

## SERIES POWERLINE PROTECTION



Series powerline protection is the best available protection for sensitive electronics such as rectifiers, switchmode power supplies, and other mission critical equipment. The Series Filter reduces the rate of rise of any transient overvoltage to acceptable levels, and also reduces the overall magnitude of the transient voltage the equipment receives.

### Low Current Single Phase Filters Location: IEC 61643 Class III

Ordering Code	Description
DLSF-XXA-24V	DIN line surge filter, 1Ph 240 Vac, 3 modes of protection, 25 kA 8/20 $\mu$ s L-N primary protection,
DLSF-XXA-230V	25 kA 8/20 $\mu$ s L-N secondary protection, and 25 kA 8/20 $\mu$ s N-E protection. 110 Vac version
DLSF-XXA-385V	available upon request.
DLSF-XXA-480V	Variants available with 8 A, 16 A and 20 A load current capacity

XX refers to load currents in amps = **8** or **16** or **20**

Please ask for Technical Data Sheet (TDS) on DLSF Surge Filters for more details



### Single and Three Phase Surge Filters Location: IEC 61643 Class I, II & III

#### Standard Surge Filter Order Code:

#### SF X YY ZZZ-100+50-AIMCB

Where X is the number of phases, YY is circuit current rating per phase, ZZZ is the voltage. Standard filters are manufactured and supplied 100 kA line and 50 kA load size. All surge filters are supplied with Alarm interface module (AIM).

#### Standard Surge Filter specifications:

All units can withstand overvoltage and fault conditions in accordance with IEC 61643 requirements. All units incorporate non saturating inductors combined with high reliability capacitors to form an effective low pass filter, incorporating shunt protection elements on the line and load sides.



Number of Phases X	Current Rating YY	Max. Continuous Operating Voltage (Uc)	Description
1 or 3	32 A, 63 A, 125 A	385, 480 Vrms	Surge filter with Class II protection applied P-N, 100 kA 8/20 $\mu$ s line side protection, 50 kA 8/20 $\mu$ s load side protection per phase. 100 kA 10/350 $\mu$ s N-E
1 or 3	200 A	385, 480 Vrms	Surge filter with Class I protection applied P-N, 50 kA 10/350 $\mu$ s, 135 kA 8/20 $\mu$ s line side protection, 50 kA 8/20 $\mu$ s load side protection per phase. 100 kA 10/350 $\mu$ s N-E
3	315 A, 400 A, 630 A, 800 A, 1000 A, 1250 A, 1500 A, 1750 A	385, 480 Vrms	Surge filter with Class I protection applied P-N, 50 kA 10/350 $\mu$ s, 135 kA 8/20 $\mu$ s line side protection, 50 kA 8/20 $\mu$ s load side protection per phase. 100 kA 10/350 $\mu$ s N-E

## TELECOMMUNICATION PROTECTION

### Din Mount Data and Telephone Line Protectors



- New DD range used directly with EIA standard interfaces RS-232, RS-422, RS-423, RS-485 and with 4-20mA instrumentation loops
- DD-1T single pair telephone line protector is suitable for analogue phone lines, ISDN, ADSL and PCM circuits

Electrical Specifications		DD-06	DD-06-BNC	DD-12	DD-24	DD-48	DD-1T
Nominal Operating Voltage	$U_N$	6 V 6.6 V <sub>DC</sub>	6 V	12 V 15.6 V <sub>DC</sub>	24 V 29 V <sub>DC</sub>	48 V 62 V <sub>DC</sub>	Telephone
Max. Continuous Operating Voltage	$U_C$	4.7 V <sub>RMS</sub>	6.6 V <sub>DC</sub>	11.0 V <sub>RMS</sub>	20 V <sub>RMS</sub>	44 V <sub>RMS</sub>	190 V <sub>DC</sub>
Surge Current rating (8/20 $\mu$ s)	$I_{MAX}$	20 kA					
Operating Current (DC or RMS)	$I_L$	2 A					
Voltage Protection Level @ 3kA (8/20 $\mu$ s)	$U_p$	16 V	16 V	28 V	60 V	120 V	240 V
Loop Resistance		< 0.1 $\Omega$					
Bandwidth		5 MHz					
Protection Modes		Line-Line & Line-Ground					
Operating Temperature		-40° C to 60° C					

Application	DD-06	DD-06-BNC	DD-12	DD-24	DD-48	DD1T
RS-232				✓		
RS-422	✓					
RS-485			✓			
Fire Alarm Panels				✓		
Security Systems			✓	✓		
Process Control loops				✓		
C-BUS					✓	
Analogue telephone line						
Digital telephone line						✓
CCTV		✓				✓