









Filtering/Line Conditioning — Product Selection Guide

- Find your application in the left column.
- Then look across for the appropriate product.

APPLICATIONS	PRODUCTS			
	Islatrol® IE Series	Islatrol® IC+/LRIC+ Series	Islatrol® SP-6TVN Series	Islatrol® RM Series
Programmable Logic Controllers				
Control Panels (AC Power)				
Various OEM Equipment				
Home Entertainment/Office				
AC Rack Equipment				



Islatrol® IE Series Active Tracking Filter®

Series connected DIN/flange mount high-frequency noise filter/surge suppressor. Ideal applications include critical industrial loads drawing up to 20 Amps of continuous current. Typical applications include any microprocessor-based products, including industrial PLCs, OEM applications, and motion control systems.

Features

- Multi-staged design, combining a unique hybrid clamping network with the active tracking technology of the Islatrol® family
- Surge current capacity – 45,000 Amps
- Transient protection in all modes: line to neutral, line to ground, and neutral to ground
- LED status indication and form C contact for remote indication
- DIN mountable enclosure
- UL 1449, 1283, CUL recognized, CE
- 10 year warranty

Performance Technical Specifications

UL 1449 Surge Voltage Rating	
120V Normal Mode	330 Volts
120V Common Mode	400 Volts
240V Normal Mode	600 Volts
240V Common Mode	800 Volts
Peak Surge Current Capability (8 x 20 µs)	
Line to Neutral	15,000 Amps
Line to Ground	15,000 Amps
Neutral to Ground	15,000 Amps
Total	45,000 Amps
Frequency Response (Forward-Reverse)	
Normal Mode	100 kHz to 50 MHz - 90 dB Min
Common Mode	5 MHz to 50 MHz - 60 dB Min
Typical Category A Ringwave (6 kV, 200 A, 100 kHz)	
Normal Mode/Common Mode	
3 Amp	1 V/300 V
5 Amp	0.7 V/292 V
10 Amp	0.7 V/300 V
20 Amp	0.7 V/300 V
Typical Category B Ringwave (6 kV, 500 A, 100 kHz)	
Normal Mode/Common Mode	
3 Amp	178 V/300 V
5 Amp	162 V/291 V
10 Amp	153 V/300 V
20 Amp	200 V/300 V

General Technical Specifications

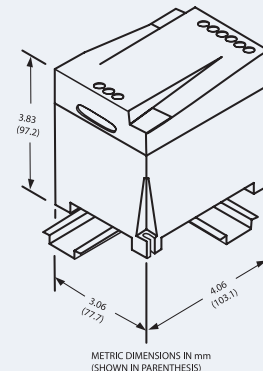
MCOV	
120 Volt	150 VRMS
240 Volt	275 VRMS
Line Frequency	47 - 63 Hz
Connection	Terminal
Mounting Type	DIN/Flange
Weight	< 3 lbs
Response Time	
Normal Mode	< 0.5 ns
Common Mode	< 5 ns
Operating Temperature	-40°C to +45°C
	Derate Linearly to 60% at +70°C
Operating Humidity	0% to 95%

Ordering Information

Voltage*	Continuous Current	Model
120 V	3 Amps	IE-103
120 V	5 Amps	IE-105
120 V	10 Amps	IE-110
120 V	20 Amps	IE-120
Voltage*	Continuous Current	Model
240 V	3 Amps	IE-203
240 V	5 Amps	IE-205
240 V	10 Amps	IE-210
240 V	20 Amps	IE-220

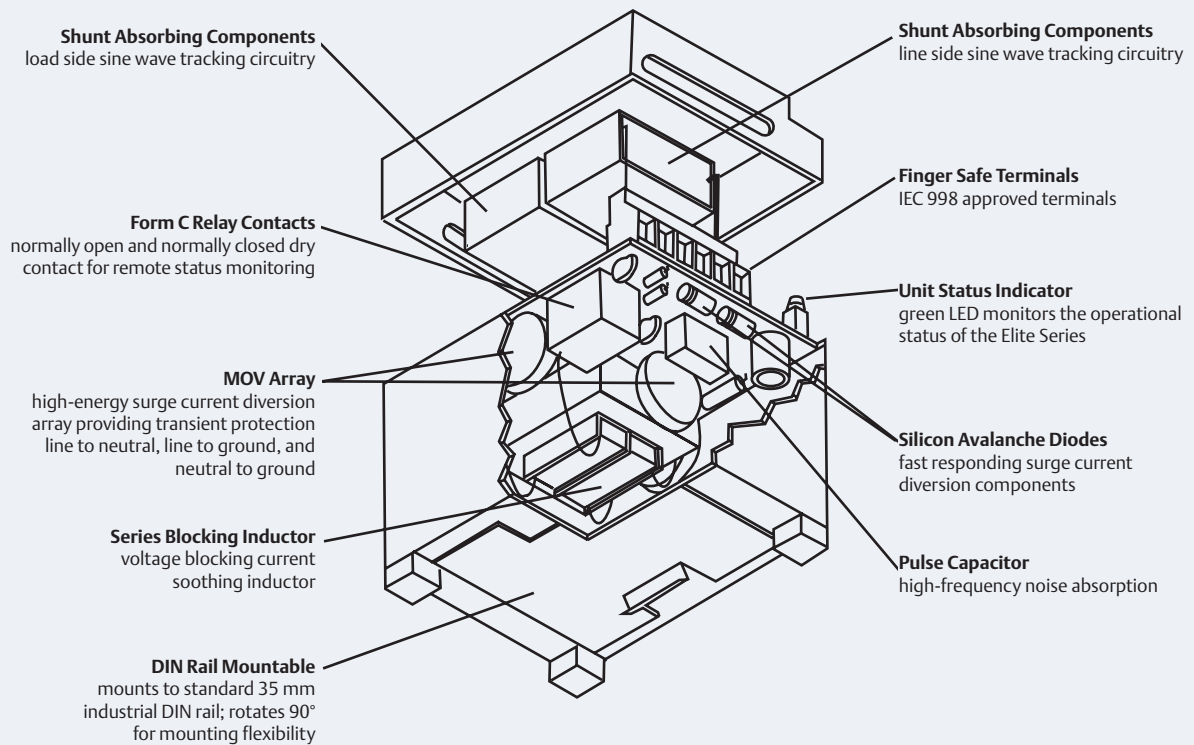
* All voltage configurations are single phase - 2 wire + gnd.

Dimensional Diagram

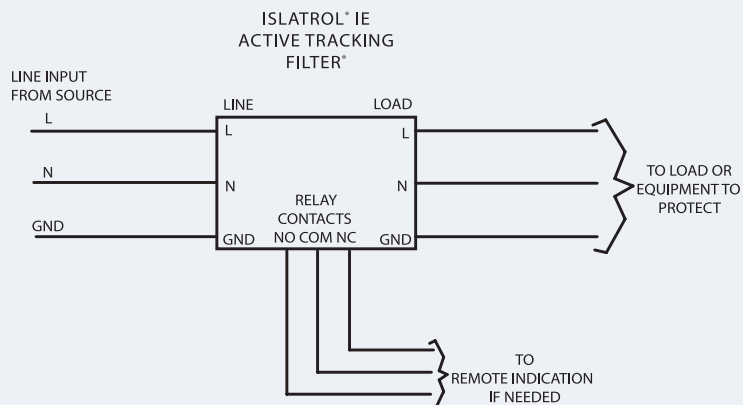


Islatrol® IE Series Active Tracking Filter®

System Design



Connection Diagram





Islatrol® IC+/LRIC+ Series

Active Tracking Filter®

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.

Features

- Typically reduces normal mode transients to +/-2 volts
- Surge current capacity – 45,000 Amps
- Transient protection in all modes: line to neutral, line to ground, and neutral to ground
- LED power indication
- UL 1283, CSA recognized
- 10 year warranty



MCOV

120 Volt	150 VRMS
240 Volt	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 +70°C

Operating Humidity 0% to 95%

Peak Surge Current Capability (8 x 20 μs)

Line to Neutral	15,000 Amps
Line to Ground	15,000 Amps
Neutral to Ground	15,000 Amps

Load Surge Current Rating

10 mSec	5 x Nominal
1 sec	3 x Nominal
10 sec	2 x Nominal

Packaging

- High Impact Plastic Case
- Vacuum Impregnated Magnetics
- Epoxy Encapsulated

Frequency Response (Forward-Reverse)

Normal Mode	100 kHz to 50 MHz - 90 dB Min
Common Mode	5 MHz to 50 MHz - 60 dB Min

Typical Category A Ringwave (6 kV, 200 A, 100 kHz)

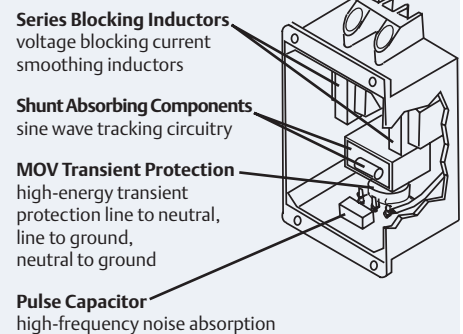
Model	Normal	Common
IC+102 / LRIC+102	1.0 / 0.9	302 / 287
IC+105 / LRIC+105	0.7 / 0.8	292 / 307
IC+107 / LRIC+107	0.7 / 0.7	302 / 293
IC+115 / LRIC+115	0.7 / 0.7	304 / 306
IC+130 / IC+202	0.5 / 1.1	306 / 536
IC+205 / IC+207	1.5 / 0.8	628 / 616
IC+215 / IC+230	0.6 / 0.9	572 / 566

Typical Category B Ringwave (6 kV, 500 A, 100 kHz)

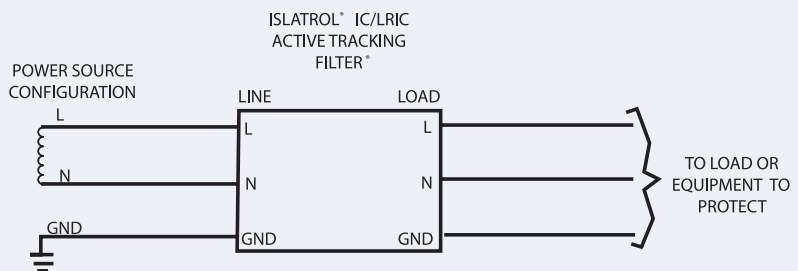
Model	Normal	Common
IC+102 / LRIC+102	178 / 188	302 / 285
IC+105 / LRIC+105	162 / 191	291 / 300
IC+107 / LRIC+107	173 / 190	300 / 298
IC+115 / LRIC+115	153 / 149	307 / 309
IC+130 / IC+202	241 / 302	299 / 532
IC+205 / IC+207	378 / 336	594 / 596
IC+215 / IC+230	272 / 342	548 / 578

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.

System Design



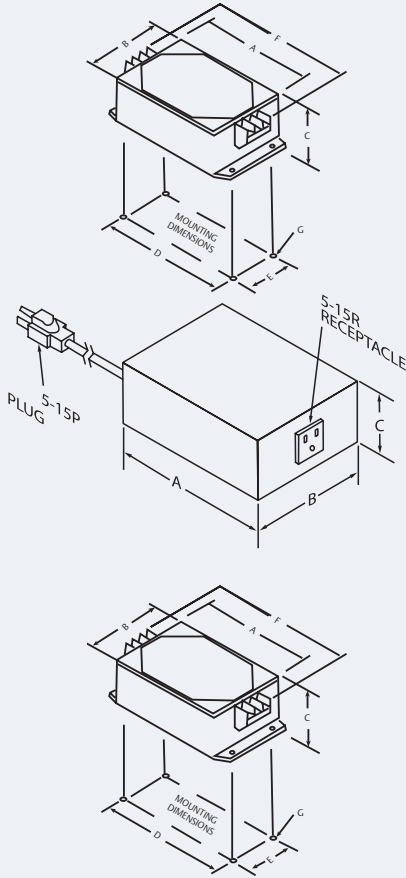
Connection Diagram



Islatrol® IC+/LRIC+ Series

Active Tracking Filter®

Dimensional Diagram



Ordering Information

120 VAC Models with barrier strip at input and output/with wire leads at input and output (WL)

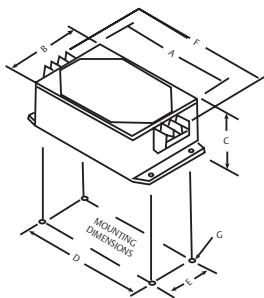
Model	Rated Output (Amps)	Case Dimensions (In) A x B x C	Mounting Flange Dimensions (In) D x E x F x G	Screw Size	Weight (lbs)
IC+102 / IC+102WL	2.5	4 x 2.88 x 1.81	4.38 x 2.12 x 5.31 x 0.19	#6	1.0
IC+105 / IC+105WL	5.0	4 x 2.88 x 1.81	4.38 x 2.12 x 5.31 x 0.19	#6	1.3
IC+107 / IC+107WL	7.5	4.75 x 4.75 x 2.35	5.25 x 3.50 x 6.25 x 0.19	#6	2.0
IC+115 / IC+115WL	15	6.25 x 4.75 x 2.35	6.75 x 3.50 x 7.75 x 0.19	#8	3.5
IC+130 / IC+130WL	30	7.75 x 4.75 x 2.35	8.25 x 3.50 x 9.00 x 0.19	#8	6.0

120 VAC Models with 5 foot line cord and single NEMA 5-15 receptacle

Model	Rated Output (Amps)	Case Dimensions (In) A x B x C	Mounting Flange Dimensions (In) D x E x F x G	Screw Size	Weight (lbs)
LRIC+102	2.5	4.5 x 3.0 x 1.88	N/A	N/A	1.3
LRIC+105	5.0	4.5 x 4.5 x 2.38	N/A	N/A	2.0
LRIC+107	7.5	6.0 x 4.5 x 2.38	N/A	N/A	2.3
LRIC+115	15	7.5 x 4.5 x 2.38	N/A	N/A	4.0

240 VAC Models with barrier strip at input and output/with wire leads at input and output (WL)

Model	Rated Output (Amps)	Case Dimensions (In) A x B x C	Mounting Flange Dimensions (In) D x E x F x G	Screw Size	Weight (lbs)
IC+202 / IC+202WL	2.5	4 x 2.88 x 1.81	4.38 x 2.12 x 5.31 x 0.19	#6	1.3
IC+205 / IC+205WL	5.0	4.75 x 4.75 x 2.35	5.25 x 3.50 x 6.25 x 0.19	#6	2.0
IC+207 / IC+207WL	7.5	6.25 x 4.75 x 2.35	6.75 x 3.50 x 7.75 x 0.19	#8	3.3
IC+215 / IC+215WL	15	7.75 x 4.75 x 2.35	8.25 x 3.50 x 9.00 x 0.19	#8	5.8
IC+230 / IC+230WL	30	7.75 x 4.75 x 2.35	8.25 x 3.50 x 9.00 x 0.19	#8	6.0



Islatrol® E Series

Active Tracking Filter® for DC Voltages

Provides continuous sine wave Active Tracking® filtration, normal mode (line to line or line to neutral) for protection from spikes, transients, and noise on AC power line. Available in either hardwired, printed circuit board mount, wire lead mount or single receptacle/line cord configurations, single phase or three phase, 50/60 Hz.

Ordering Information

35 VDC, printed circuit board mount or with wire leads at input and output
(Add "WL" suffix in place of "PC" suffix.)

Model Number	Amperes	Weight (lbs)
E-025PC	0.25	1
E-05PC	0.50	1
E-1PC	1.00	1

100 VDC with barrier strips at input and output

Model Number	Amperes	Weight (lbs)
E-1 (only 35 VDC)	1.0	3
E-2	2.5	3
E-5	5.0	3
E-7	7.5	3
E-15	15.0	9
E-30	30.0	9
E-50	50.0	10
E-100	100.0	15

Islatrol® Active Tracking Filters® carry a 10 year warranty



Repositionable Outlets



Islatrol® — SP-6TVN

Industrial Strength Surge Suppression (Series)

The Islatrol® SP-6TVN is an industrial-strength surge suppression/filtering device that plugs into a standard duplex receptacle. It features uniquely designed repositionable outlets for easy installation behind desks and other furniture. It protects your sensitive home or office equipment, including TVs, home theaters, satellite dishes, computers, printers, copiers, and fax machines, from damaging power disturbances traveling through your wiring into your electrical outlets.

Features

- Plugs into standard 120 V, 15 Amp electrical outlet
- Total peak surge current capacity of 39,000 Amps
- Cables for telephone, video, and data connections
- Repositionable outlets rotate to accommodate available space
- Perfect for tight spaces, behind furniture and appliances
- Intelligent monitoring against improper wiring/grounding
- 60 dB maximum high frequency
- Operational indicator lamp
- 5 year limited warranty

General Technical Specifications

AC Power Protection

Nominal Operating Voltage	120 VAC, Single Phase
Operating Voltage Range	120 VAC +/- 10%
Operating Frequency Range	47 – 63 Hz
Rated Output (Amps)	15 Amperes
ANSI/IEEE C62.41 Category	Category A & B
Connection Type	(6) 5-15R Receptacles and 5-15P Plug
Phase Configuration	2 Wire + Gnd
Size	7.5 x 4.75 x 1.75 (Inches)
Enclosure	High Impact Plastic
Weight	2.0 lbs (0.9 kgs)
Modes Of Protection	L – N, L – G, N – G
Indication of Suppression Status	Status Indicator
Response Time	< .5 ns Normal Mode
Certifications	UL 1449 Listed
Warranty	5 Year

Maximum Continuous Operating Voltage (MCOV)

Line to Neutral	130 VAC
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Peak Surge Current (8 x 20 ms)

Line to Neutral	13,000 Amps
Line to Ground	13,000 Amps
Neutral to Ground	13,000 Amps
Total	39,000 Amps

ANSI/IEEE C62.41 Cat A Ringwave (6 kV, 200 A, 100 kHz)

Normal Mode	265 V
Common Mode	290 V

ANSI/IEEE C62.41 Cat B Ringwave (6 kV, 500 A, 100 kHz)

Normal Mode	275 V
Common Mode	290 V

Frequency Response

Normal Mode	60 dB Maximum, forward/reverse, 100 kHz to 50 MHz
Common Mode	40 dB Maximum, forward/reverse, 5 MHz to 50 MHz

Low Voltage Protection

	Video 1 & 2	Phone	Network
Connection Type	Type "F"	Type RJ-11	Type RJ-45
Cables Provided	6 (2x) Type "F" 6' Ends	6 RJ-11 Male 6' Ends	6 RJ-45 Male Ends
Peak Surge Current	5 kA (8 x 20 μs)	2 kA (10 x 1000 μs)	3 kA (8 x 20 μs)
Capacitance	<12 pf	<50 pf	<70 pf
Protection Level	L-G	T-R, T-G, R-G	L-G (8 Lines)
Clamping Voltage (DC)	145 V	270-350 V	30 V
Attenuation	1 dB @ 2 Ghz	N/A	N/A

Islatrol® — RM Series

120 VAC Rackmount



Model shown: RM-115-10 RM

This line of AC surge protectors is ideal for protecting the power feeding valuable rack equipment. All models provide ten protected outlets on the back and two protected convenience outlets on the front. This series provides 40,000 Amps of surge protection and up to 60 dB of high-frequency noise filtering. Status LEDs indicate the correct power is coming to the unit, whether the unit is properly grounded and whether the surge components are still in tact. Units are available with an optional digital meter, mounted on the front of the unit, that will monitor the voltage, current and power of the protected equipment.

Features

- 40 kA surge protection
- 60 dB max noise filtering
- 15 & 20 A models available
- Power, ground and surge status indicators
- Digital meter
- Optional twist lock plug
- 1 year warranty

General Technical Specifications

Model	Voltage	Amperage	Plug (NEMA)	Receptacles (NEMA)	Digital Meter	Locking Plug
RM-115-10RM	120 V	15 A	5-15P	5-15R	Yes	No
RM-120-10RM	120 V	20 A	5-20P	5-20R	Yes	No
RM-120-10RML	120 V	20 A	L5-20P	5-20R	Yes	Yes

Rackmount AC Power Protection

Rated Voltage	120 V	Output Receptacles	
Rated Current	15 A & 20 A	15A Models	Front- (2) NEMA 5-15R Back- (10) NEMA 5-15R
Peak Surge Current	20 kA/mode, 40 kA/phase	20A Models	Front- (2) NEMA 5-20R Back- (10) NEMA 5-20R
Response Time	<5 ns	Thermal Protection	Thermal Protected MOVs
EMI/RFI Filtering	60 dB Max	Overcurrent Protection	Circuit
LED Indicators	Green-Power on Green-Ground OK Green-Surge Circuit OK	Dimensions	1.75"H x 19"W x 3.8"D (1U)
Digital Meter (Optional)	Voltage Amps, Watts, VA, Hz, PF, Kwh, and Clock	Certifications	UL1449
Input Power		Warranty	1 Year
15 A Models	SJT 14/3C Power Cord (15 ft) with NEMA 5-15P Plug		
20A Models	SJT 12/3C Power Cord (15 ft) with NEMA 5-20P Plug NEMA L5-20P Plug- Optional		