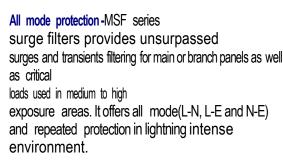
Unsurpassed performance in surges and transients filtering ensures a clean, filtered supply of electricity is provided to all the equipments connected at the output

- ◆ All mode protection
- Highest safety standard design
- Multi-stage protection for surges suppression and filtering
- Exceptional high surge handling capability
- Redundant protection and staged LED status indication
- Remote monitoring



### 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. A MCB is also included to ensure safety isolation under overloaded condition.

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

single technology can provide overall protection, so MSF 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

## Exceptional high surge handling capability up to 140KA per line -

Its 200KA to 560KA unit total unparalleled surge handling capability makes MSF series protector the ultimate choice for total facility protection.

### Redundant protection and staged LED status indication-Each

phase employs two redundant and independent fused and thermal overload protection elements to provide back-up protection for continued equipment survival There are two LED indicators per phase to monitor the integrity of the protection. This pre-failure warning indication design means you will never be unprotected.

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.



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### SPECIFICATIONS AND DRAWINGS

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

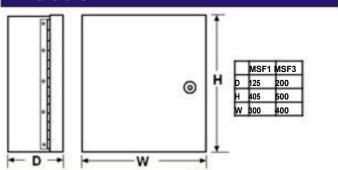
SUPPL

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

LOAD

### **Dimensions**

FROM SUPPLY



### **Ordering Information**

MODEL	DESCRIPTION	WEIGHT
MSF140-50M MSF140-80M MSF163-50M MSF163-50M MSF163-80M MSF163-140M MSF180-50M MSF180-140M MSF1100-50M MSF1100-80M MSF1100-30M MSF1100-40M MSF1125-50M MSF1125-50M MSF1125-50M	1 Ph, 40A, 50KA, surge Filter 1 Ph, 40A, 80KA, surge Filter 1 Ph, 40A, 140KA, surge Filter 1 Ph, 63A, 50KA, surge Filter 1 Ph, 63A, 50KA, surge Filter 1 Ph, 63A, 140KA, surge Filter 1 Ph, 80A, 140KA, surge Filter 1 Ph, 80A, 50KA, surge Filter 1 Ph, 80A, 140KA, surge Filter 1 Ph, 100A, 50KA, surge Filter 1 Ph, 100A, 50KA, surge Filter 1 Ph, 100A, 50KA, surge Filter 1 Ph, 100A, 140KA, surge Filter 1 Ph, 125A, 50KA, surge Filter 1 Ph, 125A, 50KA, surge Filter 1 Ph, 125A, 80KA, surge Filter	9.1kg 9.2kg 9.6kg 9.5kg 9.5kg 10.1kg 9.6kg 9.5kg 9.5kg 9.5kg 9.5kg 9.5kg 9.5kg
MSF340-50M MSF340-80M MSF340-140M MSF363-50M MSF363-80M MSF363-140M MSF380-50M MSF380-50M MSF380-140M MSF380-140M MSF380-140M	3 Ph, 40A, 50KA, surge Filter 3 Ph, 40A, 80KA, surge Filter 3 Ph, 40A, 140KA, surge Filter 3 Ph, 63A, 50KA, surge Filter 3 Ph, 63A, 80KA, surge Filter 3 Ph, 63A, 140KA, surge Filter 3 Ph, 80A, 50KA, surge Filter 3 Ph, 80A, 80KA, surge Filter 3 Ph, 80A, 80KA, surge Filter 3 Ph, 80A, 140KA, surge Filter 3 Ph, 100A, 50KA, surge Filter	21.1kg 21.3kg 22.2kg 22.5kg 22.7kg 23.6kg 22.7kg 22.7kg 23.6kg 22.5kg
MSF3100-80M MSF3100-140M MSF3125-50M MSF3125-80M MSF3125-140M	3 Ph, 100A, 80KA, surge Filt er 3 Ph, 100A, 140KA, surge Filter 3 Ph, 125A, 50KA, surge Filter 3 Ph, 125A, 80KA, surge Filter 3 Ph, 125A, 140KA, surge Filter	22 7kg 23.6kg 22.5kg 22.7kg 23.6kg

#### Notes

- (1) Other surge rating , e.g. 40KA , 60KA , 100KA , 120KA , 160KA and load current 32A, 50A are available on requested.
- (2) Optional surge counters and over -under voltage tripping device are available on requested.
- (3) The above models has an operating voltage of 180-280Vrms(1ph), 300-480Vrms(3ph). Other operating voltage ranges are available on requested.

LEPS Technologies Ltd. http://www.lepstech.com Email: sales@lepstech.com

### **General Specifications**

Nominal voltage: 220Vrms(1ph), 380Vrms(3ph)

Operating voltage: 180-280Vrms(1ph), 300-4 80Vrms(3ph)

**Load current:** ( 40A -125A ) see ordering information

Operating frequency: 40-60Hz

Connection type: Series

Max. Surge rating per line: Let 50KA to 140KA(8/20µs)

through voltage: <380V for 3KA Cat B

Protection mode: L-N ,L-E ,N-E

Earth leakage current: <1µA

Efficiency: 997

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 alarms: Siren sound,OK and FAIL LED

Alarm(volt free contact): N/O ,N/C(2A@ 250Vac)

Alarm conductor size: 2.5mm<sup>2</sup>

Conductor size: 35mm<sup>2</sup>

Mounting: Back panel screw mount

Enclosure material: Galvanized steel alloy

Enclosure IP rating: IP55

Operating temperature: -40-85°C

Humidity:

Weight: See ordering information

