

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 be inspected periodically to ensure correct tightness.

**DO NOT USE POWER TOOLS ON THESE PRODUCTS**

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Part Number: **ECSS-3101M**

**IP67 Enclosed Prewired 3 Phase TT/TN Type 1/2 SPD inc.160A Fuses**

### Features & Benefits

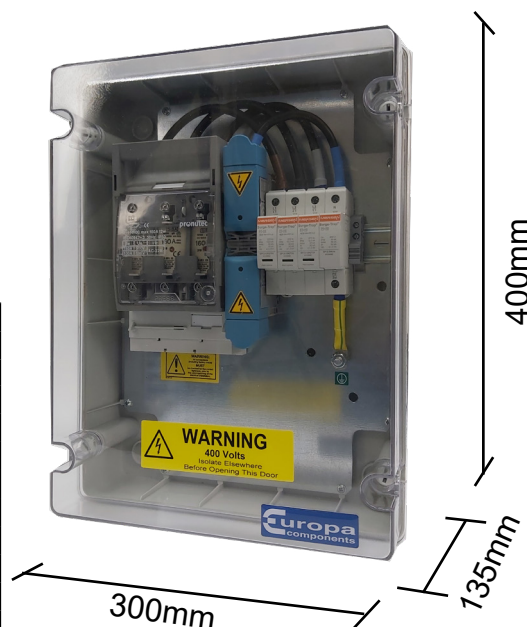
- **IP67 ABS Enclosure**
- **NH Fuse Disconnecter** allows for safe isolation for SPD Replacement
- **Translucent lid** shows fuse & SPD status (no requirement to open door/lid)
- **Retrofit unit**, no need to change existing boards
- **For protecting installations and equipment rated above 160A**

### SPD Specification

SPD Part No.		83120139
SPD according to EN 61643-11		type 1 + type 2
Supply voltage		230/400V
Nominal voltage AC 50-60 Hz (L-N)	Un (L-N)	230V
Nominal voltage AC 50-60 Hz (L-L)	Un (L-L)	400V
Maximum continuous operating voltage (L-N)	Uc (L-N)	275V
Maximum continuous operating voltage (N-PE)	Uc (N-PE)	255V
Lightning impulse current (10/350) (L-N)	limp (L-N)	12.5 kA
Lightning impulse current (10/350) (N-PE)	limp (N-PE)	50 kA
Maximum discharge current (8/20) (L-N)	Imax (L-N)	50 kA
Maximum discharge current (8/20) (N-PE)	Imax (N-PE)	50 kA
Nominal discharge current (8/20) (L-N)	In (L-N)	20 kA
Nominal discharge current (8/20) (N-PE)	In (N-PE)	50 kA
Voltage protection level (L-N) at In	Up (L-N)	1.3 kA
Voltage protection level (N-PE) at In	Up (N-PE)	1.5 kA
Recommended back-up fuse acc. IEC/EN 61643-12 (calculated)		160 A gG
Maximum back-up fuse		200 A gG
Short circuit withstand	Iscrr	25 kA
Response time (L-N)	tA (L-N)	25 ns
Response time (N-PE)	tA (N-PE)	100 ns
Following current (N-PE)	Ifi	100 A
Remote indication		Yes
Visual end of life indication		Yes
Dynamic thermal disconnection (L-N)		Yes

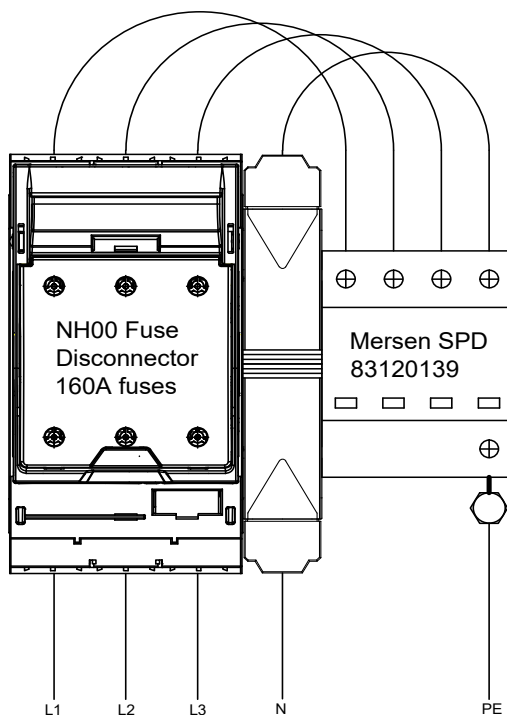
### Fuse Specification

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



### Wiring Diagram

NH Fuse disconnecter  
allows for safe isolation  
for SPD replacement



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

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

#### SPD Indicators

Green = OK  
Red = Replace

#### Fuse Indicators

Red = OK  
White = Replace

All indicators must be checked on a regular basis

