

CRITEC SURGE PROTECTION

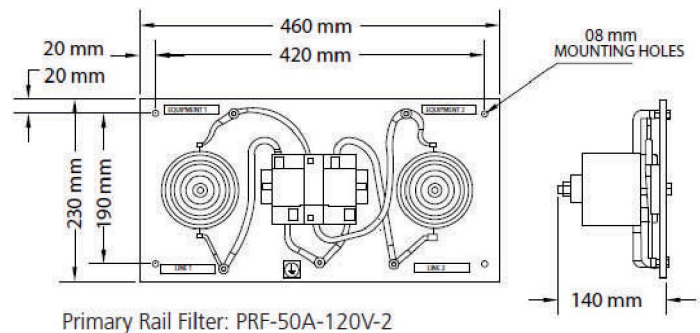
CRITEC®
ERICO®

PRIMARY RAIL FILTER (PRF)

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 CRITECR 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.



Part Number	Description
PRF100A-120V	100amp 120volt ac
PRF100A-240V	100amp 240volt ac
PRF200A-120V	100amp 120volt ac
PRF200A-240V	200amp 240volt ac
PRF50A-120V-2	50amp 120volt ac
PRF50A-240V-2	50amp 240volt ac

CRITEC SURGE PROTECTION**CRITEC®****PERIPHERAL
POWER PROTECTION****DINLINE SURGE FILTERS**

- Compact design – small footprint
- High efficiency sine wave filtering
- DIN rail mount
- Status indication
- High surge rating, 50kA (TDF), 8kA (DSF)
- TD technology

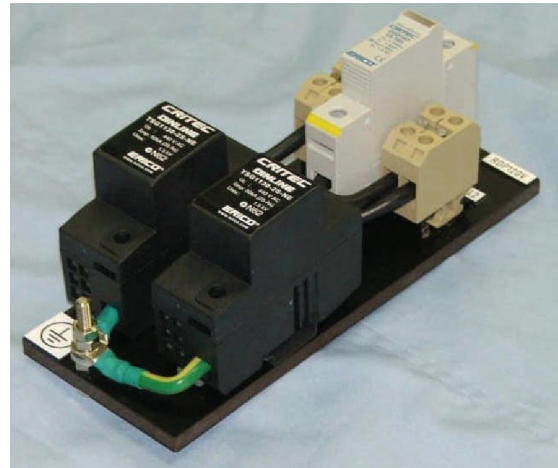


CRITEC® Transient Discriminating Filter & DINLINE Surge Filter (TDF & DSF)

Part Number	Description
DSF6A30V	24VDC/30VAC 1 phase 2W+G, 6A series filter
TDF3A120V	120V 1 phase 2W+G, 50kA, 3A series filter
TDF3A240V	240V 1 phase 2W+G, 50kA, 3A series filter
TDF10A120V	120V 1 phase 2W+G, 50kA, 10A series filter
TDF10A240V	240V 1 phase 2W+G, 50kA, 10A series filter
TDF20A120V	120V 1 phase 2W+G, 50kA, 20A series filter
TDF20A240V	240V 1 phase 2W+G, 50kA, 3A series filter

 APPROVAL No: 08-08-10-018
CRITEC®**RAIL DIVERTER PANEL (RDP)**

- Effective two-mode Surge Protection for Rail Power Circuits.
- Rugged 130kA Triggered Spark Gaps divert surge currents effectively to earth, ensuring long product service life.
- Fine line-to-line protection clamps damaging voltage transients ensuring effective protection of your sensitive equipment.
- Line-to-line protection features separate plug and base design that facilitates replacement of a failed surge module.
- Separate Line and Equipment terminals reduce effective lead length, thus reducing let-through voltage.
- Five year limited warranty.



Model	RDP-120V	RDP-240V
Nominal System Voltage Un	120 V _{AC} (line to line)	240 V _{AC} (line to line)
Max. Continuous Operating Voltage Uc	150 V _{AC} , 200 V _{DC} (line to line) 440 V _{AC} (line to earth)	275 V _{AC} , 350 V _{DC} (line to line) 440 V _{AC} (line to earth)
Technology Used	Triggered Spark Gaps from L-E MOV from L-L	
Current I _{max}	130kA 8/20μs (L-E), 40kA 8/20μs (L-L)	
Protection Modes	Common mode, differential mode	

CRITEC SURGE PROTECTION



DINLINE Decoupling Inductor/ DINLINE Alarm Relay & Surge Counter

TDSSC

DINLINE Decoupling Inductor/ Dinline Alarm Relay & Surge Counter

Ordering Information

Region	Part / Article #
North America	TDSSC
Latin America	641705510
Europe/Middle East/Africa	701250
Asia/Australia	TDS-SC



Application Information

- Decoupling inductors are installed between spark gap and MOV protection devices to help ensure correct coordination. As the decoupling inductors are installed in series with the load, two units are available, a compact unit for circuits up to 35A and a larger unit for 63A circuits.
- The DAR (DINLINE Alarm Relay) can be connected to TDF units to provide potential free change-over alarm contacts. The TDS SC (Surge Counter) unit is designed to provide visual indication of the number of surges registered. It uses a current transformer through which the ground conductor connecting to one, or all, of the surge protection modules is fed. Current diverted by the operation of the surge module, which exceeds a 300A trip threshold, will be registered on the counter.

Features

- 35 mm² tunnel terminals – accepts large cable size
- 63A model features top and bottom terminals – flexible installation
- The DINLINE Alarm Relay (DAR) is used with TDF products where alarm contacts are required for remote signaling
- The TDS-SC Surge Counter provides a non-resettable record of the number of surges diverted
- Use for decoupling of spark gaps and MOVs – allows correct coordination of different SPD technologies

CRITEC®

POTENTIAL EQUALIZATION CLAMP

The **PEC** is an equipotential bonding device that can be used to minimise damage in applications where separated ground systems are required. The PEC100 model is ATEX approved making the device suitable for use in explosion hazard areas such as

the protection of pipeline insulated joints. The PEC150 model is a higher surge rated product for more exposed locations subject to partial direct lightning strike.



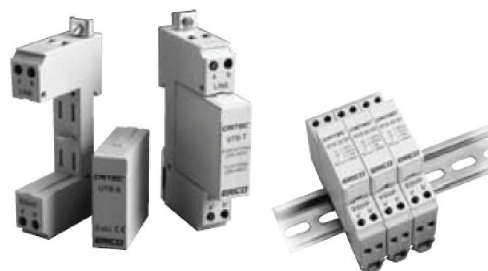
PEC100 & PEC150

CRITEC SURGE PROTECTION**Communications & Data
Equipment Protection****UNIVERSAL TRANSIENT BARRIER (UTB)**

The UTB series provides transient protection for equipment from surges induced onto balanced pair signal lines.

They are well suited to the protection of industrial equipment such as PLCs and SCADA systems.

Part Number	Description
UTB5	0-7Vpk, 20kA, 1.5A Load Current
UTB15	5-18Vpk, 20kA, 1.5A Load Current
UTB30	15-33Vpk, 20kA, 1.5A Load Current
UTB60	30-64Vpk, 20kA, 1.5A Load Current
UTB110	120VAC, 20kA, 1.5A Load Current
UTBSA	UTB, Secondary Telephone Protector

**Control Signal
Equipment Protection**

ARTC APPROVAL No: 08-08-10-018

**RAIL TRANSIENT BARRIERS (RTB)**

Includes all features Of UTB's plus fail-safe, open circuit, failure mode.

Part Number	Description
RTB12S3	12Volt dc, 20kA, 1.5A Load Current
RTB30S3	30Volt dc, 20kA, 1.5A Load Current
RTB50S3	50Volt dc, 20kA, 1.5A Load Current
RTB60S1	60Volt dc, 20kA, 1.5A Load Current



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