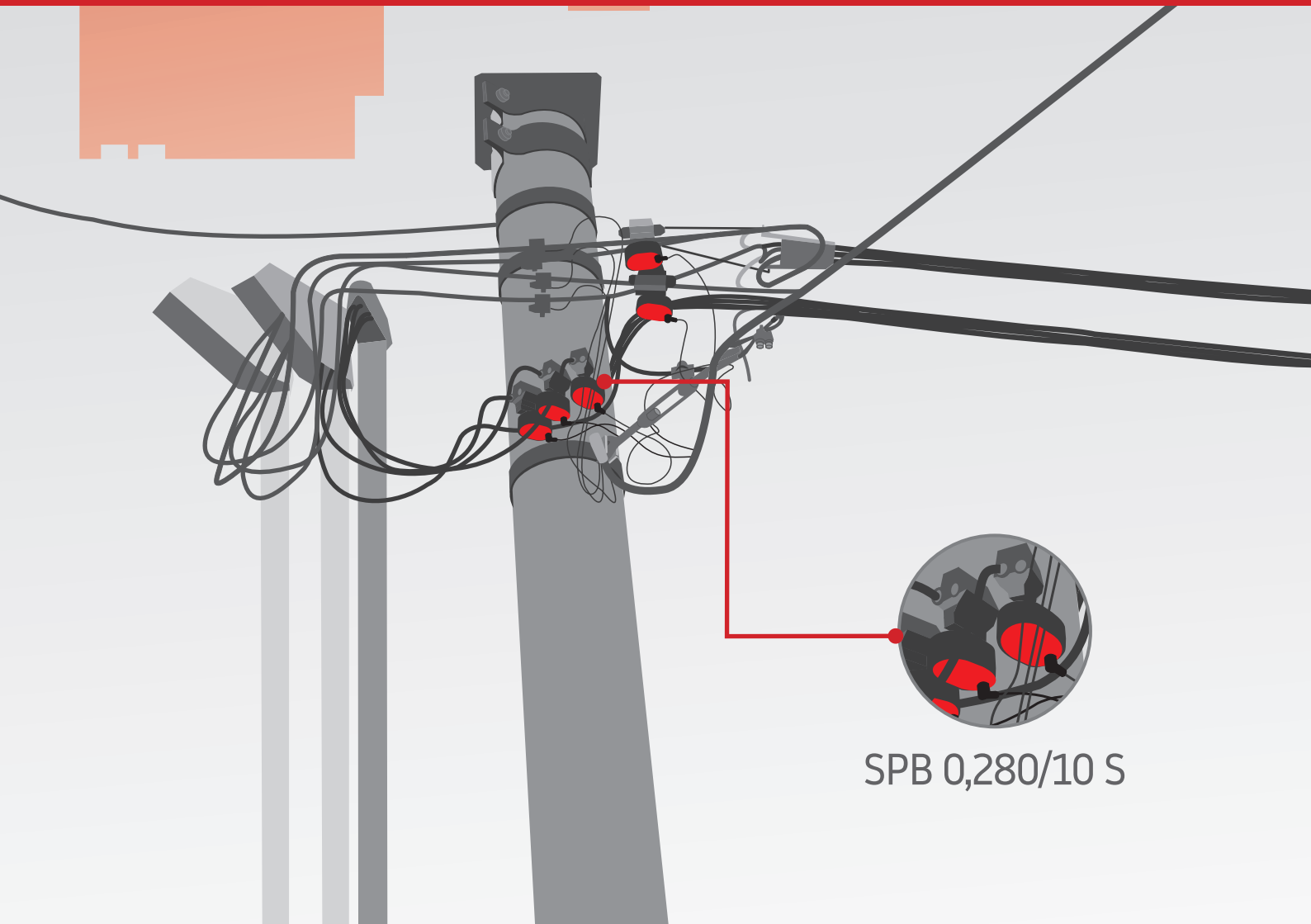


# PROTECTION AGAINST ATMOSPHERIC AND SWITCHING OVERVOLTAGE IN AC SYSTEMS

protection of LV outdoor lines, household connections, distribution transformer switchboards



SPB 0,280/10 S

- SPB \*/10 PP\* - on flat busbars
- SPB \*/10 AlFe\* - on bare overhead conductors
- SPB \*/10 S\* - on insulated overhead conductors

Surge arresters on flat busbars (SPB\*/10 PP\*) on bare overhead conductors (SPB \*/10 AlFe\*) or on insulated overhead conductors (SPB \*/10 S\*). Surge arrester as per EN 61643-11: 2012 with a nominal discharge current of 10kA and a maximum continuous operating voltage of  $U_c = 280 \text{ V}$ , 440 V, 500 V or 660 V. They

- SPD275 - without fault indication
- SPD275S - with LED fault indication
- SPD275FM - with remote fault indication

Are representatives of a wide range of surge protection devices Class 2 + 3 according to EN 61643-11: 2012 and IEC 61643-11: 2011 for general use in AC supply nets. Having a high absorbency at the disposal of interference voltage components propagating along

provide protection against low-voltage overvoltage, they protect in low-voltage overhead power distribution systems – electrical equipment, instruments, switching equipment of distribution transformers and reduce the risk of damage to in-house networks and their equipment by atmospheric and switching overvoltage in AC networks with a frequency of 48-62 Hz. The SPB surge arresters protect against the destructive effects of lightning and switching overvoltage. It is recommended to use them in places secured against contact, e.g. by a position or barrier.

the lines of the result of the switching processes alternatively due to the effects of storm activity. SPD can be applied without the use of DIN rails even in places where there is a tight installation space, as well as an additional measure in applications where the occurrence of overvoltage operates during operation problems. Acc. to customer's demand is possible to supply this protection device for max. continuous AC operating voltage  $U_c$  from 17 to 510V.

# PROTECTION AGAINST ATMOSPHERIC AND SWITCHING OVERVOLTAGE IN AC SYSTEMS

protection of LV outdoor lines, household connections, distribution transformer switchboards

**Surge arrester**  
on flat busbars



SPB \*/10 PP\* - a surge arrester as per EN 61643-11: 2012 with a nominal discharge current of 10 kA and a maximum continuous operating voltage of  $U_c = 280 \text{ V}, 440 \text{ V}, 500 \text{ V}$  or  $660 \text{ V}$ . They provide protection against low-voltage overvoltage, they protect in low-voltage overhead power distribution systems, electrical equipment, instruments, switching equipment of distribution transformers and reduce the risk of damage to in-house systems and their equipment by atmospheric and switching overvoltage in AC systems with a frequency of 48-62 Hz. The

SPB surge arresters protect against the destructive effects of lightning and switching overvoltage. It is recommended to use them in places secured against contact, e.g. by a position or barrier. The destruction of arresters due to great overloading is indicated by the lifting-off of a red signalling cap. Considering the fact that an arrester is not destroyed in the event of its excessive overloading above guaranteed limits and subsequent thermal breakdown. This arrester can be mounted into switchboards directly on the buses of a power circuit-breaker.

**Surge arrester**  
on bare overhead conductors



SPB \*/10 AlFe\* - a surge arrester as per EN 61643-11: 2012 with a nominal discharge current of 10 kA and a maximum continuous operating voltage of  $U_c = 280 \text{ V}, 440 \text{ V}, 500 \text{ V}$  or  $660 \text{ V}$ . They provide protection against low-voltage overvoltage, they protect in low-voltage overhead power distribution systems electrical equipment, instruments, switching equipment of distribution transformers and reduce the risk of damage to in-house systems and their equipment by atmospheric and switching overvoltage in AC systems with a frequency of 48-62 Hz. The

SPB surge arresters protect against the destructive effects of lightning and switching overvoltage. It is recommended to use them in places secured against contact, e.g. by a position or barrier. The destruction of arresters due to great overloading is indicated by the lifting-off of a red signalling cap. Considering the fact that an arrester is not destroyed in the event of its excessive overloading above guaranteed limits and subsequent thermal breakdown. This arrester can be mounted on a bare AlFe conductor with a stainless clip and nut.

**Surge arrester**  
on insulated overhead conductors



SPB \*/10 S\* - a surge arrester as per EN 61643-11: 2012 with a nominal discharge current of 10 kA and a maximum continuous operating voltage of  $U_c = 280 \text{ V}, 440 \text{ V}, 500 \text{ V}$  or  $660 \text{ V}$ . They provide protection against low-voltage overvoltage, they protect in low-voltage overhead power distribution systems, electrical equipment, instruments, switching equipment of distribution transformers and reduce the risk of damage to in-house systems and their equipment by atmospheric and switching overvoltage in AC systems with a frequency of 48-62 Hz. The

SPB surge arresters protect against the destructive effects of lightning and switching overvoltage. It is recommended to use them in places secured against contact, e.g. by a position or barrier. The destruction of arresters due to great overloading is indicated by the lifting-off of a red signalling cap. Considering the fact that an arrester is not destroyed in the event of its excessive overloading above guaranteed limits and subsequent thermal breakdown. This arrester can be mounted on an insulated line with an insulated terminal ENSTO SL 9.22.

**Surge arrester**  
without failure indication



SPD275 - a surge arrester Type 2+3 according to EN 61643-11: 2012 and IEC 61643-11: 2011 for general use in AC power supply systems. Having a high absorbcency at the disposal of interference voltage components propagating along the lines of the result of the switching processes alternatively due to the effects of storm activity. Acc. to customer's demand it is possible to

supply this protection device for max. continuous AC operating voltage  $U_c$  from 17 to 510 V. Way to access the protected device is designed with flexible leads  $1,5 \text{ mm}^2$  with length of 20 cm. SPD should be installed as close as possible to the protected equipment. This type is without local fault indication.

**Surge arrester**  
Put out the green LED diode OPERATION



SPD275S - a surge arrester Type 2+3 according to EN 61643-11: 2012 and IEC 61643-11: 2011 for general use in AC power supply systems. Having a high absorbcency at the disposal of interference voltage components propagating along the lines of the result of the switching processes alternatively due to the effects of storm activity. Acc. to customer's demand it is possible to

supply this protection device for max. continuous AC operating voltage  $U_c$  from 17 to 510 V. Way to access the protected device is designed with flexible leads  $1,5 \text{ mm}^2$  with length of 20 cm. SPD should be installed as close as possible to the protected equipment. This type is with LED fault indication. indication.

**Surge arrester**  
The floatig NC contact switch off



SPD275 FM - a surge arrester Type 2+3 according to EN 61643-11: 2012 and IEC 61643-11: 2011 for general use in AC power supply systems. Having a high absorbcency at the disposal of interference voltage components propagating along the lines of the result of the switching processes alternatively due to the effects of storm activity. Acc. to customer's demand it is possible to

supply this protection device for max. continuous AC operating voltage  $U_c$  from 17 to 510 V. Way to access the protected device is designed with flexible leads  $1,5 \text{ mm}^2$  with length of 20 cm. SPD should be installed as close as possible to the protected equipment. This type is with remote fault indication.indication.

