HYBRID SURGE DIVERTER

Ultimate performance in surge suppression for main panels used in industrial, commercial environments in medium to high exposure areas.

- **Hybrid technology design for higher safety standards**
- **Active Tracking and Filtering**
- **Exceptional high surge handling capability**
- **Staged LED status indication**
- **Remote monitoring**
- **Redundant protection segments**

HSD3-140M and HSD1-140M

Hybrid technology design for higher safety standards - Hybrid Spark gap series MOV technology ensures its continuous protection under temporary overvoltage(TOV) / highly fluctuated mains voltage and transient overvoltages withou follow on current problems. It has been engineered to the industry's safest criteria for full compliance with IEC61643-11 and ULI1449 Edition4. Also with its patented thermal and short circuit fusing included, it ensures safe isolation during sustained abnormal over-voltage events and component failure.

Active Tracking and Filtering - models with suffix T have the specially designed Active Tracking and Filtering circuit which allows EMI/RFI noise filtering for better protection.

Exceptional high surge handling capability - 50KA per mode , impulse surge rating makes HSD series protector the ultimate choice for total facility protection.

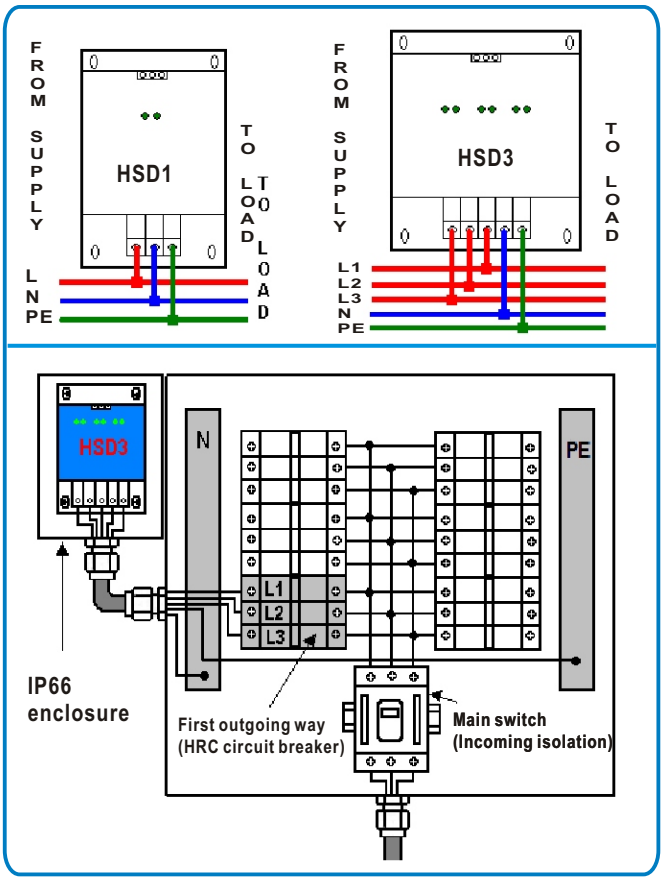
Staged LED status indication - All models have two LED indicators per phase to monitor the integrity of protection. This pre-failure warning indication design means you will never be unprotected.

Remote monitoring - All models features voltage free contacts with normal open/normal close contacts which change state to indicate a fault. It can be interfacing with intelligent building management systems for remote indication. In addition, the RMP signal interface can be connected to optional Remote Monitoring Panel(RMP-05) which offers both visual and audible alarm at remote location

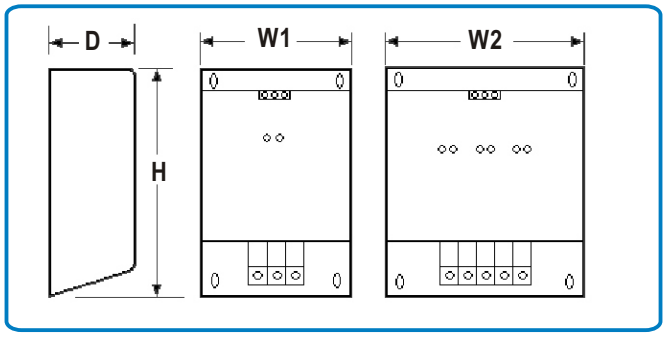
Redundant protection segments - Each phase employs two independent fused and thermal overload protection elements to provide back-up protection for continued equipment survival despite a fault condition. This means that in the event of a fault situation, you are never be unprotected.

Installation

The diverters are connected in parallel with the protected system(load) as illustrated below:



Dimensions & weight



MODEL	WEIGHT	D	H	W1	W2
HSD1-140M	~1380g	90	200	90	--
HSD3-140M/3	~1950g	90	200	--	138
HSD3-140M	~2380g	90	200	--	138

General Specifications

SPD class(EN/IEC):	Class I/Type 1
Nominal voltage, U_n:	230Vac(L-N) (other voltage upon request)
Max. working voltage, U_c:	440Vac (other voltage upon request)
Operating frequency:	40-60Hz
Max. discharge current, I_{max}:	
HSD1-140M	140KA (8/20μs)
HSD3-140M/3	140KA (8/20μs)
HSD3-140M	140KA (8/20μs)
Max. discharge current, I_n:	
HSD1-140M	50KA (8/20μs)
HSD3-140M/3	50KA (8/20μs)
HSD3-140M	50KA (8/20μs)
Impulse discharge current, I_{imp}:	
HSD1-140M	50KA (10/350μs)
HSD3-140M/3	50KA (10/350μs)
HSD3-140M	50KA (10/350μs)
Voltage protection level, U_p:	<1.0KV @ 3KA(8/20μs), IEC61643-11
Lightning impulse voltage sparkover:	<1.1KV @1.2/50μs, IEC61643-11
Specific Energy, W/R:	625KJ/Ω, IEC61643-11
Protection mode:	
HSD1-140M	L-N, L--PE, N-PE
HSD3-140M/3	L1/L2/L3-N
HSD3-140M	L1/L2/L3-N, L--PE, N-PE
Response time, t_A:	<5ns
Earth leakage current:	<5μA
Short circuit current rating, I_{sc}:	200KArms
Overcurrent & thermal disconnect:	Built-in
Standards compliance:	BS/EN IEC61643-11 Class 1 AS1768-2007 cat.A.B.C IEEE C62.41-1991 IEEE C62.41.2-2002 UL1449 4th edition
Alarm isolation:	4KV
Status indicator:	LED (Green=OK)
Optional RMP remote alarm:	Siren sound, OK and FAIL LED
Alarm(volt free contact):	N/O, N/C(2A @250Vac)
Alarm conductor size:	2.5mm²
Conductor size:	16mm²
Case material:	Galvanized steel alloy
Mounting:	35mm DIN rail (DIN 43880) or panel screw mount
Options: (Add the respective options letter)	IP66 enclosure (add "**/E**") Active tracking & filtering--ATN(add"**/T**") Surge counter(add "**/C**")
Operating temperature, T_u:	-40-85°C
Humidity:	0-95%(R.H.)
Altitude:	0-3650m

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