

PRODUCT DATA SHEET

LIGHTNING PROTECTION AND EARTHING SYSTEM COMPONENTS

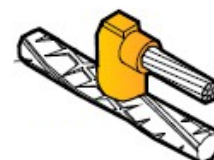
Type: PTH-RA-120/10-20

ed.02/2021

Description: Exothermic welding 120 mm² Cu / concrete steel rebar Ø10-20 mm in parallel connection

Application

Connection of copper conductor to concrete steel rebar 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.



Connection type

Classification as per IEC EN 62561

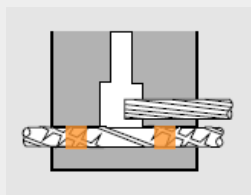
- Heavy duty (H – 100 kA)
- General use
- Intended to withstand a static mechanical load
- Permanent connection

Needed equipment

Code	Description
17 70 608	Graphite mould of average last of 70-100 connections under normal conditions of use.
18 20 150	Exothermic powder
19 30 160	Handle clamp, allowing to open and close the mould safely
19 00 002	Mould cleaner, to remove the slag and to check tap hole clearance after making every weld
19 10 032	Flint igniter
19 80 313	Soft brush for safely cleaning the inner part of the mould after every weld
19 50 000	Wire brush used for cleaning the conductors before making the weld
19 20 315	Mould seal to prevent leakage of the molten weldmetal.

Installation data

Conductor's dimensions	120 mm ² stranded / Ø10–20 mm
Conductor's material	Copper / Steel
Connection arrangement	Parallel (B2)
Installation	Above ground, buried in ground, embedded in concrete
Note	For the welding procedure please refer to general instructions O.E.2.1-15, accompanying the mould. Especially for this mould, wrap steel rebar with mastic, leaving space between the mastic larger than weld cavity. Place cable end at center of tap hole.



Testing as per IEC EN 62561

The above exothermic powder has successfully passed the testing requirements of standard IEC EN 62561-1 "Lightning protection system components (LPSC) – Part 1 : Requirements for connection components".

Test report No **30820** by accredited laboratory as per ISO 17025

Manufacturing Quality Control

Manufacturing quality control according standard ISO 9001

Country of Origin

Greece

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