ERITECH®

PRIMARY RAIL FILTER

PRF-Series

Features

- Robust Against Earth Potential Rise (EPR)
- Surge Diversion Elements designed to IEC 61643 International Standard
- Combined Surge Diversion and Power Filtering
- Assists Harmonic and Electrical noise suppression
- Extremely High Energy Handling Capacity
- Physically Robust Design
- Existing 50A filters can be upgraded to meet the PRF-50A specifications by installing the RFU kit.

The Primary Rail Filter (PRF) provides a clean, filtered supply of electricity, to all equipment connected to the unit's output, when installed in accordance with the manufacturers instructions. Protection is achieved via a two stage circuit which:

- Clamps transient voltages entering the PRF and diverts the bulk of the current to neutral or ground. This is achieved by the internal CRITEC® brand Triggered Spark Gap units which are the primary surge diverters.
- Provides filtering to the clamped waveform to reduce the rate of voltage rise
- Provides a final stage of surge diversion using thermally protected MOV's to protect from transients which may be induced onto the PRF output cables or caused by the load itself

The two stage circuit in the Primary Rail Filter substantially reduces the risk of physical equipment damage, loss of operations and economic loss to the rail industry.

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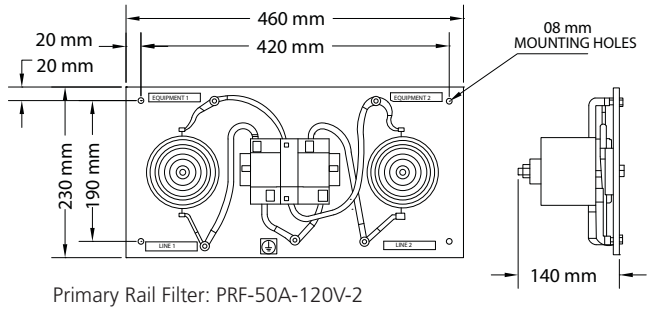
Specifications

Model	PRF-50A-120V-2	PRF-100A-120V-2	PRF-200A-120V-2	PRF-50A-240V-2	PRF-50A-440V-2	RFU
Operating Ratings:						
Nominal Input Voltage	120Vrms	120Vrms	120Vrms	240Vrms	440Vrms	120Vrms
Frequency	50/60Hz	50/60Hz	50/60Hz	50/60Hz	50/60Hz	Rail Filter
Phase	single phase	single phase	single phase	single phase	single phase	Upgrade Kit
Load Current	50A	100A	200A	50A	50A	50A / 100A / 200A
Operating Time	<1ns	<1ns	<1ns	<1ns	<1ns	<1ns
Primary Protection:						
Protection Modes	L1-GND, L2-GND					
Arrester Type	CRITEC® brand of **T**riggered **S**park **G**ap (TSG)					
Surge Rating	130 kA 8/20µs 50 kA 10/350µs					
Max. Cont. Operating Voltage	440Vrms					
Multipulse Capability	Yes					
Secondary Protection:						
Protection Mode	L1-L2					
Arrester Type	DSD 140					
Surge Rating	40kA 8/20µs L1-L2					
Indication	Yes, mechanical flag					
Max. Cont. Operating Voltage	150Vrms	150Vrms	150Vrms	275Vrms	440Vrms	
Performance:						
Cat B (6kV/3kA, 8/20µs) Filter Surge Performance	L1-L2 < 350 V	L1-L2 < 350 V	L1-L2 < 350 V	L1-L2 < 700 V	L1-L2 < 1100 V	
Cat B (6kV/3kA, 8/20µs) Filter Surge Performance	L1-GND, L2-GND < 1.500kV	L1-GND, L2-GND < 1.500kV	L1-GND, L2-GND < 1.500kV	L1-GND, L2-GND < 1.500kV	L1-GND, L2-GND < 1.500kV	
Cat C (6kV/20kA, 8/20µs) Filter Surge Performance	L1-L2 < 450 V	L1-L2 < 450 V	L1-L2 < 400 V	L1-L2 < 800 V	L1-L2 < 1000 V	
Cat B (6kV/20kA, 8/20µs) Filter Surge Performance	L1-GND, L2-GND < 1.600kV	L1-GND, L2-GND < 1.600kV	L1-GND, L2-GND < 1.600kV	L1-GND, L2-GND < 1.600kV	L1-GND, L2-GND < 1.600kV	
Physicals:						
Operating Conditions	0 to +40°C, 0-90% Humidity					0 to +40°C, 0-90% Humidity
Wiring Terminals	10 mm Stud, input / output					DIN rail - Mounting set
Dimensions in mm						
Overall (length x width x height)	460 x 230 x 140		750 x 320 x 200	460 x 230 x 140		
Test Standards						
Approvals: Surge Rated to Meet:	AS 3100 / C-Tick ANSI/IEEE C62.41 - Cat B, Cat C. AS/NZS 1768 - Cat B, Cat C. IEC 61643-1 - Class I, II					



Primary Rail Filter: PRF-50A-120V-2

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