

PRODUCT DATA SHEET

Earthing components

Substation earthing

Code: 1016603-70

Description: Mould for exothermic welding 120mm² Cu / 120mm² Cu in line, type LHH-AA-120/120, code: 1016603

Application

Connection of copper conductors through exothermic welding. The welding takes place in a graphite mould-crucible, into which has been introduced welding powder and the pieces to be welded. The powder is ignited by the starting powder using a flint igniter. Molted metal from the exothermic reaction flows over the pieces, causing them to be melted and fused into a solid homogeneous mass.



Classification

As per IEC EN 62561

- Heavy duty (H – 100 kA)
- General use
- Intended to withstand a static mechanical load
- Permanent connection

As per IEEE 837 and IPTO TD-112

- Electromagnetic force (EMF) withstand: Asymmetrical current 130 kA first peak, 55 kArms @ 150ms
- Fault current withstand: 9 kA @ 10s
- Corrosion withstand: 500h of continuous salt spray

Installation data - Needed equipment

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|------------------------|--|
| Conductor's dimensions | 120 mm ² stranded / 120 mm ² stranded. |
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|----------------------|------------------|
| Conductor's material | Copper / Copper. |
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|------------------------|---|
| Connection arrangement | In line (B3). |
| Installation | Outdoor, buried in ground, embedded in concrete. |
| Needed equipment | Exothermic powder 115 gr (code 1820115-70), handle clamp (code 1930160-70), mould cleaner (code 1900007-70), flint igniter (code 1910032-70), soft brush for cleaning the inner part of the mould (code 1980313-70), wire brush used for cleaning the conductors (code 1950000-70), mould seal (code 1920315-70). |

Testing

The above exothermic powder has successfully passed the testing requirements of standards:

- IEC 62561-1 "Lightning protection system components (LPSC) – Part 1 : Requirements for connection components". Test report No **30819B** by accredited laboratory as per ISO 17025
- IEEE 837 "Permanent connections used in substation grounding". Test report No **32184***

* EMF test performed according to requirements of IPTO (Greek Independent Power Transmission Operator)

Technical Description TD-112 "Exothermic welding system for use in substation earthing.

ELEMKO management systems

- ISO 9001
- ISO 14001
- ISO 45001

Country of Origin

Greece

Unit: piece / Package: 1 piece

We reserve the right to introduce changes in the component due to technical evolution.