

Power Protection Device - Surge Protective Device with Undervoltage Protection, 3-Mode, 120-240 VAC 1Ph, Type 2

Item CD1-024R



PRODUCT DESCRIPTION

The COMPRESSOR DEFENDER® surge protector is the only all-in-one undervoltage and surge power protection device on the HVAC Market, providing protection for central A/C and heat pump condensing units and their associated motors, controls and components—both electronic and mechanical. It can be installed inside the condensing unit or externally on the outdoor A/C disconnect. Autosense voltage technology protects at any voltage from 120-240 VAC, making it an ideal solution for residential or light commercial installations. Trusted, state-of-the-art TPMOV® (Thermally Protected Metal Oxide Varistor) surge protection technology eliminates the potentially hazardous failure modes that are associated with standard MOV technology. The device is also designed with integrated 3-minute short cycle time delay protection.

FEATURES

- TPMOV® surge protection technology
- 3-year, \$7500 connected equipment warranty
- Auto-sense voltage technology
- Quick-reacting, 5-line cycle undervoltage response time
- 120/208-240 VAC universal input
- 24 VAC/VDC, 2 A control thermostat output
- 3-minute short cycle time delay
- Two LED indicators provide real time status for quick and easy troubleshooting and functional visibility for end users
- Surge protection complies with the latest UL 1449, 4th Edition, surge protective device requirements
- Undervoltage protection complies with AHRI standard 110-2016 Range B Protective Device

APPLICATIONS

- Distribution Panel
- Service Entrance
- HVAC Equipment Protection

TECHNICAL DATA

General

Model Number	CD1-024R
Description	Surge Protective Device with Undervoltage Protection, 3-Mode, 120-240 VAC 1Ph, Type 2
UPC Code	078275142923
Brand	Intermatic
Country of Origin (Intermatic)	MEXICO
Warranty Period	3-Year limited
Connected Equipment Warranty Period	3-Year
Connected Equipment Warranty Coverage (USD)	\$7,500

Electrical Specifications

Modes of Protection	3 (L1-N, L2-N, L1-L2)
Short Circuit Current Rating	100 kA
Nominal Discharge Current	20 kA
Surge Protection Technology	TPMOV®
Maximum Continuous Operating Voltage (L-L)	300
Maximum Continuous Operating Voltage (L-N/G)	150

Voltage Protection Rating (L-L)	1200
Voltage Protection Rating (L-N/G)	700
Power Disruption Response Time	3 line cycles*
Thermostat Relay	Normally Closed Relay, 24 VAC

Control Specifications

Undervoltage Pickup [120 VAC] (VAC)	104
Undervoltage Pickup [208 VAC] (VAC)	180
Undervoltage Pickup [240 VAC] (VAC)	208
Undervoltage Response Time (cycles)	5 line cycles*
Undervoltage LED Indicator	Red
Short Cycle LED Indicator	Green
Short Cycle Delay	3 min
Surge Protection Type	2
Surge Protection LED Indicator	Green

Mechanical Specifications

Enclosure Type	Outdoor type 3
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Dimensions

Product Dimensions (H x W x D) in	6.406 x 1.593 x 4 in
Wire Size Max	#10 AWG, Tinned Copper

Material Specifications

Color	Gray
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Load Ratings

Control Output Current Rating	2 A @ 24 VAC, isolated NC contact
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Packaging

Shipping Weight (lbs)	1.198
Unit Carton Dimensions (H x W x L) in	8 x 3 x 5 in

Environmental Specifications

Temperature (operation)	-40 °F to 158 °F / (-40 °C to 70 °C)
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Standards and Certifications

Undervoltage Protection Compliance	AHRI
Surge Protection Compliance	ANSI/UL1449 4th Edition
UL Certification	cULus
Other Certifications and Compatibilities	HVACR; Green Energy
California Proposition 65	DEHP
RoHS Certification	N/A