exothermic welding CC6

Joining the ends of two parallel copper conductors

Complies with IEEE 837 and UL 467

Conductor-to-conductor exothermic welding



Code	CC6
Connection type	Joining the ends of two parallel copper conductors
Group	Conductor to conductor
Conductor cross-section	16 to 120 mm²
Branch conductor	16 to 120 mm²
Weld powder	KWD 065 to KWD 200
Matching handle clamp	HC 01
Standard	As per IEEE 837 and UL 467
Mould body material	High-grade graphite
Mould lid material	Stainless steel
Mould life	50 to 60 welds with correct use

exothermic welding CC6 Used to join the ends of two parallel copper conductors in earthing networks, bonding and lightning protection. After welding, the joint becomes one with the conductors and has no nuts and bolts to work loose over time.

Mould and powder selection table

Main conductor (mm²)	Branch conductor (mm²)	Weld powder	Mould code
16	16	KWD 065	CC6-016-016
25	25	KWD 045	CC6-025-025
35	25	KWD 065	CC6-035-025
35	35	KWD 065	CC6-035-035
50	25	KWD 065	CC6-050-025
50	35	KWD 065	CC6-050-035
50	50	KWD 090	CC6-050-050
70	25	KWD 090	CC6-070-025
70	35	KWD 090	CC6-070-035
70	50	KWD 115	CC6-070-050

Main conductor (mm²)	Branch conductor (mm²)	Weld powder	Mould code
70	70	KWD 115	CC6-070-070
95	35	KWD 115	CC6-095-035
95	50	KWD 115	CC6-095-050
95	70	KWD 115	CC6-095-070
95	95	KWD 150	CC6-095-095
120	35	KWD 115	CC6-120-035
120	50	KWD 115	CC6-120-050
120	70	KWD 150	CC6-120-070
120	95	KWD 200	CC6-120-095
120	120	KWD 200	CC6-120-120

The mould code and powder size are also marked on the lid of each mould. Do not substitute powder from another mould or another size. For other sizes, contact our specialists.

Preparation and welding

Cut the conductor end straight with wire cutters so the strands do not open and splay, brush up to about 5 cm of the end to a shine with a wire brush, and hold any conductor under tension or bent steady with a clamp.

1. Check the mould and powder against the table.
2. Preheat a cold mould before the first weld.
3. Clean the conductors to bright metal and dry them fully.
4. Close the handle clamp, place the conductors in the centre of the chamber and lock the mould.
5. Place the steel disc concave side up and pour in the powder.
6. Add the starting powder, close the lid and ignite it with a flint igniter.
7. Wait at least one minute, then open the mould.
8. Clean the mould with a soft brush and a scraper; never use a wire brush.

Welds KALWELD Complies with IEEE 837 and UL 467 , welds KALWELD have passed freeze testing (10 cycles), thermal cycling (25 cycles) and a 20 kA short-circuit test at the Power and Water University of Technology (Shahid Abbaspour) (reports 95/4221 and 95/4220, 1395/12/24).

Result
Approved by

Full illustrated guide, safety notes and troubleshooting: exothermic welding instructions KALWELD at www.kalot.ir

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