

# PRODUCT DATA SHEET

## Earthing components

### Substation earthing

**Code: 1317603-70**

**Description: Mould for exothermic welding ¾" (Ø17mm) earth rod / 120mm<sup>2</sup> Cu in "T", type TVH-EA-34/120, code: 1317603**

#### 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

- Electromagnetic force (EMF) withstand:  
Asymmetrical current 107 kA first peak, 45 kArms @ 150ms
- Fault current withstand: 7,7 kA @ 10s
- Corrosion withstand: 500h of continuous salt spray

#### Installation data - Needed equipment

Conductor's dimensions	¾" thread (Ø17 mm shank) earth rod / 120 mm <sup>2</sup> stranded.
------------------------	--

Conductor's material	Copper coated steel / Copper.
----------------------	-------------------------------

Connection arrangement	"T" (B4).
Installation	Outdoor, buried in ground, embedded in concrete.
Needed equipment	Exothermic powder 150 gr (code 1820150-70), handle clamp (code 1930160-70), mould cleaner (code 1900002-70), 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 EN 62561-1 "Lightning protection system components (LPSC) – Part 1 : Requirements for connection components". Test report No 32003 by accredited laboratory as per ISO 17025
- IEEE 837 "Permanent connections used in substation grounding". Test report No 32185

## 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.