

Replacement Parts for Carrier and ICP Branded Equipment



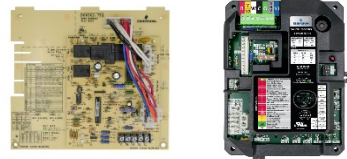
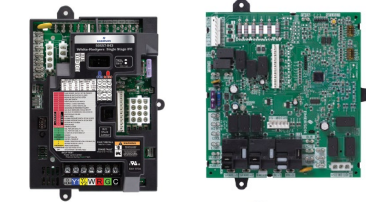
Product and Business Overview

Extensive Carrier / ICP Offerings

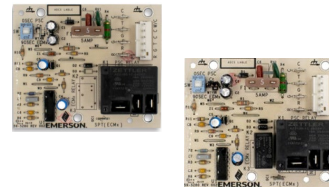
Your One-Stop Solution for:



International
Comfort
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Integrated Furnace Controls



Air Handler Controls



Defrost Control



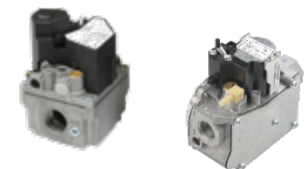
Flame Sensor & Ignitors



Furnace Fan Timer



SureSwitch Contactor



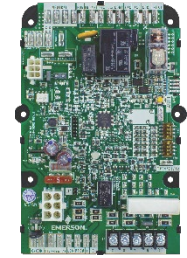
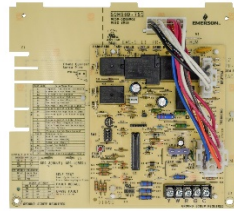
Gas Valves

Value to the Industry

- For Distributors: Stock most popular Carrier/ICP(largest market share) products without being a Carrier Distributor
- For Contractors: Convenience to buy both Carrier and ICP, at a competitive price, in one location
- For Both: Reduce SKU offering/required products on a truck with select models



Carrier/ICP Replacement Furnace Controls Overview



Model Number	50M56U-751	50M56D-751	21V51D-751	50X57-843	50F06-843
Replacement Type	Carrier/ICP	Carrier/ICP	Carrier/ICP	Universal	Universal
Stages	Single Stage	Single Stage	Two-Stage	Single Stage	Non-Integrated Electronic Fan Timer
Ignition Type	HSI	HSI	HSI	HSI	HSI-pilot, DSI
Ignition Voltage	120 VAC	120 VAC	120 VAC	120 VAC	—
Blower Motor Type	PSC	PSC	PSC, Variable Speed or ECMx	ECMx	PSC
Cross References	1172550, 1183599, 1184594, 1184783, 1186024, 1186115, 325878-751, CEPL130437-01, CEPL130437-01-1, CEPL130438-01, CEP130590-01, CEPL131004, CEPL131004-02, CEPL131004-20, CEPL131004-20-ICP, CEPL131012-01, CEPL131012-01-1, CEPL131012-02, CEPL131012-02-1, CEPL131012-20, =HK42F004, HK42FZ007, HK42FZ008, HK42FZ009, HK42FZ011, HK42FZ013, HK42FZ016, HK42FZ018, HK42FZ034, HK42FZ036, HK42FZ045, HK42FZ061, HK42FZ062	784-83-10H, 784-9-1, CESO110020, CESO11048, CESO110057-00, CESO110057-01, CESO110057-02, HH84AA016, PCB1201-2A	1172551, 1172809, 1172551, 1184408, 325879-751, CEPL130455-01, CEPL130591-01, CEPL130591-41, CEPL130948-01, CEPL130948-02, CEPL131043-01, HK42FZ005, HK42FZ010, HK42FZ015, HK42FZ017, HK42FZ019, HK42FZ020, HK42FZ028, HK42FZ040, HK42FZ041	1183386, 1184412, CEPL130934-01, CEPL130934-02, CEPL131011-01, CEPL131011-02, HK42FZ027, HK42FZ033, HK42FZ039, HK42FZ047	1008773, 1008786, 1009836, 1009837, 1009838, 1010031, 1011179, 1011543, 1011927, 1012106, 1012358, 1014460, 1084197, 1150489, 1160192, 1170063, 1138-83,200A, 1138-200, CAR20054502, HQ1008773HW, HQ1008786HW, HQ1009836HW, HQ1009837HW, HQ1009838HW, HQ1010031HW, HQ1011179HW, HQ1011543HW, HQ1011927HW, HQ1012106HW, HQ1012358HW, HQ1084197HW, HQ1170063HW

Direct Carrier/ICP Replacement Single Stage Furnace Control for PSC Blowers 50M56U-751

UPDATED DESIGN 2020

Reduces stocking SKUS

- One SKU replaces five OEM models and **33** total cross references

Advance diagnostics for servicing

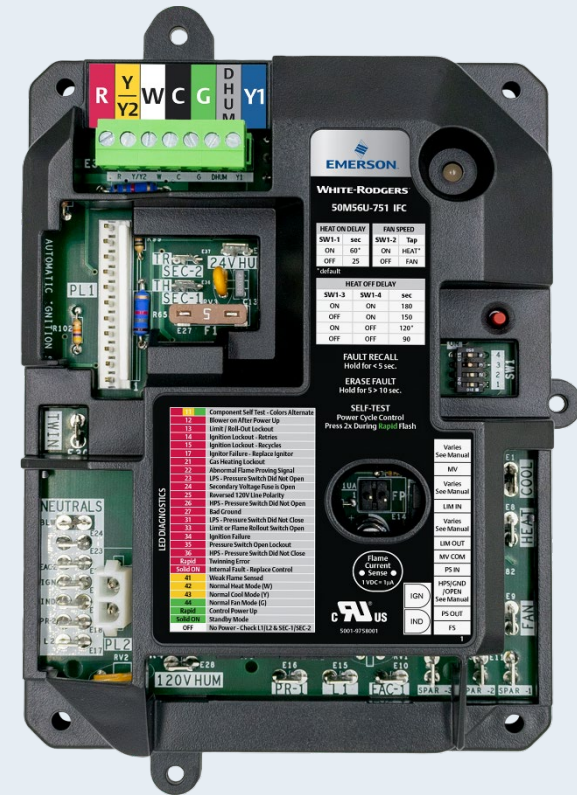
- Tri-color LED shows operational status and fault codes ● ● ●
- Simple push-button to retrieve fault codes
- Fault code label on cover

Easy Installation

- Direct OEM style mounting
- Auto detects and configures per application
- Matches OEM wiring connectors
- Plug-on thermostat wiring connector

Flame current test pins

- Easy on-board checkout



*Services Carrier / ICP equipment brands with
PSC Blower Motor and 120V HSI.*

Competitive Comparison 50M56U-751

- Replace More Parts with One SKU

	White-Rodgers	Carrier/ICP	ICM282A
Cross Reference Coverage	1 Control for 33 Cross Refs	5 Controls for 33 Cross Refs	1 Control for 7 Cross Refs
OEM Mounting	✓	✓	✓
Tri-Color LED	✓	X	X
Fault Recall & Clearing	Simple Push Button	Jumper Twin & C Terminals	1 Fault Only
Robust FR4 PC Material	✓	X	✓
Component Self Test Mode	✓	✓	✓
Flame Current Test Pins	✓	X	X
Constant Fan Speed & Dehum Mode	Included	1 Control Only	X
No Harness for most Applications	✓	✓	X



Direct Carrier/ICP Replacement Single Stage Furnace Control 50M56D-751

UPGRADES OLDER "EDGE CARD" SYSTEMS TO MODERN IGNITION ELECTRONICS

Easy Installation & Service

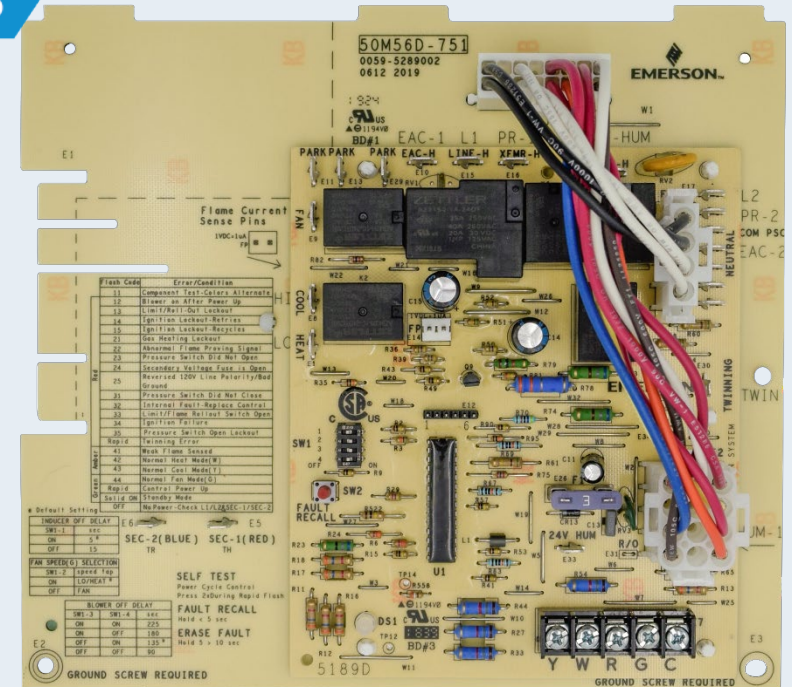
- Direct OEM style mounting with pre-wired ready-to-install control
- Status and Fault codes, dipswitch selections silk screened on control
- Flame current test pins for easy on-board checkout

Advance diagnostics for servicing

- Tri-color LED shows operational status and fault codes ● ● ●
- Simple push-button to retrieve fault codes

Flexibility

- Extra "Fan Only" blower speed tap
- 24V & 120V humidifier options



Services Carrier equipment brands with PSC Blower Motor and 120V HSI.

Direct Carrier/ICP Replacement Two-Stage Furnace Control 21V51D-751 Overview

**FIRST OF ITS KIND TO REPLACE PSC,
VARIABLE SPEED AND ECMX APPLICATIONS**

Reduces stocking SKUS

- One SKU replaces several OEM and competitive models

Advance diagnostics for servicing

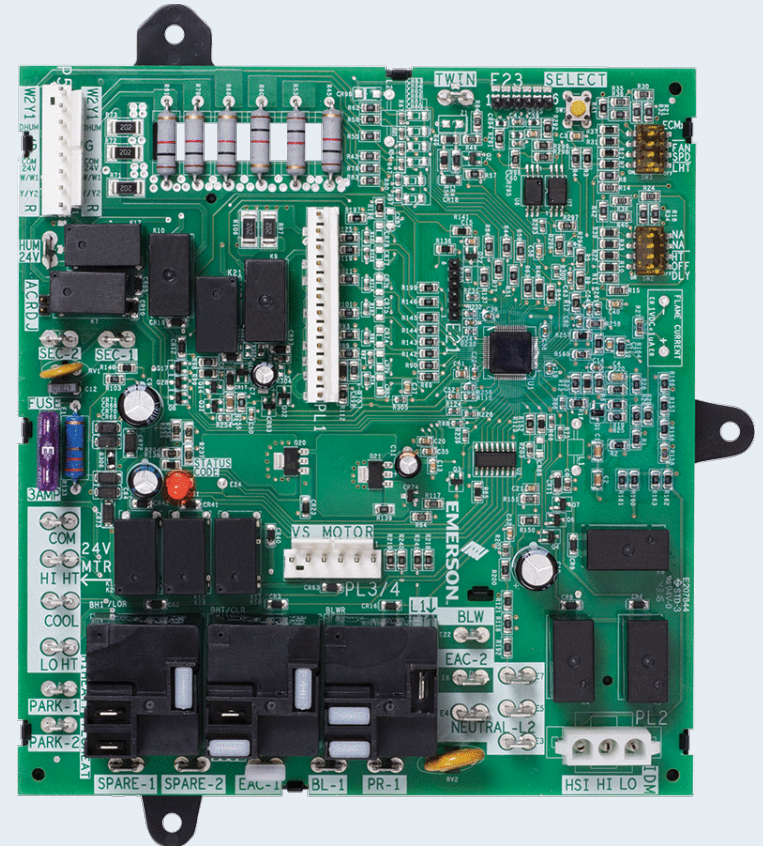
- Tri-color LED shows operational status and fault codes ● ● ●
- Simple push-button to retrieve fault codes

Premium home comfort

- Continuous low-speed fan option for better temperature balance and full-time air cleaning
- Easy dipswitch setup

Flame current test pads

- Easy on-board checkout



Two-Stage 21V51D-751 replaces Carrier / ICP equipment brands Blower Motor Types-PSC, Variable Speed and ECMx with 120V ignition.

Competitive Comparison

Replace More Parts with One SKU



Feature	Carrier / ICP	ICM 2807	WR 21V51D-751
Brands Serviced	Carrier & ICP	Carrier Only	Carrier & ICP
Capacity/ Cross Reference	4 SKU for 20 Cross References	1 SKU for 6 Cross References	1 SKU for 20 Cross References
Blower Motors Supported	PSC, VS, ECMx	PSC, VS	PSC, VS, ECMx
PCB Material	Cheaper CEM-1	Robust FR4	Robust FR4
Flame Current Test Pads	✗	✗	Yes
LED	Single Color	Single Color	Tri-Color
Status Codes (Cool & Heat Stages, Fan)	✗	✗	8 Codes
Retrieve & Clear Faults	Unplug Limit Wire	Easy-Push Button	Easy-Push Button
Control Field Self-Test	Harder-Wire Jumper	Harder-Wire Jumper	Easy-Push Button
Fan Only Speed Setup	By Thermostat Often Wrong	Jumper	Easy-Dipswitch

Universal Replacement Single Stage Furnace Control for ECMx Blowers 50X57-843

THE INDUSTRY'S ONLY UNIVERSAL CONTROL FOR ECMX CONSTANT TORQUE BLOWERS

Reduces stocking SKUs

- One SKU services Carrier/ICP, other brands

Advance diagnostics for servicing

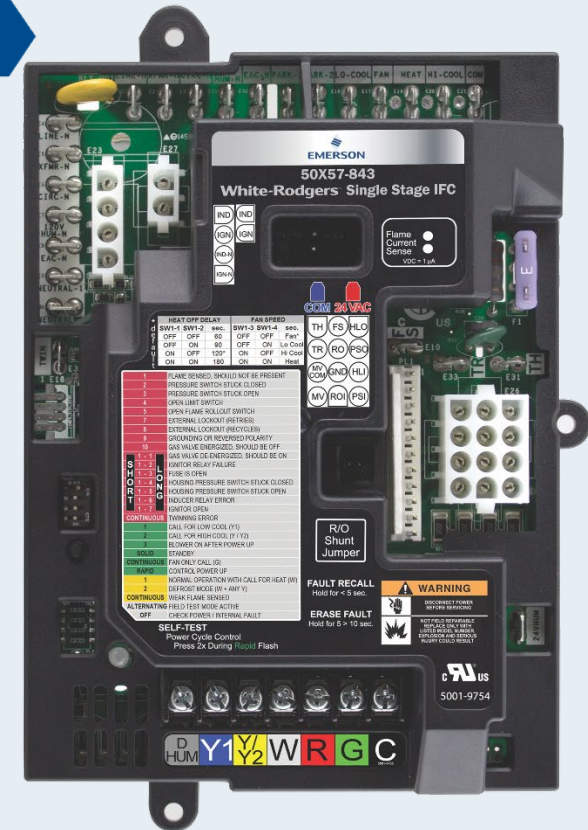
- Tri-color LED shows status & fault codes ● ● ●
- Simple push-button to retrieve fault codes
- Fault code label on cover
- Flame current test pins for on-board checkout

Easy Installation on Carrier Equipment

- Direct OEM style mounting
- Matches OEM wiring connectors
- No adapter harnesses on most applications

Flexibility

- Supports Two-Stage outdoor, dehumidification
- 24V & 120V humidifier options



Services Carrier/ ICP equipment brands with ECMx Blower Motor and 120V HSI.

Universal Furnace Electronic Fan Timer 50F06-843

- Reduces Stocking SKUs
 - More cross references than any other competitor.
- Advance Diagnostics
 - Has the only control with a tri-color LED that displays system status and fault codes (circles!)
 - Exclusive fault recall button saves the last five fault codes for proper system diagnosis
- Easy Installation
 - Two-style mounting design works for two- or four-hole configurations
 - Harnesses with terminal flags for easy wiring
 - Terminal ID's cover multiple board versions
 - Transformer connections offer 1/4" and 3/16" terminals



Universal Fan Timer Competitive Comparison

Replaces over 150 OEM and competitive part numbers

Works with SmartValve™ systems and other non-integrated modules*

* A registered trademark of Honeywell Inc.

FEATURE	White-Rodgers 50F06-843	Brand X ST9120B,U
Board Cross References	150+	48
Standard Mounting Options	2	1
24v Transformer ¼" Spade Extension Wires	Included	X
Terminal label ID's cover multiple board versions	✓	X
2 Wiring Harnesses have ID flags	✓	X
Heating & Cooling fan can be operated on single speed (ACC output)	✓	X
Fan Only (G) can be set to Heating or Cooling speed	✓	X
¼" & ⅜" 24v Transformer Connections	✓	X
Unused Motor / Park Terminals	3	2
Tri-color LED display	Green – Amber – Red	Green Only
Tri-color LED displays Heat/Cool/Fan status	✓	X
Fault code label	✓	X
Fault recall & clearing	Simple Push Button	None



Carrier/ICP Replacement Gas Valves Overview



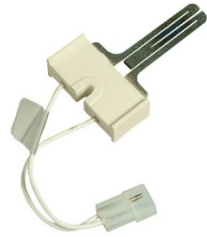
Model Number	36J24-614	36J55-614	36C94-303
Application	HSI/DSI	HSI/DSI	Cycle Pilot
Stages	Single Stage	Two-Stage	Single Stage
Opening Type	Slow Opening	Slow Opening	Fast Opening
Pipe Size	1/2" x 1/2"	1/2" x 1/2"	3/4" x 3/4"
Flow Direction	90° Bottom Outlet	90° Bottom Outlet	Straight Thru
Cross References	EF32CW206, EF32CW210	EF33CW180, EF33CW192	1162470, EF32CB197A, EF32CB198A, EF32CW183, EF32CW183A, EF32CW233, EF32W184,

Carrier/ICP Replacement Gas Valves Overview



Model Number	789A-751A1	789A-751KT1	789A-751KT2
Type	Nitride Replacement	Carbide Upgrade	Carbide Upgrade
Voltage	120 VAC	120 VAC	120 VAC
Lead Length	9.25"	9.25"	9.25"
Cross References	1176919, 50PK74, LH33ZG001	331930-751, LH33ZS001, LH33ZS001A, LH33ZS002, LH33ZS002A, LH33ZS003, LH33ZS003A, LH33ZS004 (33-1/3" furnaces)	332505-751, LH33ZS001, LH33ZS001A, LH33ZS002, LH33ZS002A, LH33ZS003, LH33ZS003A, LH33ZS004 (40" furnaces)
Features	<ul style="list-style-type: none"> No Bracket or Extension included Crosses over to OEM ICP part #'s 	<ul style="list-style-type: none"> Bracket & Nitride Adapter included For Carrier/ICP 33-1/3" Tall Furnaces 	<ul style="list-style-type: none"> Bracket & Nitride Adapter included For Carrier/ICP 40" Tall Furnaces

Carrier / ICP Replacement Carbide Ignitor & Flame Sensor

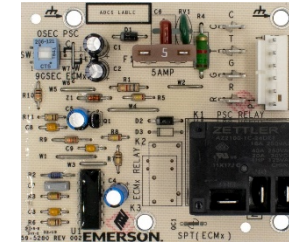
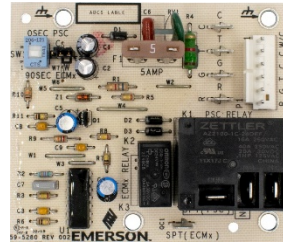


Model Number	767A-370	790-751A1
Type	Carbide	Carbide Upgrade
Voltage	120 VAC HSI	Rod withstands 2200° F
Lead Length/Bend	5.25"	7' bend
Cross References	1380654, 1380672, 1380680, LH33ZS001, LH33ZS001A, LH33ZS002, LH33ZS002A, LH33ZS003, LH33ZS003A, LH33ZS004	331930-751, LH33ZS001, LH33ZS001A, LH33ZS002, LH33ZS002A, LH33ZS003, LH33ZS003A, LH33ZS004 (33-1/3" furnaces)
Features	<ul style="list-style-type: none"> OEM approved material OEM plug and mounting 	<ul style="list-style-type: none"> OEM approved material OEM plug and mounting



Carrier/ICP Air Handler Controls

Direct Replacement for PSC & PSC/ECMx Blowers

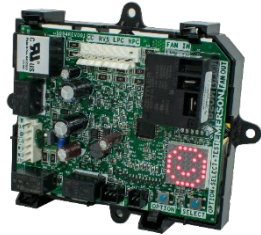


Model Number	48M55-751	48P55-751
Stages	Single Stage	Single Stage
Blower Motor Type	PSC or ECMx	PSC
Cross References	1005-83-166A, 1172975, 1171734, CEPL130541-01, CEPL130658-01-1, CES0130003-01, HK61EA002, HK61EA006, HK61EA010	1005-83-166A, 1171734, CEPL130541-01, CES013003-01, HK61EA002, HK61EA006
Features	<ul style="list-style-type: none"> Replaces 9 controls Connect with either inline connector or spade terminals 5 Amp fuse provides low voltage protection. Jumper pin selects ECMx or PSC Dipswitch selects blower off delay timing Metal eyelet mounting identical to OEM for easy install. One SKU crosses same 6 PSC as 48P55-751 + 3 ECMx controls <p>Universal PSC + ECMx AH Control</p>	<ul style="list-style-type: none"> Replaces 6 controls Connect with either inline connector or spade terminals 5 Amp fuse provides low voltage protection Dipswitch selects blower off delay timing Metal eyelet mounting identical to OEM for easy install Built to be economically competitive in the market <p>PSC Only Air Handler Control</p>



Universal Heat Pump Defrost Control

47D01U-843



The 47D01U-843 Universal Heat Pump Defrost Control is the first microprocessor-based universal replacement defrost controller intended for single stage heat pump systems with PSC fan motors.

Supports two defrost modes:

- Demand Defrost: initiates when a set difference between the outside coil and air temperature is reached
- Time/Temp Defrost: based on a field set temperature and run time

Supports both O/B Reversing Valve options (Heating/Cooling)

Model Number	47D01U-843
Stages	Single Stage
Fan Motor Type	PSC
Cross References	1050-83-7B, 1084-83-100A, 1085843, 1087515, 1160717, 1171803, 1173425, 1173696, 1177927, 1185790, 150-83-6A, 621-500, 621-505, 621-509, 621-83-550D, 621-83-550H, 621-83-550L, 621-xxx, CEBD410104-02, CEBD430524-22, CEBD430524-24A, CEPL110104-02, CEPL130433-01, CEPL130433-02, CEPL130524-21, CEPL130524-22, CEPL130547-01, CES0110063-00, CES0110063-01, CES0110063-02, CES0110063-02A, CES0130024-00, CES0130024-01, CES0130049-00, CES0130076, DDL-30011-ICP, DTL-300000-ICP, HK25SZ359A, HK32EA001, HK32EA003, HK32EA007, HK32EA008, HK32FA003, HK32FA006, HQ1052757EX, HQ1086070, HQ108671RC, HQ1087953RC, HQ1987953

Top Line Features and Benefits

This award-winning heat pump control replaces hundreds of OEM defrost controls while offering premium features that benefit both the contractor and the end-user.



Increase Efficiency

Feature	Function
Demand Defrost Option	Reduces energy usage compared to Time/Temp cycles
AUX Heat Lockout	Limits use above set temperature (No accessory kit needed)*
Low Temp Compressor Lockout	Low Temp Compressor Lockout Limits heat pump usage at inefficient temperatures

Easy to Install / Service

Feature	Function
Versatile Mounting Tray	One, universal part for all systems
Pre-Configured, Adjustable Settings	Select from OEM pre-sets or customize
Test Mode	Verify operation at any temperature
8x8 Matrix LED Display	Immediate, easy visualization of system status and faults
O/B Reversing Valve	Supports energizing in both heating and cooling

* Value add for CA Title 24, by locking out AUX heat until below 40°

US Patents 9,037,303 • 9,412,328
9,830,887 • 9,064,345

47D01U-843 Competitive Comparison

FEATURE	White-Rodgers 47D01U-843	Brand X DB7110U
Board Cross References	430+	260
Readable Display	8x8 Matrix	4x7 Segmented LED
Multi-position Display can be rotated in settings	✓	X
Display Shows Status & Fault Codes, has Fault recall	✓	✓
Set-up / Fault Code Label for quick reference	✓	X
Select from OEM pre-sets to match factory	✓	X
Menu configurable for Demand or Timed Defrost	✓	✓ (Demand-enabled)
Menu configurable for Pressure Switch enable/disable	✓	X (non-supplied jumpers required)
Auxiliary Heat & Compressor Lockout can be used in Demand & Timed Defrost	✓	X (demand only)
Wiring flags supplied for wiring ID installation ease	✓	X
Reversing Valve delay for quieter Defrost	✓	✓
Menu Config "O" or "B" Reversing Valve	✓	✓
Air and coil sensors	✓	✓
Strain-proof sensor connectors	✓	X

Universal SureSwitch Contactor Upgrade 49P11-843



Increases system reliability and homeowner peace of mind.

- 5x Contactor life
- Sealed to keep out insects and debris
- Microprocessor control nearly eliminates contact welding and pitting
- Compressor protected from brownouts and short cycling

The SureSwitch Contactor Upgrade 49P11-843 includes three key features in one convenient component.

- Brownout
- Short Cycle
- Random Start Delay

Model Number	49P11-843
Input voltage	24 VAC, 50/60 Hz
Application	Up to 5 ton/40A, 1, 1.5 or 2 pole
Contacts	1 switched, 1 shunt
Cross References	1050699, 1050839, 1059574, 1091261, 1149650, 1150015, 1172472, 3100-15Q228, HN51CB024, HN51DC024, HN51JD024, HN51JD026, HN51KB024, HN51KC024, HN52KC024, HN52KD020, HN52KD025, HN52TC024, HN52TC040, P282-0311, P282-0321



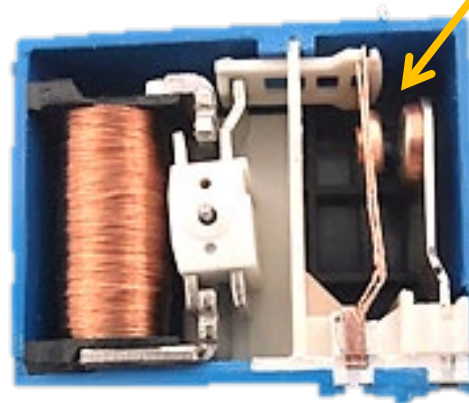
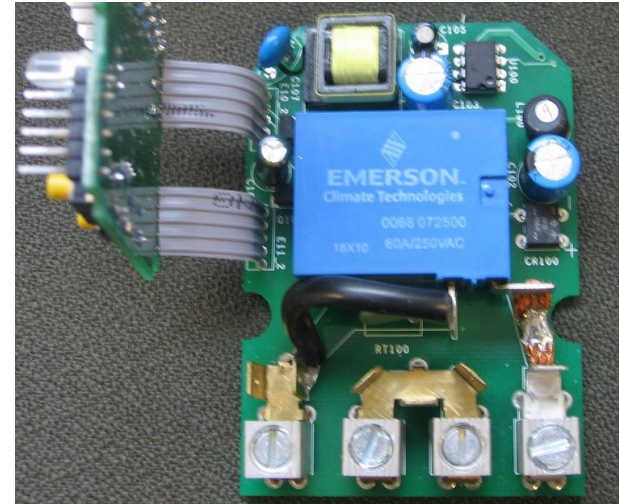
SureSwitch

Why is it Better?

Increases system reliability and homeowner peace of mind.

- 5x Contactor life
- Sealed to keep out insects and debris
- Microprocessor control nearly eliminates contact welding and pitting
- Compressor protected from brownouts and short cycling
- 5 Year warranty

Brownouts destroy compressor and fan motor windings



SureSwitch optical sensor can “see” arcing and adjust contact opening to the no arc zone of AC Sine Wave.