

# VM02SPD Surge Protection Kit

Type 2 Surge Protection Kit for Hager Consumer Units to aid compliance with 18<sup>th</sup> Edition BS 7671.

- Combination of high capacity voltage limiting varistors and N-PE spark gap
- Suitable for CT2 connection as per 534.4.3.2 BS7671 18th Edition
- Optical status indication for each cartridge  
Green = Healthy, Red = Replace
- Pluggable surge protection modules for ease of replacement
- Each cartridge incorporates its own thermal disconnect mechanism
- Cartridges are mechanically coded to prevent mis-connection
- Cartridges can be routinely checked and changed if required without interrupting supply to loads
- No secondary back-up protection required.



VM02SPD

## Product Description

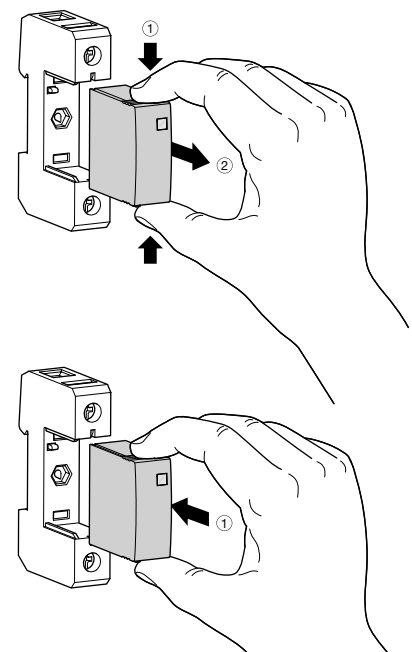
A Surge protection kit specifically developed for Hager Consumer units. Developed to ensure optimal performance of SPD technology within the residential single phase consumer units. SPD is CT2 type to ensure compatibility with all common UK Earthing arrangements e.g. TN-C-S (PME), TN-S and TT earthing arrangements. This is an IEC Type 2 / class II SPD for single phase power supply networks.

This SPD kit fits within the standard consumer unit. Line, Neutral and Earth connections are via cable links from the SPD to the supply side of the main incoming device and terminated with the spade connectors sitting firmly in the top L&N terminals of the incomer, the earth cable will be terminated within the main earth bar within the consumer unit, ensuring a connections are tighten to 3.6Nm

## Key Specifications

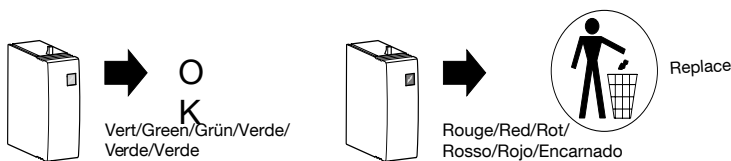
- Power Supply System -TN / TT
- Requirement class -SPD class II acc. to IEC 61643-11; SPD Type 2 acc. to EN 61643-11
- Max. continuous operating voltage  $U_c$  -L-N: 275 V a.c. / N-PE: 260 V a.c.
- Nominal voltage  $U_n$  -230/400 V AC 50/60 Hz
- Nominal discharge current  $I_n$  (8/20) microseconds 5 kA
- Max. discharge current  $I_{max}$  (8/20) microseconds 15 kA

## SPD015D, SPD040D/N



## Fault indication

### SPD215D



### 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
Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport) Permissible humidity (operation)	-40 °C ... 60 °C

### Electrical Data

Nominal voltage $U_n$	230 / 400 V AC (TN / TT)
Nominal frequency $f_n$	50 Hz (60 Hz)
Maximum continuous operating voltage $U_c$ (L-N)	275 V AC
Maximum continuous operating voltage $U_c$ (N-PE)	255 V AC
Residual current $I_{pE}$	$\leq 5 \mu A$
Standby power consumption $P_c$	$\leq 360 \text{ mVA}$
Nominal discharge current $I_n$ (8/20) $\mu s$	5 kA
Maximum discharge current $I_{max}$ (8/20) $\mu s$	15 kA
Follow current interrupt rating $I_{fl}$ (N-PE)	100A
Short-circuit current rating $I_{scR}$	10kA
Voltage protection level $U_p$ (L-N)	$\leq 1 \text{ kV}$
Voltage protection level $U_p$ (L-PE)	$\leq 1 \text{ kV}$
Max. backup fuse	125 A (gG)