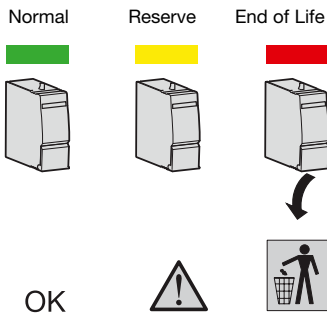




Reserve Indicator Light

Neutral cartridges cannot be put into spares reserved for phase cartridges and visa versa.



Surge Protection

Characteristics

- SPD's protect electrical and electronic equipment against transients, originating from lightning, switching of transformers, lighting and motors. These transient voltages can cause premature ageing of equipment, downtime, or complete destruction of electronic components and materials. SPDs are strongly recommended on installations that are exposed to transient voltages, to protect sensitive and expensive electrical equipment such as TV, video, Hi-Fi, PC, alarm etc.
- The range of SPDs is separated into 3 types of protection:
 - 1. Main protection - Type 1** - SPDs with higher discharge current (I_{max} 10/350), to evacuate as much of the transient over-voltages associated with lightning strikes
 - 2. Main protection - Type 2** - With a discharge current (I_{max} 8/20), to evacuate as much of the transient over-voltage to earth as possible protection level ($U_p \leq 1000V$).
 - 3. Main protection - Type 3** - To cut-down the transient surge as low as possible to protect very sensitive equipment.

Technical Data

- Complies with IEC61643-1.
- D Versions: end of life indicator, auxiliary contact for remote indication.
- R Versions: reserve status indicator, signalling.
- Connection Capacity (terminal blocks L, N & E): Rigid conductor: 10mm², Flexible conductor: 6mm².
- 230V a.c. 1A. 12V...10mA.

Installation and Connection

- The main protection SPDs are installed directly after the main incoming switch or RCCB
- Connected in parallel to the equipment to be protected.
- Protection is assured in both common and differential modes.

Replacement Cartridges

- Allow simple replacement without the need to cut-off the power supply.
- Cartridges are available for all discharge currents, (40kA and 15kA) with and without condition indication.
- A keying system exists to prevent a line cartridge being interchanged by mistake with a neutral one and visa versa neutral cartridges have a discharge current of 65kA.
- For technical details see page 44.