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Find the *Emerson / Control Concepts Isatrol IC+107* at our website: *Click HERE*

■ Surge Protection
For *Business-Critical Continuity™*

Islatrol® Series

Installation, Operation and Maintenance Manual

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Islatrol BC Series (formerly Islatron)
Islatrol E Series (DC)
Islatrol IE Series
Islatrol IC+ Series
Islatrol LRIC+ Series
Islatrol TC Series (DC)

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■ AC Power ■ Embedded Computing ■ Outside Plant ■ Racks and Integrated Cabinets
■ Connectivity ■ Embedded Power ■ Power Switching & Controls ■ Services
■ DC Power ■ Monitoring ■ Precision Cooling ■ **Surge Protection**

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IO-30100 Rev. 9 5/09 P/N-80798

EMERSON
Network Power

Islatrol® power line filters offer the original Active Tracking® technology to guard against commonly occurring, but very damaging, lower energy transients and offers excellent noise reduction. Islatrol® Plus and Islatron® combines rugged, high energy current diverters with the Active Tracking® Filter to provide protection against the full spectrum of voltage transients and surges.

INSTALLATION

Proper installation is required for maximum system performance. Read the following information to assure a quality installation. These instructions do not replace national or local electrical codes.

Environment – For use indoors, in an ambient temperature of -40ºC to +50ºC, with a relative humidity 0% to 95% (non-condensing).

Maximum Current Capability – The total current draw for all loads that a model may continuously handle is given in the table located in the middle section of this manual. Overloading the unit can permanently damage the device.

Nominal Voltage – The nominal operating voltage for each model is given in the table located in the middle section of this manual. Failure to use the unit at its rated voltage can permanently damage the unit or provide inadequate surge protection.

Supplemental Enclosures - All units provided with exposed terminal blocks must be installed inside an enclosure and located so as to prevent accidental contact with terminals during maintenance or servicing.

Summary Alarm Contacts (IE models only) – Summary alarm Form C (1 N.O. and 1 .C.) relay contacts rated 125VAC, 5A max. are provided for remote indication of protection status. Connections may be made to these terminals on the unit using 18 AWG conductors.

Grounding - Input and output ground terminals (if provided) must be connected for proper operation. This grounding is not only required for safety, but also for equipment performance. Incorrect grounding can reduce or impede the operation of the unit.

Line Cord Units – Plug unit into wall outlet and turn on power switch (if provided). For best results, plug equipment to be protected directly into the unit (do not use extension cords or power strips). Keep data cables as far away from power cords as possible.

work Power Surge Protection, Inc. receipt and inspection of the product claimed to be defective, shall be invoiced in the full current price amount and shipped freight collect F.O.B. Emerson Network Power Surge Protection, Inc. facility. Warranty coverage will be extended only after Emerson Network Power Surge Protection, Inc. receipt of the claimed defective product within thirty (30) days of shipment of any replacement parts, components or products, if applicable, Emerson Network Power Surge Protection, Inc. inspection discloses the claimed defect and the returned product shows no signs of treatment or use which would void the coverage of this Warranty.

Items Not Covered By Warranty:

THIS WARRANTY DOES NOT COVER DAMAGE OR DEFECT CAUSED BY misuse, improper application, wrong or inadequate electrical current or connection, inadequate water or drain services, negligence, inappropriate on site operating conditions, corrosive atmosphere, repair by non-Emerson Network Power Surge Protection, Inc. designated personnel, accident in transit, tampering, alterations, a change in location or operating use, exposure to the elements, Acts of God, theft or installation contrary to Emerson Network Power Surge Protection, Inc. recommendations or specifications, or in any event if the Emerson Network Power Surge Protection, Inc. serial number has been altered, defaced or removed.

THIS WARRANTY DOES NOT COVER shipping costs, installation costs, circuit breaker resetting or maintenance or service items and further, except as provided herein, does NOT include labor costs or transportation charges arising from the replacement of the Emerson Network Power Surge Protection, Inc. product or any part thereof or charges to remove same from any premises of the User.

THIS WARRANTY DOES NOT COVER DAMAGE OR DEFECT CAUSED BY use of the Emerson Network Power Surge Protection, Inc. product in combination with any electrical or electronic components, circuits, systems, assemblies, or other materials not furnished by Emerson Network Power Surge Protection, Inc. Emerson Network Power Surge Protection, Inc. does NOT warrant the suitability for use or the results of the Emerson Network Power Surge Protection, Inc. product in combination with the products of others.

REPAIR OR REPLACEMENT OF A DEFECTIVE PRODUCT OR PART THEREOF DOES NOT EXTEND THE ORIGINAL WARRANTY PERIOD.

Limitations:

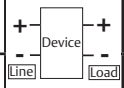
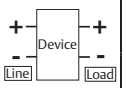
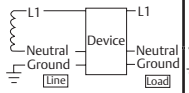
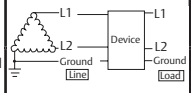
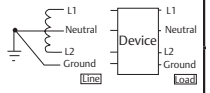
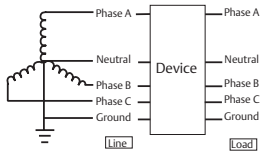
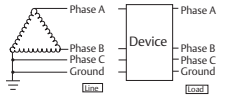
- THIS WARRANTY IS IN LIEU OF AND EXCLUDES ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
- USER'S SOLE AND EXCLUSIVE REMEDY IS REPAIR OR REPLACEMENT OF THE CONTROL CONCEPTS PRODUCT AS SET FORTH HEREIN.
- IF USER'S REMEDY IS DEEMED TO FAIL OF ITS ESSENTIAL PURPOSE BY A COURT OF COMPETENT JURISDICTION, EMERSON NETWORK POWER SURGE PROTECTION, INC. RESPONSIBILITY FOR PROPERTY LOSS OR DAMAGE SHALL NOT EXCEED ONE TIMES THE NET PRODUCT PURCHASE PRICE.
- IN NO EVENT SHALL EMERSON NETWORK POWER SURGE PROTECTION, INC. ASSUME ANY LIABILITY FOR INDIRECT, SPECIAL, INCIDENTAL, OR ECONOMIC CONSEQUENTIAL DAMAGES OF ANY KIND WHATSOEVER, INCLUDING WITHOUT LIMITATION, LOST PROFITS, BUSINESS INTERRUPTION OR LOSS OF DATA, WHETHER ANY CLAIM IS BASED UPON THEORIES OF CONTRACT, NEGLIGENCE, STRICT LIABILITY, TORT OR OTHERWISE.

Miscellaneous:

- NO SALESPERSON, EMPLOYEE OR AGENT OF EMERSON NETWORK POWER SURGE PROTECTION, INC. IS AUTHORIZED TO ADD TO OR VARY THE TERMS OF THIS WARRANTY. Warranty terms may be modified, if at all, only in a writing signed by an Emerson Network Power Surge Protection, Inc. officer.
- This Warranty is effective as of the date of Emerson Network Power Surge Protection, Inc. receipt of payment and supersedes all previous warranties. Emerson Network Power Surge Protection, Inc. reserves the right to supplement or change the terms of this Warranty in any subsequent warranty offering to User or others.
- In the event that any provision of this Warranty should be or becomes invalid and/or unenforceable during the warranty period, the remaining terms and provisions shall continue in full force and effect.
- This Warranty is given in and is intended to be construed under the laws of the State of New York.
- This Warranty represents the entire agreement between Emerson Network Power Surge Protection, Inc. and User with respect to the subject matter herein and supersedes all prior or contemporaneous oral or written communications, representations, understandings or agreements relating to this subject.

SPECIFICATIONS, WIRING DIAGRAMS, AND RECOMMENDED OVERCURRENT PROTECTION

1. In the following table, models are preceded by series designation (BC , E, IE, IC+, LRIC+, TC) *Example BC-3-4200*
2. Islatrol IC+/IE models are available in 120VAC and 240VAC single phase configurations only.
3. For units provided with a ground connection, a green (with or without one or more yellow stripes) insulated grounding conductor identical in size, insulation material, and thickness to the grounded and ungrounded conductors must be installed (ref. NEC Table 250-95) and referenced back to an acceptable building earth ground. Attachment plugs, receptacles, etc. in the vicinity of the filter must be of a grounding type, with the grounding conductors serving them connected to an acceptable building earth ground.
4. Terminals, lugs, and connectors used in installation must be suitable for the material of the conductors. Conductors of dissimilar metals shall not be intermixed in a terminal or splicing.

Voltage and Config. → Maximum Current Capability (Amps) ↓	35 VDC 	100 VDC 	120VAC Single Phase 	240VAC Single Phase 	120/240VAC Single Phase 3W+G 	3 Phase WYE 4W+G 	3 Phase DELTA 3W+G 	MIN. WIRE SIZE* (AWG Suggested)	FUSE/CIRCUIT BREAKER AMPACITY	
									SUGGEST	MAX
0.25	-025	-	-10	-20	-	-	-	34	0.25A	.3125A
0.5	-05	-	-100	-200	-	-	-	32	0.5A	.625A
1	-1	-	-101	-201	-	-	-	30	1A	1.25A
2.5	-	-2	-102	-202	-	-	-	26	2.5A	3.125A
3.0	-	-	-103	-203	-	-	-	24	3A	3.75A
5	-	-5	-105	-205	-	-	-	22	5A	6.25A
7.5	-	-7	-107	-207	-	-	-	18	7.5A	9.375A
10	-	-10	-110	-210	-	-	-	14	10A	12.5A
15	-	-15	-115	-215	-2-215	-3-215WYE (120/208VAC) -3-315WYE (220/380VAC) -3-415WYE (277/480VAC)	-3-215DELTA (240VAC) -3-315DELTA (380VAC) -3-415DELTA (480VAC)	14	15A	18.75A
20	-	-	-120	-220	-	-	-	12	20A	25A
30	-	-30	-130	-230	-2-230	-3-230WYE (120/208VAC) -3-330WYE (220/380VAC) -3-430WYE (277/480VAC)	-3-230DELTA (240VAC) -3-330DELTA (380VAC) -3-430DELTA (480VAC)	10	30A	37.5A
50	-	-	-150	-250	-2-250	-3-250WYE (120/208VAC) -3-350WYE (220/380VAC) -3-450WYE (277/480VAC)	-3-250DELTA (240VAC) -3-350DELTA (380VAC) -3-450DELTA (480VAC)	4	50A	62.5A
100	-	-100	-1100	-2100	-2-2100	-3-2100WYE (120/208VAC) -3-3100WYE (220/380VAC) -3-4100WYE (277/480VAC)	-3-2100DELTA (240VAC) -3-3100DELTA (380VAC) -3-4100DELTA (480VAC)	2	100A	125A
200	-	-	-1200	-2200	-2-2200	-3-2200WYE (120/208VAC) -3-3200WYE (220/380VAC) -3-4200WYE (277/480VAC)	-3-2200DELTA (240VAC) -3-3200DELTA (380VAC) -3-4200DELTA (480VAC)	3/0	200A	250A
400	-	-	-1400	-2400	-2-2400	-3-2400WYE (120/208VAC) -3-4400WYE (277/480VAC)	-3-2400DELTA (240VAC) -3-4400DELTA (480VAC)	500 MCM	400A	500A
600	-	-	-1600	-2600	-2-2600	-3-2600WYE (120/208VAC) -3-4600WYE (277/480VAC)	-3-2600DELTA (240VAC) -3-4600DELTA (480VAC)	2 x 300 MCM	600A	750A
1000	-	-	-11000	-21000	-2-21000	-3-21000WYE (120/208VAC) -3-41000WYE (277/480VAC)	-3-21000DELTA /240VAC) -3-41000DELTA /480VAC)	6 x 2/0	1000A	1250A
1200	-	-	-11200	-21200	-2-21200	-3-21200WYE (120/208VAC) -3-41200WYE (277/480VAC)	-3-21200DELTA /240VAC) -3-41200DELTA /480VAC)	6 x 3/0	1200A	1500A

LIMITED WARRANTY

This Warranty is given ONLY to purchasers who buy for commercial or industrial use in the ordinary course of each purchaser's business.

General:
Emerson Network Power Surge Protection, Inc. products are in our opinion the finest available. We take pride in our products and are pleased that you have chosen them. Under certain circumstances we offer with our products the following Ten Year Warranty Against Defects in Material and Workmanship. Please read your Warranty carefully. This Warranty sets forth our responsibilities in the unlikely event of defect and tells you how to obtain performance under this Warranty.

TEN YEAR LIMITED WARRANTY AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP

EMERSON NETWORK POWER SURGE PROTECTION, INC. PRODUCTS COVERED:
Islatrol® BC Series, Islatrol® IE Series, Islatrol® IC+/LRIC+ Series, Islatrol® TC Series.

Terms of Warranty:
As provided herein, the Emerson Network Power Surge Protection, Inc. product is warranted to be free of defects in material and workmanship for a perriod of ten (10) years from the date of delivery of the product to User. The delivery date will be determined only from the Emerson Network Power Surge Protection, Inc. bill of lading. If any of the Emerson Network Power Surge Protection, Inc. product fails to conform to the warranty within the warranty period, Emerson Network Power Surge Protection, Inc., at its option, will furnish new or factory remanufactured parts for repair or replacement of that part.

Warranty Extends to First Purchaser for Use, Non-transferable:
This Warranty is extended to the first person, firm, association or corporation for whom the Emerson Network Power Surge Protection, Inc. product specified herein is originally installed for use in the United States (the "User"). This Warranty is not transferable or assignable without the prior written permission of Emerson Network Power Surge Protection, Inc..

Assignment of Warranties:
Emerson Network Power Surge Protection, Inc. assigns to User any warranties which are made by manufacturers and suppliers of components of the Emerson Network Power Surge Protection, Inc. product and which are assignable, but Emerson Network Power Surge Protection, Inc. makes NO REPRESENTATIONS as to the effectiveness or extent of such warranties, assumes NO RESPONSIBILITY for any matters which may be warranted by such manufacturers or suppliers and extends no coverage under this warranty to such components.

Descriptions:
Emerson Network Power Surge Protection, Inc. warrants for the period and on the terms of the Warranty set forth herein that the Emerson Network Power Surge Protection, Inc. product will conform to the descriptions contained in Emerson Network Power Surge Protection, Inc. final invoices, orders and Emerson Network Power Surge Protection, Inc. product brochures. Emerson Network Power Surge Protection, Inc. does not control the installation and use of any Emerson Network Power Surge Protection, Inc. product. Accordingly, it is understood that the Descriptions are NOT WARRANTIES OF PERFORMANCE and NOT WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE.

Obtaining Performance Under This Warranty:
Within a reasonable time, but in no case to exceed thirty (30) days, after User's discovery of a defect, User shall contact Emerson Network Power Surge Protection, Inc. and request a return authorization number. User shall ship the product, with proof of purchase, to Emerson Network Power Surge Protection, Inc. freight prepaid. Emerson Network Power Surge Protection, Inc. products shipped to Emerson Network Power Surge Protection, Inc. without a return authorization number will be refused and returned freight collect to User at User's expense. Emerson Network Power Surge Protection, Inc. products shipped by User to Emerson Network Power Surge Protection, Inc. which have incurred freight damage due to User's improper packaging of the product will not be covered by this Warranty and any repairs or replacement parts, components or products needed will be invoiced in the full current price amount and returned freight collect to User.

Subject to the limitations specified herein, Emerson Network Power Surge Protection, Inc. will repair or replace, at its option, without charge for Emerson Network Power Surge Protection, Inc. labor or materials, subsequent to its inspection and F.O.B. Emerson Network Power Surge Protection, Inc. facility, the Emerson Network Power Surge Protection, Inc. product shipped to Emerson Network Power Surge Protection, Inc. with a return authorization number and warranted hereunder which does not conform to the Warranty. Replacement parts, components or products shipped to User prior to Emerson Net-

OPERATION

These products are designed for years of trouble-free operation and require little or no operator intervention after installation. Should the unit not appear to be functioning properly and/or the indicator LED (if provided) is extinguished, check all connections, and assure the voltage is correct and that the total current draw on the unit from all loads does not exceed the rated current. If the unit still is not functioning properly, call Emerson Network Power Surge Protection at (800) 288-6169.

DECLARATION OF CONFORMITY

Emerson Network Power Surge Protection declares under our sole responsibility that all Islatrol Elite (IE) products conforms to the protection requirements of Council Directives 89/336/EEC (Applicable Standards: BS EN 50081-1; 1992-04, BS EN 50082-1; 1992-04, IEC-1000-4-2; 1995-01, IEC-1000-4-4; 1995-01, IEC-1000-4-5; 1995-02, IEC-1000-4-7; 1991-07, IEC-1000-4-8; 1993-06) and 73/23/EEC (Low Voltage Directive) as amended by 93/68/EC (Applicable Standard IEC 61643-1; 1998-02). --- Office of the Director of Engineering, Emerson Network Power Surge Protection, Binghamton, NY USA, March, 1999.

ASSISTANCE

For installation assistance, servicing, or product information, contact Emerson Network Power Surge Protection at (800) 288-6169 or (607) 721-8840.

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