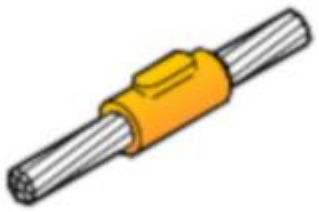
PRODUCT DATA SHEET

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 fisrt peak, 55 kArms @ 150ms
- Fault current withstand: 9 kA @ 10s
- Corrosion withstand: 500h of continuous salt spray

Installation data - Needed equipment

Conductor's dimensions	120 mm2 stranded / 120 mm2 stranded.
Conductor's material	Copper / Copper.
Connection arrangement	In line (B3).
Installation	Outdoor, buried in ground, embedded in concrete.

Needed epuipment	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 **I**ndependent **P**ower **T**ransmission **O**perator) 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.