

KW

**Type for
Grounding & Lightning Protection**





KW Type Weld Metal Powder

Kumwell designed a welding process of making grounding and lightning protection in power plant, substation, transmission line, refinery, industrial plant, commercial plant, telecommunication tower, building, housing, etc.

Applications

Suitable for grounding and lightning protection's connections, that is, Copper to copper, Copper to steel, Steel to steel, Copper to Stainless Steel, Stainless Steel to Stainless Steel

Standards



- UL 467 – Standard for Grounding & Bonding Equipment



- IEEE 837 – Standard for Qualifying Permanent Connections used in Substation Grounding

Storage

It should be stored in an ambient temperature and avoid moisture.

Packaging

Kumwell weld metal powder is contained in a moisture - resistant plastic cartridge, packed in a paper box. Integral weld metal package is identified as to the weld metal powder's amount, type of metal powder to be connected, Lot No., the number of tubes to manufacturing date (MFD).

Code	KW15	KW25	KW32	KW45	KW65	KW90	KW115	KW150	KW200	KW250
Size	15 g	25 g	32 g	45 g	65 g	90 g	115 g	150 g	200 g	250 g
Tubes/box	40	20	20	20	20	20	10	10	10	10

Criteria of Test

Kumwell Exothermic welding connections have been successfully tested in accordance with;



- **IEEE Std. 837 Standard for Qualifying Permanent Connection**

1. Mechanical pullout
2. Electromagnetic force
3. Sequential test group has 3 main procedures to test each steps if it passes the set standard of each procedure;
 - a. Current Temperature Cycling
 - b. Freeze Thaw Cycling
 - c. Corrosion Sequence Run: Salt Spray Test, Acid Test

- **UL 467 Standard for Grounding & Bonding Equipment / UL Inspection Witness**

1. Weld metal powder quality: Percentage of material, Particle size, Density of each composition, Starting powder and ignition
2. Reaction: Steady burn, No pop, No drastic color change, No porosity in the resulting copper, Consistency of color
3. Short Time Current Test
4. Mechanical Sequence from UL 486

- **American Railway Engineering Association AREA**

ASTM E8M Test methods for tensile testing of metallic material evaluate the consistency chemistry and overall quality of KW, KB and KR Welding material resulting to the average of 43,000 psi tensile strength.

Quality Assurance

Kumwell has been tested and qualified by the Underwriter Laboratories Inc. for successfully meeting the qualifications imposed by the said firm.

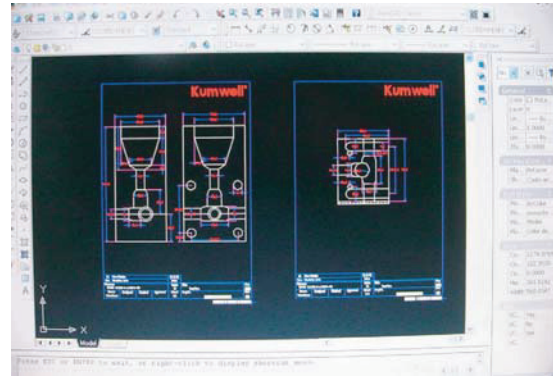
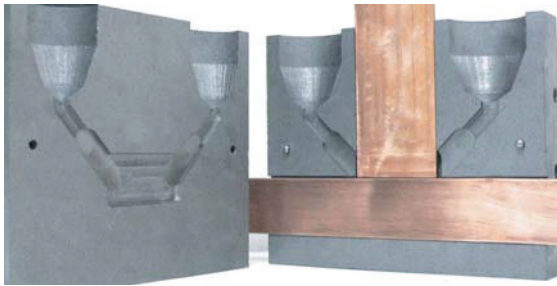
Kumwell exothermic welding metal powder and mould are distinguished internationally for its electrical quality which are **UL LISTED**.



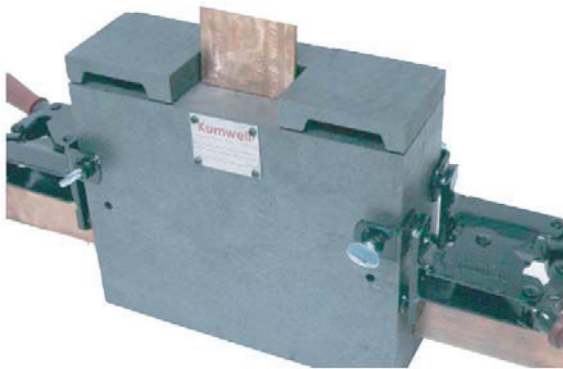
Graphite Mould

Kumwell Graphite Mould, an exothermic welding mould, is made from high quality raw material, accurate production and expert engineering resulting to earnest design for cavity and flow path, accurate tolerance and long life.

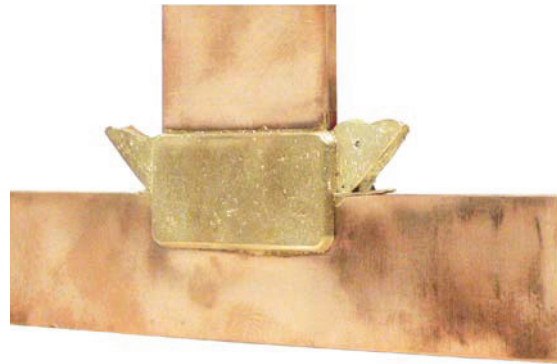
- International Standards
- Fast Delivery
- Professional Design
- Made to Order
- High Quality



Computer programs are assisted for designs



BB11-WC-508508 : 50x8 mm² Cooper bar to 50x8 mm² Cooper bar



Quality Assurance

The designing mould provides welding joint which has been successfully passed the quality control test in accordance with the UL 467 Standard for Grounding & Bonding Equipment / UL Inspection Witness.



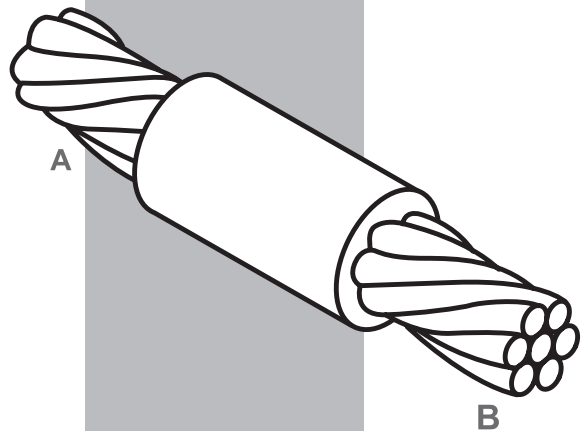
Conductor Size		Metal Powder (g)	Graphite Mold Type	Handle Clamp Type
A mm ²	B mm ²			
10	10	25	* CC1-C-10	HCC00
16	16	32	* CC1-C-16	HCC00
25	25	32	* CC1-C-25	HCC00
35	35	32	* CC1-C-35	HCC00
	25	32	CC1-C-3525	HCC00
∅ 8 mm	∅ 8 mm	45	* CC1-C-8SC	HCC00
		50	* CC1-C-50	HCC00
50	50	45	CC1-C-5035	HCC00
	25	32	CC1-C-5025	HCC00
	∅ 10 mm	∅ 10 mm	65	* CC1-C-10SC
70	70	65	* CC1-C-70	HCC00
	50	65	CC1-C-7050	HCC00
	35	45	CC1-C-7035	HCC00
	25	45	CC1-C-7025	HCC00
95	95	90	CC1-C-95	HCC00
	70	90	CC1-C-9570	HCC00
	50	65	CC1-C-9550	HCC00
	35	65	CC1-C-9535	HCC00
	25	65	CC1-C-9525	HCC00
107	107	90	* CC1-C-107	HCC00
120	120	115	CC1-C-120	HCC00
	95	115	CC1-C-12095	HCC00
	70	115	CC1-C-12070	HCC00
	50	90	CC1-C-12050	HCC00
	35	90	CC1-C-12035	HCC00
150	150	115	CC1-C-150	HCC00
	120	115	CC1-C-150120	HCC00
	95	115	CC1-C-15095	HCC00
	70	90	CC1-C-15070	HCC00
	50	90	CC1-C-15050	HCC00
185	185	150	CC1-C-185	HCC00
	150	150	CC1-C-185150	HCC00
	120	150	CC1-C-185120	HCC00
	95	115	CC1-C-18595	HCC00
240	70	115	CC1-C-18570	HCC00
	240	200	CC1-C-240	HCC00
	185	200	CC1-C-240185	HCC00
	150	200	CC1-C-240150	HCC00
300	120	200	CC1-C-240120	HCC00
	95	150	CC1-C-24095	HCC00
	70	150	CC1-C-24070	HCC00
	300	250	CC1-C-300	HCC00
400	240	250	CC1-C-300240	HCC00
	185	250	CC1-C-300185	HCC00
	150	200	CC1-C-300150	HCC00
	120	200	CC1-C-300120	HCC00
	95	200	CC1-C-30095	HCC00
500	400	2 x 150	CC1-D-400	HCD00
	300	2 x 150	CC1-D-400300	HCD00
	240	2 x 150	CC1-D-400240	HCD00
	185	2 x 150	CC1-D-400185	HCD00
	150	2 x 150	CC1-D-400150	HCD00
500	120	2 x 150	CC1-D-400120	HCD00
	500	2 x 200	CC1-D-500	HCD00
	400	2 x 200	CC1-D-500400	HCD00
	300	2 x 200	CC1-D-500300	HCD00
	240	2 x 200	CC1-D-500240	HCD00
500	185	2 x 200	CC1-D-500185	HCD00
	150	2 x 200	CC1-D-500150	HCD00

Special requirement can be requested

CC1

Cable to Cable

Horizontal end to end



Tools Request :



Tools Advice :

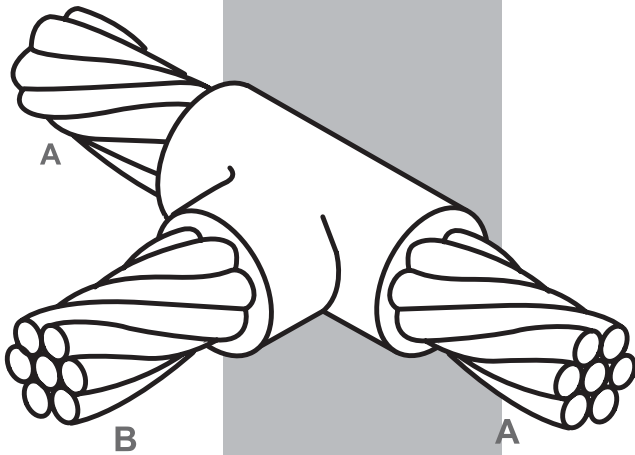
- Tool box
- Butane torch
- Butane gas
- Gloves

Note :

- SC means Solid Copper
- "2x150" means to use 2 tubes of 150 g - metal powder for one connection
- "2x200" means to use 2 tubes of 200 g - metal powder for one connection
- " * " means to meet UL Listed

CC2

Cable to Cable Horizontal cable tap to horizontal cable run



Tools Request :



Tools Advice :

- Tool box
- Butane torch
- Butane gas
- Gloves

Note :

- SC means Solid Copper
- "2x150" means to use 2 tubes of 150 g - metal powder for one connection
- "2x200" means to use 2 tubes of 200 g - metal powder for one connection
- "*" means to meet UL Listed

Conductor Size		Metal Powder (g)	Graphite Mould Type	Handle Clamp Type
A _{mm²}	B _{mm²}			
10	10	32	* CC2-C-1010	HCC00
16	16	45	* CC2-C-1616	HCC00
25	25	45	* CC2-C-2525	HCC00
∅ 5.6 mm	∅ 5.6 mm	45	* CC2-C-5.6SC5.6SC	HCC00
35	35	45	* CC2-C-3535	HCC00
	25	45	* CC2-C-3525	HCC00
∅ 8 mm	∅ 8 mm	65	* CC2-C-8SC8SC	HCC00
50	50	90	* CC2-C-5050	HCC00
	35	45	* CC2-C-5035	HCC00
	25	45	* CC2-C-5025	HCC00
∅ 10 mm	∅ 10 mm	90	* CC2-C-10SC10SC	HCC00
70	70	90	* CC2-C-7070	HCC00
	50	90	* CC2-C-7050	HCC00
	35	45	* CC2-C-7035	HCC00
	25	45	* CC2-C-7025	HCC00
95	95	115	* CC2-C-9595	HCC00
	70	90	* CC2-C-9570	HCC00
	50	90	* CC2-C-9550	HCC00
	35	90	* CC2-C-9535	HCC00
	25	90	* CC2-C-9525	HCC00
120	120	150	* CC2-C-120120	HCC00
	95	150	* CC2-C-12095	HCC00
	70	90	* CC2-C-12070	HCC00
	50	90	* CC2-C-12050	HCC00
	35	90	* CC2-C-12035	HCC00
	25	90	* CC2-C-12025	HCC00
150	150	200	CC2-C-150150	HCC00
	120	150	CC2-C-150120	HCC00
	95	150	CC2-C-15095	HCC00
	50	90	CC2-C-15050	HCC00
	35	90	CC2-C-15035	HCC00
	25	90	CC2-C-15025	HCC00
185	185	200	CC2-C-185185	HCC00
	150	200	CC2-C-185150	HCC00
	120	200	CC2-C-185120	HCC00
	95	150	CC2-C-18595	HCC00
	70	90	CC2-C-18570	HCC00
	50	90	CC2-C-18550	HCC00
	35	90	CC2-C-18535	HCC00
	25	90	CC2-C-18525	HCC00
240	240	2 x 150	CC2-C-240240	HCC00
	185	200	CC2-C-240185	HCC00
	150	200	CC2-C-240150	HCC00
	120	200	CC2-C-240120	HCC00
	95	150	CC2-C-24095	HCC00
	70	90	CC2-C-24070	HCC00
	50	90	CC2-C-24050	HCC00
	35	90	CC2-C-24035	HCC00
	25	90	CC2-C-24025	HCC00
300	300	2 x 200	CC2-D-300300	HCD00
	240	2 x 200	CC2-D-300240	HCD00
	185	250	CC2-C-300185	HCC00
	150	200	CC2-C-300150	HCC00
	120	150	CC2-C-300120	HCC00
	95	150	CC2-C-30095	HCC00
	70	150	CC2-C-30070	HCC00
	50	150	CC2-C-30050	HCC00
	35	150	CC2-C-30035	HCC00
	25	150	CC2-C-30025	HCC00

Special requirement can be requested

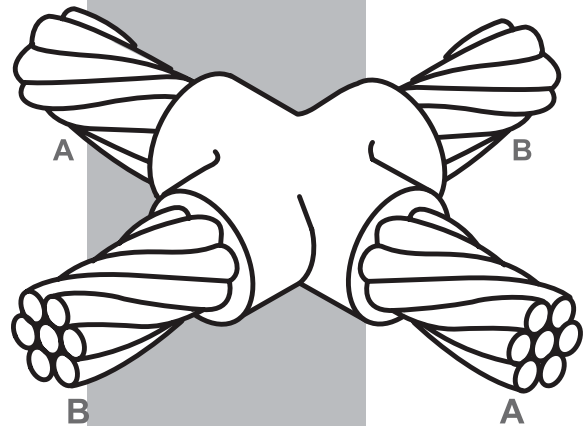
Conductor Size		Metal Powder (g)	Graphite Mould Type	Handle Clamp Type
A mm ²	B mm ²			
10	10	32	* CC4-C-1010	HCC00
16	16	45	* CC4-C-1616	HCC00
25	25	45	* CC4-C-2525	HCC00
35	35	65	* CC4-C-3535	HCC00
	25	65	* CC4-C-3525	HCC00
∅ 8 mm	∅ 8 mm	90	* CC4-C-8SC8SC	HCC00
50	50	90	* CC4-C-5050	HCC00
	35	90	* CC4-C-5035	HCC00
	25	90	* CC4-C-5025	HCC00
∅ 10 mm	∅ 10 mm	115	* CC4-C-10SC10SC	HCC00
70	70	115	* CC4-C-7070	HCC00
	50	115	* CC4-C-7050	HCC00
	35	115	* CC4-C-7035	HCC00
	25	115	* CC4-C-7025	HCC00
95	95	150	* CC4-C-9595	HCC00
	70	150	* CC4-C-9570	HCC00
	50	115	* CC4-C-9550	HCC00
	35	115	* CC4-C-9535	HCC00
	25	115	* CC4-C-9525	HCC00
120	120	200	* CC4-C-120120	HCC00
	95	200	* CC4-C-12095	HCC00
	70	150	* CC4-C-12070	HCC00
	50	150	* CC4-C-12050	HCC00
	35	115	* CC4-C-12035	HCC00
	25	115	* CC4-C-12025	HCC00
	150	150	250	CC4-C-150150
120		250	CC4-C-150120	HCC00
95		200	CC4-C-15095	HCC00
70		150	CC4-C-15070	HCC00
50		150	CC4-C-15050	HCC00
35		115	CC4-C-15035	HCC00
25		115	CC4-C-15025	HCC00
185	185	2 x 150	CC4-C-185185	HCC00
	150	250	CC4-C-185150	HCC00
	120	250	CC4-C-185120	HCC00
	95	200	CC4-C-18595	HCC00
	70	200	CC4-C-18570	HCC00
	50	200	CC4-C-18550	HCC00
	35	150	CC4-C-18535	HCC00
25	150	CC4-C-18525	HCC00	
240	240	2 x 250	CC4-D-240240	HCD00
	185	2 x 200	CC4-D-240185	HCD00
	150	2 x 200	CC4-D-240150	HCD00
	120	2 x 150	CC4-C-240120	HCC00
	95	2 x 150	CC4-C-24095	HCC00
	70	250	CC4-C-24070	HCC00
300	50	250	CC4-C-24050	HCC00
	300	3 x 200	CC4-D-300300	HCD00
	240	3 x 200	CC4-D-300240	HCD00
	185	2 x 250	CC4-D-300185	HCD00
150	2 x 250	CC4-D-300150	HCD00	
	120	2 x 200	CC4-D-300120	HCD00
	95	2 x 200	CC4-D-30095	HCD00

Special requirement can be requested

CC4

Cable to Cable

Horizontal to horizontal cable cross



Tools Request :



Tools Advice :

- Tool box
- Butane torch
- Butane gas
- Gloves

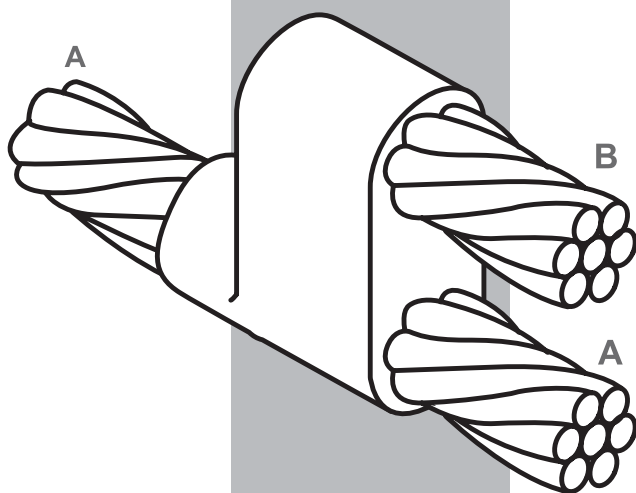
Note :

- SC means Solid Copper
- "2x150" means to use 2 tubes of 150 g - metal powder for one connection
- "2x200" means to use 2 tubes of 200 g - metal powder for one connection
- "2x250" means to use 2 tubes of 250 g - metal powder for one connection
- "3x200" means to use 3 tubes of 200 g - metal powder for one connection
- " * " means to meet UL Listed

CC 6

Cable to Cable

Horizontal parallel cable tap



Tools Request :



Tools Advice :

- Tool box
- Butane torch
- Butane gas
- Gloves

Note :

- "2x150" means to use 2 tubes of 150 g - metal powder for one connection
- "2x200" means to use 2 tubes of 200 g - metal powder for one connection
- "2x250" means to use 2 tubes of 250 g - metal powder for one connection

Conductor Size		Metal Powder (g)	Graphite Mould Type	Handle Clamp Type
A mm ²	B mm ²			
10	10	45	CC6-C-1010	HCC00
16	16	45	CC6-C-1616	HCC00
25	25	45	CC6-C-2525	HCC00
35	35	65	CC6-C-3535	HCC00
	25	65	CC6-C-3525	HCC00
50	50	90	CC6-C-5050	HCC00
	35	65	CC6-C-5035	HCC00
	25	65	CC6-C-5025	HCC00
70	70	115	CC6-C-7070	HCC00
	50	115	CC6-C-7050	HCC00
	35	90	CC6-C-7035	HCC00
	25	90	CC6-C-7025	HCC00
95	95	150	CC6-C-9595	HCC00
	70	115	CC6-C-9570	HCC00
	50	115	CC6-C-9550	HCC00
	35	115	CC6-C-9535	HCC00
120	120	200	CC6-C-120120	HCC00
	95	200	CC6-C-12095	HCC00
	70	150	CC6-C-12070	HCC00
	50	115	CC6-C-12050	HCC00
	150	150	250	CC6-C-150150
120		250	CC6-C-150120	HCC00
95		200	CC6-C-15095	HCC00
70		150	CC6-C-15070	HCC00
50		150	CC6-C-15050	HCC00
185	185	2 x 150	CC6-D-185185	HCD00
	150	2 x 150	CC6-D-185150	HCD00
	120	250	CC6-C-185120	HCC00
	95	200	CC6-D-18595	HCD00
	70	200	CC6-C-18570	HCC00
240	240	2 x 200	CC6-D-240240	HCD00
	185	2 x 150	CC6-D-240185	HCD00
	150	2 x 150	CC6-D-240150	HCD00
	120	250	CC6-D-240120	HCD00
300	300	2 x 250	CC6-D-300300	HCD00
	240	2 x 250	CC6-D-300240	HCD00
	185	2 x 200	CC6-D-300185	HCD00
	150	2 x 150	CC6-D-300150	HCD00

Special requirement can be requested

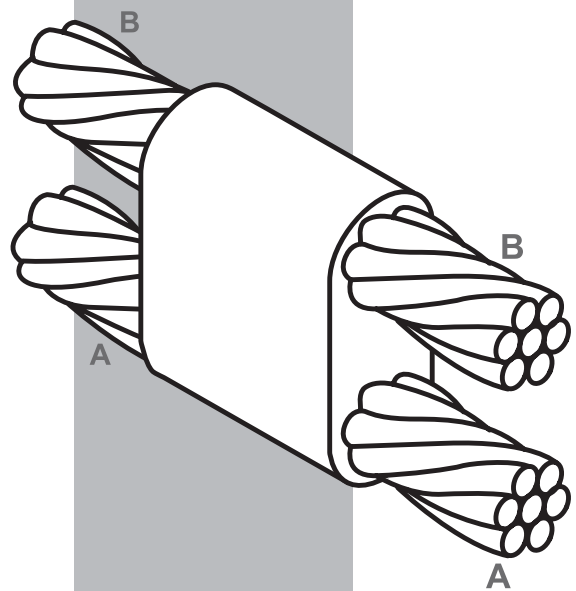
CC7

Cable to Cable

Horizontal parallel thru cables

Conductor Size		Metal Powder (g)	Graphite Mould Type	Handle Clamp Type
A mm ²	B mm ²			
10	10	45	CC7-C-1010	HCC00
16	16	45	CC7-C-1616	HCC00
25	25	45	CC7-C-2525	HCC00
35	35	65	CC7-C-3535	HCC00
	25	65	CC7-C-3525	HCC00
∅ 8 mm	∅ 8 mm	90	CC7-C-8SC8SC	HCC00
50	50	90	CC7-C-5050	HCC00
	35	90	CC7-C-5035	HCC00
	25	65	CC7-C-5025	HCC00
∅ 10 mm	∅ 10 mm	115	CC7-C-10SC10SC	HCC00
70	70	115	CC7-C-7070	HCC00
	50	115	CC7-C-7050	HCC00
	35	90	CC7-C-7035	HCC00
	25	90	CC7-C-7025	HCC00
95	95	150	CC7-C-9595	HCC00
	70	150	CC7-C-9570	HCC00
	50	115	CC7-C-9550	HCC00
	35	115	CC7-C-9535	HCC00
120	120	200	CC7-C-120120	HCC00
	95	200	CC7-C-12095	HCC00
	70	150	CC7-C-12070	HCC00
	50	150	CC7-C-12050	HCC00
	150	150	2 x 150	CC7-D-150150
150	120	250	CC7-C-150120	HCC00
	95	200	CC7-C-15095	HCC00
	70	150	CC7-C-15070	HCC00
	185	185	2 x 150	CC7-D-185185
185	150	2 x 150	CC7-D-185150	HCD00
	120	250	CC7-C-185120	HCC00
	95	200	CC7-C-18595	HCC00
240	240	2 x 200	CC7-D-240240	HCD00
	185	2 x 150	CC7-D-240185	HCD00
	150	2 x 150	CC7-D-240150	HCD00
	120	250	CC7-C-240120	HCC00
300	300	2 x 250	CC7-D-300300	HCD00
	240	2 x 250	CC7-D-300240	HCD00
	185	2 x 200	CC7-D-300185	HCD00
150	2 x 150	CC7-D-300150	HCD00	

Special requirement can be requested



Tools Request :



Tools Advice :

- Tool box
- Butane torch
- Butane gas
- Gloves

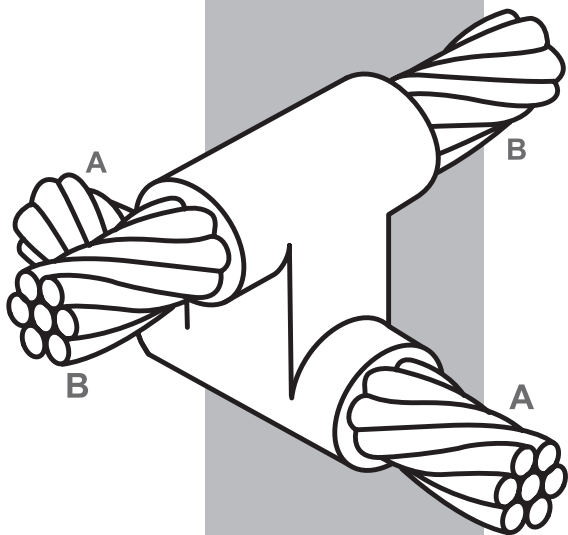
Note :

- SC means Solid Copper
- "2x150" means to use 2 tubes of 150 g - metal powder for one connection
- "2x200" means to use 2 tubes of 200 g - metal powder for one connection
- "2x250" means to use 2 tubes of 250 g - metal powder for one connection

CC11

Cable to Cable

Horizontal to horizontal cable cross



Tools Request :



Tools Advice :

- Tool box
- Butane torch
- Butane gas
- Gloves

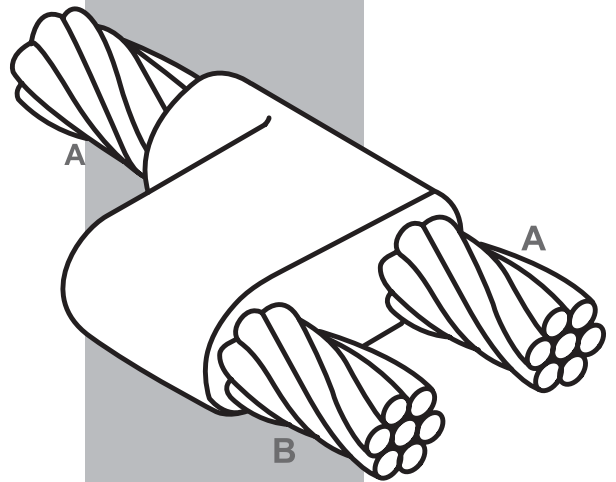
- Note :**
- This connection is recommended in case of avoid cutting conductor
 - "2x150" means to use 2 tubes of 150 g - metal powder for one connection
 - "2x200" means to use 2 tubes of 200 g - metal powder for one connection
 - "2x250" means to use 2 tubes of 250 g - metal powder for one connection
 - "3x200" means to use 3 tubes of 200 g - metal powder for one connection
 - "3x250" means to use 3 tubes of 250 g - metal powder for one connection
 - " * " means to meet UL Listed

Conductor Size		Metal Powder (g)	Graphite Mould Type	Handle Clamp Type
A _{mm²}	B _{mm²}			
25	25	65	* CC11-M-2525	HCC00
35	35	90	* CC11-M-3535	HCC00
	25	90	CC11-M-3525	HCC00
50	50	150	* CC11-M-5050	HCC00
	35	115	CC11-M-5035	HCC00
	25	115	CC11-M-5025	HCC00
70	70	200	* CC11-M-7070	HCC00
	50	200	* CC11-M-7050	HCC00
	35	150	* CC11-M-7035	HCC00
95	95	250	CC11-M-9595	HCC00
	70	200	* CC11-M-9570	HCC00
	50	200	* CC11-M-9550	HCC00
	35	150	* CC11-M-9535	HCC00
107	107	250	* CC11-M-107107	HCC00
120	120	2 x 150	CC11-M-120120	HCC00
	95	2 x 150	CC11-M-12095	HCC00
	70	250	CC11-M-12070	HCC00
	50	250	CC11-M-12050	HCC00
	35	200	CC11-M-12035	HCC00
	150	150	2 x 200	CC11-M-150150
120		2 x 200	CC11-M-150120	HCC00
95		2 x 150	CC11-M-15095	HCC00
70		250	CC11-M-15070	HCC00
50		250	CC11-M-15050	HCC00
35		150	CC11-M-15035	HCC00
185		185	2 x 250	CC11-V-185185
	150	2 x 250	CC11-V-185150	HCD00
	120	2 x 250	CC11-V-185120	HCD00
	95	2 x 200	CC11-V-18595	HCD00
	70	2 x 150	CC11-M-18570	HCC00
	50	250	CC11-M-18550	HCC00
	35	200	CC11-M-18535	HCC00
	240	240	3 x 200	CC11-V-240240
185		3 x 200	CC11-V-240185	HCD00
150		3 x 200	CC11-V-240150	HCD00
120		3 x 200	CC11-V-240120	HCD00
95		2 x 250	CC11-V-24095	HCD00
70		2 x 250	CC11-V-24070	HCD00
50		2 x 200	CC11-V-24050	HCD00
300	300	3 x 250	CC11-V-300300	HCD00
	240	3 x 250	CC11-V-300240	HCD00
	185	3 x 200	CC11-V-300185	HCD00
	150	3 x 200	CC11-V-300150	HCD00
	120	2 x 250	CC11-V-300120	HCD00
	95	2 x 250	CC11-V-30095	HCD00

Special requirement can be requested

CC 13

Cable to Cable
Horizontal parallel
cable tap (side by side)



Conductor Size		Metal Powder (g)	Graphite Mould Type	Handle Clamp Type
A mm ²	B mm ²			
10	10	45	CC13-C-1010	HCC00
16	16	45	CC13-C-1616	HCC00
25	25	45	CC13-C-2525	HCC00
35	35	65	CC13-C-3535	HCC00
	25	65	CC13-C-3525	HCC00
50	50	90	CC13-C-5050	HCC00
	35	65	CC13-C-5035	HCC00
	25	65	CC13-C-5025	HCC00
70	70	115	CC13-C-7070	HCC00
	50	115	CC13-C-7050	HCC00
	35	90	CC13-C-7035	HCC00
	25	90	CC13-C-7025	HCC00
95	95	150	CC13-C-9595	HCC00
	70	115	CC13-C-9570	HCC00
	50	115	CC13-C-9550	HCC00
	35	115	CC13-C-9535	HCC00
120	120	200	CC13-C-120120	HCC00
	95	200	CC13-C-12095	HCC00
	70	150	CC13-C-12070	HCC00
	50	115	CC13-C-12050	HCC00
150	150	250	CC13-C-150150	HCC00
	120	250	CC13-C-150120	HCC00
	95	200	CC13-C-15095	HCC00
	70	150	CC13-C-15070	HCC00
	50	150	CC13-C-15050	HCC00
185	185	2 x 150	CC13-D-185185	HCD00
	150	2 x 150	CC13-D-185150	HCD00
	120	250	CC13-C-185120	HCC00
	95	200	CC13-C-18595	HCC00
	70	200	CC13-C-18570	HCC00
240	240	2 x 200	CC13-D-240240	HCD00
	185	2 x 150	CC13-D-240185	HCD00
	150	2 x 150	CC13-D-240150	HCD00
	120	250	CC13-C-240120	HCC00
300	300	2 x 250	CC13-D-300300	HCD00
	240	2 x 250	CC13-D-300240	HCD00
	185	2 x 200	CC13-D-300185	HCD00
150	2 x 150	CC13-D-300150	HCD00	

Special requirement can be requested

Tools Request :



Tools Advice :

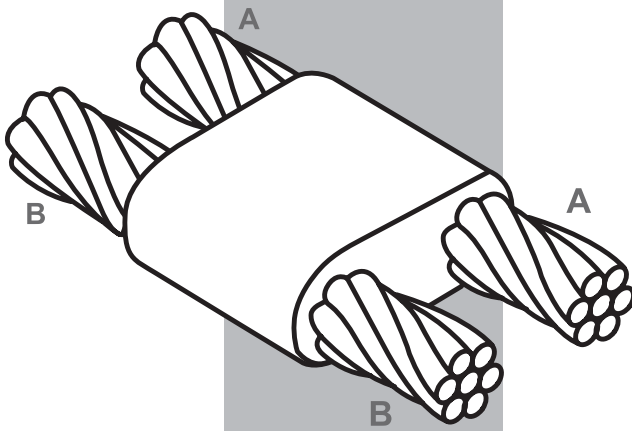
- Tool box
- Butane torch
- Butane gas
- Gloves

Note :

- "2x150" means to use 2 tubes of 150 g - metal powder for one connection
- "2x200" means to use 2 tubes of 200 g - metal powder for one connection
- "2x250" means to use 2 tubes of 250 g - metal powder for one connection

CC14

Cable to Cable
Horizontal parallel
thru cable tap (side by side)



Conductor Size		Metal Powder (g)	Graphite Mould Type	Handle Clamp Type
A mm ²	B mm ²			
10	10	45	CC14-C-1010	HCC00
16	16	45	CC14-C-1616	HCC00
25	25	45	CC14-C-2525	HCC00
35	35	65	CC14-C-3535	HCC00
	25	65	CC14-C-3525	HCC00
∅ 8 mm	∅ 8 mm	90	CC14-C-8SC8SC	HCC00
50	50	90	CC14-C-5050	HCC00
	35	65	CC14-C-5035	HCC00
	25	65	CC14-C-5025	HCC00
∅ 10 mm	∅ 10 mm	115	CC14-C-10SC10SC	HCC00
70	70	115	CC14-C-7070	HCC00
	50	115	CC14-C-7050	HCC00
	35	90	CC14-C-7035	HCC00
	25	90	CC14-C-7025	HCC00
95	95	150	CC14-C-9595	HCC00
	70	150	CC14-C-9570	HCC00
	50	115	CC14-C-9550	HCC00
	35	115	CC14-C-9535	HCC00
120	120	200	CC14-C-120120	HCC00
	95	200	CC14-C-12095	HCC00
	70	150	CC14-C-12070	HCC00
	50	150	CC14-C-12050	HCC00
	150	150	2 x 150	CC14-C-150150
150	120	250	CC14-C-150120	HCC00
	95	200	CC14-C-15095	HCC00
	70	150	CC14-C-15070	HCC00
	185	185	2 x 150	CC14-D-185185
185	150	2 x 150	CC14-D-185150	HCD00
	120	250	CC14-C-185120	HCC00
	95	200	CC14-C-18595	HCC00
240	240	2 x 200	CC14-D-240240	HCD00
	185	2 x 150	CC14-D-240185	HCD00
	150	2 x 150	CC14-D-240150	HCD00
	120	250	CC14-C-240120	HCC00
300	300	2 x 250	CC14-D-300300	HCD00
	240	2 x 250	CC14-D-300240	HCD00
	185	2 x 200	CC14-D-300185	HCD00
	150	2 x 150	CC14-D-300150	HCD00

Special requirement can be requested

Tools Request :

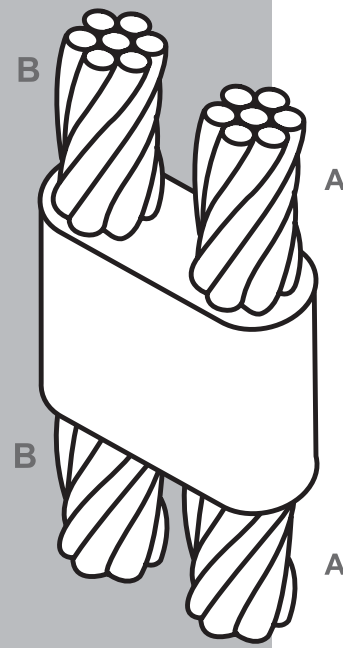


- Tools Advice :**
- Tool box
 - Butane torch
 - Butane gas
 - Gloves

- Note :**
- SC means Solid Copper
 - "2x150" means to use 2 tubes of 150 g - metal powder for one connection
 - "2x200" means to use 2 tubes of 200 g - metal powder for one connection
 - "2x250" means to use 2 tubes of 250 g - metal powder for one connection

CC34

Cable to Cable
Vertical parallel
thru cables (side by side)



Conductor Size		Metal Powder (g)	Graphite Mould Type	Handle Clamp Type
A mm ²	B mm ²			
25	25	65	CC34-CR-2525	HCC00
35	35	115	CC34-CR-3535	HCC00
	25	90	CC34-CR-3525	HCC00
∅ 8 mm	∅ 8 mm	115	CC34-CR-8SC8SC	HCC00
50	50	150	CC34-CR-5050	HCC00
	35	115	CC34-CR-5035	HCC00
	25	115	CC34-CR-5025	HCC00
∅ 10 mm	∅ 10 mm	150	CC34-CR-10SC10SC	HCC00
70	70	150	CC34-CR-7070	HCC00
	50	150	CC34-CR-7050	HCC00
	35	150	CC34-CR-7035	HCC00
	25	115	CC34-CR-7025	HCC00
95	95	250	CC34-CR-9595	HCC00
	70	250	CC34-CR-9570	HCC00
	50	200	CC34-CR-9550	HCC00
	35	200	CC34-CR-9535	HCC00
	25	150	CC34-CR-9525	HCC00
120	120	2x200	CC34-DR-120120	HCD00
	95	250	CC34-CR-12095	HCC00
	70	250	CC34-CR-12070	HCC00
	50	250	CC34-CR-12050	HCC00
	35	200	CC34-CR-12035	HCC00
	25	200	CC34-CR-12025	HCC00
150	150	2 x 200	CC34-DR-150150	HCD00
	120	2 x 200	CC34-DR-150120	HCD00
	95	2 x 150	CC34-DR-15095	HCD00
185	185	2 x 250	CC34-DR-185185	HCD00
	150	2 x 250	CC34-DR-185150	HCD00
	120	2 x 200	CC34-DR-185120	HCD00
	95	2 x 150	CC34-DR-18595	HCD00
240	240	3 x 250	CC34-DR-240240	HCD00
	185	3 x 250	CC34-DR-240185	HCD00
	150	3 x 250	CC34-DR-240150	HCD00
	120	3 x 250	CC34-DR-240120	HCD00
300	300	3 x 250	CC34-DR-300300	HCD00
	240	3 x 250	CC34-DR-300240	HCD00
	185	3 x 250	CC34-DR-300185	HCD00
	150	3 x 250	CC34-DR-300150	HCD00

Special requirement can be requested

Tools Request :



Tools Advice :

- Tool box
- Butane torch
- Butane gas
- Gloves

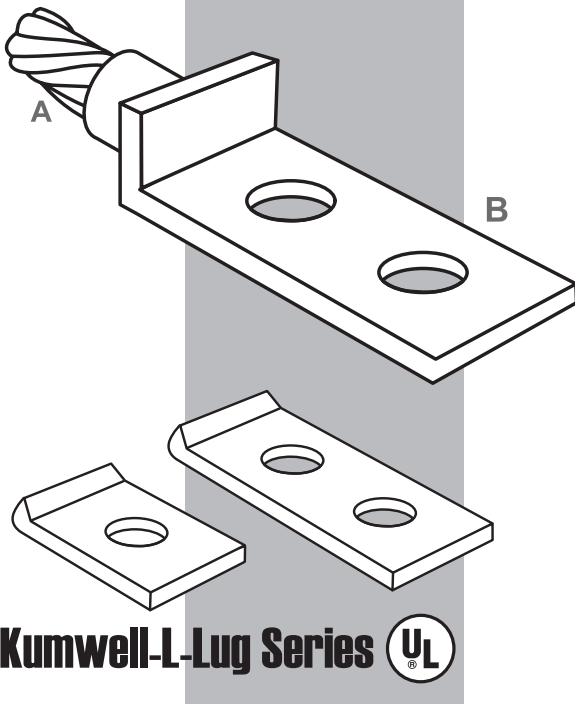
Note :

- SC means Solid Copper
- "2x150" means to use 2 tubes of 150 g - metal powder for one connection
- "2x200" means to use 2 tubes of 200 g - metal powder for one connection
- "2x250" means to use 2 tubes of 250 g - metal powder for one connection
- "3x250" means to use 3 tubes of 250 g - metal powder for one connection

(Lug) CB1

Cable to Bus Bar

Horizontal cable tap to copper lug



Conductor Size		Metal Powder (g)	Graphite Mould Type	Handle Clamp Type
A mm ²	B mm-mm			
10	25 x 3	32	* CB1-C-10253L	HCC00
16	25 x 3	32	* CB1-C-16253L	HCC00
	25 x 5	32	CB1-C-16255L	HCC00
25	25 x 3	32	CB1-C-25253L	HCC00
	25 x 5	32	CB1-C-25255L	HCC00
	25 x 6	32	CB1-C-25256L	HCC00
	38 x 6	65	CB1-C-25386L	HCC00
35	25 x 3	32	* CB1-C-35253L	HCC00
	25 x 5	32	CB1-C-35255L	HCC00
	25 x 6	32	CB1-C-35256L	HCC00
	38 x 6	65	CB1-C-35386L	HCC00
50	25 x 3	45	CB1-C-50253L	HCC00
	25 x 5	45	CB1-C-50255L	HCC00
	25 x 6	45	CB1-C-50256L	HCC00
	38 x 6	65	CB1-C-50386L	HCC00
70	25 x 3	45	CB1-C-70253L	HCC00
	25 x 5	65	CB1-C-70255L	HCC00
	25 x 6	65	CB1-C-70256L	HCC00
	38 x 6	115	CB1-C-70386L	HCC00
95	25 x 5	65	CB1-C-95255L	HCC00
	25 x 6	65	CB1-C-95256L	HCC00
	38 x 6	115	CB1-C-95386L	HCC00
120	25 x 5	65	CB1-C-120255L	HCC00
	25 x 6	65	CB1-C-120256L	HCC00
	38 x 6	115	CB1-C-120386L	HCC00
150	25 x 6	90	CB1-C-150256L	HCC00
	38 x 6	115	CB1-C-150386L	HCC00
185	38 x 6	115	CB1-C-185386L	HCC00
240	40 x 6	150	CB1-C-240406L	HCC00

Special requirement can be requested

Tools Request :



Tools Advice :

- Tool box
- Butane torch
- Butane gas
- Gloves

Note :

- This connection is used for cable conductor to 1 or 2-hole copper lug
- "*" means to meet UL Listed