ASCO®

200 SERIES

Model 275
(Islatrol® IC+/LRIC+ Series)
with The Active Tracking Filter®

Surge Protective Device

Technical Documentation

The ***ASCO Model 275*** Series connected high-frequency noise filter with transient protection. Offers the flexibility of either receptacle/line cord connection or hard-wired connection to critical loads (up to 30 Amperes). Applications include industrial or office equipment, computers placed in harsh environments.

Key Specs

- **Voltage:** 120 - 240 Volt
- **Current:** 2.5A, 5A, 7.5A, 15A, 30A
- **Connection:** Terminal
- **Mounting:** Flange

**See Ordering Information for model number selection*

Features

- Typically reduces normal mode transients to +/-2 volts
- LED power indication
- UL 1283, CSA recognized
- Surge current capacity — 6,500 Amps per mode
- Transient protection in all modes: line to neutral, line to ground, and neutral to ground
- 5 year warranty

General Technical Specifications

Maximum Continuous Operating Voltage (MCOV)	120 Volt Units = 150 VRMS 240 Volt Units = 275 VRMS
Line Frequency	47 - 63 Hz
Response Time	Normal Mode - < 0.5 ns Common Mode - < 5 ns
Operating Temperature	-40°C to +45°C at Full Load Derate Linearly to 60% at +70ºC
Operating Humidity	0% to 95%
Packaging	High Impact Plastic Case Vacuum Impregnated Magnetics Epoxy Encapsulated

Performance Technical Specifications

Typical Category A Ringwave (6 kV, 200 A, 100 kHz)			Typical Category B Ringwave (6 kV, 500 A, 100 kHz)		
Model	Normal	Common	Model	Normal	Common
275120NF002AN3N0 (IC+102)	1.0	302	275120NF002AN3N0 (IC+102)	178	302
275120NF005AN3N0 (IC+105) 275120NF005ALCN0 (LRIC+105)	0.7 0.8	292 307	275120NF005AN3N0 (IC+105) 275120NF005ALCN0 (LRIC+105)	162 191	291 300
275120NF007AN3N0 (IC+107) 275120NF007ALCN0 (LRIC+107)	0.7 0.7	302 293	275120NF007AN3N0 (IC+107) 275120NF007ALCN0 (LRIC+107)	173 190	300 298
275120NF015AN3N0 (IC+115) 275120NF015ALCN0 (LRIC+115)	0.7 0.7	304 306	275120NF015AN3N0 (IC+115) 275120NF015ALCN0 (LRIC+115)	153 149	307 309
275120NF030AN3N0 (IC+130) 275240LF002AN3N0 (IC+202)	0.5 1.1	306 536	275120NF030AN3N0 (IC+130) 275240LF002AN3N0 (IC+202)	241 302	299 532
275240LF005AN3N0 (IC+205) 275240LF007AN3N0 (IC+207)	1.5 0.8	628 616	275240LF005AN3N0 (IC+205) 275240LF007AN3N0 (IC+207)	378 336	594 596
275240LF015AN3N0 (IC+215) 275240LF030AN3N0 (IC+230)	0.6 0.9	572 566	275240LF015AN3N0 (IC+215) 275240LF030AN3N0 (IC+230)	272 342	548 578

Note: All measurements in volts. IEEE test results with no AC applied. Normal mode—L1-N or L1-L2; Common mode—L-G, N-G or L1-G, L2-G.

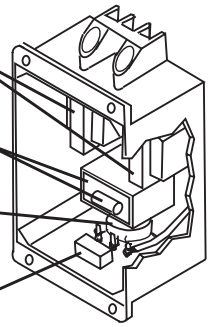
Peak Surge Current Capability (8 x 20 µs)	L - N: 6,500 Amps L - G: 6,500 Amps N - G: 6,500 Amps
Load Surge Current Rating	10 mSec: 5 x Nominal 1 sec: 3 x Nominal 10 sec: 2 x Nominal
Frequency Response (Forward-Reverse)	Normal Mode: 100 kHz to 50 MHz - 90 dB Min Common Mode: 5 MHz to 50 MHz - 60 dB Min

⚠ DANGER!

Only qualified personnel should install or service this system. Electrical safety pre-cautions must be followed when installing or servicing this equipment. To prevent risk of electrical shock, turn off and lock out all power sources to the unit before making electrical connections or servicing.

Seulement le personnel qualifié doit installer ou maintenir ce systéme. Des précautions de sécurité en électricité doivent être suivis lors de l'installation ou de la maintenance de cet equipement. Pour eviter tout risque de choc électrique, débranchez et verouiller toutes les sources d'alimentation de cet equipement avant de.

System Design



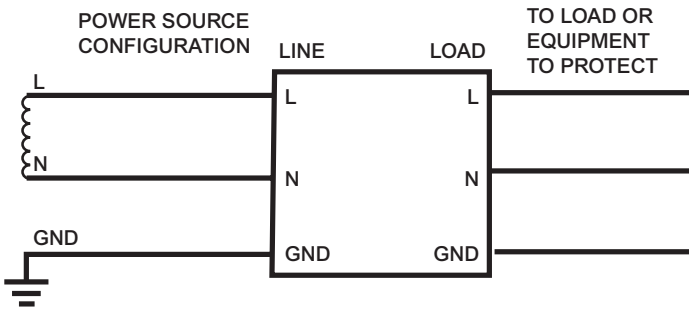
Series Blocking Inductors
voltage blocking current smoothing inductors

Shunt Absorbing Components
sine wave tracking circuitry

MOV Transient Protection
high-energy transient protection line to neutral, line to ground, neutral to ground

Pulse Capacitor
high-frequency noise absorption

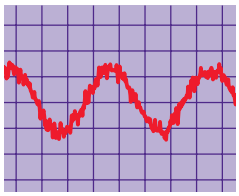
Connection Diagram



Using The Active Tracking Filter® To Control Low- And High-Voltage Transients

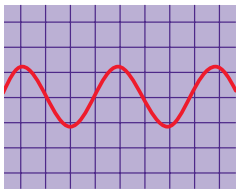
Low-Voltage Transients

Before



Lower-voltage transients (high-frequency noise) appearing on 120V, 60 Hz sine wave.

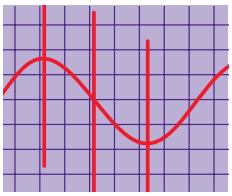
After



The Active Tracking Filter® eliminates potentially damaging noise, providing clean and reliable AC power.

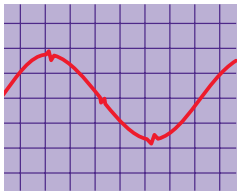
High-Voltage Transients

Before



High-voltage spikes appearing on 120V, 60 Hz sine wave.

After



The Active Tracking Filter® virtually eliminates high-voltage transients.

Dimensions & Weight

Model	Weight	Dimensions
275120NF002AN3N0	1.0 lb	4.00" x 2.88" x 1.81"
275120NF005AN3N0	1.3 lb	
275120NF007AN3N0	2.0 lb	4.75" x 4.75" x 2.35"
275120NF015AN3N0	3.5 lb	6.25" x 4.75" x 2.35"
275120NF030AN3N0	6.0 lb	7.75" x 4.75" x 2.35"
275120NF005ALCN0	2.0 lb	4.50" x 4.50" x 2.38"
275120NF007ALCN0	2.3 lb	6.00" x 4.50" x 2.38"
275120NF015ALCN0	4.0 lb	7.50" x 4.50" x 2.38"
275240LF002AN3N0	1.3 lb	4.00" x 2.88" x 1.81"
275240LF005AN3N0	2.0 lb	4.75" x 4.75" x 2.35"
275240LF007AN3N0	3.3 lb	6.25" x 4.75" x 2.35"
275240LF015AN3N0	5.8 lb	7.75" x 4.75" x 2.35"
275240LF030AN3N0	6.0 lb	
275240LF005AN3G0	3.0 lb	5.75" x 4.75" x 3.125"

Ordering Information

MODEL *Former Model Name*	VOLTAGE	CONTINUOUS CURRENT
Base Unit		
275120NF002AN3N0 *Islatrol® IC+102*	120V	2.5 Amps
275120NF005AN3N0 *Islatrol® IC+105*	120V	5 Amps
275120NF007AN3N0 *Islatrol® IC+107*	120V	7.5 Amps
275120NF015AN3N0 *Islatrol® IC+115*	120V	15 Amps
275120NF030AN3N0 *Islatrol® IC+130*	120V	30 Amps
275240LF002AN3N0 *Islatrol® IC+202*	240V	2.5 Amps
275240LF005AN3N0 *Islatrol® IC+205*	240V	5 Amps
275240LF007AN3N0 *Islatrol® IC+207*	240V	7.5 Amps
275240LF015AN3N0 *Islatrol® IC+215*	240V	15 Amps
275240LF030AN3N0 *Islatrol® IC+230*	240V	30 Amps
275240LF005AN3G0 *Islatrol® IC+405*	480V	5 Amps
Unit with 5-15P plug and a 5-15R receptacle		
275120NF005ALCN0 *Islatrol® LRIC+105*	120V	5 Amps
275120NF007ALCN0 *Islatrol® LRIC+107*	120V	7.5 Amps
275120NF015ALCN0 *Islatrol® LRIC+115*	120V	15 Amps

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