

# DINRAIL SURGE FILTER

Unsurpassed performance in surges and transients filtering ensures a clean, filtered supply of electricity is provided to all the equipments connected at the output

- ◆ All mode protection
- ◆ Highest safety standard design
- ◆ Multi-stage protection for surges suppression and filtering
- ◆ High surge handling capability
- ◆ Remote monitoring
- ◆ Fits into most switching box



#### All mode protection-DSF series

surge filters provides unsurpassed surges and transients filtering for main or branch panels as well as critical loads used in low to medium exposure areas. It offers all mode(L-N, L-E and N-E) and repeated protection in lightning intense environment.

#### Highest safety standard design -It

has been engineered to the industry's safest criteria for full compliance with ULI1449 Edition2 by using a specially designed metallic enclosure. Also with its patented thermal and short circuit fusing included, it ensures safe isolation during sustained abnormal over-voltage events and component failure.

#### Multi-stage protection for surges suppression and filtering -No

single technology can provide overall protection, so DSF surge filter utilize multi-stage design. The first stage rapidly diverts excess transient surges to ground. The second stage uses low pass filter to discriminate the noise, harmonics and remaining surges from the normal supply. The third stage ensures the impulses generated by the connected load will not return to the supply.

#### High surge handling capability-

With its 40KA per line high surge handling capability makes DSF series protector the ultimate choice for most facility protection.

#### Remote monitoring -All models

features voltage free contacts with normal open/normal close contacts which change state to indicate a fault. An optional Remote Monitoring Panel can also be chosen which offers both visual and audible alarm at remote location from the protector.

#### Fits into most switching box -It 's

design match the profile of most common MCBs at used which makes it ideal for inclusion in distribution or switchboard by mounting on the DIN43880 DIN rail.

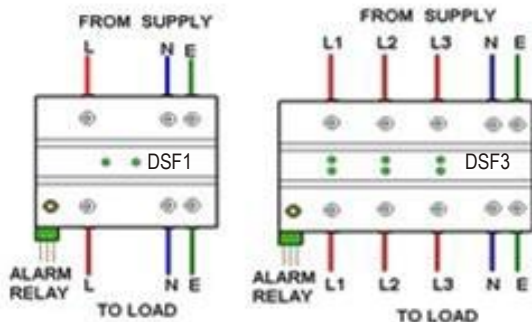




# SPECIFICATIONS AND DRAWINGS

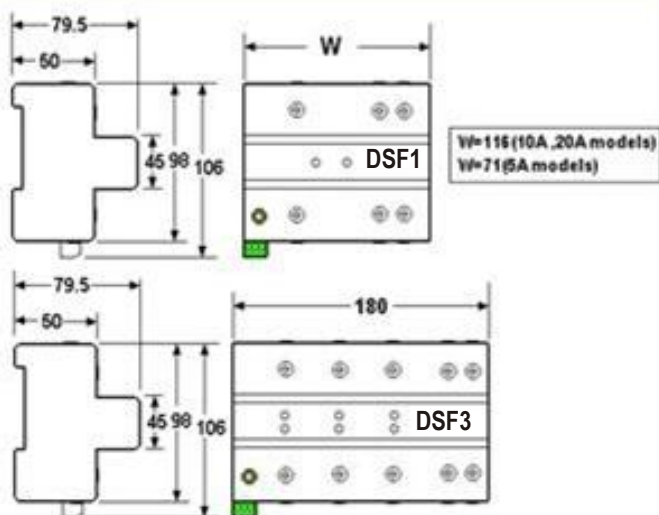
## Installation

The filters are connected in series with the protected system (load) as illustrated below:



For detail installation requirements, pls refer to relevant user manual.

## Dimensions



## Ordering Information

MODEL	DESCRIPTION	WEIGHT
DSF105- 25M	1 Ph, 5A, 25KA, DINRAIL surge filter	410g
DSF105- 25MA	1 Ph, 5A, 25KA, DINRAIL surge filter with alarm	420g
DSF105- 40M	1 Ph, 5A, 40KA, DINRAIL surge filter	430g
DSF105- 40MA	1 Ph, 5A, 40KA, DINRAIL surge filter with alarm	440g
DSF110- 25M	1 Ph, 10A, 25KA, DINRAIL surge filter	700g
DSF110- 25MA	1 Ph, 10A, 25KA, DINRAIL surge filter with alarm	710g
DSF110- 40M	1 Ph, 10A, 40KA, DINRAIL surge filter	720g
DSF110- 40MA	1 Ph, 10A, 40KA, DINRAIL surge filter with alarm	730g
DSF120- 25M	1 Ph, 20A, 25KA, DINRAIL surge filter	810g
DSF120- 25MA	1 Ph, 20A, 25KA, DINRAIL surge filter with alarm	820g
DSF120- 40M	1 Ph, 20A, 40KA, DINRAIL surge filter	830g
DSF120- 40MA	1 Ph, 20A, 40KA, DINRAIL surge filter with alarm	840g
DSF310- 25M	3 Ph, 10A, 25KA, DINRAIL surge filter	1015g
DSF310- 25MA	3 Ph, 10A, 25KA, DINRAIL surge filter with alarm	1025g
DSF310- 40M	3 Ph, 10A, 40KA, DINRAIL surge filter	1035g
DSF310- 40MA	3 Ph, 10A, 40KA, DINRAIL surge filter with alarm	1045g
DSF320- 25M	3 Ph, 20A, 25KA, DINRAIL surge filter	1180g
DSF320- 25MA	3 Ph, 20A, 25KA, DINRAIL surge filter with alarm	1190g
DSF320- 40M	3 Ph, 20A, 40KA, DINRAIL surge filter	1200g
DSF320- 40MA	3 Ph, 20A, 40KA, DINRAIL surge filter with alarm	1210g

### Notes:

(1) The above protector are all AC models. DC models: 12V, 24V, 36V, 48V, 72V, 100V, 150V are available on requested. For DC applications, pls add "V" and the required nominal DC voltage at the suffix of the model number when order. e.g. A protector with 10A load, 50Vdc and 40KA with alarm is required, pls specify DSF110- 40MA/V50

## General Specifications

Nominal voltage:	220Vrms(1ph) , 380Vrms(3ph)
Operating voltage:	200-280Vrms(1 ph) , 300-4 80Vrms(3ph)
Load current:	(5-20 A) see ordering information
Operating frequency:	40-60Hz
Connection type:	Series
Max. Surge rating per line:	Let 25KA and 40KA(8/20 $\mu$ s)
through voltage:	<700V for 3KA Cat B
Protection mode:	L-N ,L-E ,N-E
Earth leakage current:	<20 $\mu$ A
Efficiency:	99%
Frequency response:	3dB (at 800Hz)
Response time:	<5ns
Standards compliance:	BS6651-1999 cat.A,B,C AS1768-2003 cat.A,B,C IEEE C62.41 cat.A,B,C CP33-1999 cat.A,B,C IEC 1000-4-5 1995 UL1449 second edition
EMC compliance:	BS EN 60950: 1992 BS EN 61000: 1999
Alarm isolation:	4KV
Status indicator:	LED (Green=OK)
Optional remote alarm:	Beeping sound ,OK and FAILED
Alarm(volt free contact):	N/O ,N/C(2A@ 250Vac)
Alarm conductor size:	2.5mm <sup>2</sup>
Conductor size:	16mm <sup>2</sup>
Mounting:	35mm DIN rail (DIN 43880) or panel Screw mount
Enclosure material:	Galvanized steel alloy
Operating temperature:	-40-85 $^{\circ}$ C
Humidity:	0-95%(R.H.)
Weight:	See ordering information