22	K90-13	~
AKA4476YYA	115/60/1	11.3	58.8	4.22	0.59	~	85PS125D59	~	K71-02	K90-27	~
AKB4476YYA	115/60/1	10	43.5	6.65	0.71	~	161-193/250	85PR370E36	820ARR3K56	K90-27	~
AKA4476YYD	208-230/60/1	5.7	27.4	4.7	2.23	~	85PS250D10	~	K71-22	K90-19	~
AKA4482YYA	115/60/1	12.3	59	10.17	0.56	~	85PS250D07	~	K71-11	K90-27	~
AKA5460EYA	115/60/1	6	29.8	~	~	~	85PS330D65	85PR370F20	820ARR3B09	8300MRAC75	~
AKA5470EYA	115/60/1	7.1	35	10.01	1.03	~	85PS330D65	85PR370E36	K71-19	K90-22	~
AKA5470YYA	115/60/1	11.3	58.8	4.22	0.59	~	85PS330D65	85PR370E36	K71-19	K90-19	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
AKA5470EXD	208-230/60/1	3.5	22.4	~	~	~	85PS330D65	85PR370E36	820ARR3HT3	8300MRAD31	~
AKA5470EXV	265/60/1	3	19	~	~	~	85PS330D65	85PR370E36	~	~	~
AKA5483EXA	115/60/1	9	43	12.09	0.72	~	85PS330D65	85PR370E36	K71-19	K90-26	~
AKA5483EXD	208-230/60/1	4.4	21.3	7.76	2.86	~	85PS330D65	85PR370E36	K71-19	K90-16	~
AKA5483EXV	265/60/1	3.9	22.3	13.8	4.17	~	85PS330D65	85PR370E36	K71-19	8300MRAB55	~
AKA5494EXA	115/60/1	10.4	46	~	~	~	85626	85PR370E36	K71-19	K90-25	~
AKA5494EXD	208-230/60/1	5.5	26	~	~	~	85626	85PR370E36	~	8300MRAC72	~
AKA5510EXA	115/60/1	10.5	47	6.19	0.69	~	85PS330D65	85PR370F20	K71-19	K90-25	~
AKA5510EXD	208-230/60/1	5.7	28	8.9	2.59	~	85626	85PR370E36	K71-19	K90-19	~
AKA5510EXV	265/60/1	5	27.4	9.63	3.04	~	85PS330D65	85PR370E36	K71-19	K90-14	~
AKA5511EXA	115/60/1	11	50	5.95	0.69	~	85626	85PR370F20	K71-19	K90-39	~
AKA5511EXD	208-230/60/1	6	31	10.43	1.77	~	85PS330D12	85PR370E36	82243	8300MRAC46	~
AKA5512EXA	115/60/1	12.5	62	7.17	0.557	~	85PS330D65	85PR370F20	K71-21	K90-39	~
AKA5512EXD	208-230/60/1	6.8	34	10.23	1.72	~	85PS330D12	85PR370E36	K71-16	K90-22	~
AKA5512EXV	265/60/1	5.5	33	8.78	2.34	~	85PS330D65	85PR440F24	K71-21	K90-18	~
AKA8475EXA	115/60/1	5.6	29.8	4.97	1.24	~	85626	85PR370F20	820ARR3B09	8300MRAC75	~
AKA8475EXD	208-230/60/1	2.8	15.9	6.54	3.93	~	85PS330D65	85PR370E36	K71-19	8300MRAE77	~
AKA8475EXV	265/60/1	2.6	12.3	8.57	5.96	~	85PS330D65	85PR370E36	K71-19	8300MRAE78	~
AKA8483EXA	115/60/1	6.6	35	~	~	~	85PS330D65	85PR370E36	K71-19	~	~
AKA8494EXA	115/60/1	7	40	3.09	0.8	~	85626	85PR370F17	820ARR3B09	K90-22	~
AKA8494EXD	208-230/60/1	3.5	20	7.19	3.26	~	85PS330D65	85PR370E36	K71-19	8300MRAD96	~
AKA8494EXV	265/60/1	3	16	7.8	4.15	~	85PS330D65	85PR370E36	K71-19	8300MRAD97	~
AKA8511EXA	115/60/1	8.9	50	5.95	0.69	~	85626	85PR370F20	K71-19	K90-39	~
AKA8511EXD	208-230/60/1	4.8	31	10.43	1.77	~	85626	17.5/370	K71-19	8300MRAC46	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
AKA8511EXV	265/60/1	3.8	26.3	7.11	2.69	~	85PS330D65	85PR370E36	K71-19	8300MRAF48	~
AKA8512CCXV	265/60/1	4	26.3	7.15	2.75	~	85PS330D65	85PR370E36	K71-19	8300MRAD17	~
AKA8512EXA	115/60/1	9.4	53	~	~	~	~	~	~	~	~
AKA8512EXD	208-230/60/1	4.6	31.2	4.44	2.36	~	85PS330D65	85PR370F20	820ARR3C24	8300MRAF10	~
AKA8512EXV	265/60/1	4.2	26.3	7.11	2.69	~	85PS330D65	85PR370E36	K71-19	8300MRAD17	~
AKA8513EXA	115/60/1	10.8	50	5.95	0.69	~	85626	85PR370F20	K71-19	K90-39	~
AKA8513EXD	208-230/60/1	5.8	31	10.43	1.77	~	85626	85PR370E36	K71-19	8300MRAC46	~
AKA8513EXV	265/60/1	4.7	26.3	7.11	2.69	~	85PS330D65	85PR370E36	K71-19	8300MRAD17	~
AKA8514EXA	115/60/1	10.75	53	2.95	0.65	~	85626	85PR370F21	820ARR3B16	8300CRAC05	~
AKA8514EXD	208-230/60/1	5.5	31.2	4.61	2.25	~	85PS330D65	85PR370F20	820ARR3C24	8300MRAE61	~
AKA8514EXV	265/60/1	4.8	27	8.19	2.75	~	85PS330D65	85PR440F24	K71-19	8300MRAE57	~
AKA8515CCXV	265/60/1	4.9	33	8.78	2.38	~	85PS330D65	85PR440F24	K71-21	K90-18	~
AKA8515EXA	115/60/1	13	75	7.77	0.438	~	85PS330D65	85PR370F17	K71-19	8300CRAK78	~
AKA8515EXD	208-230/60/1	6.2	36	6.09	2.15	~	85PS330D65	85PR370F20	K71-19	8300MSTET4	~
AKA8515EXV	265/60/1	5.4	33	8.78	2.34	~	85PS330D65	85PR440F24	K71-21	K90-18	~
AKA9427ZA	115/60/1	7.8	48	4.6	0.66	~	85PS165C96	~	K71-02	K90-32	~
AKA9427ZXD	208-230/60/1	3.8	23	6.23	2.75	~	72-88/370	~	82484-1	K90-09	~
AKA9428EXA	115/60/1	7.3	48	4.6	0.66	~	85PS165C96	~	K71-02	K90-35	~
AKA9428EXD	208-230/60/1	3.7	23	6.23	2.75	~	85PS330D12	~	82484-1	K90-13	~
AKA9428ZXA	115/60/1	7.3	48	4.6	0.66	~	85PS165C96	~	K71-02	K90-35	~
AKA9428ZXD	208-230/60/1	3.7	23	6.23	2.75	~	85PS330D12	~	82484-1	K90-13	~
AKA9434AXA	115/60/1	7.75	48	4.6	0.66	~	85PS165C96	~	K71-02	K90-23	~
AKA9434AXD	208-230/60/1	4.2	23	4.6	0.66	~	85PS330D12	~	K71-02	K90-23	~
AKA9438ZXA	115/60/1	9.2	58.8	4.22	0.59	~	85PS125D59	85PR370F23	K71-02	K90-34	~



Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
AKA9438ZXD	208-230/60/1	4.3	31	10.43	1.77	~	85PS330012	85PR370E36	K71-17	K90-12	~
AKA9441AXA	115/60/1	9.2	58.8	4.22	0.59	~	85PS125D59	~	K71-02	K90-23	~
AKA9441AXD	208-230/60/1	4.6	27.4	4.7	2.23	~	85PS250D10	~	8200EMBJ93	K90-19	~
AKA9442EXA	115/60/1	8.8	58.8	4.22	0.59	~	85PS125D59	~	K71-02	K90-37	~
AKA9442EXD	208-230/60/1	4	31	10.43	1.77	~	85PS330012	85PR370E36	K71-17	K90-16	~
AKA9451ZXA	115/60/1	9.4	50	5.95	0.69	~	85PS250C30	85PR370F20	K71-19	K90-24	~
AKA9451ZXD	208-230/60/1	5.2	31	10.43	1.77	~	85PS330012	85PR370E36	K71-17	8300MRAM71	~
AKA9455EXD	208-230/60/1	4.9	31	10.43	1.77	~	85PS330012	85PR370E36	K71-17	K90-20	~
AKA9455ZXA	115/60/1	10.1	50	5.95	0.69	~	85PS250C30	85PR370F20	K71-19	K90-27	~
AKA9455ZXD	208-230/60/1	5.7	31	10.43	1.77	~	85PS330012	85PR370E36	K71-17	K90-20	~
AKA9458JXA	115/60/1	9.3	50	5.95	0.69	~	85PS250C30	85PR370F20	K71-19	K90-27	~
AKA9458JXD	208-230/60/1	5.2	31	10.43	1.77	~	85PS330012	85PR370E36	K71-17	K90-16	~
AKA9462EXD	208-230/60/1	5.3	31	10.43	1.77	~	85PS330012	85PR370E36	K71-17	K90-20	~
AKA9462ZXA	115/60/1	11.9	68	7.12	0.45	~	85PS250C30	85PR370F20	K71-19	K90-40	~
AKA9462ZXD	208-230/60/1	6.8	34	10.23	1.72	~	85PS330012	85PR370E36	K71-16	K90-22	~
AKA9466JXA	115/60/1	10.4	50	5.95	0.69	~	85PS250C30	85PR370F20	K71-19	8300MRAG76	~
AKA9466JXD	208-230/60/1	5.9	31	10.43	1.77	~	85PS330012	85PR370E36	K71-17	K90-20	~
AKA9474JXA	115/60/1	12.2	68	7.12	4.5	~	85PS330012	85PR370F20	K71-16	K90-40	~
AKA9474JXD	208-230/60/1	6.8	34	10.23	1.72	~	85PS250C30	85PR370E36	K71-16	K90-22	~
ANA5590EXG	460/60/3	13.7	86.1	~	~	1.35	~	~	~	INTERNAL	~
ANB5590EXG	460/60/3	13.7	86.1	~	~	1.35	~	~	~	INTERNAL	~
ANC5590EXG	460/60/3	13.7	86.1	~	~	1.35	~	~	~	INTERNAL	~
AND5590EXG	460/60/3	13.7	86.1	~	~	1.35	~	~	~	INTERNAL	~
ANA5590EXT	200-230/60/3	27	172	~	~	0.343	~	~	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
ANB5590EXT	200-230/60/3	27	172	~	~	~	~	~	INTERNAL	~
ANC5590EXT	200-230/60/3	27	172	~	~	~	~	~	INTERNAL	~
AND5590EXT	200-230/60/3	27	172	~	~	~	~	~	INTERNAL	~
ANA5610EXG	460/60/3	14.4	93.3	~	~	~	~	~	INTERNAL	~
ANB5610EXG	460/60/3	14.4	93.3	~	~	~	~	~	INTERNAL	~
ANC5610EXG	460/60/3	14.4	93.3	~	~	~	~	~	INTERNAL	~
AND5610EXG	460/60/3	14.4	93.3	~	~	~	~	~	INTERNAL	~
ANA5610EXT	200-230/60/3	29	183	~	~	~	~	~	INTERNAL	~
ANB5610EXT	200-230/60/3	29	183	~	~	~	~	~	INTERNAL	~
ANC5610EXT	200-230/60/3	29	183	~	~	~	~	~	INTERNAL	~
AND5610EXT	200-230/60/3	29	183	~	~	~	~	~	INTERNAL	~
ANA5612EXG	460/60/3	17.8	116	~	~	~	~	~	INTERNAL	~
ANB5612EXG	460/60/3	17.8	116	~	~	~	~	~	INTERNAL	~
ANC5612EXG	460/60/3	17.8	116	~	~	~	~	~	INTERNAL	~
AND5612EXG	460/60/3	17.8	116	~	~	~	~	~	INTERNAL	~
ANA5612EXH	575/60/3	14.5	91	~	~	~	~	~	INTERNAL	~
ANB5612EXH	575/60/3	14.5	91	~	~	~	~	~	INTERNAL	~
ANC5612EXH	575/60/3	14.5	91	~	~	~	~	~	INTERNAL	~
AND5612EXH	575/60/3	14.5	91	~	~	~	~	~	INTERNAL	~
ANA5612EXT	200-230/60/3	36	229	~	~	~	~	~	INTERNAL	~
ANB5612EXT	200-230/60/3	36	229	~	~	~	~	~	INTERNAL	~
ANC5612EXT	200-230/60/3	36	229	~	~	~	~	~	INTERNAL	~
AND5612EXT	200-230/60/3	36	229	~	~	~	~	~	INTERNAL	~
ANA5614EXG	460/60/3	20.8	135	~	~	~	~	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
ANB5614EXG	460/60/3	20.8	135	~	~	~	~	~	INTERNAL	~
ANC5614EXG	460/60/3	20.8	135	~	~	~	~	~	INTERNAL	~
AND5614EXG	460/60/3	20.8	135	~	~	~	~	~	INTERNAL	~
ANA5614EXH	575/60/3	15.8	99	~	~	~	~	~	INTERNAL	~
ANB5614EXH	575/60/3	15.8	99	~	~	~	~	~	INTERNAL	~
ANC5614EXH	575/60/3	15.8	99	~	~	~	~	~	INTERNAL	~
AND5614EXH	575/60/3	15.8	99	~	~	~	~	~	INTERNAL	~
ANA5614EXT	200-230/60/3	42	269	~	~	~	~	~	INTERNAL	~
ANB5614EXT	200-230/60/3	42	269	~	~	~	~	~	INTERNAL	~
ANC5614EXT	200-230/60/3	42	269	~	~	~	~	~	INTERNAL	~
AND5614EXT	200-230/60/3	42	269	~	~	~	~	~	INTERNAL	~
AVA2490ZYG	460/60/3	3.6	38.3	~	~	~	~	~	INTERNAL	~
AVA2490ZXN	208-230/60/1	11.4	106.6	1.84	0.47	~	85PS330D17	~	INTERNAL	~
AVA2490ZXT	200-230/60/3	7.4	65.1	~	~	~	~	~	INTERNAL	~
AVA2512ZYG	460/60/3	4.6	38.3	~	~	~	~	~	INTERNAL	~
AVA2512ZXN	208-230/60/1	16.9	120.3	1.67	0.419	~	85PS330D18	~	INTERNAL	~
AVA2512ZXT	200-230/60/3	9.3	65.1	~	~	~	~	~	INTERNAL	~
AVA4542EXN	208-230/60/1	19.7	108	2.2	0.641	~	85PP440F28	~	INTERNAL	Non self equalizing application
AVA5532EXG	460/60/3	4.35	32.8	~	~	~	~	~	INTERNAL	~
AVA5532EXN	208-230/60/1	14.5	78	2.83	0.775	~	85PP370F17	~	INTERNAL	Non self equalizing application
AVC5532EXN	208-230/60/1	13.4	78.8	1.367	0.697	~	85PS330D16	~	INTERNAL	~
AVA5532EXT	200-230/60/3	8.9	59.5	~	~	~	85PS330C23	~	INTERNAL	~
AVA5532EXV	265/60/1	12.2	73.8	2.98	0.96	~	~	~	INTERNAL	~
ANB5533EXH	575/60/3	3.5	26	~	~	~	85PP440F18	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AVB5533EXN	208-230/60/1	13.5	78.8	1.367	0.697	85PS330C23	85PR370F21	K71-19	INTERNAL	~
AVD5533EXN	208-230/60/1	13.2	76	1.26	0.576	90669-5	85PR370F21	~	INTERNAL	Start device specific to this model
AVB5533EXT	200-230/60/3	8.9	65.1	~	~	~	~	~	INTERNAL	~
AVA5535EXG	460/60/3	4.76	32.8	~	~	~	~	~	INTERNAL	~
AVD5535EXG	460/60/3	4.4	37.5	~	~	~	~	~	INTERNAL	~
AVB5535EXH	575/60/3	4	31	~	~	~	~	~	INTERNAL	~
AVA5535EXN	208-230/60/1	15.8	88	2.69	0.628	85PS330D16	85PR370E63	K71-20	INTERNAL	Non self equalizing application
AVB5535EXN	208-230/60/1	14.2	86.7	1.46	0.629	85PS330C23	85PR370F21	K71-19	INTERNAL	~
AVC5535EXN	208-230/60/1	14.9	86.7	1.46	0.629	85PS330C23	85PR370F21	K71-19	INTERNAL	~
AVD5535EXN	208-230/60/1	13.8	92	1.27	0.522	90669-5	85PR370F21	~	INTERNAL	Start device specific to this model
AVA5535EXT	200-230/60/3	9.7	65.1	~	~	~	~	~	INTERNAL	~
AVB5535EXT	200-230/60/3	9.2	65.1	~	~	~	~	~	INTERNAL	~
AVD5535EXT	200-230/60/3	8.8	75	~	~	~	~	~	INTERNAL	~
AVA5538EXG	460/60/3	5.3	37.7	~	~	~	~	~	INTERNAL	~
AVB5538EXG	460/60/3	5.3	37.7	~	~	~	~	~	INTERNAL	~
AVB5538EXH	575/60/3	4.2	31.0	~	~	~	~	~	INTERNAL	~
AVA5538EXN	208-230/60/1	17.2	95.0	3.35	~	85PS330D16	85PR440F18	K71-20	INTERNAL	~
AVB5538EXN	208-230/60/1	15.4	97.6	1.666	0.558	85PS330D16	85PR440E65	82OARR3C80	INTERNAL	Non self equalizing application
AVC5538EXN	208-230/60/1	16.5	97.6	1.666	0.558	85PS330D16	85PR440E65	82OARR3C80	INTERNAL	Non self equalizing application
AVD5538EXN	208-230/60/1	15.1	92	1.27	0.522	90669-5	85PR370F21	~	INTERNAL	Start device specific to this model
AVA5538EXT	200-230/60/3	10.8	73.4	~	~	~	~	~	INTERNAL	~
AVB5538EXT	200-230/60/3	10.3	73.4	~	~	~	~	~	INTERNAL	~
AVA5538EXV	265/60/1	14.6	86.3	3.2	0.78	85PS330D12	35/500	K71-20	INTERNAL	~
AVD5540EXG	460/60/3	5	42	~	~	~	~	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AVD5540EXH	575/60/3	4	35	~	~	~	~	~	INTERNAL	~
AVD5540EXN	208-230/60/1	16.16	92	1.27	0.522	~	85PR370F21	~	INTERNAL	Start device specific to this model
AVD5540EXT	200-230/60/3	10	84	~	~	~	~	~	INTERNAL	~
AVA5542EXG	460/60/3	5.96	37	~	~	~	~	~	INTERNAL	~
AVB5542EXG	460/60/3	5.65	37	~	~	~	~	~	INTERNAL	~
AVB5542EXH	575/60/3	4.6	31	~	~	~	~	~	INTERNAL	~
AVA5542EXN	208-230/60/1	19.7	108	2.2	0.641	~	85PS330D16	K71-20	INTERNAL	Non self equalizing application
AVB5542EXN	208-230/60/1	17.1	107.4	1.7	0.515	~	85PS330D16	82DARR3C80	INTERNAL	Non self equalizing application
AVC5542EXN	208-230/60/1	18.3	107.4	1.7	0.515	~	85PS330D16	82DARR3C80	INTERNAL	Non self equalizing application
AVD5542EXN	208-230/60/1	16.9	110	1.31	0.446	~	90669-5	~	INTERNAL	Start device specific to this model
AVA5542EXT	200-230/60/3	12	74	~	~	~	~	~	INTERNAL	~
AVB5542EXT	200-230/60/3	11.3	73.4	~	~	~	~	~	INTERNAL	~
AVA5542EXV	265/60/1	16	95.2	~	~	~	~	~	INTERNAL	~
AVD5545EXG	460/60/3	5.8	46	~	~	~	~	~	INTERNAL	~
AVD5545EXH	575/60/3	4.65	37	~	~	~	~	~	INTERNAL	~
AVD5545EXN	208-230/60/1	18.24	110	1.31	0.446	~	90669-5	~	INTERNAL	Start device specific to this model
AVD5545EXT	200-230/60/3	11.5	90	~	~	~	~	~	INTERNAL	~
AVA5546EXG	460/60/3	6.6	46	~	~	~	~	~	INTERNAL	~
AVA5546EXN	208-230/60/1	21.5	116	2.49	0.544	~	85PS330D16	K71-20	INTERNAL	~
AVC5546EXN	208-230/60/1	20.4	110	1.76	0.461	~	85PS330D16	K71-20	INTERNAL	~
AVA5546EXT	200-230/60/3	13.28	92	~	~	~	~	~	INTERNAL	~
AVA5546EXV	265/60/1	18.25	102	2.14	0.684	~	85PS330D12	82270	INTERNAL	~
AVD5548EXG	460/60/3	6.15	52.5	~	~	~	~	~	INTERNAL	~
AVD5548EXH	575/60/3	5	44	~	~	~	~	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AVD5548EXN	208-230/60/1	19.2	110	1.31	0.446	90669-5	55/370	~	INTERNAL	Start device specific to this model
AVD5548EXT	200-230/60/3	12.3	105	~	~	~	~	~	INTERNAL	~
AVB5549EXG	460/60/3	6.7	46	~	~	~	~	~	INTERNAL	~
AVB5549EXH	575/60/3	5.4	44	~	~	~	~	~	INTERNAL	~
AVB5549EXN	208-230/60/1	20.5	110	1.76	0.461	85FPS3300D16	85PR440E65	K71-20	INTERNAL	~
AVB5549EXT	200-230/60/3	13.5	92	~	~	~	~	~	INTERNAL	~
AVA5555EXG	460/60/3	7.8	55	~	~	~	~	~	INTERNAL	~
AVA5555EXT	200-230/60/3	15.7	110	~	~	~	~	~	INTERNAL	~
AVB5558EXG	460/60/3	7.8	55	~	~	~	~	~	INTERNAL	~
AVD5558EXG	460/60/3	8	63	~	~	~	~	~	INTERNAL	~
AVB5558EXH	575/60/3	6.3	44	~	~	~	~	~	INTERNAL	~
AVD5558EXH	575/60/3	6.1	55.5	~	~	~	~	~	INTERNAL	~
AVB5558EXN	208-230/60/1	24.8	141	1.67	0.379	85FPS3300D16	85PR440E65	K71-20	INTERNAL	Non self equalizing application
AVD5558EXN	208-230/60/1	24	123	1.15	0.378	90669-5	70/370	~	INTERNAL	Start device specific to this model
AVB5558EXT	200-230/60/3	15.7	110	~	~	~	~	~	INTERNAL	~
AVD5558EXT	200-230/60/3	15.9	128	~	~	~	~	~	INTERNAL	~
AVA7524ZYG	460/60/3	5.1	38.3	~	~	~	~	~	INTERNAL	~
AVA7524ZYN	208-230/60/1	16.7	106.6	1.84	0.47	85FPS3300D16	85PR440E65	K71-20	INTERNAL	Non self equalizing application
AVA7524ZXT	200-230/60/3	10.9	65.1	~	~	~	~	~	INTERNAL	~
AVA7528ZYG	460/60/3	6.2	38.3	~	~	~	~	~	INTERNAL	~
AVA7528ZYN	208-230/60/1	22.2	120.3	1.67	0.42	85FPS3300D18	85PR440E65	820ARR3K72	INTERNAL	~
AVA7528ZXT	200-230/60/3	12.2	75	~	~	~	~	~	INTERNAL	~
AVA9519ZYG	460/60/3	4.6	37.7	~	~	~	~	~	INTERNAL	~
AVA9519ZYN	208-230/60/1	14.5	95	3.35	0.61	85PS3300C23	85PR440F18	K71-20	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AVA9522ZYG	460/60/3	5.1	37	~	~	~	~	~	INTERNAL	~
AVA9522ZYN	208-230/60/1	17	108	2.2	0.64	~	85PS330D17	~	INTERNAL	~
AVA9522ZXT	200-230/60/3	10.3	74	~	~	~	~	~	INTERNAL	~
AVA9528ZYG	460/60/3	6.6	55	~	~	~	~	~	INTERNAL	~
AVA9528ZYN	208-230/60/1	20	132	1.25	0.338	~	85PS330D17	820ARR3K17	INTERNAL	~
AVA9528ZXT	200-230/60/3	13.3	110	~	~	~	~	~	INTERNAL	~
AWA2440ZXD	208-230/60/1	5.13	73	2.1	0.88	~	85PS330D17	~	INTERNAL	~
AWA2440ZYG	460/60/3	1.8	20.3	~	~	~	~	~	INTERNAL	~
AWA2440ZXT	200-230/60/3	3.8	40.5	~	~	~	~	~	INTERNAL	~
AWA2450ZXD	208-230/60/1	5.9	56	3.25	1.1	~	85PS330D16	~	INTERNAL	~
AWA2450ZXT	200-230/60/3	4.2	40.5	~	~	~	~	~	INTERNAL	~
AWA2460ZXD	208-230/60/1	8.2	86	2.22	0.65	~	85PS330D17	~	INTERNAL	~
AWA2460ZYG	460/60/3	2.9	36	~	~	~	~	~	INTERNAL	~
AWA2460ZXT	200-230/60/3	5.6	63.4	~	~	~	~	~	INTERNAL	~
AWA2480ZYN	208-230/60/1	8.4	73.1	2.38	0.82	~	85PS330D18	~	INTERNAL	~
AWG4515EXG	460/60/3	2.4	25	~	~	~	~	~	INTERNAL	~
AWG4520EXG	460/60/3	2.9	25	~	~	~	~	~	INTERNAL	~
AWG4520EXN	208-230/60/1	9.3	52	2.72	1.32	~	85PS330D17	~	INTERNAL	~
AWG4524EXG	460/60/3	3.4	25	~	~	~	~	~	INTERNAL	~
AWG4524EXN	208-230/60/1	11	60	2.53	1.09	~	85PS330C23	~	INTERNAL	~
AWG4530EXG	460/60/3	4.2	36	~	~	~	~	~	INTERNAL	~
AWG4530EXN	208-230/60/1	14.4	90	2.09	0.73	~	85PS330D17	~	INTERNAL	~
AWH5513EXN	208-230/60/1	6.1	43	4.73	1.45	~	85PS330D17	82765	INTERNAL	~
AWA5515EXD	208-230/60/1	7.18	43	4.73	1.45	~	85PS330D17	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
AWC5515EXD	208-230/60/1	6.4	49	~	~	~	85PS330017	85PR370F17	820ARR3C64	INTERNAL	~
AWG5515EXN	208-230/60/1	6.9	43	4.73	1.45	~	85PS330017	85PR370E35	820ARR3J44	INTERNAL	~
AWJ5515EXN	208-230/60/1	6.9	43	4.73	1.45	~	85PS330017	85PR370E35	82765	INTERNAL	~
AWG5515EXT	200-230/60/3	4.7	51	~	~	1.63	~	~	~	INTERNAL	~
AWA5515EXV	265/60/1	6.1	39.5	~	~	~	85PS330C23	85PR440F22	K71-19	INTERNAL	~
AWC5515EXV	265/60/1	5.6	41	~	~	~	85PS330D12	85PR440F22	K71-19	INTERNAL	~
AWG5515EVA	265/60/1	6.2	39	6.49	1.78	~	85PS330D65	85PR370E35	K71-19	INTERNAL	~
AWJ5515EVA	265/60/1	6.2	39	6.49	1.78	~	85PS330D65	85PR370E35	K71-19	INTERNAL	~
AWD5516EXD	208-230/60/1	6.5	48.3	~	~	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWF5516EXN	208-230/60/1	6.6	48.3	2.53	1.21	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWH5516EXN	208-230/60/1	7	43	4.73	1.45	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWZ5516EXN	208-230/60/1	7	43	~	~	12.3	85PS330D17	85PR370E35	K71-17	INTERNAL	~
AWF5516EVA	265/60/1	5.8	41	2.81	1.79	~	85PS330D12	85PR440F22	82477	INTERNAL	~
AWA5517EXD	208-230/60/1	7.6	43	~	~	~	85PS330D65	85PR370F20	K71-19	INTERNAL	~
AWB5517EXD	208-230/60/1	7.2	49	~	~	~	85PS330D65	85PR370F20	K71-19	INTERNAL	~
AWC5517EXD	208-230/60/1	6.8	49	~	~	~	85PS330D17	85PR370F17	820ARR3C64	INTERNAL	~
AWD5517EXD	208-230/60/1	7.1	48.3	~	~	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWF5517EXN	208-230/60/1	6.7	48.3	2.53	1.21	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWG5517EXN	208-230/60/1	7.6	43	3.95	1.56	~	85PS330D65	85PR370F20	K71-19	INTERNAL	~
AWJ5517EXN	208-230/60/1	7.6	43	3.95	1.56	~	85PS330D65	85PR370F20	K71-19	INTERNAL	~
AWA5517EXV	265/60/1	6.6	45	~	~	~	85PS330C23	85PR440F22	K71-19	INTERNAL	~
AWB5517EXV	265/60/1	6.4	46.5	~	~	~	85PS330C23	85PR440F22	820ARR3C64	INTERNAL	~
AWC5517EXV	265/60/1	6	41	~	~	~	85PS330D12	85PR440F22	K71-19	INTERNAL	~
AWG5517EVA	265/60/1	6.8	45	5.28	1.69	~	85PS330C23	85PR440F22	820ARR3G60	INTERNAL	~



Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
AWF5518EXN	208-230/60/1	7.1	48.3	2.53	1.21	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWF5518EVA	265/60/1	6.7	47	3.01	1.53	~	85PS330C23	85PR440F18	82464	INTERNAL	~
AWA5519EXD	208-230/60/1	8.4	52	~	~	~	85PS330D17	85PR370F20	K71-19	INTERNAL	~
AWB5519EXD	208-230/60/1	8.1	49	~	~	~	85PS330D65	85PR370F20	K71-19	INTERNAL	~
AWC5519EXD	208-230/60/1	8	49	~	~	~	85PS330D17	85PR370F17	820ARR3C64	INTERNAL	~
AWF5519EXN	208-230/60/1	7.7	48.3	2.53	1.21	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWG5519EXN	208-230/60/1	8.6	52	2.72	1.32	~	85PS330D17	85PR370F20	K71-16	INTERNAL	~
AWA5519EXV	265/60/1	4.3	45	~	~	~	85PS330C23	85PR440F22	K71-19	INTERNAL	~
AWB5519EXV	265/60/1	7.1	46.5	~	~	~	85PS330C23	85PR440F22	820ARR3C64	INTERNAL	~
AWC5519EXV	265/60/1	7.1	47	~	~	~	85PS330D12	85PR440F18	K71-19	INTERNAL	~
AWF5519EVA	265/60/1	7	47	3.01	1.53	~	85PS330D12	85PR440F18	K71-19	INTERNAL	~
AWG5519EVA	265/60/1	7.7	45	5.28	1.69	~	85PS330C23	85PR440F22	820ARR3G60	INTERNAL	~
AWG5520EXG	460/60/3	2.9	25	~	~	6.52	~	~	~	INTERNAL	~
AWF5520EXN	208-230/60/1	8.3	48.3	2.53	1.21	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWG5520EXN	208-230/60/1	9.3	52	2.72	1.32	~	85PS330D17	85PR370F20	K71-16	INTERNAL	~
AWJ5520EXN	208-230/60/1	9.7	52	2.72	1.32	~	85PS330D17	85PR370F20	K71-16	INTERNAL	~
AWZ5520EXN	208-230/60/1	9.7	52	~	~	15.4	85PS330D15	85PR370F17	K71-21	INTERNAL	~
AWG5520EXT	200-230/60/3	5.8	51	~	~	1.63	~	~	~	INTERNAL	~
AWG5520EVA	265/60/1	8.2	51	4.68	1.43	~	85PS330C23	85PR440F22	820ARR3G60	INTERNAL	~
AWF5522EXG	460/60/3	2.9	25	~	~	6.52	~	~	~	INTERNAL	~
AWF5522EXN	208-230/60/1	9	60	2.48	0.98	~	85PS330D17	85PR370F17	K71-21	INTERNAL	~
AWG5522EXN	208-230/60/1	10.1	60	2.89	1.09	~	85PS330C23	85PR370F20	K71-19	INTERNAL	~
AWH5522EXN	208-230/60/1	10	60	2.89	1.09	~	85PS330C23	85PR370F20	K71-19	INTERNAL	~
AWZ5522EXN	208-230/60/1	10	60	~	~	16.4	85PS330C23	85PR370F20	K71-19	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
AWF5522EXT	200-230/60/3	5.6	50	~	~	1.63	~	~	~	INTERNAL	~
AWF5522EVA	265/60/1	7.8	58	2.91	1.23	~	85PS330C23	85PR440F18	82OARR3H16	INTERNAL	~
AWG5522EVA	265/60/1	8.6	51	4.68	1.43	~	85PS330C23	85PR440F22	82OARR3G60	INTERNAL	~
AWJ5522EVA	265/60/1	8.8	51	4.68	1.43	~	85PS330C23	85PR440F22	82OARR3G60	INTERNAL	~
AWF5524EXG	460/60/3	3.3	25	~	~	6.52	~	~	~	INTERNAL	~
AWG5524EXG	460/60/3	3.4	25	~	~	6.52	~	~	~	INTERNAL	~
AWC5524EXD	208-230/60/1	9.8	60.7	2.41	0.98	~	85PS330D17	~	K71-21	INTERNAL	~
AWF5524EXN	208-230/60/1	9.95	60	2.44	0.974	~	85PS330D17	85PR370F17	82OARR3C44	INTERNAL	~
AWG5524EXN	208-230/60/1	11	60	2.53	1.09	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWJ5524EXN	208-230/60/1	11	60	2.53	1.09	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWZ5524EXN	208-230/60/1	11	60	~	~	19.1	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWF5524EXT	200-230/60/3	6.5	50	~	~	1.63	~	~	~	INTERNAL	~
AWG5524EXT	200-230/60/3	6.7	50	~	~	1.63	~	~	~	INTERNAL	~
AWF5524EVA	265/60/1	7.8	58	2.91	1.23	~	85PS330C23	85PR440F18	82OARR3H16	INTERNAL	~
AWG5524EVA	265/60/1	9.2	54	2.98	1.42	~	85PS330C23	85PR440F18	82OARR3G70	INTERNAL	~
AWJ5524EVA	265/60/1	9.5	54	2.98	1.42	~	85PS330C23	85PR440F18	82OARR3G70	INTERNAL	~
AWF5526EXN	208-230/60/1	10.9	69.4	1.642	0.83	~	85PS330D17	85PR370F21	K71-19	INTERNAL	~
AWF5528EXG	460/60/3	3.3	36	~	~	5.1	~	~	~	INTERNAL	~
AWF5528EXN	208-230/60/1	11.42	69.4	1.642	0.83	~	85PS330D17	85PR370F21	K71-19	INTERNAL	~
AWG5528EXN	208-230/60/1	13	73	2.1	0.88	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWJ5528EXN	208-230/60/1	13	73	2.1	0.88	~	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWZ5528EXN	208-230/60/1	13	73	~	~	22	85PS330C23	85PR370F17	K71-19	INTERNAL	~
AWF5528EXT	200-230/60/3	7.6	63.4	~	~	1.28	~	~	~	INTERNAL	~
AWF5528EVA	265/60/1	10.5	65	3.23	1.01	~	85PS330C23	85PR440F18	K71-21	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AWG5528EVA	265/60/1	10.9	65	2.55	1.15	85PS330C23	85PR440F18	K71-21	INTERNAL	~
AWJ5528EVA	265/60/1	10.9	65	2.55	1.15	85PS330C23	85PR440F18	K71-21	INTERNAL	~
AWF5530EXG	460/60/3	4.1	36	~	5.1	~	~	~	INTERNAL	~
AWF5530EXN	208-230/60/1	12.5	84	1.62	0.67	85PS330D17	85PR370F21	K71-19	INTERNAL	~
AWG5530EXN	208-230/60/1	14.4	90	2.09	0.73	85PS330D17	85PR370F21	K71-19	INTERNAL	~
AWZ5530EXN	208-230/60/1	13.2	85	~	~	85PS330D17	85PR370F21	K71-19	INTERNAL	~
AWF5530EXT	200-230/60/3	8.2	63.4	~	1.28	~	~	~	INTERNAL	~
AWG5530EXT	200-230/60/3	8.4	63.4	~	1.28	~	~	~	INTERNAL	~
AWF5530EVA	265/60/1	12	83	2.54	0.82	85PS330C23	85PR440E65	820ARR3G70	INTERNAL	~
AWG5530EVA	265/60/1	11.7	83	2.54	0.82	85PS330C23	85PR440E65	820ARR3G70	INTERNAL	~
AWF5532EXG	460/60/3	4.3	36	~	5.1	~	~	~	INTERNAL	~
AWF5532EXN	208-230/60/1	13.4	84	1.62	0.67	85PS330D17	85PR370F21	K71-19	INTERNAL	~
AWG5532EXN	208-230/60/1	15.1	90	2.09	0.73	85PS330D17	85PR370F21	K71-19	INTERNAL	~
AWJ5532EXN	208-230/60/1	15.6	90	2.09	0.73	85PS330D17	85PR370F21	K71-19	INTERNAL	~
AWZ5532EXN	208-230/60/1	14.5	90	~	~	85PS330D17	85PR370F21	K71-21	INTERNAL	~
AWF5532EXT	200-230/60/3	8.6	63.4	~	1.28	~	~	~	INTERNAL	~
AWG5532EXT	200-230/60/3	9	63.4	~	1.28	~	~	~	INTERNAL	~
AWF5532EVA	265/60/1	12	83	2.54	0.82	85PS330C23	85PR440E65	820ARR3G70	INTERNAL	~
AWG5532EVA	265/60/1	12.5	83	2.54	0.82	85PS330C23	85PR440E65	820ARR3G70	INTERNAL	~
AWJ5532EVA	265/60/1	12.8	83	2.54	0.82	85PS330C23	85PR440E65	820ARR3G70	INTERNAL	~
AWF5533EXN	208-230/60/1	13.8	84	1.62	0.67	85PS330D17	85PR370F21	K71-19	INTERNAL	~
AWF5533EVA	265/60/1	13.2	83	2.54	0.82	85PS330C23	85PR440E65	820ARR3G70	INTERNAL	~
AWZ5535EXN	208-230/60/1	15.4	96	~	~	85PS330D17	85PR370F21	K71-21	INTERNAL	~
AWZ5538EXN	208-230/60/1	18.3	110	~	~	85PS330D17	85PR370F21	K71-21	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
AWZ5542EXN	208-230/60/1	18.5	100	~	~	85PS330D17	85PR440E65	K71-21	INTERNAL	~
AWA7490ZXD	208-230/60/1	7.4	52	2.72	1.32	85PS330D16	85PR370F20	K71-16	INTERNAL	~
AWA7512ZXD	208-230/60/1	9.55	73	2.1	0.88	85PS330D16	85PR370F17	K71-19	INTERNAL	~
AWA7512ZXT	200-230/60/3	8.04	63.4	~	~	~	~	~	INTERNAL	~
AWA7515ZXD	208-230/60/1	12.5	96.8	3.25	0.59	85PS330D14	85PR370F17	K71-20	INTERNAL	~
AWA7515ZXT	200-230/60/3	7.7	63.4	~	~	~	~	~	INTERNAL	~
AWA9480ZNX	208-230/60/1	6.5	52	2.72	1.32	85PS330D16	85PR370F20	K71-16	INTERNAL	~
AWA9490ZYG	460/60/3	2.4	25	~	~	~	~	~	INTERNAL	~
AWA9490ZYN	208-230/60/1	7.5	52	2.72	1.32	85PS330D17	85PR370F17	820ARR3A03	INTERNAL	~
AWA9490ZXT	200-230/60/3	4.7	51	~	~	~	~	~	INTERNAL	~
AWA9512ZYG	460/60/3	2.8	20.3	~	~	~	~	~	INTERNAL	~
AWA9512ZYN	208-230/60/1	8.9	60	2.53	1.09	85PS330D16	85PR370F17	K71-19	INTERNAL	~
AWA9512ZXT	200-230/60/3	5.5	50	~	~	~	~	~	INTERNAL	~
AWA9513ZXD	208-230/60/1	10.6	73	2.1	0.88	85PS330D17	85PR370F17	K71-19	INTERNAL	~
AWA9514ZYG	460/60/3	3.6	36	~	~	~	~	~	INTERNAL	~
AWA9514ZYN	208-230/60/1	12	90	2.09	0.73	85PS330D17	85PR370F21	K71-19	INTERNAL	~
AWA9514ZXT	200-230/60/3	7.3	63.4	~	~	~	~	~	INTERNAL	~
AWA9518ZNX	208-230/60/1	13.1	84	1.62	0.64	85PS330D18	85PR370F21	K71-19	INTERNAL	~
AZA0335YYA	115/60/1	1.18	10.2	15.28	7.99	~	~	820RR12K80	8300MRPH38	Condenser Fan Required
AZA0345AXA	115/60/1	1.1	10.2	15.28	7.99	~	~	~	~	Static Condenser
AZA0349YXA	115/60/1	1.6	13.6	14.5	4.46	~	~	820RR12C20	8300MRPH91	Condenser Fan Required
AZA0360AXA	115/60/1	1.6	13.6	14.49	4.44	~	~	~	~	Condenser Fan Required
AZA0370YXA	115/60/1	2.2	18.5	12.84	3.08	~	~	K71-07	K90-04	Condenser Fan Required
AZA0374AXA	115/60/1	1.9	16.3	13.64	3.69	~	~	~	~	Condenser Fan Required

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
AZA0387AXA	115/60/1	2.13	18.5	12.81	3.06	~	~	~	~	Condenser Fan Required	
AZA0395YXA	115/60/1	2.9	28	9.75	2.31	~	85PS165C96	~	K90-06	Condenser Fan Required	
AZA0411AXA	115/60/1	2.9	25.3	9.73	2.29	~	~	~	~	Condenser Fan Required	
AZA1316YXA	115/60/1	0.82	8.4	23.2	10.18	~	~	82402	8300MRPG04	Static Condenser	
AZB1320AXA	115/60/1	0.82	8.4	25.3	9.91	~	~	~	~	Static Condenser	
AZA1326YXA	115/60/1	1	10.9	15.69	7.95	~	~	82461	8300MRPG04	Static Condenser	
AZB1328AXA	115/60/1	1.04	10.9	15.42	7.95	~	~	~	~	Static Condenser	
AZA1332YXA	115/60/1	1.15	13.2	14.09	5.18	~	~	82462	8300MRPG05	Static Condenser	
AZB1335AXA	115/60/1	1.2	13.2	14.09	5.18	~	~	~	~	Static Condenser	
AZA1338YXA	115/60/1	1.5	15.9	12.34	3.78	~	~	82451	8300MRPG06	Static Condenser	
AZB1340AXA	115/60/1	1.45	15.9	14.81	3.77	~	~	~	~	Static Condenser	
AZA1350YXA	115/60/1	1.9	18.8	2.66	9.59	~	~	~	~	Static Condenser	
AZB1355AXA	115/60/1	1.86	18.8	9.59	2.66	~	~	~	~	Static Condenser	
CL5538E	208-230/60/1	20	92.5	~	~	~	135-155/330	85PR440F18	8308347A15	~	
CL5540E	230/60/1	22	92.5	~	~	~	135-155/330	85PR440F18	8308347A15	~	
CL5544E	208-230/60/1	23	115	~	~	~	135-155/330	85PR440F28	8308347A15	~	
CL5544F	208-230/60/1	23	115	~	~	~	85PS330012	85PR440F28	8308347A15	~	
CL5550E	208-230/60/1	27	140	~	~	~	135-155/330	85PR440E65	83749	~	
CL5550G	208-230/60/1	27	140	~	~	~	85PS330012	85PR440E65	83749	~	
CL5562E	208-230/60/1	34	147	~	~	~	135-155/330	85PR440E90	83749	~	
CL5562G	208-230/60/1	36	175	~	~	~	85PS330012	85PR440E90	83749	~	
HGA0440EYA	115/60/1	4.8	36.2	3.6	1.1	~	85PS330023	85PR240F37	8300MRAN19	~	
HGA0450EYA	115/60/1	6.2	45.6	3.8	0.74	~	85PS330023	85PR240F37	8300MRAN94	~	
HGA0470EYA	115/60/1	10.2	58.4	4	0.58	~	85PS330023	85PR370F17	K90-27	~	

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
HGA0470EXD	208-230/60/1	4.1	27.9	5.9	2.3	~	85PS330C23	85PR370E35	K71-16	8300MRAP09	~
HGA2425ZXA	115/60/1	6.02	46.5	2.64	0.79	~	270-324/250	85PR240F37	820ARR3K50	8300MST183	~
HGA2425ZXD	208-230/60/1	2.9	23	5.93	2.91	~	85PS330C23	85PR370E35	820ARR3K63	8300MRAU04	~
HGA2434ZXA	115/60/1	8.4	58.7	2.68	0.59	~	270-324/250	85PR240F37	820ARR3E39	8300MRT120	~
HGA5467EXA	115/60/1	5.6	36.2	3.54	1.02	~	85PS330C23	85PR240F37	K71-19	8300MRAN18	~
HGA5467EXD	208-230/60/1	2.8	17.7	6.53	4.01	~	85PS330C23	85PR370E36	K71-16	8300MRAN93	~
HGA5467EXV	265/60/1	2.4	15	6.77	5.29	~	~	85PR370E36	~	8300MRAP17	~
HGA5480EXA	115/60/1	7	45.6	3.8	0.74	~	85PS330C23	85PR240F37	K71-19	K90-24	~
HGA5480EXD	208-230/60/1	3.5	22.2	7.29	2.93	~	85PS330C23	85PR370E36	K71-16	8300MRAK04	~
HGA5480EXV	265/60/1	2.9	18.8	10.56	4.27	~	~	10/440	~	8300MRAP15	~
HGA5480YYD	208-230/60/1	3.6	27.9	5.9	2.3	~	~	85PR370E35	~	8300MST178	~
HGA5492EXA	115/60/1	7.7	45.6	3.8	0.74	~	85PS330C23	85PR240F37	K71-19	8300MRAN99	~
HGA5492EXD	208-230/60/1	3.7	22.2	7.29	2.93	~	85PS330C23	85PR370E36	K71-16	8300MRAK04	~
HGA5492EXV	265/60/1	3.3	18.8	10.56	4.27	~	~	10/440	~	8300MRAP15	~
HGA5510EXA	115/60/1	9	58.4	3.735	0.7	~	85PS330C23	85PR370F17	K71-19	8300MRAP11	~
HGA5512EXA	115/60/1	10.2	58.4	4.09	0.634	~	85PS330C23	85PR370F17	K71-19	8300MRAP11	~
HGA5512EXD	208-230/60/1	5	27.9	5.93	2.32	~	85PS330C23	85PR370E35	K71-16	8300MRAP09	~
HGA5512EXV	265/60/1	4.3	22.2	8.55	3.43	~	~	85PR440F24	~	8300MRAP13	~
HGA9430YYA	115/60/1	4.6	45.6	3.8	0.74	~	85PS330D15	85PR370F17	K71-19	8300MRAS17	~
HGA9430YYD	208-230/60/1	2.1	22.2	7.35	2.95	~	64-77/330	85PR440F24	820ARR3K63	8300MSPU05	~
HGA9443YYA	115/60/1	6.5	58.4	4	0.58	~	85PS330D15	85PR370F17	K71-19	8300MRAS17	~
HGB9443YAA	115/60/1	7.2	58.4	4	0.58	~	85PS330D15	85PR370F17	K71-19	8300MRAS17	~
HGA9443YYD	208-230/60/1	3.1	27.9	5.93	2.32	~	85PS330C23	85PR370E35	820ARR3K63	8300MST187	~
HGA9450ZXD	208-230/60/1	4.1	32.5	4.76	2.63	~	85PS330D15	85PR370E35	820ARR3J44	8300MST184	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
HGA9468ZXA	115/60/1	11.7	64	2.87	0.56	~	270-324/250	85PR240F37	82DARR3K34	K90-28	~
HGA9468ZXD	208-230/60/1	5.2	34	5.92	2.21	~	85PS330C23	85PR440F19	K71-17	8300MRAT64	~
RG45450EYA	115/60/1	4.4	30.1	3.63	1.19	~	85PS330C23	85PR240F37	K71-19	K90-18	Opt. PTC Start device 90669-5
RG85450EYA	115/60/1	4.08	30.7	2.68	1.24	~	~	85PR240F37	~	PURCH.BRAZIL	~
RG45453BAA	115/60/1	5	36.2	3.6	1.02	~	~	85PR240F37	~	8300MRAN19	~
RG45453BXD	208-230/60/1	2.5	17.7	6.63	4.08	~	~	85PR370E36	~	8300MSP159	~
RG45457BAA	115/60/1	5.5	36.2	3.6	1.02	~	~	85PR240F37	~	8300MRAN19	~
RG45460BAA	115/60/1	5.7	36.2	3.6	1.02	~	~	85PR240F37	~	8300MRAN19	~
RG45460BXD	208-230/60/1	2.8	17.7	6.63	4.08	~	~	85PR370E36	~	8300MSP159	~
RG45460EYA	115/60/1	5	30.1	3.63	1.19	~	85PS330C23	85PR240F37	K71-19	K90-18	Opt. PTC Start device 90669-5
RG85460EYA	115/60/1	4.8	31.5	2.64	1.1	~	~	85PR240F37	~	PURCH.BRAZIL	~
RG45467CXA	115/60/1	5.4	36.2	3.54	1.02	~	~	85PR240F37	~	8300MRAN19	Opt. PTC Start device 90669-5
RG45467CXD	208-230/60/1	2.6	17.7	6.53	4.01	~	~	85PR370E36	~	8300MRAN93	Opt. PTC Start device 90669-5
RG45467EYA	115/60/1	5.7	36.2	3.54	1.02	~	85PS330C23	85PR240F37	K71-19	8300MRAN19	Opt. PTC Start device 90669-5
RG45467EXD	208-230/60/1	2.76	17.7	6.53	4.01	~	85PS330C23	85PR370E36	K71-16	8300MRAN93	~
RG45467EXV	265/60/1	2.45	15	6.77	5.29	~	85PS330C23	85PR370E36	K71-19	8300MRAP17	~
RG45471BAA	115/60/1	7	45.6	3.48	0.71	~	~	85PR240F37	~	8300MRAT66	~
RG45471BXD	208-230/60/1	3.4	22.2	7.35	2.95	~	~	85PR370E36	~	8300MST162	~
RG45471BXV	265/60/1	2.9	18.8	10.74	4.27	~	~	10/440	~	8300MST89	~
RG45472EYA	115/60/1	6.2	36.2	3.54	1.02	~	85PS330C23	85PR240F37	K71-19	8300MRAN19	Opt. PTC Start device 90669-5
RG85472EYA	115/60/1	5.97	41.1	2.86	0.82	~	~	85PR240F37	~	PURCH.BRAZIL	~
RG45472EXD	208-230/60/1	3	17.7	6.53	4.01	~	85PS330C23	85PR370E36	K71-16	8300MRAN93	~
RG45472EXV	265/60/1	2.65	15	6.77	5.29	~	85PS330C23	85PR370E36	K71-19	8300MRAP17	~
RG45479BAA	115/60/1	7.6	45.6	3.48	0.71	~	~	85PR240F37	~	8300MRAT66	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
RGAS479BXD	208-230/60/1	3.6	22.2	7.35	2.95	~	~	85PR370E36	~	8300MRAT71	~
RGAS480CXA	115/60/1	7	45.6	3.8	0.74	~	~	85PR240F37	~	K90-24	Opt. PTC Start device 90669-5
RGAS480EXA	115/60/1	7	45.6	3.8	0.74	~	85PS330C23	85PR240F37	K71-19	K90-24	Opt. PTC Start device 90669-5
RGAS490EXD	208-230/60/1	3.5	22.2	7.29	2.93	~	85PS330C23	85PR370E36	K71-16	8300MRAK04	Opt. PTC Start device 90669-5
RGAS485BAA	115/60/1	8	45.6	3.48	0.71	~	~	85PR240F37	~	8300MRAT85	~
RGAS485BXD	208-230/60/1	4	22.2	7.35	2.95	~	~	85PR440F24	~	8300MRAT69	~
RGAS485EXA	115/60/1	7.2	45.6	3.8	0.74	~	85PS330C23	85PR240F37	K71-19	8300MRAN94	Opt. PTC Start device 90669-5
RGAS485EXD	208-230/60/1	3.4	22.2	7.35	2.95	~	85PS330C23	85PR370E36	K71-16	8300MRAK04	Opt. PTC Start device 90669-5
RGAS485EXV	265/60/1	3.1	18.8	10.56	4.27	~	~	10/440	~	8300MRAP16	~
RGAS492EXA	115/60/1	7.7	45.6	3.8	0.74	~	85PS330C23	85PR240F37	K71-19	8300MRAN99	Opt. PTC Start device 90669-5
RGB5492EXA	115/60/1	7.7	45.6	3.03	0.75	~	~	85PR240F37	~	8300MRAN99	~
RGAS492EXD	208-230/60/1	3.7	22.2	7.29	2.93	~	85PS330C23	85PR370E36	K71-16	8300MRAK04	Opt. PTC Start device 90669-5
RGAS492EXV	265/60/1	3.3	18.8	10.56	4.27	~	~	10/440	~	8300MRAP16	~
RGAS494BAA	115/60/1	9.6	58.4	4	0.58	~	~	85PR370F17	~	8300MSTT72	~
RGAS494BXD	208-230/60/1	4.6	27.9	5.9	2.3	~	~	85PR370E35	~	8300MSTT91	~
RGAS494BXV	265/60/1	3.8	22.2	8.69	3.47	~	~	85PR440F24	~	8300MSTT91	~
RGAS510BAA	115/60/1	11.8	63	3.89	0.54	~	~	85PR370F17	~	K90-27	~
RGAS510BXD	208-230/60/1	5.6	32.5	5.7	2.15	~	~	85PR440F19	~	8300MRAT77	~
RGAS510ENA	208-230/60/1	4.4	27.9	5.93	3.32	~	85PS330C23	85PR370E35	K71-16	8300MRAP10	~
RGAS510EXA	115/60/1	9	58.4	3.735	0.7	~	~	85PR370F17	K71-19	K90-27	Opt. PTC Start device 90669-5
RGB5510EXA	115/60/1	9	58.4	2.06	0.59	~	~	50/370	~	K90-27	~
RGAS511BAA	115/60/1	12.5	63	3.89	0.54	~	~	85PR370F17	~	K90-27	~
RGAS512BAA	115/60/1	12.7	63	3.49	0.54	~	~	85PR370E63	~	T80400-78	~
RGAS512BXD	208-230/60/1	5.6	29	5.45	2.31	~	~	85PR440F22	~	8300MSTT80	~



Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
RG45512BXV	265/60/1	4.6	20	7.39	3.58	~	~	85PR40F24	~	8300MRAT90	~
RG45512CXA	115/60/1	10.1	58.4	4	0.58	~	~	85PR370F17	~	K90-27	Opt. PTC Start device 90669-5
RG45512CXD	208-230/60/1	4.7	27.9	5.93	2.32	~	~	85PR370E35	~	8300MRAP10	Opt. PTC Start device 90669-5
RG45512ENA	208-230/60/1	5	27.9	5.93	2.32	~	85PS330C23	85PR370E35	K71-16	8300MRAP10	~
RG45512EXA	115/60/1	10.2	58.4	4	0.58	~	85PS330C23	85PR370F17	K71-19	K90-27	Opt. PTC Start device 90669-5
RG45512EXV	265/60/1	4.3	22.2	8.55	3.43	~	~	85PR40F24	~	8300MRAP14	~
RG45513BAA	115/60/1	13.8	63	3.49	0.54	~	~	85PR370E63	~	T80400-78	~
RKA5454YYA	115/60/1	5.5	39.2	5.01	0.88	~	85PS330D14	85PR370E36	820ARR3K58	K90-25	~
RKA5454YYD	208-230/60/1	2.4	23	5.88	3.57	~	85PS330D12	85PR370E36	82759	8300MRAL20	~
RKA5470YYA	115/60/1	6	48.3	4.27	0.65	~	85PS330C23	85PR370F20	820ARR3K57	8300MRAL22	~
RKA5470YYD	208-230/60/1	3.2	27	3.97	3.03	~	85PS330C23	85PR370E36	820ARR3K59	K90-17	~
RKA5480EXA	115/60/1	6.6	39.2	5.01	0.88	~	~	85PR370F20	~	K90-25	Must use SAK2 for hard start
RKA5480EXD	208-230/60/1	3.4	23	5.88	3.57	~	~	85PR370E36	~	8300MRAL20	Must use SAK2 for hard start
RKA5480EXV	265/60/1	3.2	16	3.85	4.8	~	~	85PR370F20	~	8300MRAL21	Must use SAK2 for hard start
RKA5486YYA	115/60/1	7.3	48.3	4.27	0.65	~	85PS330C23	85PR370F20	820ARR3K47	8300MRAL22	~
RKA5486YYD	208-230/60/1	3.6	27	3.97	3.03	~	85PS330C23	85PR370F20	K71-21	K90-17	~
RKA5490CXD	208-230/60/1	3.7	20	4.23	3.65	~	85PS330D12	85PR370F20	820ARR3H43	K90-16	~
RKA5490EXA	115/60/1	7.4	44	3.96	0.94	~	~	85PR370F20	~	K90-25	Must use SAK2 for hard start
RKA5490EXD	208-230/60/1	3.8	20	4.23	3.65	~	~	85PR370F20	~	K90-16	Must use SAK2 for hard start
RKA5490EXV	265/60/1	3.3	18.6	3.61	4.01	~	~	85PR370F20	~	K90-12	Must use SAK2 for hard start
RKA5510CXA	115/60/1	8.6	48.3	4.27	0.65	~	~	85PR370F20	~	8300MRAP96	~
RKA5510EXA	115/60/1	8.6	48.3	4.27	0.65	~	~	85PR370F20	~	8300MRAL22	Must use SAK2 for hard start
RKA5510EXD	208-230/60/1	4.3	27	3.97	3.03	~	~	85PR370F20	~	K90-17	Must use SAK2 for hard start
RKA5510EXV	265/60/1	4.2	22	3.83	3.76	~	~	85PR370F20	~	K90-12	Must use SAK2 for hard start

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
RKA5510YXA	115/60/1	8.4	57	2.93	0.56	~	85PS330D18	85PR240F37	820ARR3H43	INTERNAL	~
RKA5510YXD	208-230/60/1	4.5	38	3.82	1.74	~	85PS330C23	85PR370F20	K71-21	8300MST152	~
RKA5512CXD	208-230/60/1	4.6	26.3	3.61	2.54	~	~	85PR370F20	~	K90-19	~
RKA5512EXA	115/60/1	9.7	54	4.42	0.63	~	85PS330C23	85PR370F20	K71-19	K90-27	~
RKA5512EXD	208-230/60/1	4.8	26.3	3.61	2.54	~	85PS330C23	85PR370F20	~	K90-19	~
RKA5512EXV	265/60/1	4.2	28	4.56	2.88	~	~	85PR440F22	~	K90-14	Must use SAK2 for hard start
RKA5512YXA	115/60/1	9.6	57	2.93	0.56	~	85PS330D18	85PR240F37	820ARR3H43	INTERNAL	~
RKA5512YXD	208-230/60/1	4.9	38	3.82	1.74	~	85PS330C23	85PR370F20	K71-21	K90-24	~
RKA5513CXA	115/60/1	11	67	4.01	0.55	~	~	85PR370F20	~	K90-28	~
RKA5513CXD	208-230/60/1	5.2	29	5	2.37	~	~	85PR370F20	~	K90-21	~
RKA5513EXA	115/60/1	11.4	67	4.01	0.55	~	85PS330C23	85PR370F20	K71-19	K90-28	~
RKB5513EXA	115/60/1	11	54	4.42	0.63	~	85PS330C23	85PR370F23	K71-19	K90-28	Must use SAK2 for hard start
RKG5513EXA	115/60/1	10.8	54	4.1	0.63	~	85PS330C23	85PR370F21	K71-19	K90-28	~
RKA5513EXD	208-230/60/1	5.4	29	5	2.37	~	85PS330C23	85PR370F20	K71-21	K90-21	~
RKA5513EXV	265/60/1	4.8	27	5.64	2.83	~	~	85PR440F22	~	8300MRAL29	Must use SAK2 for hard start
RKC5515EXA	115/60/1	13	71	3.24	0.45	~	85PS330C23	85PR370E63	820ARR3C24	INTERNAL	Must use SAK2 for hard start
RKA5515EXD	208-230/60/1	6.4	38	3.82	1.74	~	85PS330C23	85PR370F20	K71-21	K90-24	~
RKA5515EXV	265/60/1	5.4	32	4.86	2.24	~	~	85PR440F22	~	K90-21	Must use SAK2 for hard start
RKA5518EXD	208-230/60/1	7.6	45	4.25	1.45	~	85PS330C23	85PR370F20	K71-16	K90-26	Must use SAK2 for hard start
RKA5518EXV	265/60/1	6.3	32	4.86	2.24	~	~	85PR440F22	~	8300MSTL34	Must use SAK2 for hard start
RKGB515EXA	115/60/1	9	54	4.1	0.63	~	85PS330C23	85PR370F21	K71-19	K90-28	~
SFAA530ZG	460/60/3	6.4	48	~	~	2.81	~	~	~	INTERNAL	~
SFAA530ZH	575/60/3	4.9	37	~	~	4.99	~	~	~	INTERNAL	~
SFAA530ZVN	208-230/60/1	22	122	2.56	0.465	~	85PS330D17	85PR440F18	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
SFAA530ZXT	200-230/60/3	12.6	95	~	~	~	~	~	INTERNAL	~
SFAA536ZYG	460/60/3	7.8	59.9	~	~	~	~	~	INTERNAL	~
SFAA536ZXH	575/60/3	6.1	48.4	~	~	~	~	~	INTERNAL	~
SFAA536ZXN	208-230/60/1	27.2	155	1.8	0.326	85PS330D17	85PR440E65	~	INTERNAL	~
SFAA536ZXT	200-230/60/3	15.4	117	~	~	~	~	~	INTERNAL	~
SFAA540ZYG	460/60/3	8.6	66	~	~	~	~	~	INTERNAL	~
SFAA540ZXH	575/60/3	7	54	~	~	~	~	~	INTERNAL	~
SFAA540ZXT	200-230/60/3	17.1	134	~	~	~	~	~	INTERNAL	~
SFA5554EXG	460/60/3	7	60	~	~	~	~	~	INTERNAL	~
SFA5554EXH	575/60/3	5.7	48.4	~	~	~	~	~	INTERNAL	~
SFA5554EXN	208-230/60/1	22.5	155	1.8	0.326	85PS330D17	85PR440E65	~	INTERNAL	~
SFA5554EXT	200-230/60/3	14.3	108	~	~	~	~	~	INTERNAL	~
SFA5558EXG	460/60/3	7.65	66	~	~	~	~	~	INTERNAL	~
SFA5558EXH	575/60/3	6.1	54	~	~	~	~	~	INTERNAL	~
SFA5558EXN	208-230/60/1	24.4	160	1.47	0.285	85PS330D17	85PR440E90	~	INTERNAL	~
SFA5558EXT	200-230/60/3	15	125	~	~	~	~	~	INTERNAL	~
SFA5560EXG	460/60/3	7.75	66	~	~	~	~	~	INTERNAL	~
SFA5560EXH	575/60/3	6.4	54	~	~	~	~	~	INTERNAL	~
SFA5560EXN	208-230/60/1	25.2	160	1.47	0.285	85PS330D17	85PR440E90	~	INTERNAL	~
SFA5560EXT	200-230/60/3	15.7	125	~	~	~	~	~	INTERNAL	~
SFA5572EXG	460/60/3	9.5	72	~	~	~	~	~	INTERNAL	~
SFA5572EXH	575/60/3	7.6	58	~	~	~	~	~	INTERNAL	~
SFA5572EXT	200-230/60/3	19	142	~	~	~	~	~	INTERNAL	~
SFA5581EXG	460/60/3	10.5	75.9	~	~	~	~	~	INTERNAL	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run					
SFA561EXT	200-230/60/3	21	151	~	~	~	~	~	INTERNAL	~
SFA561EXG	460/60/3	12.4	89	~	~	~	~	~	INTERNAL	~
SFA561EXH	575/60/3	10.4	78.4	~	~	~	~	~	INTERNAL	~
SFA561EXT	200-230/60/3	25	185	~	~	~	~	~	INTERNAL	~
SFA561EXG	460/60/3	14.4	104	~	~	~	~	~	INTERNAL	~
SFA561EXH	575/60/3	11.4	78.4	~	~	~	~	~	INTERNAL	~
SFA561EXT	200-230/60/3	28.3	205	~	~	~	~	~	INTERNAL	~
SFA561EXG	460/60/3	17	119	~	~	~	~	~	INTERNAL	~
SFA561EXH	575/60/3	15.2	111	~	~	~	~	~	INTERNAL	~
SFA561EXT	200-230/60/3	34.5	239	~	~	~	~	~	INTERNAL	~
SFA561EXG	460/60/3	20.7	135	~	~	~	~	~	INTERNAL	~
SFA561EXH	575/60/3	17.2	111	~	~	~	~	~	INTERNAL	~
SFA561EXT	200-230/60/3	41	269	~	~	~	~	~	INTERNAL	~
THA0412YXA	115/60/1	3.35	27.5	10.21	1.96	~	~	82008EAH05	8300T57179	~
THA0414YXA	115/60/1	4	33	7.33	1.7	~	~	82008EAH05	83004TMT40	~
THA1340YXA	115/60/1	0.96	16.4	9.2	3.77	~	10/220	K71-23	83004TMJ89	~
THG1340YXA	115/60/1	0.98	16.4	9.16	~	~	~	K71-23	83004TMJ89	~
THB1355YXA	115/60/1	2.15	22.2	6.6	2.59	~	~	82008EAH05	83004TMS11	~
THG1374YXA	115/60/1	1.55	21	8.51	2.69	~	12/250	82008EAG74	PUR.BRAZIL	~
TPA0413YXA	115/60/1	3.8	30	9.12	1.63	~	85PS110C91	K71-08	8300MRPS30	~
TPA0413YXD	208-230/60/1	2.2	19.2	30.06	4.84	~	53-64/220	82767	8300MRAS43	~
TPA0415YXA	115/60/1	4	30	9.12	1.63	~	85PS110C91	K71-08	8300MRPS44	~
TPA0415YXD	208-230/60/1	2.3	19.2	30.06	4.84	~	53-64/220	82767	8300MRAS43	~
TPA0421YXA	115/60/1	5.5	37.5	9.06	1.37	~	~	~	8300MRAR88	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance		Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run						
TPA0421YD	208-230/60/1	3.4	25.5	16.83	4.21	~	~	~	RP5610	8300MRPR89	~
TPA0423YA	115/60/1	6.1	42.5	10.62	0.987	~	~	~	8200EMBK21	8300MRT107	~
TPA1370YA	115/60/1	1.2	21.3	4.27	2.58	~	85PR220F12	~	K71-23	K90-05	~
TPB1370YA	115/60/1	2.1	23.5	10.19	2.31	~	~	~	K71-23	K90-05	~
TPE1370YA	115/60/1	1.15	19.5	4.49	2.79	~	85PR220F12	~	K71-23	K90-05	~
TPA1380YA	115/60/1	1.4	21.3	4.27	2.58	~	~	~	K71-23	K90-05	Condenser Fan Required
TPD1380YA	115/60/1	1.4	21.3	4.27	2.58	~	~	~	K71-23	K90-05	~
TPE1380YA	115/60/1	1.35	19.5	4.49	2.79	~	~	~	K71-23	K90-05	~
TPG1380YA	115/60/1	1.34	19	4.28	3.33	~	~	~	~	~	~
TPA1390YA	115/60/1	1.6	21.3	4.27	2.58	~	85PR220F12	~	K71-23	K90-05	Condenser Fan Required
TPB1390YA	115/60/1	2.7	25.5	8.73	1.88	~	~	~	K71-23	83004TMR17	~
TPE1390YA	115/60/1	1.5	19.5	4.49	2.79	~	~	~	K71-23	K90-05	~
TPG1390YA	115/60/1	1.44	19	4.28	3.33	~	~	~	~	~	~
TPA1410YA	115/60/1	1.8	21.3	4.27	2.58	~	~	~	~	~	~
TPA1410YD	208-230/60/1	1.09	15.8	19.19	6.08	~	~	~	K71-23	K90-05	Condenser Fan Required
TPA1413YA	115/60/1	2.3	20.5	3.95	1.77	~	~	~	82008EAJ54	83004TMP67	~
TPA9415YA	115/60/1	3.9	26.5	4.48	1.92	~	85PS110C92	~	K71-23	8300MRAT22	~
TPB9415YA	115/60/1	3.7	26	4.68	1.58	~	85PS165C27	~	820RR12K99	8300MRAT22	~
TPA9415YD	208-230/60/1	2	15.5	16.58	5.72	~	88-108/165	~	82448	8300MRAT26	~
TPA9417YA	115/60/1	5	34	7.93	1.2	~	85PS110C76	~	K71-10	8300MRT130	~
TPA9419YA	115/60/1	6.2	40	5.9	0.97	~	85PS165C96	~	K71-06	K90-14	~
TPA9421YA	115/60/1	6.4	40	5.9	0.97	~	85PS165C96	~	K71-06	K90-14	~
TPA9421YD	208-230/60/1	3.3	21.2	13.94	4.26	~	88-108/220	~	820RR12K99	8300MRPR89	~
TPA9423YA	115/60/1	6.9	44.5	4.77	0.86	~	216-259/220	~	K71-06	K90-17	~

Model	Volts/Hz/Ph	RLA	LRA	Winding Resistance			Line to Line	Start Cap P/N or MFD/Volt	Run Cap P/N or MFD/Volt	Relay	Overload	Remarks
				Start	Run	Line to Line						
TPB9423YAA	115/60/1	6.6	44.5	5.08	0.85	~	85PS220D57	~	820RR12J61	K90-17	Non self equalizing application	
TPA9423YXD	208-230/60/1	3.6	24	15.35	3.29	~	85PS250D09	~	820RR12L04	8300MRA174	~	
VSA9490ZXT	200-230/60/3	5.2	40.5	~	~	2.33	~	~	~	INTERNAL	~	
VSA9514ZNA	208-230/60/1	10.3	83	1.86	0.648	~	85FS330C23	85PR370F21	820ARR3K62	INTERNAL	~	
VSA9514ZXT	200-230/60/3	7.1	48.5	~	~	1.85	~	~	~	INTERNAL	~	
VSA9517ZNA	208-230/60/1	12	83	1.86	0.648	~	85PS330C23	85PR370F21	820ARR3K62	INTERNAL	~	
VSA9517ZXT	200-230/60/3	8.2	77.5	~	~	1.32	~	~	~	INTERNAL	~	
VSA9521ZXT	200-230/60/3	9.75	80	~	~	1.07	~	~	~	INTERNAL	~	
VSA9524ZTB	200-230/60/3	12.6	104	~	~	0.824	~	~	~	INTERNAL	~	
VSA9528ZXT	200-230/60/3	12.2	96	~	~	0.689	~	~	~	INTERNAL	~	
VSA9536ZXT	200-230/60/3	15.9	153	~	~	0.441	~	~	~	INTERNAL	~	
VSA9544ZXT	200-230/60/3	19.1	156	~	~	0.375	~	~	~	INTERNAL	~	

# Introduction to Electrical Drawings

1. The drawings which follow cover both current production and obsolete compressor models.
2. For ease in determination of the proper drawing, indexes are provided.
3. Each drawing has a descriptive title, a representative compressor photograph.
4. The following general points should be considered:
  - A. All notations are important and must be heeded.
  - B. All ESP relays must be mounted as shown in the drawings or, in the case of remote installations, exactly as was the original.
  - C. The two terminal overloads shown in the drawings are typical examples. ESP overloads may be provided with terminals at #1 and #3 or #1 and #2 or may have factory applied leads or straps. Regardless, as long as they are wired as shown in the drawings, the circuit will be correct.
  - D. Fan motor leads, if not originally connected elsewhere in the equipment, are always connected to line terminals.

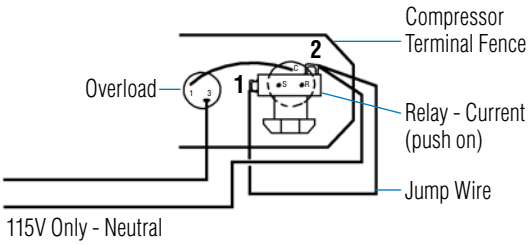
<b>Page</b>	<b>Model</b>	<b>Description</b>
64	AE	RSIR and CSIR with current relay
65	AE	PSC or CSR with potential relay
66	AG	PSC or CSR with potential relay
67	AH	CSIR with current relay
68	AH	PSC or CSR with potential relay
69	AJ	CSIR with current relay
71	AJ	PSC or CSR with potential relay
72	AK	CSIR with current relay
73	AK	PSC or CSR with potential relay
74	AV	PSC or CSR with potential relay
75	AW	PSC or CSR with potential relay
76	AZ	RSIR or CSIR with current relay
77	RG, RK	PSC or CSR with potential relay
78	SF	PSC or CSR with potential relay
79	TP	PTCS/CR
80	AB	PSC or CSR with potential relay
81	CL	PSC or CSR with potential relay (internal overload models)
82	CL	PSC or CSR with potential relay (internal thermostat models)
83	CL	3 Phase (internal thermostat models)



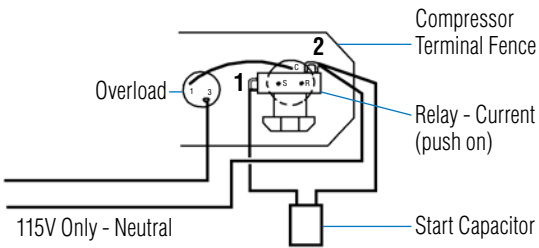
# AE Models



Representative photo only  
Many variations possible

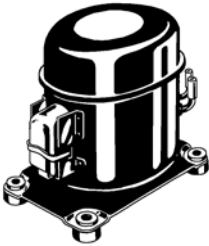


(RSIR)

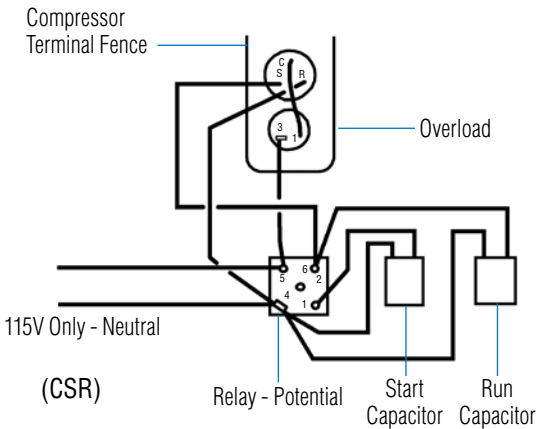
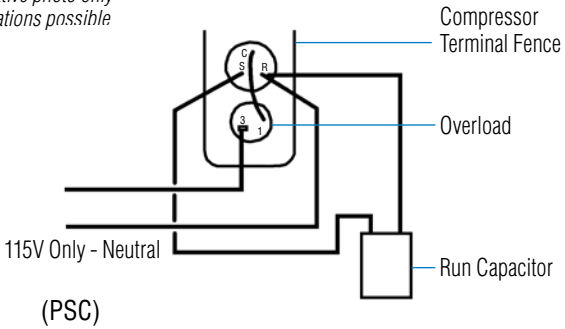


(CSIR)

# AE Models



*Representative photo only  
Many variations possible*

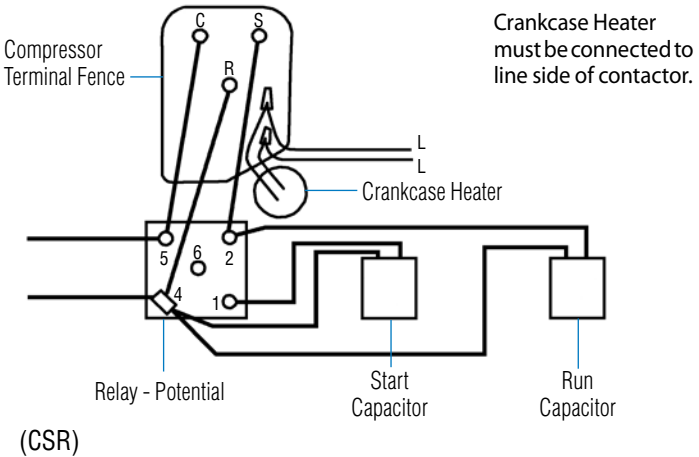
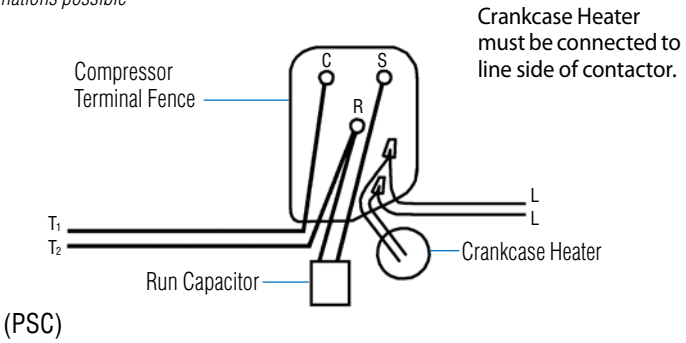


**NOTE:** Wire to relay as shown regardless of terminal location.

# AG Models



Representative photo only  
Many variations possible

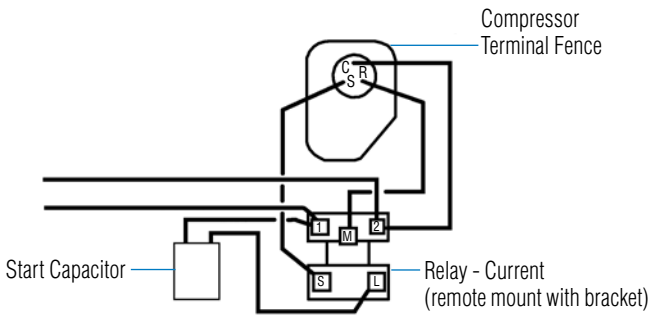


**NOTE:** Wire to relay as shown regardless of terminal location.

# AH Models



*Representative photo only  
Many variations possible*



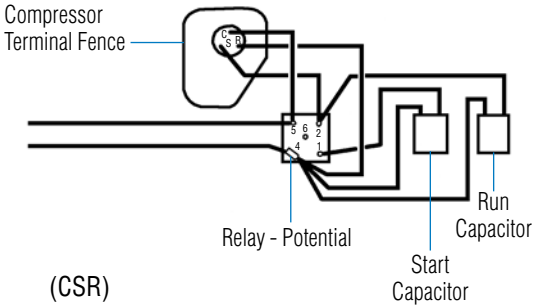
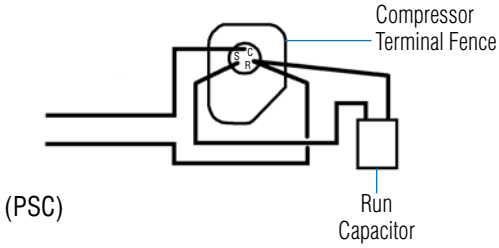
(CSIR)

**NOTE:** Wire to relay as shown regardless of terminal location.

# AH Models



*Representative photo only  
Many variations possible*

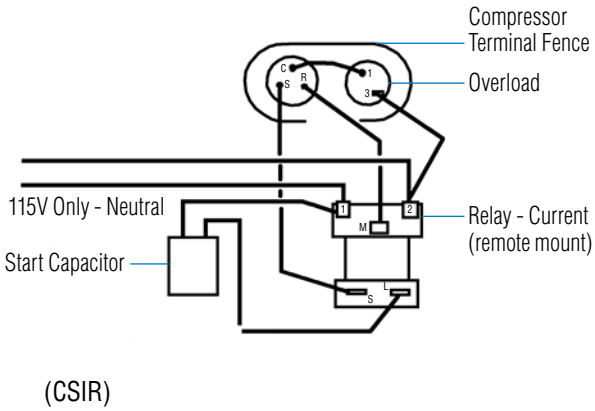


**NOTE:** Wire to relay as shown regardless of terminal location.

# AJ Models



*Representative photo only  
Many variations possible*

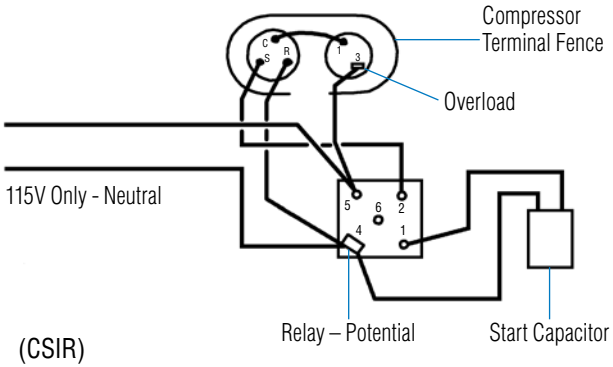


**NOTE:** Wire to relay as shown regardless of terminal location.

# AJ Models



*Representative photo only  
Many variations possible*

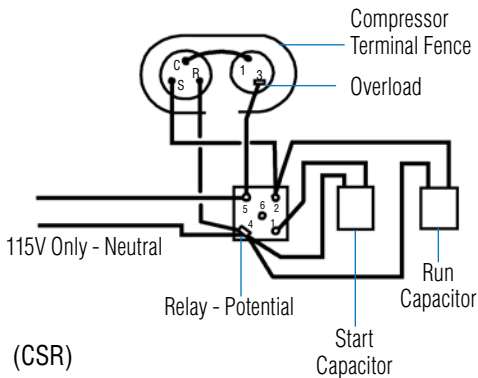
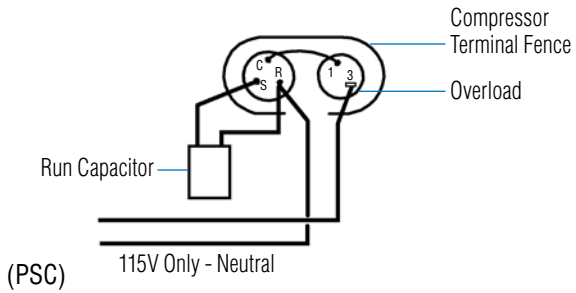


**NOTE:** Wire to relay as shown regardless of terminal location.

# AJ Models



*Representative photo only  
Many variations possible*



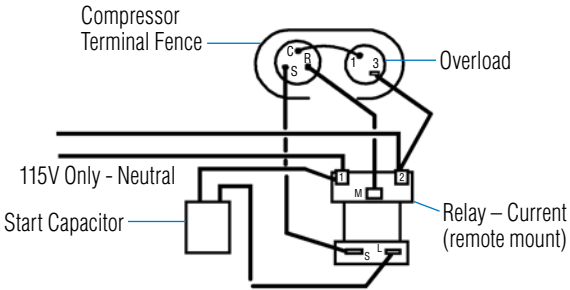
**NOTE:** Wire to relay as shown regardless of terminal location.



# AK Models



*Representative photo only  
Many variations possible*



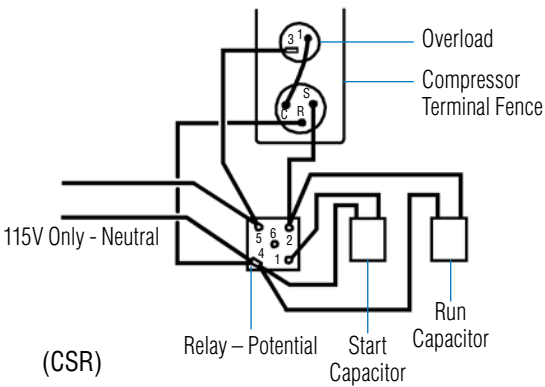
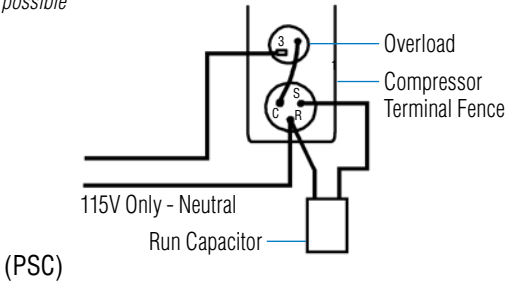
(CSIR)

**NOTE:** Wire to relay as shown regardless of terminal location.

# AK Models



*Representative photo only  
Many variations possible*



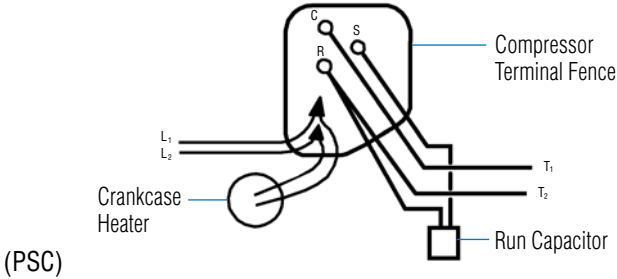
**NOTE:** Wire to relay as shown regardless of terminal location.

# AV Models

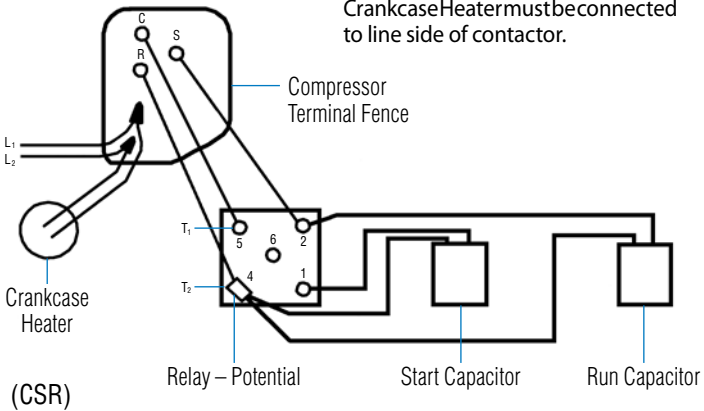


Representative photo only  
Many variations possible

Crankcase Heater must be connected to line side of contactor.



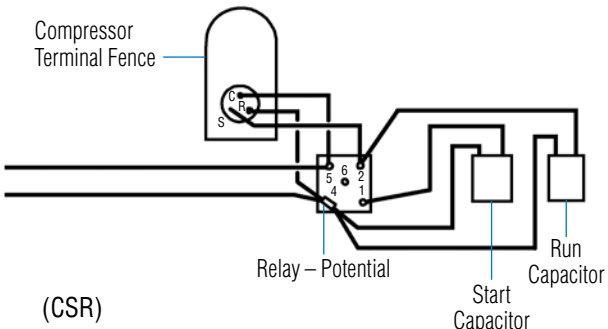
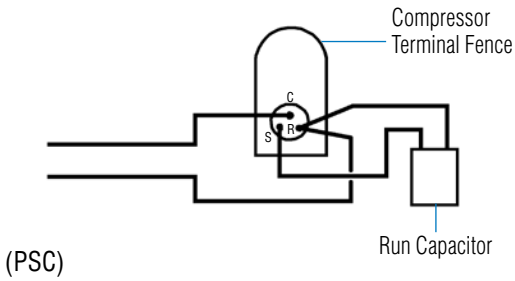
Crankcase Heater must be connected to line side of contactor.



# AW Models



*Representative photo only  
Many variations possible*

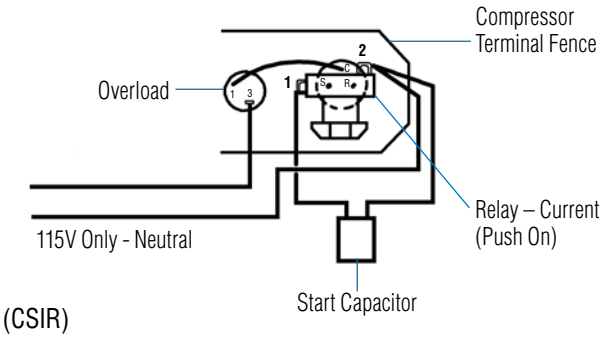
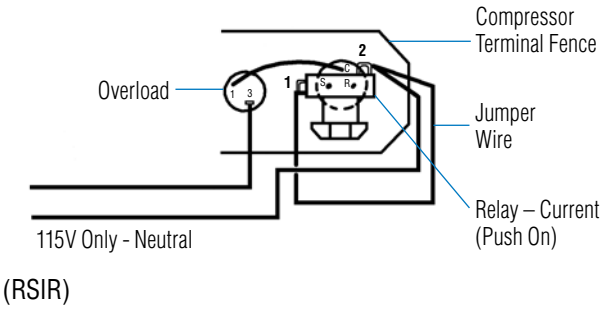


**NOTE:** Wire to relay as shown regardless of terminal location.

# AZ Models



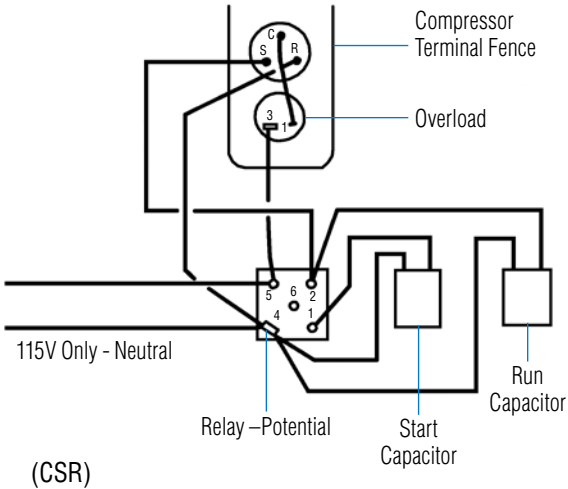
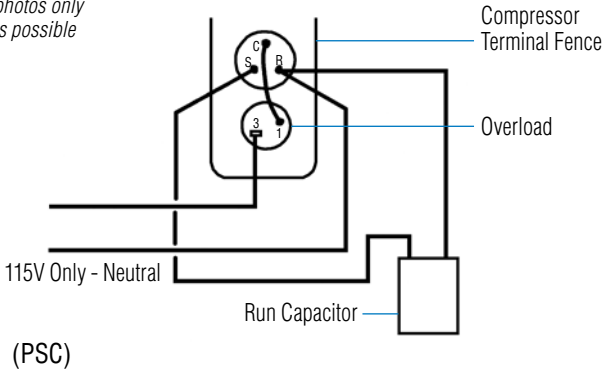
Representative photo only  
Many variations possible



# RG and RK Models

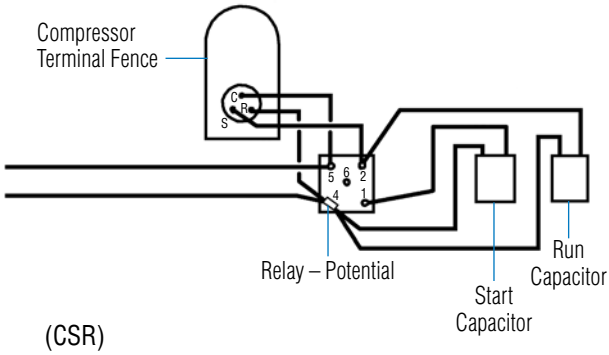
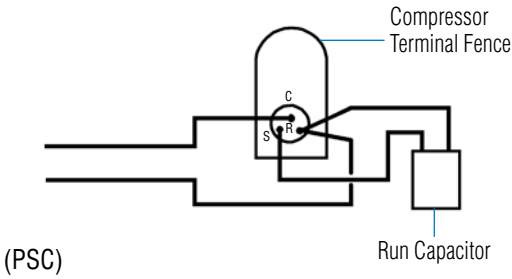


Representative photos only  
Many variations possible



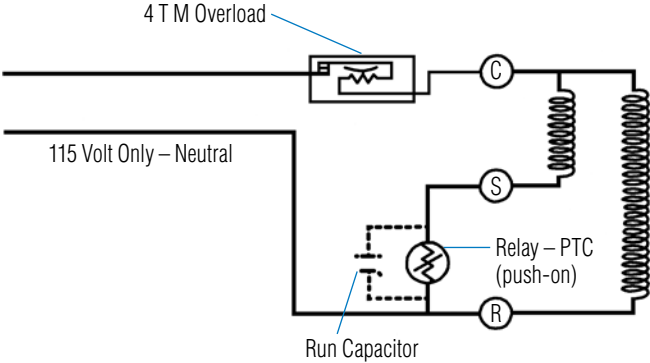
**NOTE:** Wire to relay as shown regardless of terminal location.

# SF Models



**NOTE:** Wire to relay as shown regardless of terminal location.

# TP Models



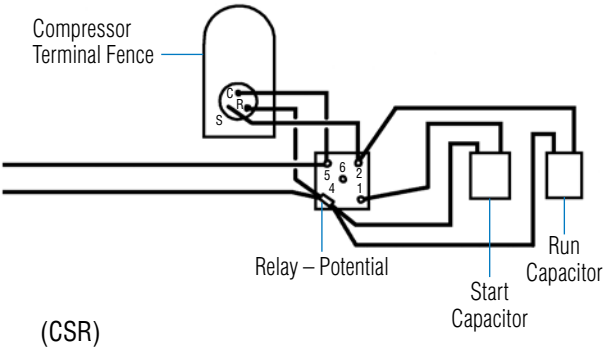
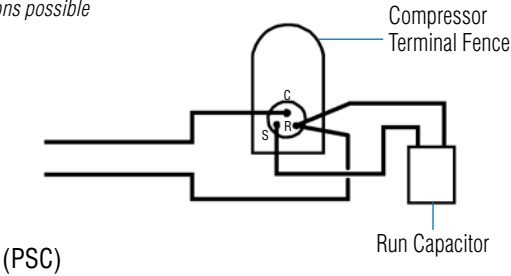
(PTCS-CR)



# AB Models



*Representative photo only  
Many variations possible*

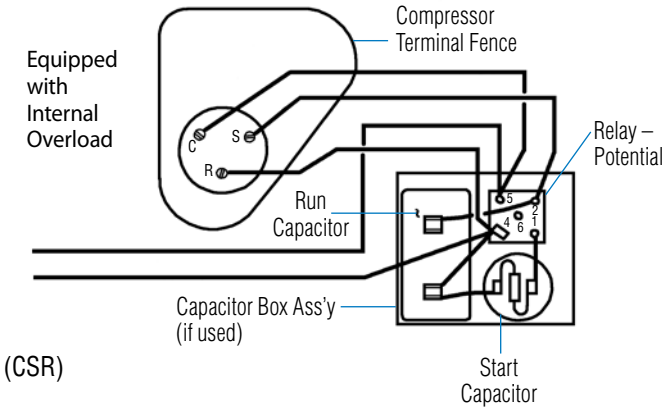
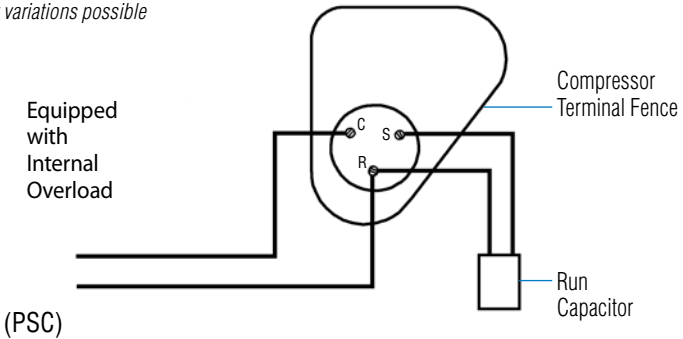


**NOTE:** Wire to relay as shown regardless of terminal location.

# CL Models



*Representative photo only  
Many variations possible*

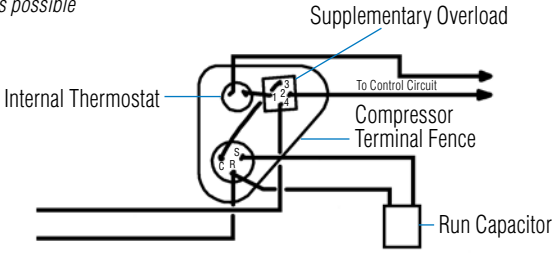


**NOTE:** Wire to relay as shown regardless of terminal location.

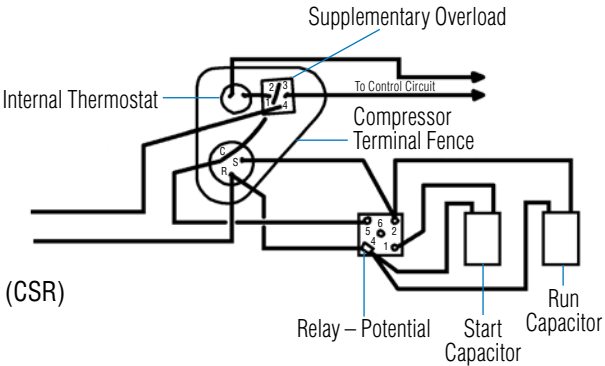
# CL Models



Representative photo only  
Many variations possible



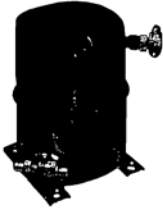
(PSC)



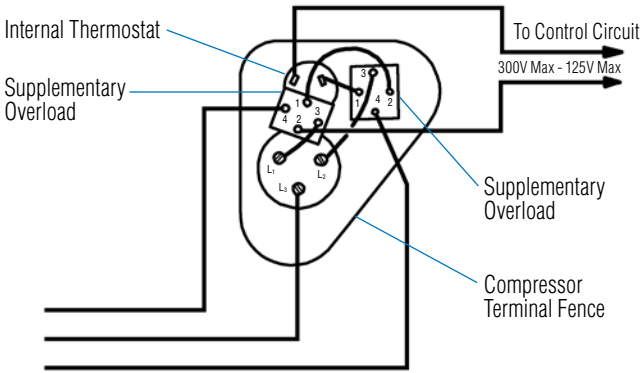
(CSR)

**NOTE:** Wire to relay as shown regardless of terminal location.

# CL Models



*Representative photo only  
Many variations possible*



(3 Phase)

# Trouble Shooting and Service Chart

Complaint	Possible Cause	Repair
<b>A</b> Compressor will not start - no hum	<ol style="list-style-type: none"> <li>1. Line disconnect open.</li> <li>2. Fuse removed or blown.</li> <li>3. Overload protector tripped.</li> <li>4. Control stuck in open position.</li> <li>5. Control off due to cold location.</li> <li>6. Wiring improper or loose.</li> </ol>	<ol style="list-style-type: none"> <li>1. Close start or disconnect switch.</li> <li>2. Replace fuse.</li> <li>3. Refer to electrical section.</li> <li>4. Repair or replace control.</li> <li>5. Relocate control.</li> <li>6. Check wiring against diagram.</li> </ol>
<b>B</b> Compressor will not start - hums but trips on overload protector	<ol style="list-style-type: none"> <li>1. Improperly wired.</li> <li>2. Low voltage to unit.</li> <li>3. Starting capacitor defective.</li> <li>4. Relay failing to close.</li> <li>5. Compressor motor has a winding open or shorted.</li> <li>6. Internal mechanical trouble in compressor.</li> <li>7. Liquid refrigerant in compressor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring against diagram.</li> <li>2. Determine reason and correct.</li> <li>3. Determine reason and replace.</li> <li>4. Determine reason and correct, replace if necessary.</li> <li>5. Replace compressor.</li> <li>6. Replace compressor.</li> <li>7. Replace compressor.</li> </ol>
<b>C</b> Compressor starts, but does not switch off of start winding	<ol style="list-style-type: none"> <li>1. Improperly wired.</li> <li>2. Low voltage to unit.</li> <li>3. Relay failing to open.</li> <li>4. Run capacitor defective.</li> <li>5. Excessively high discharge pressure.</li> <li>6. Compressor motor has a winding open or shorted.</li> <li>7. Internal mechanical trouble in compressor (tight).</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring against diagram.</li> <li>2. Determine reason and correct.</li> <li>3. Determine reason and correct, replace if necessary.</li> <li>4. Determine reason and replace.</li> <li>5. Check discharge shut-off valve, possible overcharge, or insufficient cooling on condenser.</li> <li>6. Replace compressor.</li> <li>7. Replace compressor.</li> </ol>
<b>D</b> Compressor starts and runs, but short cycles on overload protector	<ol style="list-style-type: none"> <li>1. Additional current passing through overload protector.</li> <li>2. Low voltage to unit (or unbalanced if three phase).</li> <li>3. Overload protector defective.</li> <li>4. Run capacitor defective.</li> <li>5. Excessive discharge pressure.</li> <li>6. Suction pressure too high.</li> <li>7. Compressor too hot - return gas hot.</li> <li>8. Compressor motor has a winding shorted.</li> </ol>	<ol style="list-style-type: none"> <li>1. Check wiring diagram. Check for added fan motors, pumps, etc., connected to wrong side of protector.</li> <li>2. Determine reason and correct.</li> <li>3. Check current, replace protector.</li> <li>4. Determine reason and replace.</li> <li>5. Check ventilation, restrictions in cooling medium, restrictions in refrigeration system.</li> <li>6. Check for possibility of mis-application. Use stronger unit.</li> <li>7. Check refrigerant charge (fix leak), add if necessary.</li> <li>8. Replace compressor.</li> </ol>

# Trouble Shooting and Service Chart

Complaint	Possible Cause	Repair
<b>E</b> Unit runs OK, but short cycles on	<ol style="list-style-type: none"> <li>1. Overload protector.</li> <li>2. Thermostat.</li> <li>3. High pressure cut-out due to:               <ol style="list-style-type: none"> <li>a - Insufficient air/water supply</li> <li>b - Overcharge</li> <li>c - Air in system</li> </ol> </li> <li>4. Low pressure cut-out due to:               <ol style="list-style-type: none"> <li>a - Liquid line solenoid leaking</li> <li>b - Compressor valve leak</li> <li>c - Undercharge</li> <li>d - Restriction in expansion device</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. See D on previous page.</li> <li>2. Differential set too close-widen.</li> <li>3.               <ol style="list-style-type: none"> <li>a -Check air/water supply to condenser - correct.</li> <li>b - Reduce refrigerant charge</li> <li>c -Purge</li> </ol> </li> <li>4.               <ol style="list-style-type: none"> <li>a - Replace</li> <li>b - Replace</li> <li>c - Fix leak, add refrigerant</li> <li>d - Replace device</li> </ol> </li> </ol>
<b>F</b> Unit operates long or continuously	<ol style="list-style-type: none"> <li>1. Shortage of refrigerant.</li> <li>2. Control contacts stuck or frozen closed.</li> <li>3. Refrigerated or air conditioned space has excessive load or poor insulation.</li> <li>4. System inadequate to handle load.</li> <li>5. Evaporator coil iced.</li> <li>6. Restriction(s) in refrigeration system.</li> <li>7. Dirty condenser.</li> <li>8. Filter dirty.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fix leak, add charge.</li> <li>2. Clean contacts or replace control.</li> <li>3. Determine fault and correct.</li> <li>4. Replace with larger system.</li> <li>5. Defrost.</li> <li>6. Determine location and remove.</li> <li>7. Clean condenser.</li> <li>8. Clean or replace.</li> </ol>
<b>G</b> Start capacitor open, shorted, or blown	<ol style="list-style-type: none"> <li>1. Relay contacts not operating properly.</li> <li>2. Prolonged operation on start cycle due to:               <ol style="list-style-type: none"> <li>a - Low voltage to unit</li> <li>b - Improper relay</li> <li>c - Starting load too high</li> </ol> </li> <li>3. Excessive short cycling.</li> <li>4. Improper capacitor.</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean contacts or replace relay if necessary.</li> <li>2.               <ol style="list-style-type: none"> <li>a - Determine reason and correct</li> <li>b - Replace</li> <li>c - Correct by using pump down arrangement if necessary</li> </ol> </li> <li>3. Determine reason for short-cycle (E above) and correct.</li> <li>4. Determine reason and correct.</li> </ol>
<b>H</b> Run capacitor open, shorted, or blown	<ol style="list-style-type: none"> <li>1. Improper capacitor.</li> <li>2. Excessively high line voltage (110% of rated-max).</li> </ol>	<ol style="list-style-type: none"> <li>1. Determine correct size and replace.</li> <li>2. Determine reason and correct.</li> </ol>

# Trouble Shooting and Service Chart

Complaint	Possible Cause	Repair
<b>I</b> Relay defective or burned out	<ol style="list-style-type: none"><li>1. Incorrect relay.</li><li>2. Incorrect mounting angle.</li><li>3. Line voltage too high or too low.</li><li>4. Excessive short cycling.</li><li>5. Relay being influenced by loose mounting.</li><li>6. Incorrect run capacitor.</li></ol>	<ol style="list-style-type: none"><li>1. Check and replace.</li><li>2. Remount relay in correct position.</li><li>3. Determine reason and correct.</li><li>4. Determine reason (See E on previous page) and correct.</li><li>5. Remount rigidly.</li><li>6. Replace with proper capacitor.</li></ol>
<b>J</b> Conditioned space temperature too high	<ol style="list-style-type: none"><li>1. Control setting too high.</li><li>2. Expansion valve too small.</li><li>3. Cooling coils too small.</li><li>4. Inadequate air circulation.</li></ol>	<ol style="list-style-type: none"><li>1. Reset control.</li><li>2. Use larger valve.</li><li>3. Add surface area or replace.</li><li>4. Improve air movement.</li></ol>
<b>K</b> Suction line frosted or sweating	<ol style="list-style-type: none"><li>1. Expansion valve passing excess refrigerant or is oversized.</li><li>2. Expansion valve stuck open.</li><li>3. Evaporator fan not running.</li><li>4. Overcharge of refrigerant.</li></ol>	<ol style="list-style-type: none"><li>1. Adjust valve or replace with smaller valve.</li><li>2. Clean valve or foreign particles, replace if necessary.</li><li>3. Determine reason and correct.</li><li>4. Correct charge.</li></ol>
<b>L</b> Liquid line frosted or sweating	<ol style="list-style-type: none"><li>1. Restriction in filter-drier or strainer.</li><li>2. Liquid shut-off (king-valve) partially closed.</li></ol>	<ol style="list-style-type: none"><li>1. Replace part.</li><li>2. Open valve fully.</li></ol>
<b>M</b> Unit noisy	<ol style="list-style-type: none"><li>1. Loose parts or mounting.</li><li>2. Tubing rattle.</li><li>3. Bent fan blade causing vibration.</li><li>4. Fan motor bearings worn.</li></ol>	<ol style="list-style-type: none"><li>1. Find and tighten.</li><li>2. Reform to be free of contact.</li><li>3. Replace blade.</li><li>4. Replace motor.</li></ol>

When it comes to compressors...

# Think Safety!

**Be alert for sounds of arcing** (sizzling, sputtering or popping) inside the compressor. **IMMEDIATELY GET AWAY** if you hear these sounds.

**Disconnect ALL electrical power** before removing the protective thermal cover.

**Never energize the system unless:**

- the protective terminal cover is securely fastened and
- the compressor is properly connected to ground

**Never reset a breaker or replace a fuse** without first checking for a ground fault (also known as a short circuit to ground).