

## **Features**

- CRITEC<sup>®</sup> Transient Discriminating (TD) Technology provides increased service life
- In-line series protection
- High efficiency low pass sine wave filtering – ideal for the protection of switched mode power supplies
- Three modes of protection: L-N, L-PE & N-PE
- 35 mm DIN rail mount – simple installation
- LED status indication and opto-isolated output – for remote status monitoring
- CE, UL<sup>®</sup> 1449 Ed. 3 Listed

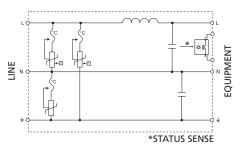


## CRITEC<sup>®</sup> Transient Discriminating Filter

The TDF series has been specifically designed for process control applications to protect the switched mode power supply units on devices such as PLC controllers, SCADA systems and motor controllers. Units are UL® Recognized and available for 3A, 10A and 20A loads and suitable for 110-120V ac/dc and 220-240Vac circuits.

The TDF is a series connected, single phase surge filter providing an aggregate surge capacity of 50kA (8/20µs) across L-N, L-PE, and N-PE. The low pass filter provides up to 65dB of attenuation to voltage transients. Not only does this reduce the residual let-through voltage, but it also helps further reduce the steep voltage rate-of-rise providing superior protection for sensitive electronic equipment.





Model	TDF3A120V	TDF3A240V	TDF10A120V	TDF10A240V	TDF20A120V	TDF20A240V		
tem Number for Europe	700001	700002	700003	700004	700005	700006		
Nominal Voltage, Un	110-120 V	220-240 V	110-120 V	220-240 V	110-120 V	220-240 V		
Distribution System	TN-C-S, TN-S							
Max Cont. Operating	170VAC	340VAC	170VAC	340VAC	170VAC	340VAC		
Voltage, Uc								
Stand-off Voltage	240V	400V	240V	400V	240V	400V		
Frequency	0-60Hz	50/60Hz	0-60Hz		•	50/60Hz		
Max Line Current, IL	3 A		10 A		20 A			
Operating Current @ Un	135 mA	250 mA	240 mA	480 mA	240 mA	480 mA		
Max Discharge Current,	10kA 8/20µs N	3/20µs N-PE						
max	20kA 8/20µs L-N							
	20kA 8/20µs L-PE							
Protection Modes	All modes protected							
Technology	In-line series low pass sine wave filter							
	TD Technology							
Voltage Protection Level,	500V @ 500A	700V @ 500A	500V @ 500A	700V @ 500A	500V @ 500A	700V @ 500A		
Up	250V @ 3kA	600V @ 3kA	250V @ 3kA	600V @ 3kA	250V @ 3kA	600V @ 3kA		
Filtering	-62dB @ 100kHz -53dB @ 100kHz -53dB @ 100kH				lz			
Status	Green LED. On=Ok. Isolated opto-coupler output							
Dimensions H x D x W:	90 x 68 x 72 90 x 68 x 144							
mm (in)	(3.54 x 2.68 x 2.83)		(3.54 x 2.68 x 5.67)					
Module Width	4 M	8 M						
Weight: kg (lbs)	0.7 (1.54)		1.48 (3.25)		1.57 (3.46)			
Enclosure	DIN 43 880, UL94V-0 thermoplastic, IP 20 (NEMA®-1)							
Connection	1 mm <sup>2</sup> to 6 mm <sup>2</sup> (#18AWG to #10)							
Mounting	35 mm top hat DIN rail							
Back-up Overcurrent	3A		10A		20A			
Protection								
Temperature	-35°C to 55°C (-31°F to 131°F)							
Humidity	0% to 90%							
Approvals	C-Tick, CE (NOM 3A, 120V), CSA 22.2, UL <sup>®</sup> 1283,							
	UL <sup>®</sup> 1449 Ed 3 Recognized Component Type 2							
Surge Rated to Meet	ANSI®/IEEE® C6	52.41.2 Cat A, (	Cat B, Cat C					

(1) Opto-coupler output can be connected to DINLINE Alarm Relay (DAR275V) to provide Form C dry contacts.

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## **Features**

- In-line series protection
- EMI/RFI noise filtering – protects against industrial electrical noise
- Compact design

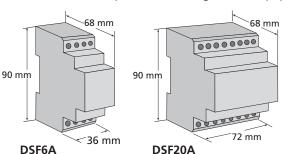
   fits into motor
   control and
   equipment panels
- Three modes of protection: L-N, L-PE & N-PE
- 35 mm DIN rail mount – simple installation
- LED power indicator

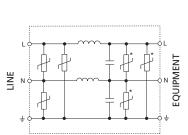


# CRITEC<sup>®</sup> Dinline Surge Filter

The "two port" DSF series has been specifically designed for process control applications to protect the switched mode power supply units on devices such as PLC controllers, SCADA systems and motor controllers. The 30V unit is suitable for 12V and 24Vac/dc signaling and control systems.

The 6A DSF series incorporates a space efficient, low pass, series filter which provides attenuation to high frequency interference. The larger 20A model provides status indication and a higher surge rating, making this ideal for the protection of higher risk equipment.





\*DSF20A275V only

DIIVA	DJIZOA						
Model	DSF6A30V	DSF6A150V	DSF6A275V	DSF20A275V			
Item Number for Europe	702090	701000	701030	701020			
Nominal Voltage, Un	24 110-120 V 220		220-240 V				
Distribution System	1Ph 2W+G	•	•				
System Compatibility	TN-S, TN-C-S						
Max Cont. Operating Volt-	30VAC, 38VDC 150VA		275VAC				
age, Uc							
Frequency	0-60Hz	50/60Hz					
Max Line Current, I∟	6 A	20 A					
Operating Current @ U <sub>n</sub>	7 mA						
Max Discharge Current, I <sub>max</sub>	4kA 8/20µs	16kA 8/20µs		15kA 8/20µs L-N			
_				15kA 8/20µs L-PE			
				25kA 8/20µs N-PE			
Protection Modes	All modes protected						
Technology	In-line series filter						
	MOV						
Voltage Protection Level, U <sub>p</sub>		400V @ 3kA	750V @ 3kA	710V @ 3kA			
Filtering	-3dB @ 300kHz	-3dB @ 62kHz					
Status	LED power indicator	Status indicator					
Dimensions H x D x W:	90 x 68 x 36	90 x 68 x 72					
mm (in)	(3.54 x 2.68 x 1.42)	(3.54 x 2.68 x 2.83)					
Module Width	2 M	4 M					
Weight: kg (lb)	0.2 (0.441)	0.7 (1.543)					
Enclosure	DIN 43 880, UL94V-0 thermoplastic, IP 20 (NEMA-1)						
Connection	1 mm <sup>2</sup> to 6 mm <sup>2</sup> (#18AWG to #10AWG)						
Mounting	35 mm top hat DIN rail						
Back-up Övercurrent	6A			20A			
Protection							
Temperature	-35°C to 55°C (-31°F to 131°F)						
Humidity	0% to 90%						
Approvals	C-Tick, CE, NOM, UL <sup>®</sup> 1449 Ed 3	C-Tick, CE					
	Recognized Component Type 2						
Surge Rated to Meet	ANSI <sup>®</sup> /IEEE <sup>®</sup> C62.41.2 Cat A, Cat B						

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