JN202SPD
Surge Protection Kit

Type 2 Surge Protection Kit for Hager 250A JN MCCB Panelboards to aid compliance with 18th Edition BS 7671.

JN202SPD

- Plug-in surge arrester, in accordance with Type 2/Class II, for 3-phase power supply networks with separate N
- and PE (5-conductor system: L1, L2, L3, N, PE), with remote indication contact.

  Green = Healthy, Red = Replace
- Varistor arrester with a low leakage current
- High-performance gas-filled surge arrester for N/PE protection
- Extremely narrow design, just 12 mm per position
- High continuous voltage of 350 V AC for 230/400 V AC networks with high voltage fluctuations
- Pluggable
- Low voltage protection level of 1.5 kV
- Optical, mechanical status indicator
- Floating remote indication contact

Product Description

A Surge protection device (SPD) kit specifically developed for Hager standard 250A JN MCCB Panelboards. Developed to ensure optimal performance of SPD technology within Hager distribution boards. SPD is CT2 type to ensure compatibility with all common UK Earthing arrangements e.g. TN-C-S (PME), TN-S and TT earthing arrangements. This is an IEC Type 2 / class II SPD for 3 – phase power supply networks. A type 2 SPD is generally used in sub-distribution boards, downstream of the primary board which may incorporate a Type 1 SPD.

This SPD kit fits within the standard distribution board. Line, Neutral and Earth connections are via 25mm copper cables and a earth copper link, minimising SPD conductor losses, maximising the effective performance of the SPD (U_p effective). SPD performance coordination with upstream Type 1 SPD within
Hager MCCB Panelboards has been verified.

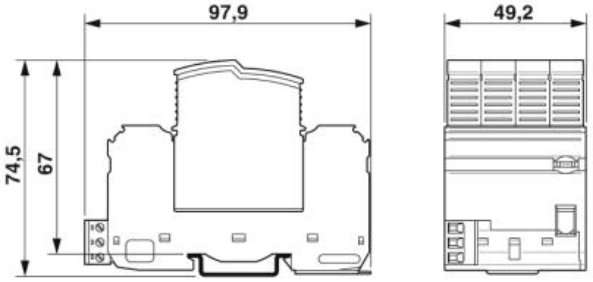
Key Specifications

- Power Supply System -TN / TT
- Requirement class -SPD class II acc. to IEC 61643-11; SPD Type 2 acc. to EN 61643-11
- Max. continuous operating voltage Uc -L-N: 275 V a.c. / N-PE: 260 V a.c.
- Nominal voltage U_n -230/400 V AC 50/60 Hz
- Nominal discharge current I_n (8/20) microseconds 20 kA
- Max. discharge current I max (8/20) microseconds 40 kA

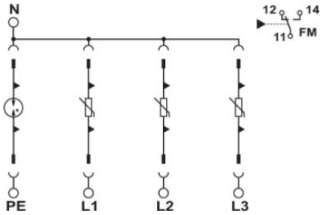
SPD Protection level U_p -L-N: < 1.35 kV/ N-PE: <1.5 kV

Solution Protection level U_p *effective* (measured at the main busbars on the TPN board) -L-N: <1.5kV/ N-PE: < 1.5kV
Short-circuit current rating I_{SCCR} -25kA
Degree of protection - IP20
Tightening torque - see installation instructions.

Dimensional Drawing



Circuit Diagram



General Data	
Standards/regulations	IEC 61643-11 2011 EN 61643-11 2012
IEC test classification	T2
EN type	T2
Mode of protection	L-N L-PE N-PE
Mounting type	DIN rail: 35 mm
Degree of pollution	2
Overvoltage category	III
Degree of protection	IP20
Shock (operation)	30g (Half-sine / 11 ms / 3x ±X, ± Y, ±Z)
Vibration (operation)	5g (10 ... 500 Hz/ 2.5 h / X, Y, Z)
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport) Permissible humidity (operation)	-40 °C ... 80 °C

Electrical Data	
Nominal voltage U_n	240 / 415 V AC (TN / TT)
Nominal frequency f_n	50 Hz (60 Hz)
Maximum continuous operating voltage Uc (L-N)	350 V AC
Maximum continuous operating voltage Uc (L-PE)	350 V AC
Maximum continuous operating voltage Uc (N-PE)	260V AC
Residual current I_{PE}	≤ 1 uA
Standby power consumption Pc	≤ 360 mVA
Nominal discharge current In (8/20) µs	20kA
Maximum discharge current Imax (8/20) µs	40kA
Follow current interrupt rating I_{fi} (N-PE)	100A
Short-circuit current rating IsccR	25kA
Voltage protection level Up (L-N)	≤ 1.5kV
Voltage protection level Up (L-PE)	≤1.9 kV
Voltage protection level UP (N-PE)	≤ 1.5kV
Max. backup fuse	315 A (gG)
Max. backup fuse with V-type through wiring	63 A (gG)