

This document must be retained for future reference.

It is the responsibility of the person installing the electrical equipment to ensure that the installation meets the requirements of the IET wiring regulations and is therefore 'fit for purpose'. Factors such as correct selection of components, cable sizing, protective devices and Earth bonding are all critical and should be checked prior to full testing and power-up. Any other regulations applicable to the equipment being installed such as the Machinery Directive and current health and safety legislation must also be adhered to.

All connections (including factory made) must be checked for the correct tightness prior to commissioning of the electrical installation.
All connections should also be inspected periodically to ensure correct tightness.

DO NOT USE POWER TOOLS ON THESE PRODUCTS



ECSS-3101D

IP65 Enclosed Prewired 3 Phase TT/TN-S Type 1/2 SPD inc.160A Fuses

Features & Benefits

- IP65 ABS Enclosure
- Translucent lid
- Retrofit unit, no need to change existing boards

SPD Specification

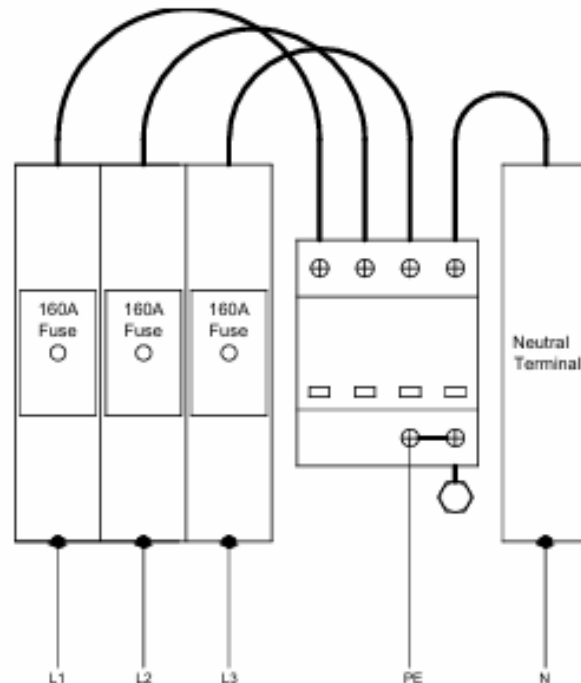
SPD Part No.	941310
SPD according to EN 61643-11	type 1 + type 2
Energy coordination with terminal equipment (≤ 10m)	type 1 + type 2 + type 3
Nominal a.c. voltage (UN)	230 / 400 V (50 / 60 Hz)
Max. continuous operating a.c. voltage [L-N] (UC)	255 V (50 / 60 Hz)
Lightning impulse current (10/350 μs) [L1+L2+L3+N-PE] (Itotal)	50 kA
Specific energy [L1+L2+L3+N-PE] (W/R)	625.00 kJ/ohms
Lightning impulse current (10/350 μs) [L-N]/[N-PE] (Iimp)	12.5 / 50 kA
Specific energy [L-N]/[N-PE] (W/R)	39.06 / 625.00 kJ/ohms
Nominal discharge current (8/20 μs) [L-N]/[N-PE] (In)	12.5 / 50 kA
Voltage protection level [L-N]/[N-PE] (UP)	≤ 1.5 / ≤ 1.5 kV
Follow current extinguishing capability [L-N]/[N-PE] (Ifi)	25 kArms / 100 Arms
Response time (tA)	≤ 25 ns
Max. mains-side overcurrent protection	≤ 100 ns
Temporary overvoltage (TOV) [L-N] (UT) – Characteristic	440 V / 120 min. – withstand
Temporary overvoltage (TOV) [N-PE] (UT) – Characteristic	1200 V / 200 ms – withstand
Operating temperature range (TU)	-40 °C ... +80 °C
Operating state / fault indication	green / red
Cross-sectional area (L1, L2, L3, N, PE, 9) (min.)	1.5 mm2 solid / flexible
Cross-sectional area (L1, L2, L3, N, PE, 9) (max.)	35 mm2 stranded / 25 mm2 flexible



Fuse Specification

Fuse Part No.	Rated Current (A)	Power loss (W)	Pre-arcing I ² t -value (A ² s)	Total I ² t -value at 240V (A ² s)	Total I ² t -value at 440V (A ² s)
20-001-13/160A	160A	11.2	78,500	139,600	226,600

Wiring Diagram



Connections from equipment/installation to be protected

Connections

All connections (including factory made) must be checked for the correct tightness (4Nm), prior to the commissioning of the electrical installation and on a regular basis

As per clause 534.4.8 in the IET Wiring Regulations, when connecting an SPD in parallel, the optimal connection is a "V-type" as below. Whenever this is not feasible, and SPD is connected as above, the maximum cable length to the SPD must not exceed 0.5m

SPD Indicators

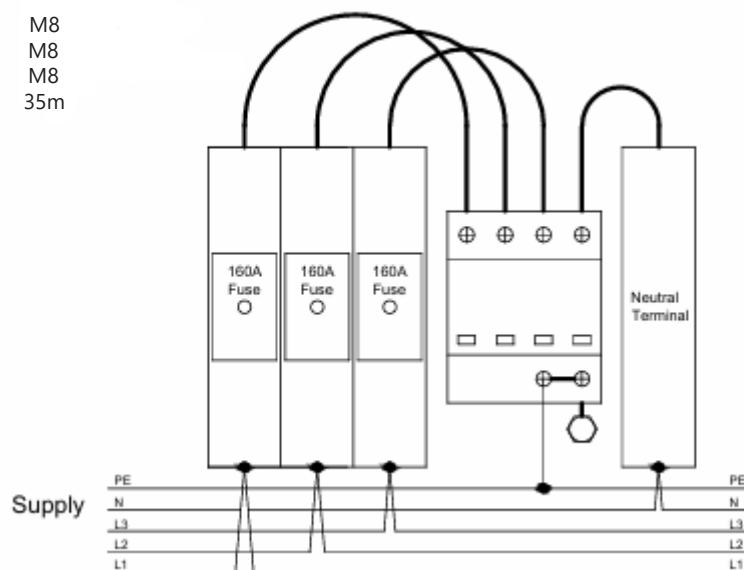
Green = OK
Red = Replace

Fuse Indicators

Red = OK
White = Replace

Fuse holder	M8
Neutral Terminal	M8
Earth Stud	M8
PE - SPD Tunnel	35m

All indicators must be checked on a regular basis



To equipment/
installation to be protected