

## Information for „Electro-Systems”

### New fuse links with rated currents

**DO - 13 A, 32 A, 40 A**

**D III - 32 A, 40 A**

**gG Characteristics**

|                      |                      |                        |                        |
|----------------------|----------------------|------------------------|------------------------|
| DO fuse link 13<br>A | DO fuse link 40<br>A | DIII fuse link 32<br>A | DIII fuse link 40<br>A |
|----------------------|----------------------|------------------------|------------------------|

ETI - POLAM Sp. z o.o. in Pultusk extended the family of TO and TIII installation fuse links, and introduced to the offer additional fuse links with following rated currents:

TO - 13 A, 32 A, 40 A

D III - 32 A, 40 A,

Consequently fuse links TO and D III with gG characteristics at present have following rated currents:

TO 1 - 2 A, 4 A, 6 A, 10 A, 13 A, 16 A,

TO 2 - 20 A, 25 A, 32 A, 35 A, 40 A, 50 A, 63 A

D III - 32 A, 35 A, 40 A, 50 A, 63 A

This is the answer for the Electricity Generating Boards services, to limit the level of the power consumption by receivers of the electrical energy, and designers for the correct lines protection against short-circuits and surcharges, as well as to the optimum- selection of the lines cross-section (wire diameters). Construction and the technology was developed in ETI Elektroelement in Slovenia according to PN-IEC 269-3 norm requirements. A condition of the realization of requirements for installation fuse links with gG characteristics, is first of all the construction and the quality of the fuse element and the dynamic endurance and the heatstroke resistance ceramic bodies. The significant influence on parameters of insertions has also the technological discipline of the assembly, and especially the exactitude of the arrangement of fuse elements in ceramic body and the degree of the fulfillment of the fuse link by quartz. Fuse elements mentioned above are made from the copper tape coated with a layer of silver, which protects the fuse-link against aging processes. The fuse link aging process appears as oxidation of its surface and decrease of its cross-section (diameter), what bears on decrease of the fuse link resistance against impulse- surcharges and on increase of its power losses and heating.

gG installation fuse links TO and D have very low power losses, much lower than allowed by norm PN-IEC 269-3. This is their very essential advantage, because installation fuse cut-outs are installed usually in closed switch boxes without ventilations, next to other devices sensitive on raised temperatures. Besides, when fuse links determine before meter protection of the building, then the energy losses consequential from their excessive heating charge The Electricity Generating Board. This is why, every, even not large limitation of the power loss in fuse links, has a large practical meaning. Fuse cut-outs D III correctly switch off surcharge ( at the voltage 1, 1 x 500 V) currents beginning from the upper testing- current - 1, 6 In to the rated ability of switching off - 50 kA at the alternating current and  $\cos \varphi = 0, 2$  and 8 kA at

the direct current and  $T = 15$  ms.  $t$ -I characteristics and characteristics of limited currents for the extended family of TO and D III fuse links are available for request in ETI -Polam Sp. z o.o. in Pułusk.

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