



PHOTOVOLTAIC SYSTEM MODULAR DIVERTER

PMD series is designed for any DC power systems such as photovoltaic (PV) power or other DC power supply systems used in industrial and commercial environments located in low to high exposure areas

- ◆ **Plug-in protection modules for easy maintenance**
- ◆ **Fault proof circuit design**
- ◆ **High surge handling capability up to 120KA**
- ◆ **Status indication**
- ◆ **Remote monitoring**
- ◆ **Redundant protection segments(80KA or above)**
- ◆ **Full range of voltage to choose**
- ◆ **Fits into most switching box**



Plug-in protection modules for easy maintenance - LEPS PMD series surge diverters uses state-of-the-art plug-in protection modules. This makes the maintenance work much more easy in case there is the need to replace the protection modules.

Fault proof circuit design - It has been engineered to the industry's safest criteria by using fault proof circuit design which not only avoids damage of the diverter due to insulation faults in the PV generator but also prevents damages caused by installation errors.

High surge handling capability up to 120KA per line - PMD series has surge rating from 20KA to 120KA per line which makes it an economical and ideal choice for any DC power protection at low to high exposure areas.

Status indication - All models have mechanical indicators per line to monitor the integrity of protection.

Remote monitoring - Models with suffix A 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.

Redundant protection segment - 80KA or above models employs two independent fused and thermal overload protection elements to provide back-up protection for continued equipment survival despite a fault condition. This means you are never left unprotected.

Full range of voltage to choose- PMD series has plenty of voltage levels to chose. Start from 110V to as high as 1000V dc models, users can find the right model for their protection requirements.

Fits into most switching box - It's compact 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.

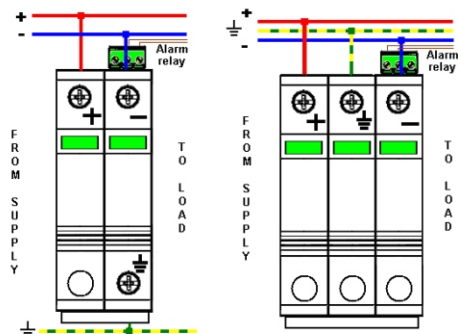




SPECIFICATIONS AND DRAWINGS

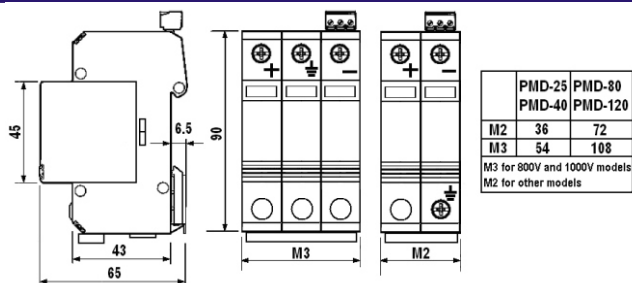
Installation

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



For 110, 220, 330, 500 & 600V models For 800V & 1000V models
For detail installation requirements, pls refer to relevant user manual.

Dimensions



Ordering Information

MODEL	MAX. WORKING VOLTAGE (DC)	CLAMPING VOLTAGE (DC)	DESCRIPTION
PMD-20I	110V	250	PV system
PMD-20J	220V	455V	Modular
PMD-20K	330V	710V	Diverter,
PMD-20L	500V	1025V	20KA
PMD-20M	600V	1240V	
PMD-20H	800V	1650V	
PMD-20U	1000V	1980V	
PMD-40I	110V	250V	PV system
PMD-40J	220V	455V	Modular
PMD-40K	330V	710V	Diverter,
PMD-40L	500V	1025V	40KA
PMD-40M	600V	1240V	
PMD-40H	800V	1650V	
PMD-40U	1000V	1980V	
PMD-80I	110V	250V	PV system
PMD-80J	220V	455V	Modular
PMD-80K	330V	710V	Diverter,
PMD-80L	500V	1025V	80KA
PMD-80M	600V	1240V	
PMD-80H	800V	1650V	
PMD-80U	1000V	1980V	
PMD-120I	110V	250V	PV system
PMD-120J	220V	455V	Modular
PMD-120K	330V	710V	Diverter,
PMD-120L	500V	1025V	120KA
PMD-120M	600V	1240V	
PMD-120H	800V	1650V	
PMD-120U	1000V	1980V	

Notes:

(1) The above models are without volt free dry contact, for models with volt free dry contact, please add "A" after the L, M, H and U. e.g. PMD-80MA

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

General Specifications

Max. Surge rating per line:

PMD-20x	20KA(8/20μs), 7.5KA(10/350μs)
PMD-40x	40KA(8/20μs), 15KA(10/350μs)
PMD-80x	80KA(8/20μs), 30KA(10/350μs)
PMD-120x	120KA(8/20μs), 45KA(10/350μs)

Max. operating voltage:

See ordering information

Protection level:

See ordering information

Earth leakage current:

10μA

Protection mode:

Transverse and common

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
IEC 60364-7-712
IEC 61643-1 1998
UL1449 second edition

SPD Category(IEC/EN/VDE):

Class II/Type 2/C---PMD-20, PMD-40
Class I/II/Type 1+2/B+C---PMD-80, PMD-120

Alarm isolation:

4KV

Status indicator:

Mechanical Indicator (Green=OK.
Red=Fault)

Alarm(volt free contact):

N/O, N/C(2A@250Vac)

Alarm conductor size:

2.5mm²

Conductor size:

35mm²

Operating temperature:

-40-85°C

Humidity:

0-95%(R.H.)

Mounting:

35mm DIN rail (DIN 43880)

Enclosure material:

Thermal Plastic UL94-V0

Weight:

PMD-20x--3 modules(M3)	370g
PMD-20x--2 modules(M2)	250g
PMD-40x--3 modules(M3)	410g
PMD-40x--2 modules(M2)	275g
PMD-80x--3 modules(M3)	540g
PMD-80x--2 modules(M2)	360g
PMD-120x--3 modules(M3)	870g
PMD-120x--2 modules(M2)	580g

Local Distributor:

