TRANSTECTOR
an INFINITE brand

AC SURGE PROTECTION

I2R 75K Series

Type 1 and Type 2 Industrial Applications



The I2R 75K series of modular DIN Rail AC Surge Protection Devices (SPD) are ideal for industrial communications, public safety, security as well as automation and control applications where UL Type 1 and Type 2 requirements are needed. The I2R 75K series offers configurations for all standard electrical service applications up to 690 Vac, including single phase, split phase, delta and three-phase WYE and are UL 1449 4th Edition approved.

Network safety and reliability are built into the I2R 75K series. Engineered using a safe-fail self-protection design, the I2R SPD couples a high short circuit rating with thermally protected MOV, which eliminates the need for additional back up fusing.

Through superior design, each I2R provides a robust 75 kA surge capacity that protects critical equipment against both high energy transients and long term exposure to harsh electrical environments.

FEATURES

- Safe-fail, self-protected design
- No additional overcurrent protection devices or back up fusing required
- Reverse chassis direction capability allows cable entry from top to bottom
- Remote visual status indication
- IP 20 finger-safe design
- Available in Single Phase, Split-Phase, Three-Phase WYE, Delta and High-Leg Delta
- Compact DIN Rail mounted SPD easy to install or retrofit

APPLICATIONS

- Electrical Panelboards
- Motor Control Centers
- Switchgear
- Automatic Transfer Switches
- Small Cells
- UL508 Panel Shops
- HVAC Controls
- Traffic Controls
- Access Security

SPECIFICATIONS

Item	Specification
Surge Capacity	75 kA
Short-Circuit Current Rating	200 kA
Frequency	50-60 Hz
Wire Range	4-14 AWG Solid/Stranded CU
Visual Indication- End of Life	Red
Remote Indication	NO/NC Dry Contact
Mounting	DIN Rail (35 mm)
Operating Temperature	-40°C to +85°C
Degree of Protection	IP 20
UL	ANSI/UL 1449 4th Edition (file E321582), UL 94 VO
IEEE	ANSI/IEEE C62.41.1, C62.41.2, C62.45
CE/RoHS	Compliant
MIL-STD	MIL-STD 810E Vibration
Warranty	10 Year

1458-021 RevC
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PRODUCT NUMBERING GUIDE

Looking for the right part number is quick and logical.

I2R-75K	S		120

Service Phase	
S	L-N Single Slice
Y	WYE
D	Delta
E	Split-Phase
H	High-Leg

CM Module	
G	N-G Common Mode
Blank	No N-G Common Mode

Voltage
Refer to service phase for appropriate AC voltage including. (120, 127, 208, 220, 240, 277, 480, 600, 690)

PRODUCT ORDERING GUIDE

The following charts are available to provide unique part specifications and wiring diagrams to determine the correct I2R 75K series of AC Surge protection device for your application. Contact Transtector at 208 635 6400 or visit us at www.transtector.com to request technical support or to place an order.

1-Pole, Single-Phase, 2-Wire

Part Number	Nominal Voltage	Maximum Continuous Operating Voltage				Voltage Protection Level				Nominal Discharge Current	Replacement Module
	Vac	L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L		L1
I2R-75KS120	120	175 Vac				600 Vac				20 kA	I2R-75KR120
I2R-75KS127	127	175 Vac				600 Vac				20 kA	I2R-75KR120
I2R-75KS277	277	320 Vac				600 Vac				20 kA	I2R-75KR277

2-Pole, Split-Phase, 3-Wire

Part Number	Nominal Voltage	Maximum Continuous Operating Voltage				Voltage Protection Level				Nominal Discharge Current	Replacement Module
	Vac	L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L		L1, L2
I2R-75KE240	120/240	175 Vac			350 Vac	600 Vac			1200 Vac	20 kA	I2R-75KR120
I2R-75KE480	240/480	275 Vac			550 Vac	600 Vac			1800 Vac	20 kA	I2R-75KR240

3-Pole, Delta, 3-Wire

Part Number	Nominal Voltage	Maximum Continuous Operating Voltage				Voltage Protection Level				Nominal Discharge Current	Replacement Module
	Vac	L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L		L1, L2, L3
I2R-75KD240	240		275 Vac		550 Vac		900 Vac		1800 Vac	20 kA	I2R-75KR240
I2R-75KD480	480		550 Vac		1100 Vac		1500 Vac		3000 Vac	10 kA	I2R-75KR480

3-Pole, 3-Phase Wye, 4-Wire

Part Number	Nominal Voltage	Maximum Continuous Operating Voltage				Voltage Protection Level				Nominal Discharge Current	Replacement Module
	Vac	L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L		L1, L2, L3
I2R-75KY208	120/208	175 Vac			350 Vac	600 Vac			1200 Vac	20 kA	I2R-75KR120
I2R-75KY220	127/220	175 Vac			350 Vac	600 Vac			1200 Vac	20 kA	I2R-75KR120
I2R-75KY480	277/480	320 Vac			640 Vac	1500 Vac			2500 Vac	20 kA	I2R-75KR277
I2R-75KY600	347/600	420 Vac			840 Vac	1500 Vac			2500 Vac	10 kA	I2R-75KR347
I2R-75KY690	400/690	420 Vac			840 Vac	1500 Vac			2500 Vac	10 kA	I2R-75KR347

4- Pole, 3-Phase Wye, 5-Wire, Including N-G Mode

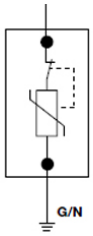
Part Number	Nominal Voltage	Maximum Continuous Operating Voltage Vac				Voltage Protection Level Vac				Nominal Discharge Current	Replacement Module	
	Vac	L-N	L-G	N-G	L-L	L-N	L-G	N-G	L-L		L1, L2, L3	N-G
I2R-75KYG208	120/208	175	175	175	350	600	1200	600	1200	20 kA	I2R-75KR120	I2R-75KR120
I2R-75KYG480	277/480	320	495	175	640	1000	1500	600	2000	20 kA	I2R-75KR277	I2R-75KR120
I2R-75KYG600	347/600	420	695	275	840	1500	2000	800	2500	10 kA	I2R-75KR347	I2R-75KR240
I2R-75KYG690	400/690	420	740	320	840	1500	2000	800	2500	10 kA	I2R-75KR347	I2R-75KR277

4- Pole, 3-Phase Delta High-Leg, 5-Wire, Including N-G Mode

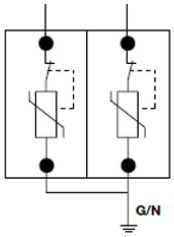
Part Number	Nominal Voltage	Maximum Continuous Operating Voltage Vac				Voltage Protection Level Vac				Nominal Discharge Current	Replacement Module		
	Vac	L-N/HL-N	L-G/HL-G	N-G	L-L/HL-L	L-N/HL-N	L-G/HL-G	N-G	L-L/HL-L		L1, L3	L2	N-G
I2R-75KH240	120/240	175/125	350/450	175	350/450	600/800	1200/1500	600	1200/1500	20 kA	I2R-75KR120	I2R-75KR240	I2R-75KR120
I2R-75KH480	240/480	275/550	450/725	175	550/825	800/1500	1500/2000	600	1500/2500	10 kA	I2R-75KR240	I2R-75KR480	I2R-75KR120

WIRING DIAGRAM

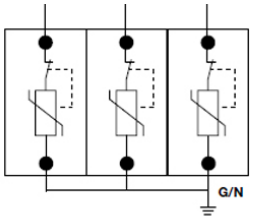
1-Pole, Single-Phase, 2-Wire



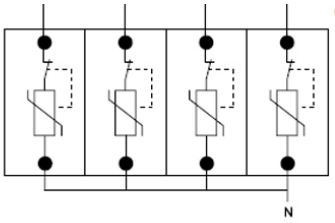
2-Pole, Split-Phase, 3-Wire



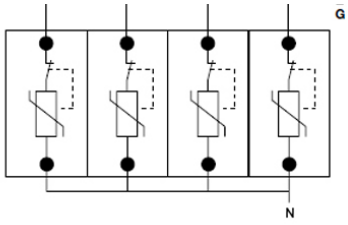
3-Pole, 3-Phase Wye/Delta 4-Wire



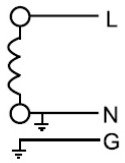
4-Pole, 3-Phase Wye, 5-Wire



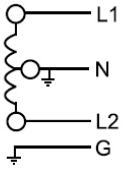
4-Pole, 3-Phase Delta, High Leg, 5-Wire



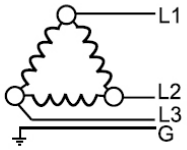
Single-Phase, 2-Wire + Ground



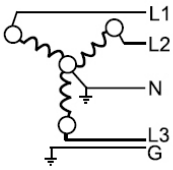
Split-Phase, 3-Wire + Ground



3-Phase Delta, 3-Wire + Ground



3-Phase Wye, 4-Wire + Ground

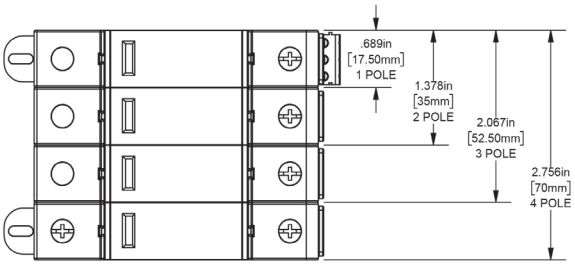


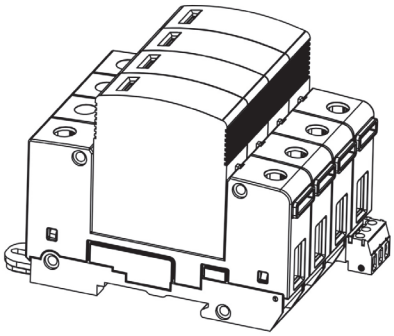
What our Customers are Saying:

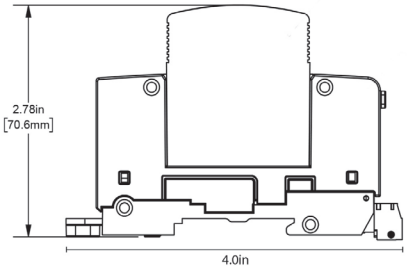
"I tell clients, Transtector Surge Protection is the only product I would want to sell if I was a sales person"
– Industrial Safety Consultant, USA

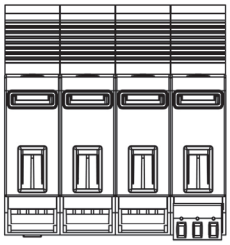
"Transtector offers very solid products and quick service—don't change a thing!"
– Electrical Supply Contractor, USA

DRAWINGS









WEIGHTS

Transtector I2R SKU	Dimensions L" x H" x W"	Individual Weight (lb)
I2R-75KS120	4 x 0.69 x 2.78	0.34
I2R-75KS127	4 x 0.69 x 2.78	0.34
I2R-75KS277	4 x 0.69 x 2.78	0.34
I2R-75KE240	4 x 1.38 x 2.78	0.75
I2R-75KE480	4 x 1.38 x 2.78	0.75
I2R-75KY208	4 x 2.07 x 2.78	1.00
I2R-75KYG208	4 x 2.76 x 2.78	1.15
I2R-75KY220	4 x 2.07 x 2.78	1.00
I2R-75KY480	4 x 2.07 x 2.78	1.00
I2R-75KYG480	4 x 2.76 x 2.78	1.15
12R-75KY600	4 x 2.07 x 2.78	1.00
I2R-75KYG600	4 x 2.76 x 2.78	1.15
I2R-75KY690	4 x 2.07 x 2.78	1.00
I2R-75KYG690	4 x 2.76 x 2.78	1.15
I2R-75KD240	4 x 2.07 x 2.78	1.00
I2R-75KD480	4 x 2.07 x 2.78	1.00
I2R-75KH240	4 x 2.76 x 2.78	1.15
I2R-75KH480	4 x 2.76 x 2.78	1.15
I2R-75KR480	Replacement Module	0.05
I2R-75KR347	Replacement Module	0.05
I2R-75KR277	Replacement Module	0.05
I2R-75KR240	Replacement Module	0.05
I2R-75KR120	Replacement Module	0.05