

Enclosed Surge Protection with 100A Main Switch Type 2 Surge Device

For protection against transient overvoltages and switching overvoltages.

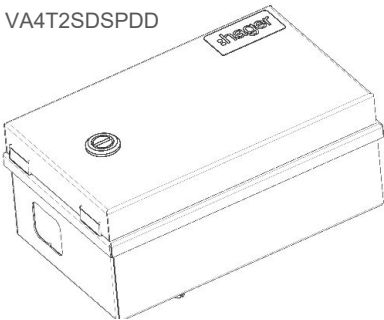
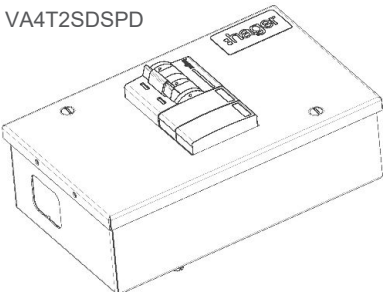
Surge protection devices are designed to protect electronic equipment within an installation from the harmful effects of overvoltages.
BS 7671 regulation 443.4.1 now requires protection against transient overvoltages could result in:

- (i) serious injury to, or loss of, human life
- (ii) failure of a safety service, as defined in part 2
- (iii) significant financial or data loss.

For all other cases, protection against transient overvoltages shall be provided unless the owner of the installation declares it is not required due to any loss or damage being tolerable and they accept the risk of damage to equipment and consequential loss.

The unit is designed to be installed before the consumer unit or distribution board on an installation fed by meter tails (BS 6004). Meter tails can be connected into and out of the 100 A switch with the surge protection device in parallel. The main earthing conductor is also connected into and out of the earth terminal on the surge protection device.

The Line is protected by a Metal Oxide Varistor (MOV) and the neutral by a spark gap device. The Metal Oxide Varistor will degrade each time it deals with high voltage or electromagnetic disturbances, when it is end of life the flag will turn red and the cartridge will require to be changed. At this point the cartridge will fail open circuit and the device will no longer provide surge protection. Simply remove the cartridge and replace with a new cartridge (SPB015, SPB015N). The rest of the installation will remain unaffected.



VA4T2SDSPD

Description	Reference
Enclosed Type II Surge Protection with 100 A Main Switch	VA4T2SDSPD
Enclosed Type II Surge Protection with 100 A Main Switch and Metal Door	VA4T2SDSPDD

Features & Benefits

- Protects the installation against transient overvoltages
- End of life indicator on Line cartridge gives indication when replacement is required.
- Ideal when retrofitting surge protection to an installation
- No space required inside existing consumer unit or distribution board.
- Complete with 2 cable entry plates for 2 x 25mm² meter tails and 1 x 16mm² earthing conductor

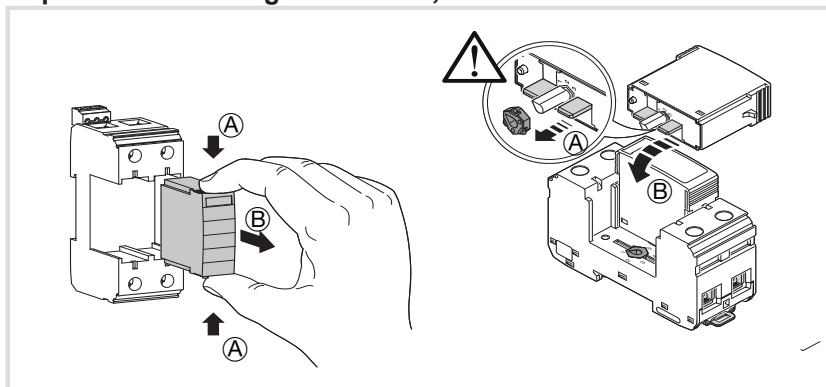
General Data

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 ... 80 °C
Ambient temperature (storage/transport) Permissible humidity (operation)	-40 °C ... 80 °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)	260 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) μs	20 kA
Maximum discharge current I_{max} (8/20) μs	40 kA
Follow current interrupt rating I_{fl} (N-PE)	100A
Short-circuit current rating I_{scCR}	50kA
Voltage protection level U_p (L-N)	$\leq 1.5 \text{ kV}$
Voltage protection level U_p (L-PE)	$\leq 1.5 \text{ kV}$
Max. backup fuse	125 A (gG)

Replacement cartridges - SPB015, SPB015N



Fault indication

