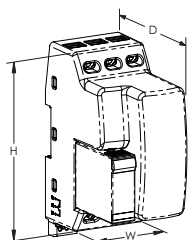


Transient Surge Filter – TSF20A120V



The ERICO CRITEC Transient Surge Filter (TSF) product family is a UL registered, IEC compliant, compact, serviceable solution for protection of PLC controllers, SCADA systems, motor control centers and other process control systems.

- Compact, space saving design
- Replaceable surge module reduces down time and unprotected time during maintenance
- Compliance to the latest UL 1449 Edition 4 and IEC 61643-11 surge standards and UL 1283 Electromagnetic Interference Filters (EMI) standard
- Low let-through voltages on the critical line to neutral mode
- Transient Discriminating (TD) Technology provides increased service life



Part Number	TSF20A120V
Nominal System Voltage (Un)	120 V
Rated Load Current (IL)	20 A
Max Continuous Operating Voltage (Uc)	170 V
Stand-off Voltage	230
Frequency	0 – 100 Hz
Max Discharge Current (Imax), L-N	20 kA 8/20 μ s
Max Discharge Current (Imax), L-PE	20 kA 8/20 μ s
Max Discharge Current (Imax), N-PE	20 kA 8/20 μ s
Filtering	-50 dB @ 100 kHz
Distribution System	1Ph 2W+G
Protection Modes	L-N L-PE N-PE
Connection, Solid	#14 – #10
Connection, Stranded	#14 – #10
Mounting	35 mm top hat DIN rail
Status Indication	Mechanical flag Remote Contacts
Enclosure Material	UL® 94V-0 Thermoplastic
Enclosure Rating	IP 20

Part Number	TSF20A120V
Temperature	23 – 104 °F
Module Width	3 M
Depth (D)	3 3/4"
Height (H)	4.83"
Width (W)	2.13"
Unit Weight	1.12 lb
Replacement Module	TSF120MTDS
Certifications	CE cURus
Standard Packaging Quantity	1 pc
UPC	78285679981
EAN-13	0782856799818

UL 1449 Edition 4 / UL 1283 Edition 5 Ratings					
Part Number	TSF6A24V	TSF6A120V	TSF20A120V	TSF6A240V	TSF20A240V
Max Continuous Operating Voltage (Uc)	-	170 V		275 V	
Rated Load Current (IL)	-	6 A	20 A	6 A	20 A
Nominal Discharge Current (In), L-N	-	3 kA 8/20 μs			
Nominal Discharge Current (In), L-PE	-	3 kA 8/20 μs			
Nominal Discharge Current (In), N-PE	-	3 kA 8/20 μs			
Voltage Protection Rating (VPR), L-N	-	330 V	400 V	-	-
Voltage Protection Rating (VPR), L-PE	-	900 V	800 V	-	-
Voltage Protection Rating (VPR), N-PE	-	700 V	700 V	-	-
Measured Limiting Voltage (MLV), L-N	-	-	-	620 V	680 V
Measured Limiting Voltage (MLV), L-PE	-	-	-	1450 V	1360 V
Measured Limiting Voltage (MLV), N-PE	-	-	-	1220 V	1330 V
Overcurrent Protection Fuse	-	Bussmann FNQ-R-7-1/2	Mersen ATMR25	Bussmann FNQ-R-7-1/2	Mersen ATMR25
Certification Details	-	UL® 1449 Edition 4 Type 2CA, 3 kA Mode		UL® 1449 Edition 4 Type 4CA, 3 kA Mode	
		UL® 1283 Edition 5 EMI Filter			

IEC 61643-11 Ratings					
Part Number	TSF6A24V	TSF6A120V	TSF20A120V	TSF6A240V	TSF20A240V
Max Continuous Operating Voltage (Uc)	30 V	170 V		275 V	
Rated Load Current (IL)	6 A		16 A	6 A	16 A
Nominal Discharge Current (In), L-N	3 kA 8/20 µs				
Nominal Discharge Current (In), L-PE	3 kA 8/20 µs				
Nominal Discharge Current (In), N-PE	3 kA 8/20 µs				
Voltage Protection Level (Up), L-N	330 V	330 V	330 V	800 V	850 V

IEC 61643-11 Ratings					
Part Number	TSF6A24V	TSF6A120V	TSF20A120V	TSF6A240V	TSF20A240V
Voltage Protection Level (Up), L-PE	500 V	1050 V	1050 V	1800 V	1900 V
Voltage Protection Level (Up), N-PE	500 V	1050 V	1050 V	1800 V	1900 V
Overcurrent Protection Circuit Breaker	Clipsal 4CB106/10		Clipsal 4CB116/10	Clipsal 4CB106/10	Clipsal 4CB116/10
Complies With	IEC® 61643-11 Class II				

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WARNING

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