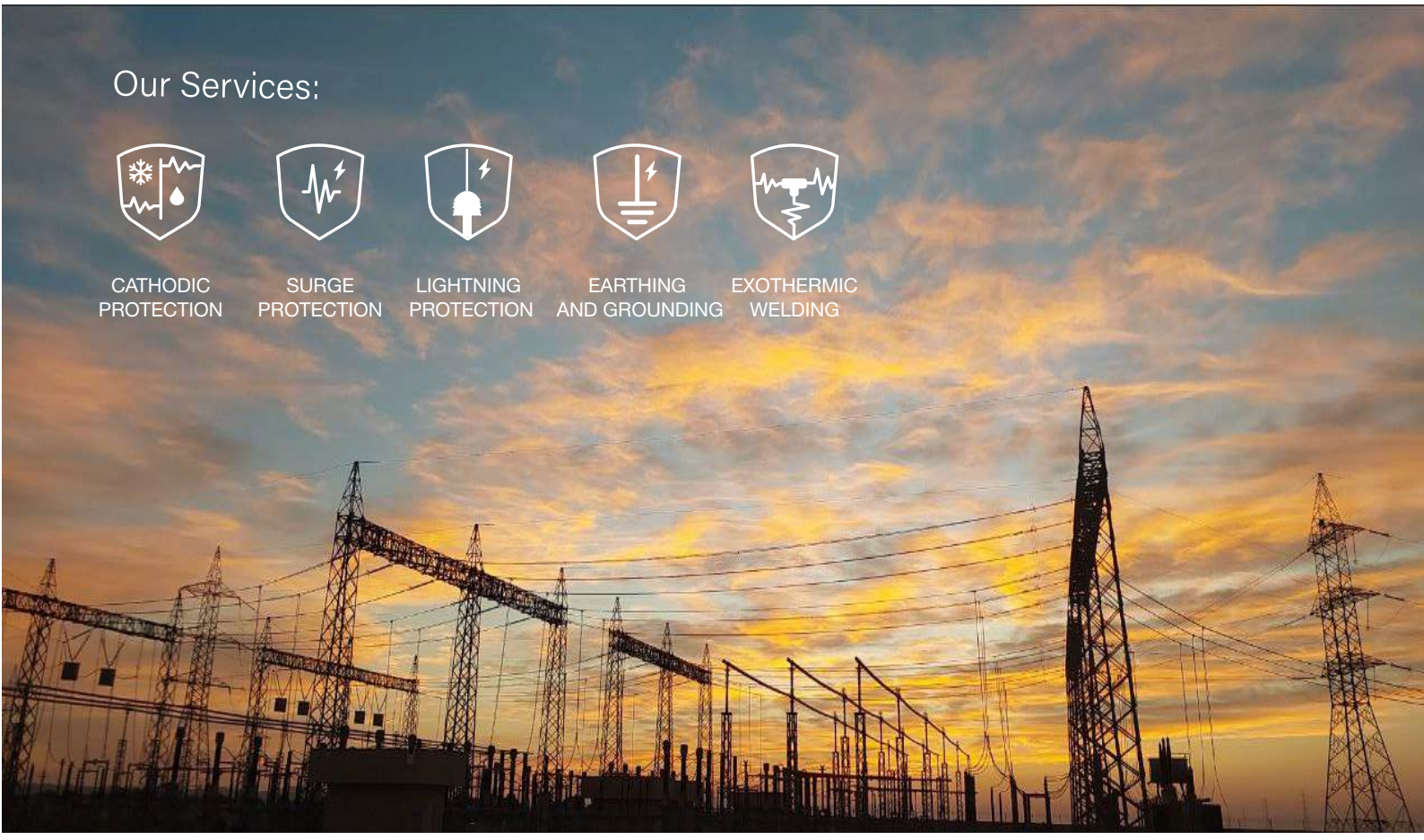
KAHANGAN

TAJHIZ KAVAN



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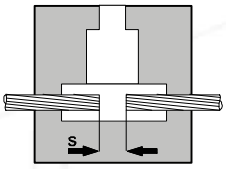
CABLE TO CABLE CONNECTION DETAILS

HORIZONTAL DIRECT CONNECTION

Note:
For 240mm^2 and larger gap cables (s) 5 - 6mm.
under the center of the tap hole.

MOULD TYPE :

CE-A (Run Cond.)



Handel Clamp KM58

*Use Sleeve 10x25 & 16x35

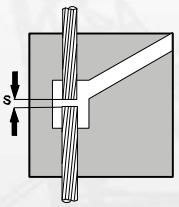
CE-A	RUN CONNECTOR (mm^2)											
	10*	16*	25	35	50	70	95	120	150	185	240	300
CARTRIDGE	C - 32	C - 32	C - 32	C - 45	C - 45	C - 65	C - 90	C - 115	C - 115	C - 150	C - 200	C - 250

VERTICAL DIRECT CONNECTION

Note:
For 240mm^2 and larger gap cables (s) 5 - 6mm.
under the center of the tap hole.

MOULD TYPE :

CE-B (Run Cond.)



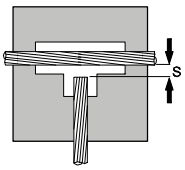
Handel Clamp KM58
KM78

*Use Sleeve 10x25 & 16x35

CE-B	RUN CONDUCTOR SECTION (mm^2)											
	10*	16*	25	35	50	70	95	120	150	185	240	300
CARTRIDGE	C - 45	C - 45	C - 45	C - 45	C - 65	C - 90	C - 115	C - 150	C - 150	C - 200	C - 250	2XC - 200

For other size & type,please contact us.

CABLE TO CABLE CONNECTION DETAILS



Handel Clamp KM58
KM78
*Use Sleeve 10x25 & 16x35

HORIZONTAL TEE CONNECTION

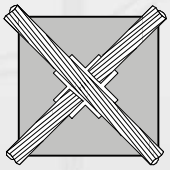
Note:
For 240mm^2 and larger gap Tap cables (s) 5 - 6mm.
from the run cable

MOULD TYPE :

CT-A (Run Cond.)/(Tab Cond.)

CT-A

MAIN CONDUCTOR (mm^2) \ TAP CONDUCTOR (mm^2)	10*	16*	25	35	50	70	95	120	150	185	240	300
10 *	C - 45	C - 45	C - 45									
16 *	C - 45	C - 45	C - 45									
25	C - 45	C - 45	C - 45									
35	C - 45	C - 45	C - 45	C - 45								
50	C - 65	C - 65	C - 65	C - 65	C - 90							
70	C - 65	C - 65	C - 65	C - 65	C - 90	C - 90						
95	C - 90	C - 90	C - 90	C - 90	C - 90	C - 90	C - 115					
120	C - 90	C - 90	C - 90	C - 90	C - 90	C - 90	C - 115	C - 150	C - 150	C - 150		
150				C - 115	C - 115	C - 115	C - 150	C - 150	C - 200	C - 200	C - 200	
185				C - 115	C - 115	C - 150	C - 150	C - 200	C - 200	C - 200	C - 200	
240				C - 150	C - 150	C - 150	C - 150	C - 200	C - 200	C - 200	2XC - 150	
300				C - 200	C - 200	C - 200	C - 200	C - 250	C - 250	2XC - 150	2XC - 200	2XC - 200



Handel Clamp KM58S
KM78S

HEAVY DUTY CROSS CONNECTION

Note:
Smaller cable must be placed over the larger one

MOULD TYPE :

CX-A (RUN Cond.)/(Tab Cond.)

CX-A

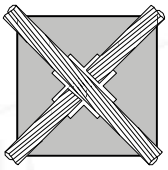
MAIN CONDUCTOR (mm^2) \ TAP CONDUCTOR (mm^2)	10	16	25	35	50	70	95	120	150	185	240	300
10	Use XB Connection											
16	Use XB Connection											
25	Use XB Connection											
35	Use XB Connection			C - 90								
50				C - 115	C - 115							
70				C - 150	C - 200	C - 200						
95				C - 200	C - 200	C - 250	C - 250					
120					C - 250	C - 250	2XC - 150	2XC - 150				
150						C - 250	2XC - 150	2XC - 200	2XC - 200			
185						2XC - 200	2XC - 200	2XC - 250	2XC - 250	2XC - 250		

For other size & type,please contact us.

CABLE TO CABLE CONNECTION DETAILS

HORIZONTAL CROSS CONNECTION

Note:
Cut the larger cable and but the ends against the smaller one.



Handel Clamp KM58
KM78
*Use Sleeve 10x25 & 16x35

MOULD TYPE :

CX-B (Run Cond.)/(Tab Cond.)

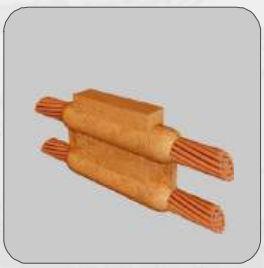
CX-B

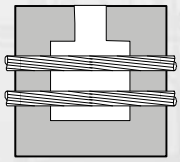
TAP CONDUCTOR (mm^2)

RUN CONDUCTOR (mm^2)	10*	16*	25	35	50	70	95	120	150	185	240	300
10 *	C - 45	C - 45	C - 45									
16 *	C - 65	C - 65	C - 65									
25	C - 45	C - 45	C - 45									
35	C - 65	C - 65	C - 65	C - 65								
50	C - 90	C - 90	C - 90	C - 90	C - 90							
70				C - 115	C - 115	C - 115						
95				C - 115	C - 115	C - 150	C - 150					
120				C - 115	C - 150	C - 150	C - 200	C - 200				
150				C - 150	C - 150	C - 150	C - 200	C - 250	C - 250			
185					C - 200	C - 200	C - 200	C - 250	C - 250	C - 250		
240						C - 250	2XC - 150	2XC - 150	2XC - 200	2XC - 200	2XC - 250	
300						2XC - 150	2XC - 150	2XC - 200	2XC - 200	2XC - 200	2XC - 250	2XC - 250

AL TOGETHER PARALLEL CONNECTION

Note:
Smaller cable must be placed over the larger one
Cut smaller cable & gap 3-4 mm -For heavy duty type dont cut cable.





Handel Clamp KM58
KM78
*Use Sleeve 10x25 & 16x35

MOULD TYPE :

CD-A (Run Cond.)/(Tab Cond.)

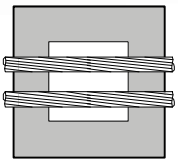
CD-A

TAP CONDUCTOR (mm^2)

RUN CONDUCTOR (mm^2)	10*	16*	25	35	50	70	95	120	150	185	240	300
10 *	C - 45											
16 *	C - 65	C - 65										
25	C - 45	C - 65	C - 45									
35	C - 65	C - 65	C - 65	C - 65								
50	C - 65	C - 90	C - 65	C - 90	C - 90							
70				C - 90	C - 115	C - 115						
95				C - 115	C - 115	C - 150	C - 150					
120				C - 150	C - 150	C - 150	C - 200	C - 250				
150				C - 150	C - 150	C - 150	C - 200	C - 250	2XC - 150			
185				C - 150	C - 150	C - 150	C - 200	C - 250	2XC - 150	2XC - 150		
240					C - 200	C - 200	C - 250	C - 250	2XC - 150	2XC - 150	2XC - 200	
300					C - 250	C - 250	C - 250	2XC - 150	2XC - 150	2XC - 200	2XC - 250	2XC - 250

For other size & type,please contact us.

CABLE TO CABLE CONNECTION DETAILS



SIDE BY SIDE PARALLEL CONNECTION

Note:
Place cable according to the sketch on view.

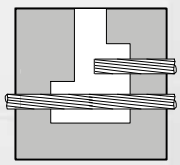
MOULD TYPE :

CD-B (Run Cond.)/(Tab Cond.)

Handel Clamp KM58
KM78
*Use Sleeve 10x25 & 16x35

CD - B

RUN CONDUCTOR (mm 2) \ TAP CONDUCTOR (mm 2)	10*	16*	25	35	50	70	95	120	150	185	240
10*	C - 45										
16*		C - 65									
25			C - 45								
35			C - 65	C - 65							
50			C - 90	C - 90	C - 90						
70			C - 90	C - 90	C - 115	C - 115					
95				C - 115	C - 150	C - 150	C - 150				
120				C - 150	C - 200	C - 200	C - 200	C - 200			
150				C - 150	C - 200	C - 200	C - 200	C - 250	C - 250		
185				C - 150	C - 200	C - 250	C - 250	C - 250	C - 250	2XC -150	
240					C - 200	C - 250	2XC - 150	2XC - 150	2XC -200	2XC - 200	2XC - 250



UNILATERAL PARALLEL CONNECTION

Note:
Smaller cable must be place over the larger one & its end shoud be exactly in the center of tap hole

MOULD TYPE :

CD-C (Run Cond.)/(Tab Cond.)

Handel Clamp KM-58

*Use Sleeve 10x25 & 16x35

CD - C

RUN CONDUCTOR (mm 2) \ TAP CONDUCTOR (mm 2)	10*	16*	25	35	50	70	95	120
10*	C - 45							
16*		C - 65						
25			C - 45					
35			C - 65	C - 65				
50			C - 65	C - 65	C - 90			
70			C - 90	C - 90	C - 115	C - 115		
95				C - 115	C - 115	C - 115	C - 150	
120					C - 115	C - 150	C - 200	C - 200

For other size & type,please contact us.

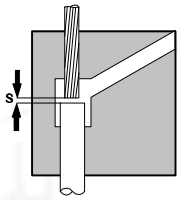
CABLE TO GROUND ROD CONNECTION DETAILS

END TO END VERTICAL CONNECTION

Note:
Gap rod and cable (s) 5-6mm.
at the axis of the tap hole. Use a clamp on rod below mould

MOULD TYPE :

CR-V (Cable.)/(Rod.)



Handel Clamp KM58

*Use sleeve 10x25 & 16x35

CR-V

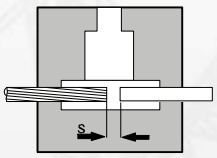
ROD DIA.mm	CABLE SECTION.mm²										
	10*	16*	25	35	50	70	95	120	150	185	240
12/7	C -65	C - 65	C - 65	C - 65	C-90				C-115		C-150
14/2	C -65	C - 65	C - 65	C - 65							
17/2	C -90	C - 90	C - 90	C - 90							
18/2	C -90	C - 90	C - 90	C - 90							

END TO END HORIZENTAL CONNECTION

Note:
Gap of 3-4mm is required between the rod & the cable exactly under the tap hole.

MOULD TYPE :

CR-H (Cable.)/(Rod.)



Handel Clamp KM58

*Use sleeve 10x25 & 16x35

CR-H

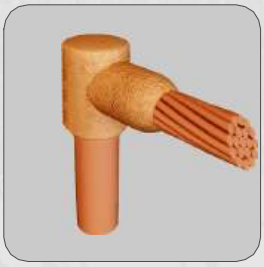
ROD DIA.mm	CABLE SECTION.mm²										
	10*	16*	25	35	50	70	95	120	150	185	240
12/7	C-65				C-90				C-115		C-150
14/2											
17/2	C-90										
18/2											

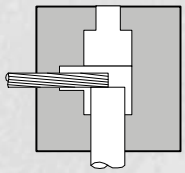
END TO END PERPENDICULAR CONNECTION

: Note
Place end of cable at the axis of the tap
. hole and rod butted against the cable
.Use a clamp on rod below mould

MOULD TYPE :

CR-L (Cable.)/(Rod.)





Handel Clamp KM58

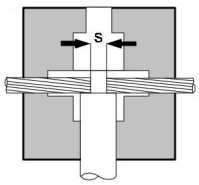
*Use Sleeve 10x25 & 16x35

CR-L

ROD DIA.mm	CABLE SECTION.mm²										
	10*	16*	25	35	50	70	95	120	150	185	240
12/7	C-65				C-90				C-115		C-150
14/2											
17/2	C-90										
18/2											

For other size & type,please contact us.

CABLE TO GROUND ROD CONNECTION DETAILS



Handel Clamp KM58 KM78

*Use Sleeve 10x25 & 16x35

VERTICAL TEE CONNECTION

Note:

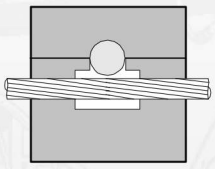
For 120mm^2 and larger cut run cable and gap it (s) 5-6mm under center of tap hole.
Use a clamp on rod below mould.Don't cut cable for heavy duty (CR-TS)

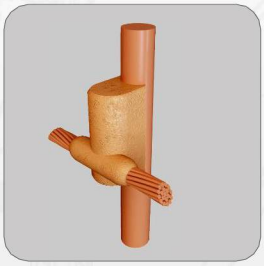
MOULD TYPE :

CR-T (Cable.)/(Rod.)

CR-T

ROD DIA.mm	CABLE SECTION.mm^2 10*	16*	25	35	50	70	95	120	150	185	240	300
12/7	C -90	C - 90	C -90	C -90	C -90	C - 115	C - 115	C - 150	C - 200	C - 200	C - 250	2XC -150
14/2	C -90	C -90	C -90	C -90	C -90	C - 115	C - 115	C - 150	C - 200	C - 200	C - 250	2XC -150
17/2	C -90	C -90	C -90	C -90	C - 115	C - 115	C - 115	C - 150	C - 200	C - 200	C - 250	2XC -150
18/2	C -90	C -90	C -90	C -90	C - 115	C - 115	C - 115	C - 150	C - 200	C - 200	C - 250	2XC -150





Handel Clamp KM58 KM78

HEAVY DUTY CROSS CONNECTION

Note:

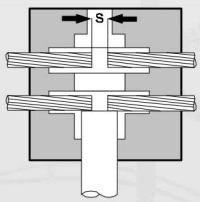
Insert cable into the mould and secure it to rod with backing plate attacment.
use another clamp on rod below mould.

MOULD TYPE :

CR-X (Cable.)/(Rod.)

CR-X

ROD DIA.mm	CABLE SECTION.mm^2 35	50	70	95	120	150	185	240	300
12/7	C -90	C - 115	C - 115	C - 115	C - 150	C - 150	C - 250	2XC - 200	2XC - 250
14/2	C -90	C - 115	C - 115	C - 115	C - 150	C - 150	C - 250	2XC - 200	2XC - 250
17/2	C -90	C - 115	C - 150	C - 150	C - 200	C - 250	2XC - 200	2XC - 250	2XC - 250
18/2	C -90	C - 115	C - 150	C - 150	C - 200	C - 250	2XC - 200	2XC - 250	2XC - 250



Handel Clamp KM58 KM78

PARALLEL CONNECTION TO GROUND ROD

Note:

For 120mm^2 and larger cut run cable and gap it (s) 5-6mm under centre of tap hole.
Use a clamp on rod below mould.Don't cut cable for heavy duty type CR-D

MOULD TYPE :

CR-D (Cable.)/(Rod.)

CR-D

ROD DIA.mm	CABLE SECTION.mm^2 35	50	70	95	120	150	185	240	300
12/7	C -115	C - 115	C - 150	C - 200	C- 250	2XC - 150	2XC - 150	2XC - 200	2XC - 250
14/2	C -115	C - 115	C - 150	C - 200	C -250	2XC - 150	2XC - 150	2XC - 200	2XC - 250
17/2	C -115	C - 150	C - 150	C - 200	C -250	2XC - 150	2XC - 150	2XC - 250	2XC - 250
18/2	C -115	C - 150	C - 150	C - 200	C - 250	2XC - 150	2XC - 150	2XC - 250	2XC - 250

For other size & type,please contact us.

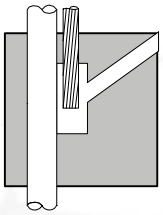
CABLE TO GROUND ROD CONNECTION DETAILS

TAP VERTICAL PARALLEL CONNECTION

Note:
Insert cable until the axis of the tap hole.
Use a clamp on rod below mould.

MOULD TYPE :

CR-R (Cable.)/(Rod.)



Handel Clamp KM58
KM78
*Use Sleeve 10x25 & 16x35

CR-R

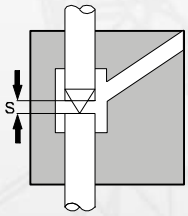
ROD DIA.mm	CABLE SECTION.mm²										
	10	16	25	35	50	70	95	120	150	185	240
12/7	C -90	C - 90	C - 90	C - 90	C - 115	C - 150	C - 150	C -200	C - 250	2 xC-150	2 xC-200
14/2	C -90	C - 90	C - 90	C - 90	C - 115	C - 150	C - 150	C -200	C - 250	2 xC-150	2 xC-200
17/2	C -90	C - 90	C - 90	C - 90	C - 115	C - 150	C - 200	C -200	C - 250	2 xC-150	2 xC-250
18/2	C -90	C - 90	C - 90	C - 90	C - 115	C - 150	C - 200	C 200	C - 250	2 xC-150	2 xC-250

VERTICAL LINEAR CONNECTION

Note:
Upper pointed rod is butted against lower rod and blunt rod is gapped (s) 10mm. at the axis of the tap kole. Use a clamp on lower rod below mould.

MOULD TYPE :

RE-A (Rod.)/(Rod.)



Handel Clamp KM58

*Use Sleeve 10x25 & 16x35

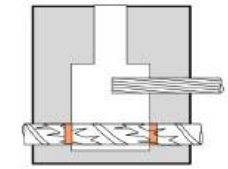
RE-A

ROD DIA.mm	CABLE SECTION.mm²
12/7	C -200
14/2	C -200
17/2	2XC - 150
18/2	2XC - 150

For other size & type,please contact us.

CABLE TO REBAR KADWELD CONNECTION DETAILS

Note: Remove oxids from connection point of armator surface perfectly with metallic brush or chemical compound.



Handel Clamp KM58

*Use Sleeve 10x25 & 16x35

C/RB UNILATERAL - HORIZONTAL

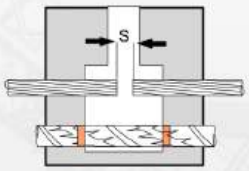
Note:
Warp around steel re-bar with mastic, leaving space between the mastic larger than weld cavity. Place cable end at center of tap hole.

MOULD Type :

CA-D (Cable.)/(Arm.)

CA-D

ARM DIA mm	CABLE SECTION.mm² 10*	16*	25	35	50	70	95	120	150	185	240
10*	F-90	F-90	F-90	F-90	F-115	F-115	F-150				
16*	F-90	F-90	F-90	F-90	F-115	F-115	F-150	F-150	F-200		
20	F-90	F-90	F-90	F-90	F-115	F-115	F-150	F-150	F-200	F-250	F-250



Handel Clamp KM58
KM78

*Use Sleeve 10x25 & 16x35

C/RB PARALLEL - HORIZONTAL LAP

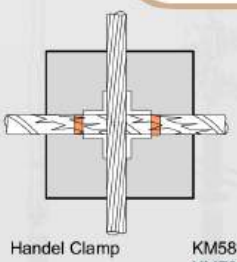
Note:
Warp around steel re-bar with mastic, leavingspace between the mastic larger than weld cavity.Cut cable and gap it (s)3-4mm under center of tap hole.

MOULD Type :

CA-DR (Cable.)/(Arm.)

CA-DR

ARM DIA mm	CABLE SECTION.mm² 10*	16*	25	35	50	70	95	120	150	185	240
10*	F-115	F-115	F-115	F-115	F-115	F-150	F-200				
16*	F-115	F-115	F-115	F-115	F-115	F-150	F-200	F-200	F-250		
20	F-115	F-115	F-115	F-115	F-115	F-150	F-200	F-200	F-250	F-300	F-300



Handel Clamp KM58
KM78

*Use Sleeve 10x25 & 16x35

C/RB HORIZONTAL - UNCUT CROSS

Note:
Warp around steel re-bar with mastic, leaving space between the mastic larger than weld cavity. Place cable over top of re-bar.

MOULD Type :

CAX-A (Cable.)/(Arm.)

CAX-A

ARM DIA mm	CABLE SECTION.mm² 10*	16*	25	35	50	70	95	120	150	185	240
10	F-90	F-90	F-90	F-90	F-115	F-115	F-150				
16	F-115	F-115	F-115	F-115	F-150	F-150	F-200	F-200	F-200		
20	F-115	F-115	F-115	F-115	F-150	F-150	F-200	F-200	F-250	F-250	F-150

For other size & type,please contact us.

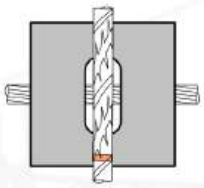
CABLE TO REBAR KADWELD CONNECTION DETAILS

C/RB VERTICAL AND UNCUT CROSS

Note:
Wrap around stee re-bar with mastic below the weld cavity.
Insert cable into the mould and secure it to re-bar with backing Plate attacment. Use a clamp on re-bar below mould.

MOULD Type :

CAX-B (Cable.)/(Arm.)



Handel Clamp KM58R
KM78R
*Use Sleeve 10x25 & 16x35

CAX-B

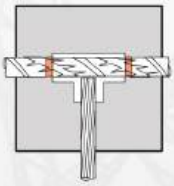
ARM DIA mm	CABLE SECTION.mm² 10*	16*	25	35	50	70	95	120	150	185	240
10	F - 90	F - 90	F - 90	F - 90	F - 115	F - 115	F - 150				
16	F - 90	F - 90	F - 90	F - 90	F - 115	F - 115	F - 150	F - 150	F - 200		
20	F - 90	F - 90	F - 90	F - 90	F - 115	F - 115	F - 150	F - 150	F - 200	F250	2XF - 200

C/RB HORIZONTAL "T"

Note:
Warp around steel re-bar with mastic, leaving space between the mastic larger than weld cavity. Butt tap cable against re-bar.

MOULD Type :

CAT-A (Cable.)/(Arm.)



Handel Clamp KM58
KM78
*Use Sleeve 10x25 & 16x35

CAT-A

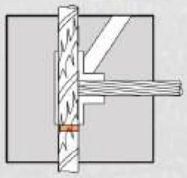
ARM DIA mm	CABLE SECTION.mm² 10*	16*	25	35	50	70	95	120	150	185	240
10	F - 90	F - 90	F - 90	F - 90	F - 115	F - 115	F - 115				
16	F - 150	F - 150	F - 150	F - 150	F - 150	F - 150	F - 200	F - 200	F - 250		
20	F - 150	F - 150	F - 150	F - 150	F - 200	F - 200	F - 200	F - 250	F - 250	2XF - 250	2XF - 150

C/RB VERTICAL "T"

Note:
Warp around steel re-bar with mastic, below the weld caity. butt tap cable against re-bar.
Use a clamp on re-bar below mould.

MOULD Type :

CAT-B (Cable.)/(Arm.)



Handel Clamp KM58
KM78
*Use Sleeve 10x25 & 16x35

CAT-B

ARM DIA mm	CABLE SECTION.mm² 10*	16*	25	35	50	70	95	120	150	185	240
10	F - 90	F - 90	F - 90	F - 90	F - 115	F - 115	F - 150				
16	F - 150	F - 150	F - 150	F - 150	F - 150	F - 150	F - 200	F - 200	F - 250		
20	F - 150	F - 150	F - 150	F - 150	F - 200	F - 200	F - 200	F - 250	F - 250	2XF - 150	2XF - 200

Note: Remove oxids from connection point of armator surface perfectly with metallic brush or chemical compound.

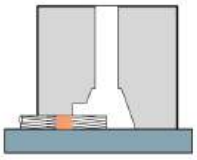
For other size & type,please contact us.

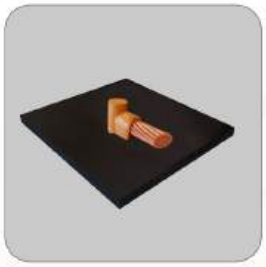
CABLE TO FLAT SURFACE CONNECTION DETAILS

This refrence codes refer to flat surfaces and thick wall cylenders & tubs (above 3mm thickness) with Dia. above 30".If connecting to copper surface a cartrige one size larger is required.

Note: Remove oxids from connection point of steel surface perfectly with electrical grindstone.

TAP CABLE ON SURFACE CONNECTION





Handel Clamp KM58
KM78
*Use Sleeve 10x25 & 16x35

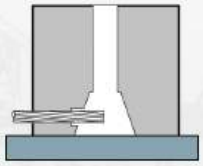
Note:
Place cable end at centre of tap hole. Fill the gap between cable and steel surface with mastic outsid the weld cavity. Hold mould down carefully to prevent from its slip.

MOULD TYPE :

CS-A (Cable)/(FlatSurf.)

CS-A	CABLE SECTION.mm²											
	25	35	8mm	50	10mm	70	95	120	150	185	240	300
CARTRIDGE	F - 45	F - 45	F - 45	F - 45	F - 65	F - 65	F - 90	F - 115	F - 150	F - 200	F - 200	F - 250

TAP CABLE OFF SURFACE CONNECTION



Handel Clamp KM58
KM78

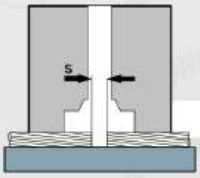
Note:
Place cable end at center of tap hole. hold down on mould cover to prevent mould from tipping.

MOULD TYPE :

CS-B (Cable)/(FlatSurf.)

CS-B	CABLE SECTION.mm²									
	10,16,25,35	8mm	50	10mm	70	95	120	150	185	240	300
CARTRIDGE	Use CS-A Connection	F - 90	F - 90	F - 90	F - 90	F - 115	F - 150	F - 150	F - 200	F - 200	F - 250

RUN CABLE ON SURFACE CONNECTION



Handel Clamp KM-58
KM-78
Use sleeve for Cable Under 25mm² : 10x25 & 16x35

Note:
Cut cable and gap it (s)3-4mm under center of tap hole.Fore cross sec. above 50mm² fill the gap betwen cable and steel with mastic. Hold down on mould cover to prevent mould from tipping.

MOULD TYPE :

CS-AR (Cable)/(FlatSurf.)

CS-AR	CABLE SECTION.mm²									
	25	35	8mm	50	10mm	70	95	120	150	185	240
CARTRIDGE	F - 45	F - 45	F - 90	F - 90	F -115	F -115	F - 115	F - 150	F - 200	F - 250	2XF - 150

For other size & type,please contact us.

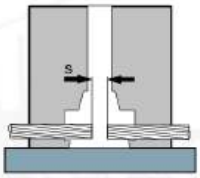
CABLE TO FLAT SURFACE CONNECTION DETAILS

RUN CABLE OFF SURFACE CONNECTION

Note:
Cut cable and gap it (s)3-4mm under center of tap hole. Hold mould down carefully to prevent from its slip.

MOULD TYPE :

CS-BR (Cable)/(FlatSurf.)



Handel Clamp KM58
KM78
Use sleeve for Cable Under 25mm^2 : 10x25 & 16x35

CS-BR	CABLE SECTION.mm^2											
	10 16 25	35	8mm	50	10mm	70	95	120	150	185	240	300
CARTRIDGE	F - 65	F - 90	F - 90	F - 90	F-115	F-115	F - 115	F - 150	F - 200	F - 250	2XF - 150	2XF - 200

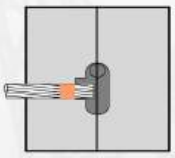
TAP CABLE TO VERTICAL SURFACE.right direction

Note:
Place cable end at center of tap hole.For cross sec. above 50mm^2 fill the gap between cable and steel with mastic outside the weld cavity. Secure mould to the steel surface with a clamp, if possible.

For left direction mould type is CS-HB

MOULD TYPE :

CS-HA,CS-HB (Cable)/(FlatSurf.)



Handel Clamp KM-58

Use sleeve for Cable Under 25mm^2 : 10x25 & 16x35

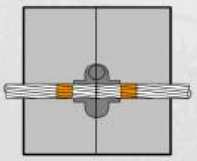
CS-HA CS-HB	CABLE SECTION.mm^2											
	25	35	8mm	50	10mm	70	95	120	150	185	240	300
CARTRIDGE	F - 65	F - 65	F - 90	F - 90	F-115	F - 90	F - 115	F - 110	F - 150	F - 200	F - 200	F - 250

RUN CABLE TO VERTICAL SURFACE.

Note:
Fill the gap between cable and steel surface with mastic outside the weld cavity. Secure mould to the steel surface with a clamp, if possible.

MOULD TYPE :

CS-HR (Cable)/(FlatSurf.)



Handel Clamp KM58
KM78
UseSleeve for Cable Under 25mm^2 : 16 x25 & 16 x35

CS-HR	CABLE SECTION.mm^2											
	25	35	8mm	50	10mm	70	95	120	150	185	240	300
CARTRIDGE	F - 65	F - 90	F - 115	F - 115	F-150	F - 115	F - 150	F - 150	F - 200	F - 250	2XF - 150	2XF - 200

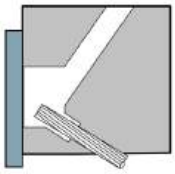
Note: Remove oxids from connection point of steel surface perfectly with electrical grindstone.

For other size & type,please contact us.

CABLE TO FLAT SURFACE CONNECTION DETAILS

Note: Remove oxids from connection point of steel surface perfectly with electrical grindstone.

TAP CABLE TO VERTICAL SURFACE.



Handel Clamp KM58
KM78
Use Sleeve for Cable Under 25mm^2 : 16 x25 & 16 x35

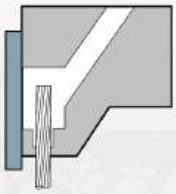
Note:
The cable end should make contact with the steel surface secure mould to the steel surface with a clamp, if possible.

MOULD TYPE :

CS-V (Cable)/(FlatSurf.)

CS-V	CABLE SECTION.mm^2											
	25	35	8mm	50	10mm	70	95	120	150	185	240	300
CARTRIDGE	F - 45	F - 45	F - 90	F - 90	F - 90	F - 90	F - 115	F - 115	F - 150	F - 200	F - 200	F - 250

TAP CABLE TO VERTICAL SURFACE.



Handel Clamp KM58
KM78
Use Sleeve for Cable Under 25mm^2 : 16 x25 & 16 x35

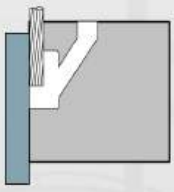
Note:
Cable end must be positioned as show above. Fill the gap between cable and steel with mastic below the weld cavity. Secure mould to the steel surface with a clamp, if possible.

MOULD TYPE :

CS-VA (Cable)/(FlatSurf.)

CS-VA	CABLE SECTION.mm^2											
	25	35	8mm	50	10mm	70	95	120	150	185	240	300
CARTRIDGE	F - 45	F - 65	F - 90	F - 90	F -115	F - 90	F - 115	F - 115	F - 150	F - 200	F - 200	F - 250

TAP CABLE TO VERTICAL SURFACE.



Handel Clamp KM58
KM78

Use Sleeve for Cable Under 25mm^2 : 16 x25 & 16 x35

Note:
Cable end must be positioned as shown above Secure mould to the steel surface with a clamp, if possible.

MOULD TYPE :

CS-VB (Cable)/(FlatSurf.)

CS-VB	CABLE SECTION.mm^2											
	10 16 25	35	8mm	50	10mm	70	95	120	150	185	240	300
CARTRIDGE	F - 65	F - 90	F - 90	F- 115	F- 115	F- 115	F - 115	F - 200	F - 150	F -200	F - 250	2XF -150

For other size & type,please contact us.

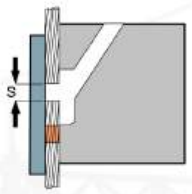
CABLE TO FLAT SURFACE CONNECTION DETAILS

RUN CABLE TO VERTICAL SURFACE CONNECTION

Note:
Cut cable and gap it (s)5-6mm as show above. Fill the gap between cable and steel with mastic below the weld cavity. Secure mould to the steel surface with a clamp, if possible

MOULD TYPE :

CS-VR (Cable)/(FlatSurf.)



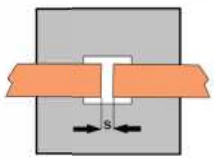
Handel Clamp KM58
KM78
Use Sleeve for Cable Under 25mm^2 : 16 x25 & 16 x35

CS-VR	CABLE SECTION.mm^2											
	25	35	8mm	50	10mm	70	95	120	150	185	240	300
CARTRIDGE	F - 90	F - 115	F- 115	F- 150	F - 150	F - 200	F - 250	F - 250	2XF - 150	2XF - 150	2XF - 200	2XF - 200

Note: Remove oxids from connection point of steel surface perfectly with electrical grindstone.

For other size & type,please contact us.

BUSBAR TO BUSBAR CONNECTION DETAILS



Handel Clamp KM58
KM78

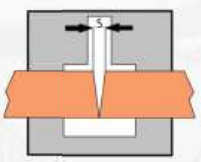
HORIZENTAL FLAT LINEAR CONNECTION

Note:
Busbar 3mm thick and thinner is gapped (S) 3mm under center of tap hole.
Busbar thicker than 3mm is gapped (S) 5-6mm.

MOULD TYPE :

BE-A (BusBar/BusBar)

BE-A	MAIN CONDOCTOR (Belt)											
	20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5	60*5	80*5	80*10
CARTRIDGE	C -45	C - 65	C - 65	C -90	C -90	C - 115	C -115	C -150	C -200	2XC - 150	2XC - 200	3XC - 200



Handel Clamp KM58
KM78

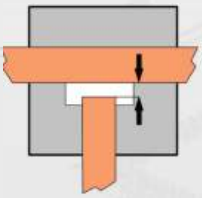
HORIZENTAL EDGE LINEAR CONNECTION

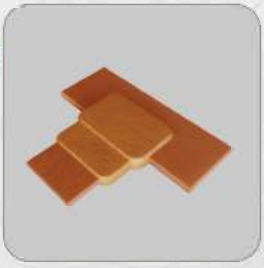
Note:
Ends of bus bar less than 30 mm wide must be cut as shown above under centre tap hole (S) 5-6mm.
Busbar wider than 30mm (S) 10-12mm.

MOULD TYPE :

BE-B (BusBar/BusBar)

BE-B	MAIN CONDOCTOR (Belt)											
	20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5	60*5	80*5	80*10
CARTRIDGE	C -45	C - 65	C - 65	C - 90	C - 90	C - 115	C - 115	C - 150	C - 200	2XC - 150	2XC - 200	3XC - 200





Handel Clamp KM58
KM78

HORIZENTAL TEE CONNECTION

Note:
Tap bas bar 6mm thick and thinner is gapped (S) 5-6mm from the edge of the run busbar
Busbar thicker than 6mm is gapped (S) 10mm.

MOULD TYPE :

BT-A (BusBar/BusBar)

BT-A	MAIN CONDOCTOR (Belt)											
	20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5	60*5	80*5	80*10
CARTRIDGE	C -45	C - 65	C - 65	C - 90	C - 65	C - 115	C - 90	C - 150	C - 200	2XC - 150	2XC -200	3XC - 200

For other size & type,please contact us.

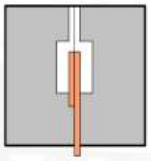
BUS BAR TO BUS BAR CONNECTION DETAILS

VERTICAL TEE CONNECTION

Note:
Insert end of tap bus bar even with upper edge of run busbar

MOULD TYPE :

BT-B (BusBar/BusBar)



Handel Clamp KM58
KM78

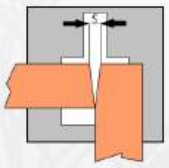
BT-B	MAIN CONDOCTOR (Belt)											
	20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5	60*5	80*5	80*10
CARTRIDGE	C -45	C - 65	C - 65	C - 90	C - 90	C - 90	C - 115	C - 150	C - 200	2XC - 150	2XC - 200	3XC - 200

VERTICAL ANGLED CONNECTION

Note:
Ens of busbar less than 30 mm wide must be cut as shown . above under center tap hole (S) 5-6mm. bus bar wider than 30mm (S) 10-12mm.

MOULD TYPE :

BB-L (BusBar/BusBar)



Handel Clamp KM58
KM78

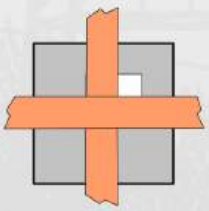
BB-L	MAIN CONDOCTOR (Belt)											
	20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5	60*5	80*5	80*10
CARTRIDGE	C -65	C - 65	C - 65	C -90	C - 90	C - 115	C - 115	C - 150	C - 200	2XC - 150	2XC - 200	2XC - 200

HORIZENTAL CROSS CONNECTION

Note:
Place BusBar into the mould in their respective places.

MOULD TYPE :

BX-A (BusBar/BusBar)

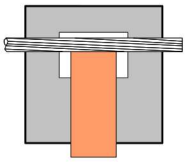


Handel Clamp KM58
KM78

BX-A	MAIN CONDOCTOR (Belt)									
	20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5	50*10
CARTRIDGE	C - 65	C - 90	C - 65	C - 90	C - 115	C - 115	C - 115	C - 150	C - 200	2XC - 150

For other size & type,please contact us.

CABLE TO BAS BAR CONNECTION DETAILS



Handel Clamp KM58
KM78
UseSleeve 10 x25 & 16 x35

RUN CABLE TO TAP BUS-BAR TEE CONNECTION

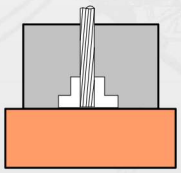
Note:
The busbar should make contact with the cable.

MOULD TYPE :

CB-T (Cable)(Bus-bar)

CB-T

MAIN CONDUCTOR (mm^2)	TAP CONDUCTOR (Belt) 20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5	60*5	60*10	80*10
10	C - 45	C - 45	C - 45									
16	C - 45	C - 45	C - 45									
25	C - 45	C - 45	C - 45									
35	C - 65	C - 65	C - 65	C - 90								
50	C - 65	C - 65	C - 90	C -115	C -115							
70			C - 90	C -115	C -115	C -150						
95				C -115	C -150	C -150	C -150	C -200				
120					C -150	C -200	C -200	C -200	C -250			
150					C -200	C -200	C -250	C -250	2XC-150			
185					C -200	C -200	C -200	C -250	2XC-150			
240							C -250	C -250	2XC-150	2XC-200		
300										2XC-200	2XC-250	



Handel Clamp KM58

UseSleeve 10 x25 & 16 x35

RUN BUS-BAR TO TAP CABLE TEE CONNECTION

Note:
Run busbar is inserted to seat in mould. Tap cable should make contact with the upper edge of run bar.

MOULD TYPE :

BC-T (Bus-Bar)(Cable)

BC-T

RUN BUS BAR	TAP CONDUCTOR (Belt) 25	35	50	70	95	120	150	185	240	300
20x3 Upto 60x5	90	65	65	90	115	115	115	150	200	200
40x10 Upto 80x10	90	90	90	115	150	150	150	200	250	250

For other size & type,please contact us.

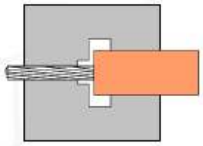
CABLE TO BAS BAR CONNECTION DETAILS

HORIZENTAL CABLE TO BUS BAR SPLICE

Note:
The cable and the busbar should make contact under the center of tap hole.

MOULD TYPE :

CB-E (Cable)(Bus-bar)



Handel Clamp KM58
KM78
Use Sleeve 10 x25 & 16 x35

CB-E

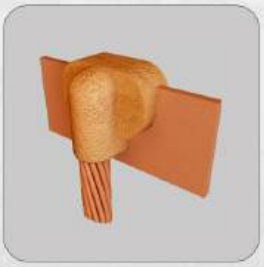
MAIN CONDUCTOR (Belt) \ TAP CONDUCTOR (mm^2)	10	16	25	35	50	70	95	120	150	185	240
20*3	C-45	C-45	C-45	C-45	C-45						
20*5			C-45	C-45	C-65						
25*3			C-45	C-45	C-60	C-65					
25*5				C-65	C-90	C-90	C-90	C-115	C-115	C-150	C-200
30*3						C-90	C-90	C-90	C-115	C-150	C-200
30*5							C-90	C-115	C-115	C-150	C-200
40*3							C-115	C-115	C-115	C-150	C-200
40*5							C-115	C-115	C-115	C-150	C-200
50*5								C-150	C-150	C-200	C-250
60*5										2XC-150	2XC-150

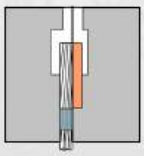
CABLE TO RUN BUS BAR VERTICAL TEE CONNECTION

Note:
Insert end of tap cable even with upper edge of run busbar.
Fill the gap between cable and mould with mastic below weld cavity.

MOULD TYPE :

BC-TV (Cable)(Bus-bar)





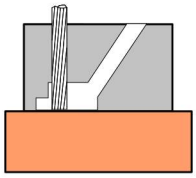
Handel Clamp KM58
KM78
Use Sleeve 10 x25 & 16 x35

BC-TV

MAIN CONDUCTOR (Belt) \ TAP CONDUCTOR (mm^2)	10*	16*	25	35	50	70	95	120	150	185	240
20*3	C - 90	C -90	C - 90	C - 115	C - 115	C - 115	C - 150				
20*5			C - 90	C - 115	C - 115	C - 150	C - 150	C - 200			
25*3			C - 90	C - 115	C - 115	C - 150	C - 150	C - 200			
25*5			C - 115	C - 115	C - 115	C - 150	C - 150	C - 200	C - 200	C - 250	C - 250
30*3			C - 115	C - 115	C - 115	C - 150	C - 200	C - 200	C - 200	C - 250	C - 250
30*5				C - 115	C - 115	C - 150	C - 200	C - 200	C - 200	C - 250	C - 250
40*3				C - 115	C - 115	C - 150	C - 200	C - 250	C - 250	2XC-150	2XC-150
40*5				C - 115	C - 115	C - 150	C - 200	C - 250	C - 250	2XC-150	2XC-150
50*5					C - 150	C - 200	C - 250	2XC-150	2XC-150	2XC-150	2XC-150
60*5						C - 150	C - 250	2XC-150	2XC-150	2XC-200	2XC-200

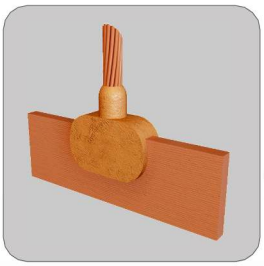
For other size & type,please contact us.

CABLE TO BAS BAR CONNECTION DETAILS



Handel Clamp KM58

UseSleeve 10 x25 & 16 x35



UP CABLE TO RUN BUS BAR VERTICAL TEE CONNECTION

Note:
Run busbar is inserted to seat in mould. butt tap cable against upper edge of run bus bar.

MOULD TYPE :

BC-TU (Cable)(Bus-bar)

BC-TU

TAP CONDUCTOR (mm^2)

MAIN CONDUCTOR (Belt)	10	16	25	35	50	70	95	120	150	185	240
20*3				C-90			C-115		C-150		
20*5											
25*3											
25*5											C-200
30*3											C-200
30*5											C-200
40*3											C-250
40*5				C-90	C-115	C-115	C-150	C-150	C-200	C-200	C-250
50*5				C-90	C-115	C-115	C-150	C-150	C-200	C-200	C-250
60*5				C-90	C-115	C-115	C-150	C-150	C-200	C-200	C-250

For other size & type,please contact us.

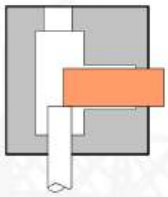
ROD TO BAS BAR CONNECTION DETAILS

TAP BUS BAR TO GROUND ROD CONNECTION

Note:
Butt ends of cable and bus bar under center of tap hole

MOULD TYPE :

BR-L (Rod)(Bus-bar)



Handel Clamp KM58

BR-L

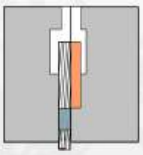
ROD DIA mm	CABLE SECTION.mm² 20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5
12/7	C -90	C -115	C - 90	C - 115	C - 90	C - 115	C -115	C -150	C -150
14/2	C -90	C -115	C -90	C -115	C -115	C -150	C -115	C -150	C -150
17/2	C -115	C -115	C -150	C -150	C -115	C -150	C -150	C -200	C -200

RUN BUS BAR TO GROUND ROD ,TEE CONNECTION

Note:
Insert end of tap rod even with upper edge of run busbar.
Fill the gap between rod and mould with mastic below weld cavity.

MOULD TYPE :

BR-T (Rod)(Bus-bar)



Handel Clamp KM58
KM78

BR-T

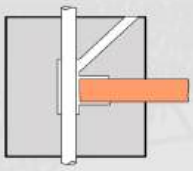
ROD mm	CABLE SECTION.mm² 20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5	60*5
12/7	C-90	C-90	C-90	C-90	C-90	C-150	C-115	C-150	C-200	
14/2	C-90	C-90	C-90	C-115	C-115	C-150	C-150	C-150	C-200	C-250
17/2	C-115	C-150	C-150	C-150	C-150	C-200	C-200	C-200	2XC-150	2XC-150

ROD TO TAP BUS VERTICAL TEE CONNECTION

Note:
Tap busbar is inserted to seat in mould. Gap busbar 5-6 mm Under tap hole.

MOULD TYPE :

BR-R (Rod)(Bus-bar)



Handel Clamp KM58

BR-R

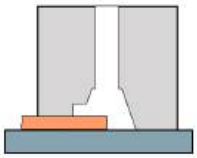
ROD DIA mm	CABLE SECTION.mm² 20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5
12/7	C -115	C - 115	C - 115	C - 115	C - 115	C - 150	C - 115		
14/2	C -115	C -115	C - 115	C -150	C -150	C -200	C -150	C -200	C -200
17/2	C -150	C-150	C -200	C -200	C -200	C -200	C -200	C -250	C -250

For other size & type,please contact us.

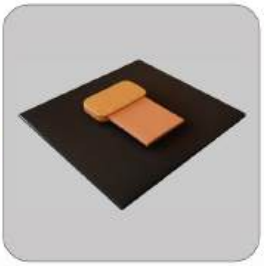
BUSBAR TO SURFACE CONNECTION DETAILS

These refrence codes refer to flat surface with Min 3mm thickness.

Note: Remove oxids from connection point of steel surface perfectly with electrical grindstone.



Handel Clamp KM58
KM78



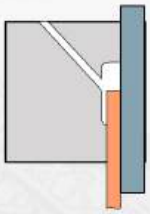
TAP BUS BAR TO HORIZENTAL SURFACE CONNECTION

Note:
Place bas bar end in center of tap hole & Hole down mould to prevent mould from tipping.

MOULD TYPE :

BS-A (Flat Surf.)/(Bus-Bar)

BS-A	SECTION mm^2								
	20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5
CARTRIDGE	F-90	F-115	F-90	F-150	F-115	F-200	F-115	F-200	2xF-250



Handel Clamp KM58

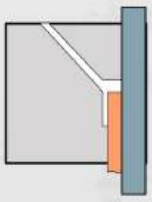
DOWN BUS BAR TO VERTICAL SURFACE CONNECTION

Note:
Place bus bar end in center of tap hole & Secure mould to the surface with clamp if passible.

MOULD TYPE :

BS-B (Flat Surf.)/(Bus-Bar)

BS-B	BELT SECTION mm^2								
	20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5
CARTRIDGE	F-90	F-115	F-90	F-150	F-115	F-150	F-150	F-200	F-250



Handel Clamp KM58

HORIZENTAL RUN BUS BAR TO VERTICAL SURFACE CONNECTION

Note:
Secure mould to the surface with clamp if possible.

MOULD TYPE :

BS-C (Flat Surf.)/(Bus-Bar)

BS-C	BELT SECTION mm^2									
	20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5	60*5
CARTRIDGE	F-90	F-150	F-115	F-150	F-115	F-150	F-150	F-200	F-250	F-250

For other size & type,please contact us.

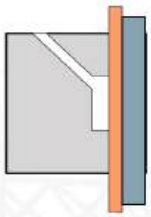
ROD TO SURFACE CONNECTION DETAILS

VERTICAL RUN BUS BAR TO VERTICAL SURFACE CONNECTION

Note:
Secure mould to the surface with clamp iF possible

MOULD TYPE :

BS-E (Flat Surf.)/(Bus-Bar)



Handel Clamp KM58

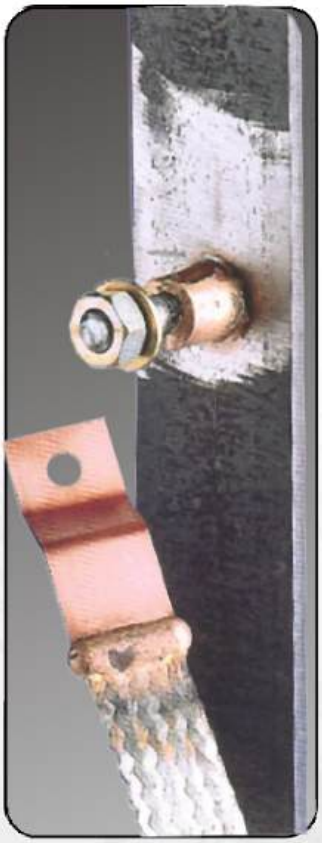
BS-E	BELT SECTION mm^2									
	20*3	20*5	25*3	25*5	30*3	30*5	40*3	40*5	50*5	60*5
CARTRIDGE	F-90	F-150	F-115	F-150	F-115	F-150	F-150	F-200	F-250	F-250

Note: Remove oxids from connection point of steel surface perfectly with electrical grindstone.

For other size & type,please contact us.

STUD TO SURFACE CONNECTION DETAILS

Note: Remove oxids from connection point of steel surface perfectly with electrical grindstone.



Handel Clamp KM58

STUD TO HORIZENTAL SURFACE CONNECTION

Note:
Place screw and surface perpendicularly.
Remove surface to oxide perfectly with electrical grind stone

MOULD TYPE :

SS-H (STUD)/(FlatSurf.)

SS-H		CARTRIDGE
STUD DIA.mm	M12	F-65
	M14	F-90
	M16	F-115
	M20	F-150

Handel Clamp KM58

STUD TO VERTICAL SURFACE CONNECTION

Note:
Place stud and surface perpendicularly.

MOULD TYPE :

SS-V (SUTFACE)/(FlatSurf.)

SS-V		CARTRIDGE
STUD DIA.mm	12/7	F-65
	14/2	F-90
	17/2	F-115
	18/2	F-150

For other size & type,please contact us.

CABLE TO RAIL CONNECTION DETAILS

TAP CABLE TO RAIL WEB CONNECTION

Note:
Use mastic for cable above 50mm²

MOULD TYPE :

CI-A , CI-AL , CI-AR (Cable)/(Rail)

CI-A CI-AL CI-AR

Handel Clamp: KM50

CI-A CI-AR CI-AL	TAP CONDUCTOR							
	10	16	25	35	50	70	95	120
UIC RAIL UIC-49	F-45				F-65		F-90	F-115
UIC-54								
UIC-60								
CI-A	F-65				F-90		F-115	F-150

Sample code : CI-AR 10/UIC60

WEB CONNECTION

Note:
Use mastic for cable above 50mm²

MOULD TYPE :

CI-B (Cable)/(Rail)

Handel Clamp RKM58

CI-B	TAP CONDUCTOR							
	10	16	25	35	50	70	95	120
UIC RAIL UIC-49	F-90					F-115	F-150	F-200
UIC-54								
UIC-60								

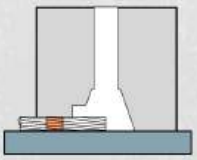
Sample code : CI-C 10/UIC60

CABLE TO PIPE CONNECTION FOR COTHODIC PROTECTION

Note:
Place cable end at centre of tap hole. Fill the gap between cable and steel with mastic outsid the weld cavity. Hold down on mould cover toprevent mould from tipping.

MOULD TYPE :

CP-A (Cond.)



Handel Clamp PKM58

Sleeve for Cable Under 35mm²

CP-A	TAP CONDUCTOR					
	2.5 ,4,6,10,16	25	35	50	70	95
PIP DIA mm 30-60	F-115	F-25	F-32	F-45	F-65	F-90
60-120		F-25	F-32	F-45	F-65	F-90
120-170		F-25	F-32	F-45	F-65	F-90
ABOVE 170		F-25	F-32	F-45	F-56	F-90

Sample code : CP-A 10/Ø35

Note: Remove oxids from connection point of pipe & rail surface perfectly with electrical grindstone.

For other size & type,please contact us.

MORE CONNECTIONS


CT-BV


CX-BV


CX-AV


CD-E

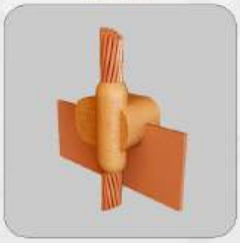

CT-D


CT-AV


BE-C


BT-E


BT-C


CBX-V


CBT-C


CBT-E


CBT-D


CAD-V


CAX-C


CAT-C


CI-BL & CI-BR


RI-A


BI-A


CI-DL & CI-DR

For other size & type,please contact us.

EARTH ROD & ACCESSORIES

COPPER BONDED EARTH ROD

CBR (Earth Rod)

Note:
Manufactured from high tensile low carbon steel by molecularly bonding 99,9% pure electrolytic copper by diffusion welding process ,these earth rods confirm to UL 467 standard, the threads are formed by roll threading process which ensure strength and maintain the molecularly bonded copper along the full length of the threads, the rods can be deep driven manually or by using power hammer.

SOLID COPPER EARTH ROD (EXTERNALLY THREADED)

ECR (Earth Rod)

Note:
Kahangan offer pure copper earth rods for use where extreme soil condition such as high salt or moisture content demands high corrosion resistance and exceptionally long late of rods.
Kahangan solid copper earth rods are made from high conductivity hard drawn copper to BS2874 C101. Threads are formed by roll threading process to ensure extra strength and avoid the risk of chipping while driving the rods in the ground.

COUPLING

CPB (Coupling)

Note:
Made of high grade silicon Bronze for higher strength with counted bore for protecting the rod threads from damage

DRIVING STUD

DST (Driving stud)

Note:
Made of re-usable high tensile steel,suitable for both manual and power hammering

SEMI THREADED STEEL COUPLING

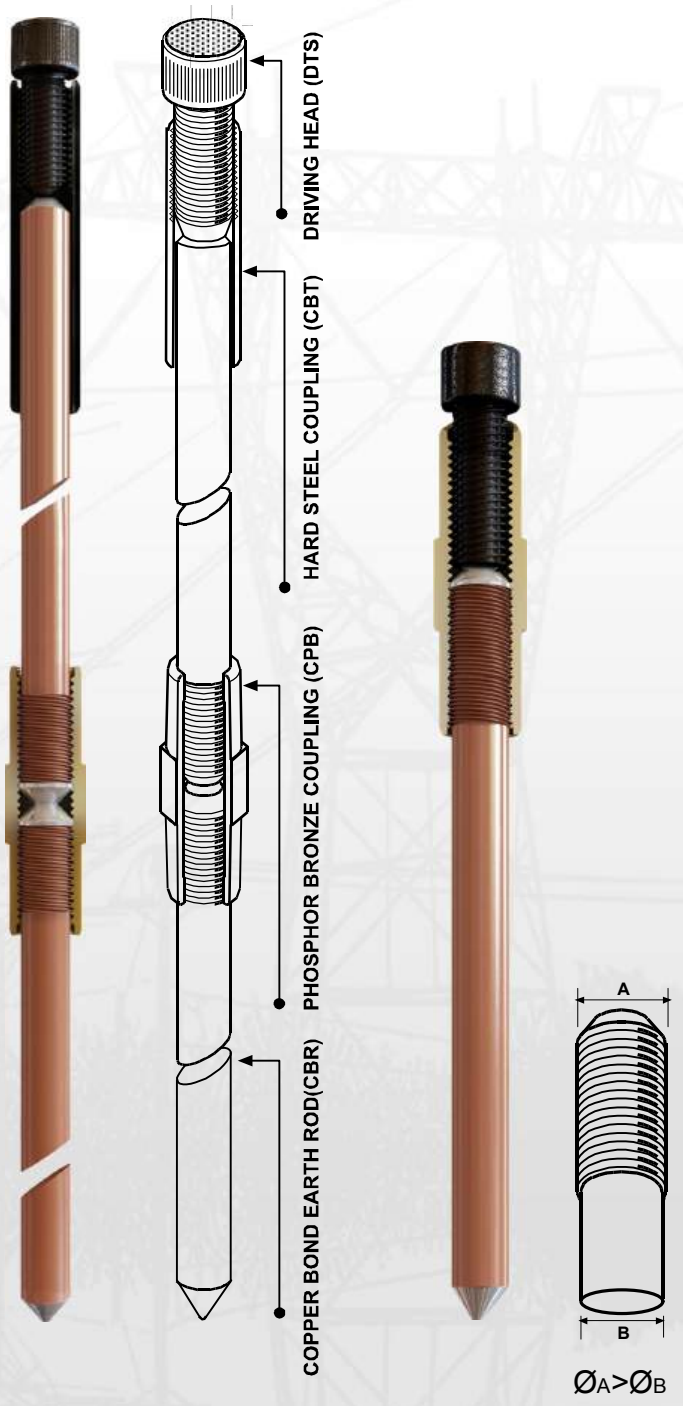
CST (Coupling)

Note:
Made of re-usable high tensile steel for coupling driving head (DST) & non threaded head of earth rod

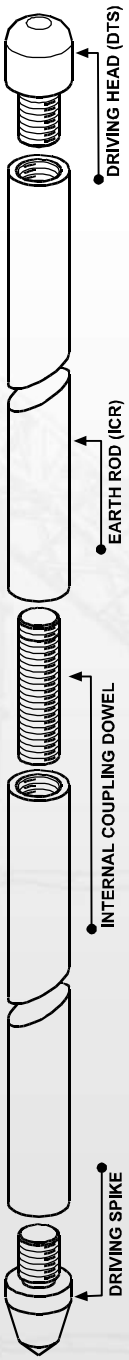
EYE BOLT

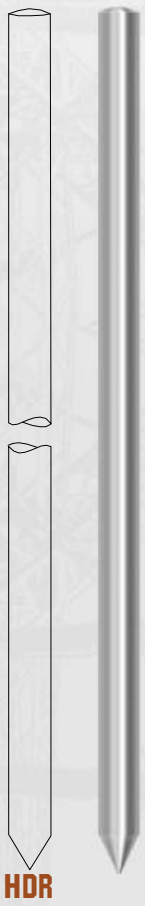
EBT (Eye Bolt)

Note:
Made of gunmetal, these Eye Bolts can be directly screwed on to earth rods thereby offering a static discharge unit.



EARTH ROD & ACCESSORIES DETAILS





SOLID COPPER EARTH ROD (INTERNALLY THREADED)

ICR (Earth Rod)

Note:
Manufactured from high conductivity hard drawn copper to BS2874 C101 standard

INTERNAL COUPLING DOWEL

DWP (Dowel)

Note:
Made of Brass

DRIVING HEAD

DST (Driving Head)

Note:
Made of re-usable high tensile steel,suitable for both manual and power hammering

DRIVING SPIKE

DSP (Spike)

Note:
Made of high tensile steel.

STAINLESS STEEL EARTH ROD(INTERNALLY THREADED)

SSR (Earth Rod)

Note:
Stainless steel earth rods are used where galvanic corrosion is likely to affect earth rods due to dissimilar metals buried in close proximity as copper earth rods are more vulnerable to galvanic corrosion. Stainless steel rods are more anodic than copper and are more effective against corrosion problem. These rods are manufactured from austenitic stainless steel to BS 970, grade 316S12.

HOT DIP GALVANIZED STEEL EARTH ROD

HDR (Earth Rod)

Note:
As a cost effective option for earthing kahangan offers Hot dip galvanized steel earth rods which are made of high strength low carbon steel. These are hot dip galvanized to BS729.

Earth Rod	EARTH ROD DIMENSION		
Earth rod Code	Accessories	DIA. ØA	Leangth
CBR	CPB,CST,DST	1/2"(12mm) 5/8"(16mm) 3/4"(19mm)	1.2 m 1.5 m 2.0 m 3.0 m
HDR		16 mm 18 mm 20 mm	
SSR			
ECR	CPB,CST,DST,DSP		
ICR	DWP,DST,DSP		

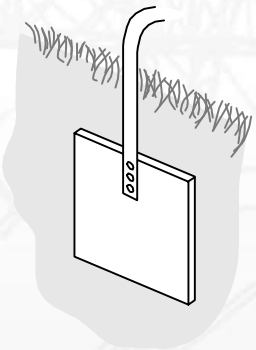
Sample Code: CBR 16 x 1500

EARTH PLATE / LATTICE DETAILS

SOLID COPPER & COPPER COATED STEEL EARTH PLATES

CPL-SPL (Earth Plate)

Note:
Earth plates are used where earth rods are unsuitable.
Kahangan earth plates are manufactured from electrolytic grade solid copper**(CPL)**.Steel earth plates made of steel electroplated with electrolytic copper are also available**(SPL)**.



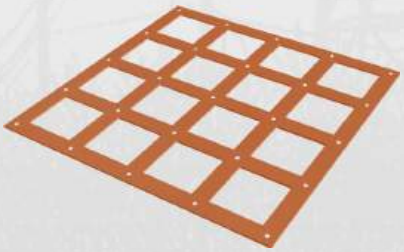
EARTH PLATE	EARTH PLATE DIMENSION (mm)			
	Length x Width x Thickness (L x W x T)			
CPL	330 x 330 x 3	660 x 660 x 3	330 x 330 x 5	660 x 660 x 5
SPL	330 x 330 x 5	660 x 660 x 5		

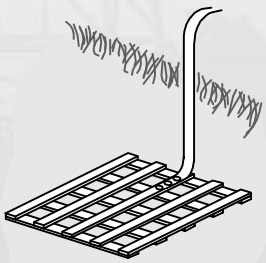
Sample Code: CPL 33x33x3

EARTH LATTICE

EL (Earth LATTICE)

Note:
Kahangan earth lattices are usable as an alternative to earth Plates, which are made of electrolytic grade copper strips of various sizes.



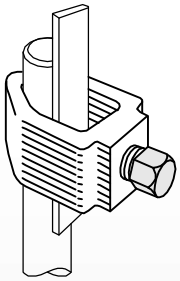


EARTH LATTICE	EARTH LATTICE DIMENSION (mm)		
	Lattice Size	CU Type Size	Mesh Size
Earth Lattice Code: EL	500 x500 600 x600 900 x900 1000 x 1000	3 x25 & 5 x 25	70 x70

Sample Code: EL 60x60x3

CABLE TO GROUND ROD CLAMP DETAILS

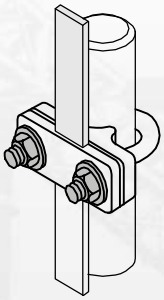
Kahangan offers a variety of earth rod clamps suitable for different applications of earthing .Clamp bodies are manufactured from hard copper Alloys /silicon Aluminum Bronze / Gunmetal and bolts are manufactured from stainless steel /phosphor Bronze/HD galvanized Steel



ROD TO TAPE CLAMP

ERT (Rod/Tape Clamp)

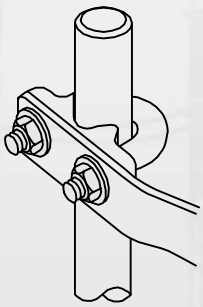
Note:
Used for joining earth rods to cable, these clamps are available to suit different sizes of earth rods and cable. The clamp bodies, made of hard copper alloy / Gunmetal /Aluminum Bronze, and bolts made of phosphor Bronze / stainless steel / HD galvanized Steel ensure perfect fit and lasting connection.



U BOLT ROD TO TAPE CLAMP (VERTICALLY)

URV (Rod/Tape Clamp)

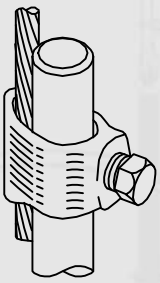
Note:
These clamps are used to connect tape to the earth rod vertically. Available in single plate and double plate, application being the same but suitable for fixing in different angles, made of strong copper alloy / Gunmetal



U BOLT ROD TO TAPE CLAMP (HORIZANTALLY)

URT (Rod/Tape Clamp)

Note:
These clamps are used to connect tape to the earth rod horizantally. Material and characteristics same as type URV



ROD TO CABLE CLAMP

ERC (Rod/Cable Clamp)

Note:
These clamps are used for joining earth rods to copper cables. Material and characteristics same as type 'ERT' clamps.

EARTH ROD CLAMP	ROD / CONDUCTOR DIMENSION (mm)		
Earth Rod Clamp Code	Max. Rod Dia.(mm) / Max. Cond. Size		
ERT	20 /30 x 10mm		
URV	20 /30 x3mm	20 /30 x5mm	
URT	20 /30 x 5mm		
ERC	20 /70mm^2	20 / 120mm^2	20 / 185mm^2

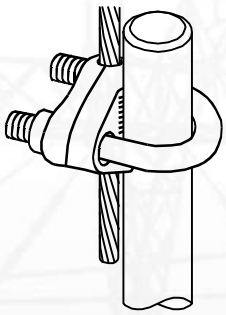
Sample Code:ERC 20/70

CABLE TO GROUND ROD CLAMP DETAILS

ROD TO CABLE CLAMP

URC (Rod/Cable Clamp)

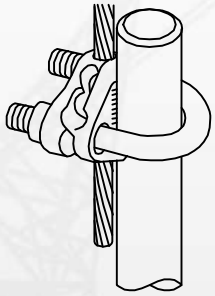
Note:
These special Heavy Duty copper alloy Double plated clamps are suitable for connecting earth rod with cables / round conductors vertically.



ROD TO CABLE CLAMP

URX (Rod/Cable Clamp)

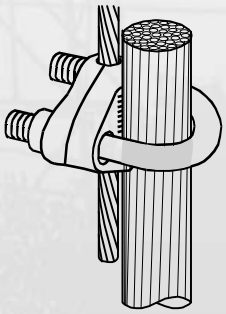
Note:
Heavy duty copper double plated clamps are sutable for connecting earth rod with cables/round conductors,vertically or horizontally.



ROD/WIRE ROPE TO CABLE CLAMP

URW (Wire Rope/Cable Clamp)

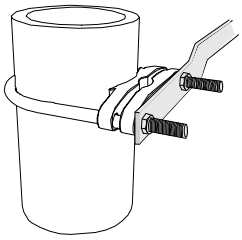
Note:
Made of Gunmetal,these clamps are used for connecting earth rod to cables



U BOLT CLAMP		DIAMETER /CONDUCTOR SIZE	
		Max. Rod Dia.(mm) / Max. Cond. Size	
Earth Clamp Code	URC	20 / 70mm^2	20 / 185mm^2
	URX	20 / 70mm^2	20 / 185mm^2
	URW	20mm / 70mm^2	

Sample Code: URC 20/70

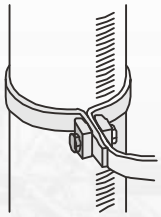
CABLE/TAPE TO PIPE CLAMP DETAILS



PIPE TO CABLE / TAPE CLAMP

URP (Pipe/Cable Clamp)

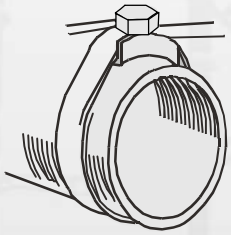
Note:
These u bolts, made of gunmetal, are used for universal parallel cable or 90' tape connection to pipe.

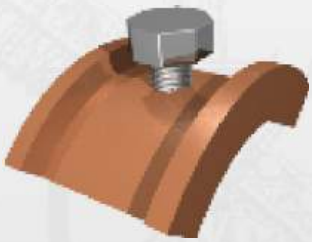


TAPE TO PIPE BOND

RBP (Bond Clamp)

Note:
Rainwater pipes Bonds, made of gunmetal, are used for bonding tapes to rainwater pipes. Bolts are made of Phosphor Bronze / Stainless Steel /HD galvanized steel.

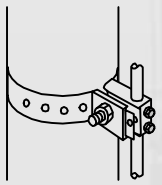


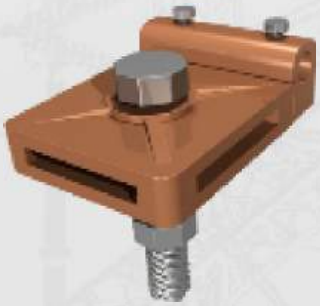


TAPE TO PIPE BOND

TBP (Bond Clamp)

Note:
These types of bonds are used for bonding pipes in to earthing or lightning protection system. Made of gunmetal, bolts are made of Phosphor Bronze / Stainless Steel /HD galvanized steel.





CABLE TO PIPE BOND

HBP (Bond Clamp)

These bonds is used for bonding to handrails, reinforcing bars, pipes etc,

PIPE CLAMP	EARTH CLAMP DIMENSION (mm)	
	Max. Pipe Dia.(mm) / Cable (mm^2)	
Earth Clamp Code: URP	25 / 70mm^2	50 / 120mm^2
	Max. Tape Dim.(mm)	
TPB / RBP	3 x 30 mm	
	Min.Pipe Dia.(mm)/Cable (mm^2)	
HBP	60 / 50mm^2	60 / 70mm^2

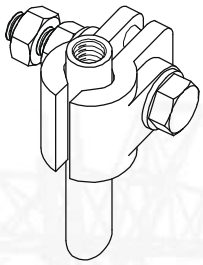
Sample Code: URP 25/70

CABLE LOG TO GROUND ROD CONNECTION DETAILS

ROD TO CABLE LUG CLAMP

DCT (Rod /Cable Clamp)

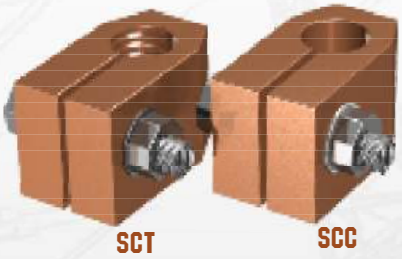
Note:
These clamps are used to connect tape to the earth rod. Made of strong copper alloy / gunmetal, bolts are made of phosphor Bronze/ stainless steel /HD galvanized steel.

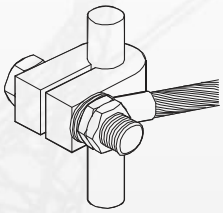


SPLIT CONNECTOR

SCT & SCC (Rod/Cable Clamp)

Note:
Used with threaded and unthreaded rods, suitable for connecting earth rod with cable lugs, supplied with or without threades,bolts are made of Phosphor Bronze / Stainless Steel /HD galvanized steel.





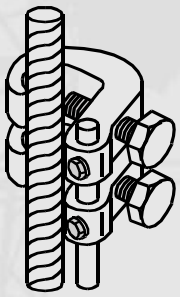
EARTH CLAMP		SPLIT CONNECTION DIMENSION					
		Max. Rod Dia.(mm) / Max Cable Lug Size					
Earth Clamp Code	DCT	18/120	18/240	20/120	20/240		
	SCC	16/120	16/240	18/120	18/240	220/120	20/240
		Thread Size / Max Cable Lug Size					
	SCT	5/8" / 120	5/8" / 240	3/4" / 120	3/4" / 240		

Sample Code: EL 60x60x3

RE-BAR CLAMP

REC (Armature/Cable Clamp)

These clamps are used for bonding to handrails, reinforcing bars, pipes etc. Bolts are made of Bronze / Stainless Steel /HD galvanized Steel.



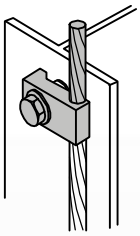
REC	EARTH CLAMP DIMENSION (mm)	
	Max. Armatur Dia.(mm)	
Cond. Dia. Ø10	Ø8-Ø20 mm	Ø20-Ø40 mm

Sample Code: REC 8-20

BARE WIRE TO STRUCTURE CONNECTION DETAILS

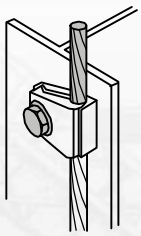
TOWER EARTH CLAMP

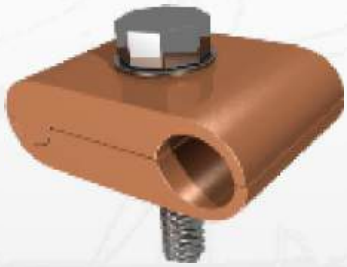
KAHANGAN Tower Earth Clamps are manufactured from Brass alloy (Forging) designed for bonding copper Bare wire (conductor) to metal surfaces. Bolts are made of Phosphor Bronze / Stainless Steel /HD galvanized steel.



SINGLE PLATE

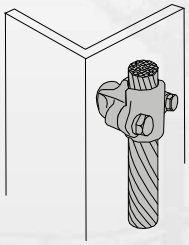
TEC(Tower Earth Clamp)





DUBLE PLATE

DTEC (Tower Earth Clamp)

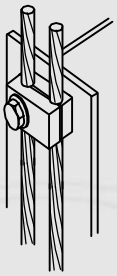


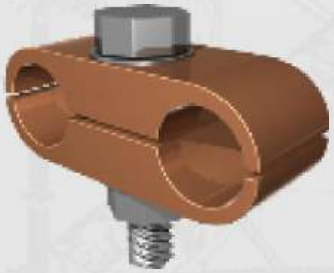
HEAVY DUTY - DUBLE PLATE

HEC (Tower Earth Clamp)

2WAY EART CLAMP

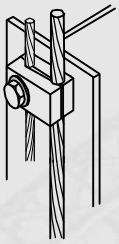
Are manufactured from brass alloy (Forging),designed for bonding two copper conductors with equal or close dia. to metal surfaces. Bolts are made of Bronze / Stainless Steel /HD galvanized Steel.





FOR EQUAL OR CLOSE BARE WIRE DIA .

ECC (Tower Earth Clamp)



FOR DIFFERENT CLOSE WIRE DIA .

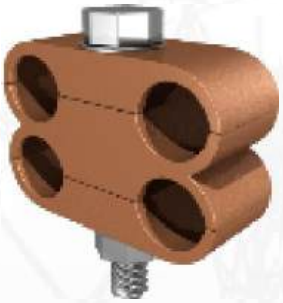
ECC (Tower Earth Clamp)

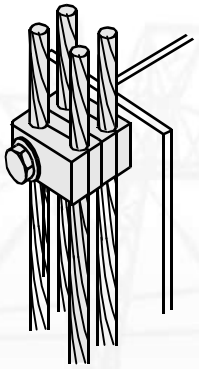
CABLE TO STRUCTURE CONNECTION DETAILS

4WAY EARTHING CABLE CLAMP

DEC (Tower Earth Clamp)

Note:
Are manufactured from brass alloy (Forging),designed for bonding four copper conductors with equal or close dia. to metal surfaces. Bolts are made of Bronze / Stainless Steel /HD galvanized Steel.

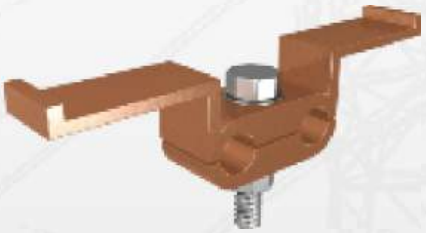


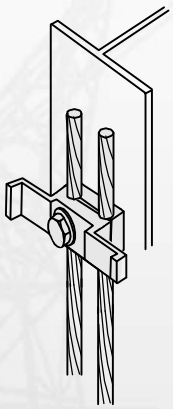


TEMPORARY EARTHING -FIX POINT- CONNECTION

FCC (Armed Clamp)

Note:
Are manufactured from brass alloy,designed as a fixed point for connecting earth clamp of temporary earthing system.





TOWER EARTH CLAMP

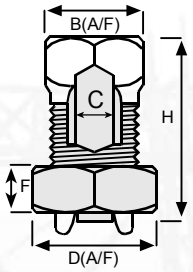
Earth Clamp Code	STRACTURE CLAMP: CONDUCTOR SIZE.(mm2)				SAMPLE CODE
TEC	35,50 (Bolt: M10x40)	70,95,120 (Bolt: M12x60)	150,185,240 (Bolt: M12x60)		TEC35,TEC150
DTEC					DTEC 50,DTEC 120
HEC	150,185,240 (Bolt: M10x30)				HEC150
ECC	(35,50)/(35,50) (Bolt: M10x40)	(70-185)/(70-185) (Bolt: M12x60)	(240,300)/(240,300) (Bolt: M14x60)	(70,185)/(35,50) (Bolt: M12x60)	ECC 35/35 ,ECC 120/95
FCC					FCC (120-150) /(120-35)
DEC	(35,50)/(35,50) (Bolt: M10x50)	(70-185)/(70-185) (Bolt: M12x80)	(240,300)/(240,300) (Bolt: M14x80)		DEC (120-150) /(120-35)

BARE WIRE TO STRUCTURE CONNECTION DETAILS

SPLIT BOLT CONNECTOR

SBU (Split Clamp)

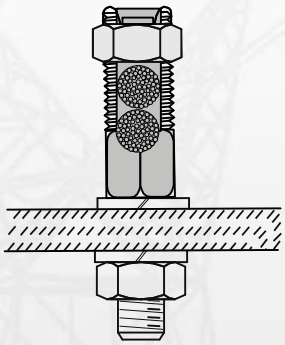
Note:
Made of high tensile copper alloy and brass bolt .Split Connectors are used for copper to copper stranded or solid circular conductors.



BOLTED SPLIT BOLT CONNECTOR

BSU (Split Clamp)

Note:
Same as above but for connecting one or two conductors to structure.
Bolts are made of Phosphor Bronze / Stainless Steel /HD galvanized steel.



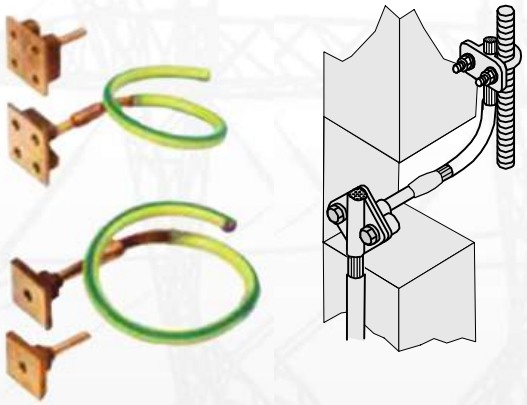
SPLIT BOLT	SPILET BOLT CONNECTOR					
	CONDUCTORS SIZE (mm^2)					SAMPLE CODE
SBU	25,35	50,70	95,120	150,185	240	SBU 120/70
BSU	25,35 (Bolt: M10x30)	50,70 (Bolt: M10x30)	95,120 (Bolt: M10x30)	150,185 (Bolt: M12x30)	240 (Bolt: M12x30)	BSU 240/35 - BSU 185

BARE WIRE CONNECTION DETAILS

EARTH BONDING POINT

BP & MBP (Earth Bond Point)

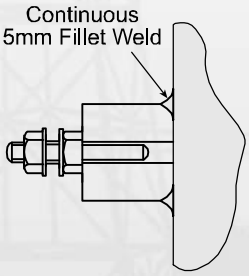
Note:
For providing continuity and a multiple bonding point, and are available with one, two and four hole connection .These are made of gunmetal.



EARTH BOSS

EBS (Earth Boss)

Note:
KAHANGAN Earth Boss are manufactured from High tensile mild steel zinc plated to avoid corrosion .Supplied with SS bolts, spring and plain washers.



EARTH TERMINALS & DISCONNECTING LINK DETAILS

EARTH TERMINALS

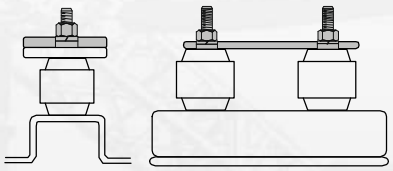
LIK (Earth Terminal)

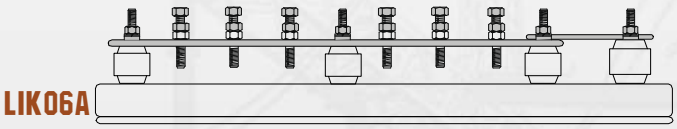
Note:
Earth Bars which are made of hard drawn copper (bare or tin plated) conforming to BS1432 with brass/phosphor bronze/ Stainless steel or HD galvanized fittings and supported with reinforcing polyester insulators fitted on channel base of HD galvanized / Stainless Steel, Available in various size and specifications with or without disconnecting links.

DISCONNECTING LINK

LIK01 (Earth)

Note:
Comprising of solid copper earth bar (bare or tin plated) mounted on HD golvanized / Stainless Steel bracket and supported with reinforcing polyester insulators, these links are used for temporary disconnection of the circuit for inspection and testing of the lightning protection system network.





Type	Cat.no
Six way Earth Bar with Single Disconnecting	LIK 06A
Six way Earth Bar with Tow Disconnecting Link	LIK06B
Six way Earth Bar	LIK06

EARTH BARS - FLAT OR BRIDGE

BSF & BSB (Earth Bar)

Note:
Earth Bars made of hard drawn copper (tin coated if requested) are used as earth terminal mounted on the wall,steel structure or earth pit with or without insulator.

BSB:Available in various Hole with following size:

Size	Cat.no
50x5x200 mm	BSF50x5x200
100x5x200 mm	BSF100x5x200

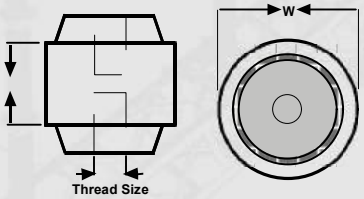
BSF:Available in various length & Hole with following cross sec:

25x3 , 25x5 , 30x3 , 30x5 , 40x5 , 50x5 50x10 , 100x5 , 100x10 ,120x10	BSB25x5x300

INSULATOR

ISL (Earth Clamp)

Note:
Made of reinforcing polyester with metal inserts, for various uses, including insulating conductors from each other or against a wall.



ØD x h	Thread Size
ISL 50 x 50	M12
ISL 45 x 45	M8
ISL 40 x 40	M8

AIR ROD AND AIR ROD BASE DETAILS

SOLID COPPER TAPER OR MULTIPLE POINTED AIR RODS

Air Rod (AR & MAR)

KAHANGAN taper pointed air rods are manufactured from Electrolytic grade copper with Ni-Cr coating.One side taper pointed and the other side with suitable threads for fixing to saddles/ air terminal bases..Rods made of stainless steel also can be supplied for specific requirements. Rods can be installed with or without multiple points. However researches conducted in this regard suggest use of multi points with taper pointed air rods are more effective than taper pointed air rods.

AIR ROD		DIMENSION (mm)		
		Dia.(mm)	Length.(mm)	Sample Code
Air Rod Code	AR & MAR	16,18	1000,1500	AR 16 / 1
		20	2000	
		30	3000,4500	

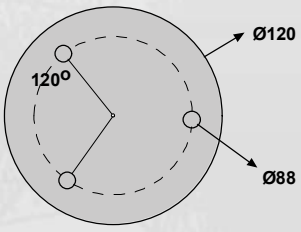
for stainless steel air rod use AR-SS & MAR-SS

AIR TERMINAL BASE

KAHANGAN air terminal bases are made from gunmetal in several types for installing air rods in different roofs & positions.

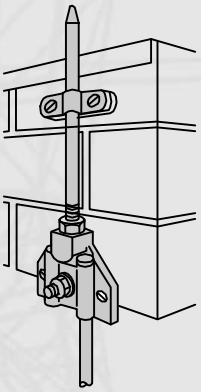
SIMPLE FLATBASE

Terminal Base (RB)

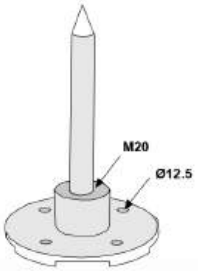


VERTICAL /HORIZONTAL BASE

Terminal Base (HRB)

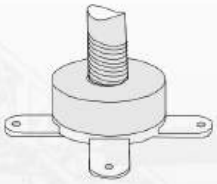


AIR ROD BASE AND SADDLE DETAILS



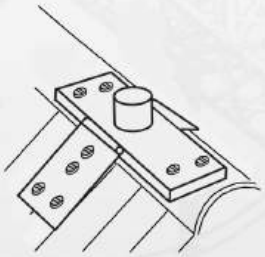
LINEAR / CROSS BUSBAR BASE

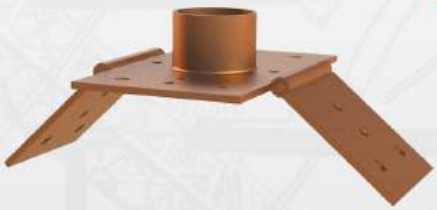
Terminal Base (XRB)



LINEAR / CROSS BUSBAR BASE

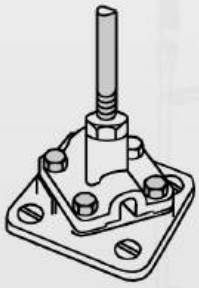
Terminal Base (XRB+)





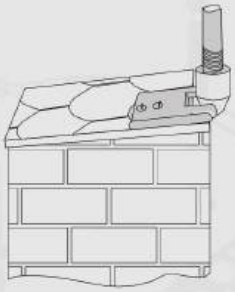
RIDGE ROOF BASE

Terminal Base (GRB)



MULTI PURPOSE BASE

Terminal Base (MRB)



SLOPING ROOF BASE

Terminal Base (SRB)

AIR ROD BASE AND SADDLE DETAILS

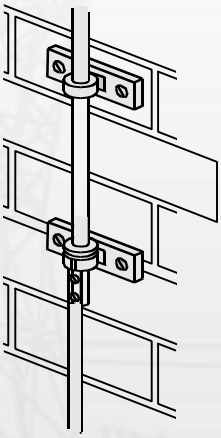
Air Rod BASE

Air Rod Base Code	ROD / CONDUCTOR DIMENSION		
	Max Rod Dia.(mm)	Max Conductor Size	Sample Code
RB	Ø30	95 mm ^{2} (Round)	RB 30
HRB	Ø16	70 mm ^{2} (Round)	HRB 16
XRB & XRB$^+$	Ø30	30 x 5	XRB 30
GRB	Ø20	30 x 5	BRB 20
MRB	Ø20	30 x 5 /95 mm ^{2} (Round)	MRB 20
SRB	Ø20	30 x 5	SRB 20

ROD BRACKETS & COUPLING

Terminal Base & COUPLING (RBR/RTC)

Note:
These are manufactured from gunmetal and being used for providing projection from the building wall or face. Rod brackets are mainly used with rod to tape(lug) coupling where it is not possible to fit a saddle on the roof and the air rod has to be fitted on the side of the building.



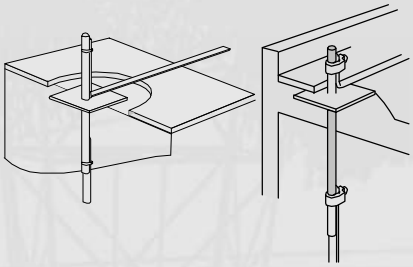
Rod COUPLING

	ROD / CONDUCTOR DIMENSION (mm)		
	Dia.(mm)	Length.(mm)	SampleCode
RBR	20	30 x 5	RBR 20
RTC	16,18 , 20	30 x 10	RTC 16

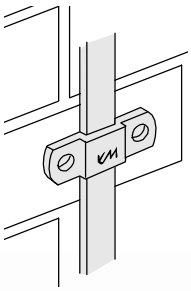
PUDDLE FLANGE

Note:
Puddle Flanges, made of copper or aluminum, are used where the waiting down conductors have to pass through water proof covering,roof, etc.
Preferred dimention: 66x66x3 mm

Flang (FLG)



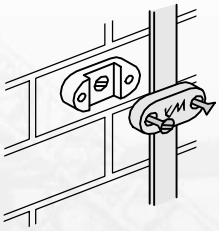
BUS BAR TO BUS BAR CONNECTION DETAILS

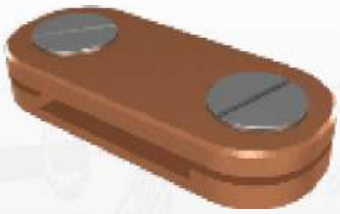


TAPE CLIP

TC (Tape Clip)

Note:
Tape clips are used to hold the tape to wall and being manufactured from copper and brass strip. These are fixed to the surface by using screw and plug.

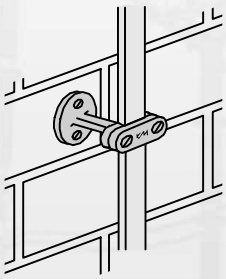


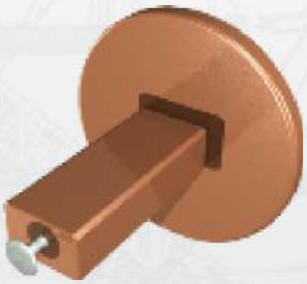


DC TAPE CLAMP

LTC (Tape Clamp)

Note:
These heavy duty clamps are used to secure copper tap to building, Made of brass alloy (Forging), the clamp has a hole in the base for fixing to building with an appropriate screw and plug.

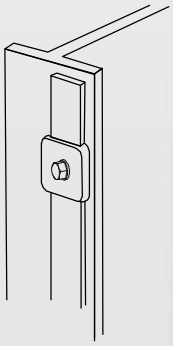


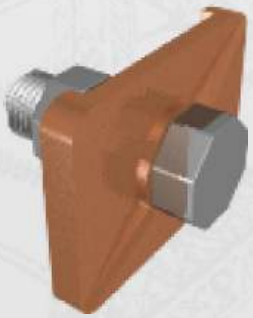


BASE DC TAPE CLAMP

STM (LTC Base)

Note:
These heavy duty clamps are used to secure copper tap to building, Made of brass alloy (Forging), the clamp has a hole in the base for fixing to building with an appropriate screw and plug.

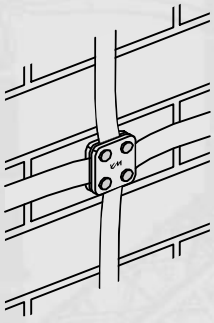




BOUND TAPE CLAMP

BTC (Tape Clamp)

Note:
Made of Gunmetal and these bonds are used for bonding tape to metal structure. Bolts are made of Phosphor Bronze / Stainless Steel /HD galvanized steel.



SQURE TAPE CLAMP

XTC (Tape Clamp)

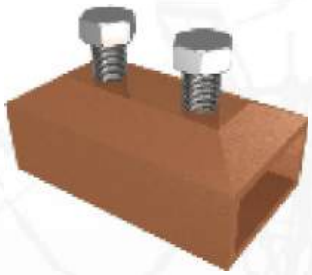
Note:
KAHANGAN Square Tape / Junction clamp are made from brass alloy (forging) and are used for crossing over tapes, or for T joints or for making straight through joints in a network of tapes.

BUS BAR TO BUSBAR CONNECTION DETAILS

OBLONG TEST OR JUNCTION CLAMP

RJC (Test Clamp)

Note:
Manufactured from gunmetal, these clamps are used for straight through connection of tapes. Being joints, these can also effectively be used as testing Point for the network by disconnecting the joints. Bolts are made of phosphor Bronze / Stainless Steel / HD galvanized Steel.



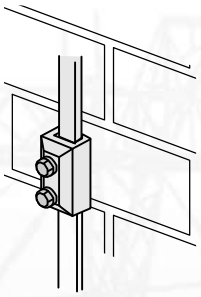
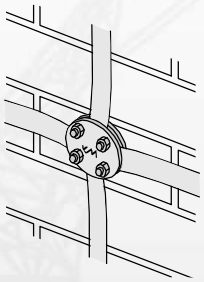


PLATE TYPE TEST CLAMP

XJC+ (Test Clamp)

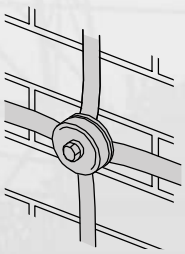
Note:
These plate type test clamp, made of gunmetal or aluminum can be used as T joints or straight through joints of tapes. Being joints, these can also effectively be used as testing points for the network by disconnecting the joints. Plate test clamp can also be used for heavy duty up to 50x6 tape connections.



SCREW DOWN TEST CLAMP

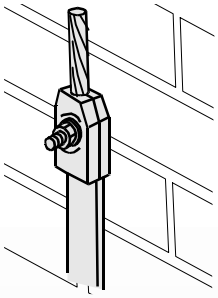
XJC (Test Clamp)

Note:
These clamps, made of gunmetal, provide easy access to copper tapes / conductors for inspection or testing.



TAPE CLAMPS	TAPE CLAMP & CONNECTORS						
Tape Clamp Code	Tape Dim.(mm) - Width -Thickness						Sample Code
TC	25x3	25x5	30x3	30x5	40x5		TC 25x3
LTC	25x5,30x	25x5,30x5	40x5	50x5,50x6	60x3	60x5,80x6	LTC 25x3
BTC	25 x3 , 30 x 3			25 x 5,30x5			BTC 30x3
XTC	25x3,30x3		25x3,30x5		40x5,50x5,50x6		XTC 30x3
RJC							JC 30x3
XJC	25x3,30x3,25x5,30x5			40x5,50x5,50x6			XJC 30x3
XJC+	25x3,30x3,25x5,30x5						XJC+ 30x3

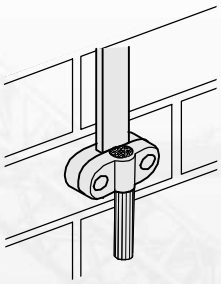
CABLE TO BAS BAR CONNECTION DETAILS

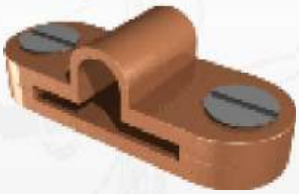


TAPE TO CABLE CONNECTOR

CTC (Tape/Cable Clamp)

Note:
These connector are sutible making straight through Joint of tapes & cables made off brass alloy forging.

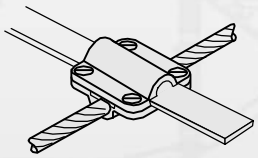




TAPE TO CABLE CONNECTOR

CJC (Tape/Cable Clamp)

Note:
These connector are sutible making straight through Joint of tapes & cables made off brass alloy forging.



TAPE TO CABLE CONNECTOR

MPC (Tape/Cable Clamp)

Note:
These connector are sutible making straight through Joint of tapes & cables made off brass alloy forging.

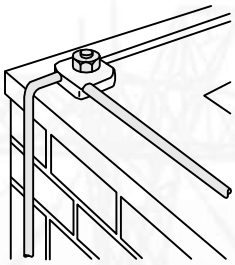
TAPE /CABLE CONNECTOR	TAPE & CABLE DIMENSION		
	MAX. Tape Dia.(mm)	MAX. Conductor Size	Sample Code
CTC	30x3,30x5,40x5,50x6 60x5,80x5	35,50,70,95,120,150	CTC 35 / 30 x 3
CJC	3 x 30	50,95	CJC 50 / 30 x 3
MPC			MPC 50 / 30 x 3

BARE WIRE CONNECTION DETAILS

SQUARE CLAMP

SC (Cable Clamp)

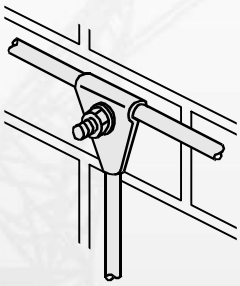
Note:
These clamps are suitable for forming & bonding Tee and cross joints for round conductors and are manufactured from Gunmetal. Bolts are made of Bronze / Stainless Steel /HD galvanized Steel.



TEE CLAMP

TAC (Cable Clamp)

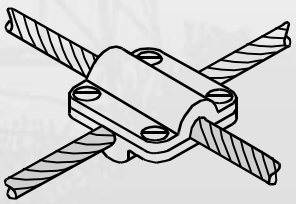
Note:
These clamps are suitable for forming & bonding Tee joints for round conductors and are manufactured from Gunmetal.Bolts are made of Bronze / Stainless Steel /HD galvanized Steel.



SQUARE CONDUCTOR CLAMP

XCC (Cable Clamp)

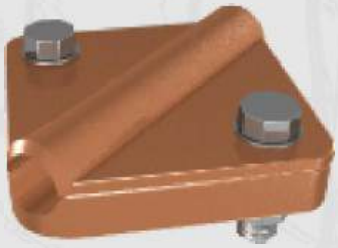
Note:
Made from Gunmetal, these are meant to be used for cross ,tee or straight connection of round conductors.

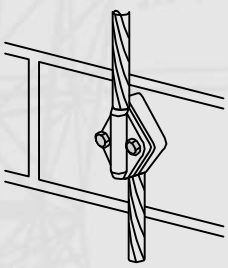


TEST CLAMP

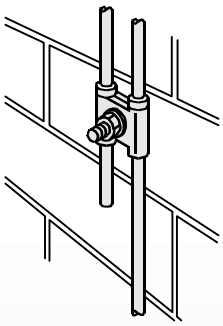
ETC (Cable Clamp)

Note:
These clamps are suitable for test and overlapping joints, and are manufactured from Gunmetal.





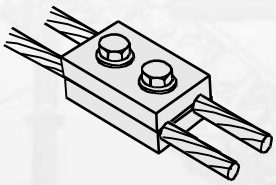
BARE WIRE CONNECTION DETAILS



JOINTING CLAMP

DJC (Cable Clamp)

Note:
These clamps are suitable for forming straight through joints, and are manufactured from Gunmetal. Bolts are made of Bronze / Stainless Steel /HD galvanized Steel.



2WAY STRAIGHT CONDUCTOR CLAMP

ECW (Connector Clamp)

Note:
Are manufactured from brass alloy (Forging),are used for copper to copper stranded or solid circular conductors.

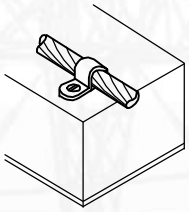
BARE WIRE Connector	BARE WIRE CONNECTION	
	Cable Size (mm ^{2})	Sample Code
Cable Clamp Code: SC	(35,35)	SC 35,35
TAC		TAC 35,35
XCC	(50,50)	XCC 35,35
ETC	(70,70)	ETC 35,35
DJC		DJC 35,35
ECW		ECW 35,35

ONE &TWO HOLE CABLE CLIPS

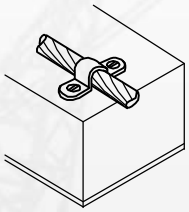
ONE & TWO HOLE CABLE CLIPS (SUPPORT)

These are used for fixing bare or **PVC** coated cable conductors or PG pipe on wall (or structures) manufactured from high quality copper / Brass / Stainless Steel / HD galvanizes Steel.

TWC (CABLE CLIP)



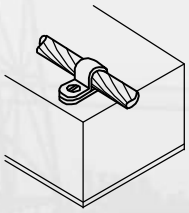
TWC+ (CABLE CLIP)



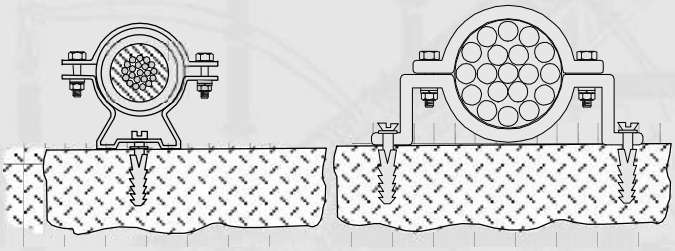
DWC (CABLE CLIP)

$A \leq 95mm^2$

$A \geq 95mm^2$



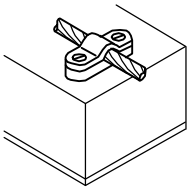
UWC (CABLE CLIP)



$\varnothing \leq 37mm$

$\varnothing \geq 37mm$

ONE &TWO HOLE CABLE CLIPS

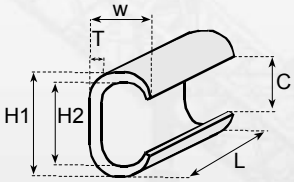


HEAVY DUTY CABLE SADDLE

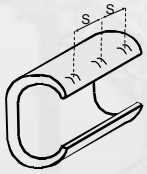
HWC (Cable Saddle)

Note:
Manufactured from brass alloy (Forging) these are being used for either as a support for air rod or as a DC clip for bare or PVC covered copper cable

CABLE TO WALL CLIP		CABLE TO WALL CLIP	
		Conductor Size (mm or mm^2)	Sample Code
CLIP Code	TWC	35,50,70,95,120,150,185,240 mm^2	TWC 35
	DWC		DWC 35
	HWC		HWC 35
	TWC+	Ø16 -Ø60 mm	TWC+ Ø20
	UWC	Ø16 -Ø65 mm	UWC Ø61



(C-11~T-122)
except C-20,C-26,C-44



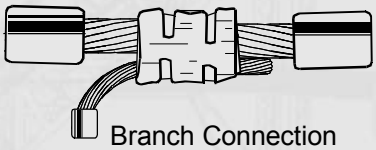
(C-154~T-700)

C CRIMP CONNECTORS

C (C Clamp)

Note:
Crimp Connectors are made of extruded electrolytic copper with thick walls, used for parallel or tap connection of copper. Appropriate tools may be used for installation of C Crimp Connectors.

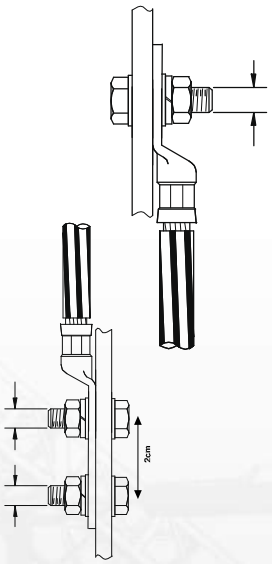
C Clamp		Dimensions(mm)						Installation		
		H_1	H_2	W	L	T	C	# of Crimps	S	Total sectional area of applicable wire
Connector Size	C 44	19.0	13.4	14.4	20	4.0	8.5	1	--	27~44
	C 60	21.0	15.4	15.1	22	4.0	9.7	2	11	45~60
	C 76	24.4	17.3	17.6	22	5.0	10.8	2	11	61~76
	C 98	27.8	20.8	18.8	25	5.0	13.8	2	11	77~98
	C154	34.0	25.7	24.4	28	6.0	17.0	3	8.5	123~154
	C 190	37.0	28.5	25.4	35	6.0	17.4	3	10.5	155~190
	C 240	40.0	30.2	28.5	40	7.0	19.0	3	13	191~240
	C 365	47.5	37.7	34.0	50	7.0	24.8	3	16	289~365
	C 450	57.0	42.5	41.0	60	10.0	28.0	3	18.5	366~450
	C 560	62.0	46.0	45.0	65	11.0	31.0	3	20	451~560
	C 700	68.0	51.0	49.0	70	12.0	34.0	3	21	561~700

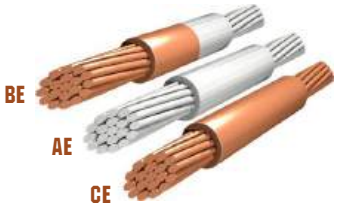


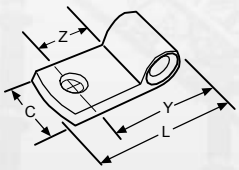
Branch Connection

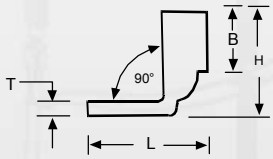
Parallel Connection

CABLE LUG &BIMETALIC WASHERS DETAILS









CRIMP TYPE STRIGHT COUPLING

CE,AE,BE (Coupling)

Note:

Made from high purity, copper/aluminum thick wall tube, bimetallic couplings used for connecting CU conductors to AL conductors, produced by diffusion welding process.

CABLE LUG

TL &DTL (Bimetalic CableLUG)

Note:

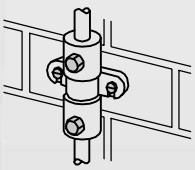
Cable lugs are made of high conductivity pure copper (BS1432-C101) and are tin plated to improvement corrosion resistance properties.The Dims are as din standard. Cen. To Cen. of DTL holes are 25 mm (other dist. can be ordered).

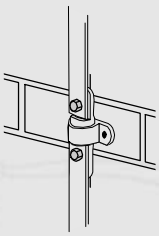
BIMETALIC CABLE LUG

BL &DBL (Bimetalic CableLUG)

Note:

Bimetalic cable lugs are manufactured from bimetalic CU-AL Friction welded tubes.In routine types,cable hole part is from CU & bolt hole part from AL.





METALLIC CONNECTOR - CABLE TO CABLE & TYPE TO TYPE

BIC&BIT (Coupling)

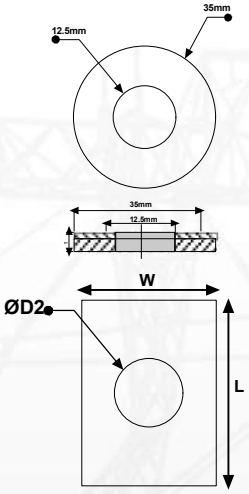
Note:

These connectors are made of copper and aluminum, are meant to be used where aluminum lightning protection system and copper earthing network. An inhibiting compound is normally recommended to use with this assembly.

CABLE LUG & coupling		CONNECTIONS SIZE	
		Wire Size.(mm^2)	SampleCode
CONNECTIONS TYPE	TL	16,25,35,50,70,95,120,150,185,240,300	TL 120
	DTL		DTL 120
	BL		BL 120
	DBL		DBL 120
	CE	16,25,35,50,70,95,120,150,185,240,300	CE 120 /35
	AE		AE 150 / 185
	BE		BE 240 / 300
	BIC	35,50,70	BIC 120/35
	BIT	20x3,25x3,30x3,20x5,15x5,30x5	BIT 120/35

OTHER EARTHING ACCESSORIES DETAILS

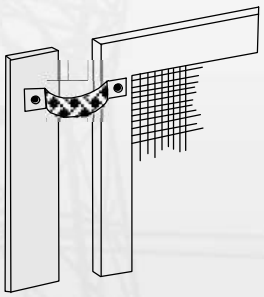
METALLIC PLATE & WASHER



BIW (BIW CLAMP)

Note:
These washers are made of AL & CU by diffusion welding process to protect from galvanic corrosion between copper and brass alloys & galvanized steel structures.
Routine Thickness :1.5mm (Lengths & Width must be ordered)
for other thicknesses please call

FLEXIBLE CONNECTORS

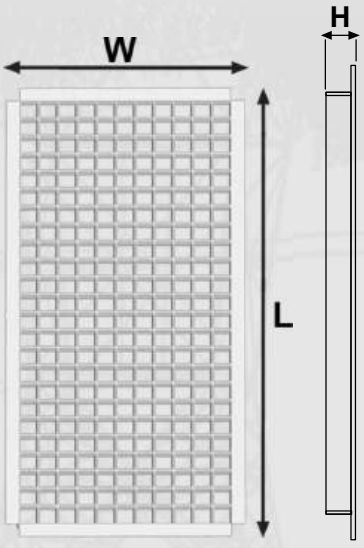


FC (Copper Bonds)

Note:
These flexible tinned copper Braids can be effectively used for bonding metallic doors, gates etc.
made with new manufacturing process: the contact areas are pressure soldered befor punching and cutting.
This Results in:
- direct contact without interface(no need to lug)
- excellent performance under vibration and fatigue
- higher temsile strength

Routine Dim: 3x20,3x25,3x30 with length free
for other thicknesses please call

HD GALVANIZED EARTH EQUIPOTENTIAL MAT



EM (Earth Mat)

Note:
These mats are used on top of finish level and directly below the operators normal standing position for manually operating disconnect switches.

Routine Dim: 1000x500x30 & 800x500x30 mm with 40x40 mesh
for other Dimension please call

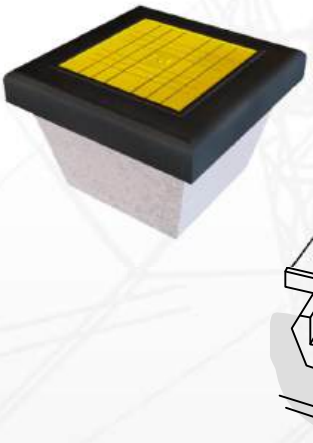
OTHER EARTHING ACCESSORIES DETAILS

CONCRETE INSPECTION PIT

EP (Earth Pit)

Note:
This earth pit is made of concrete body and cast iron lid. Being used for making availble inspection and testing connections.

Available Dim: 500x500x400 mm

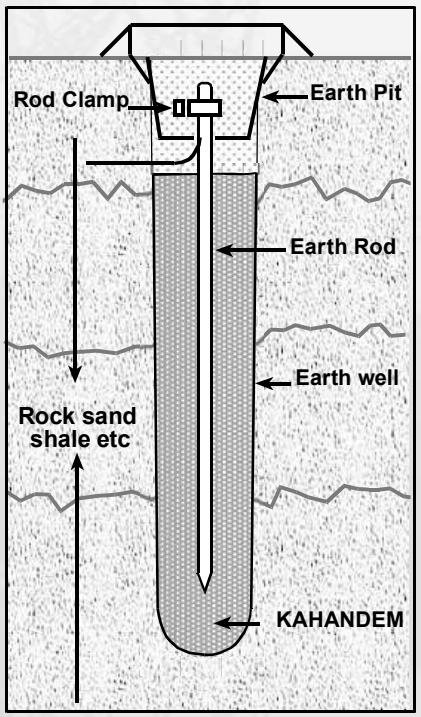


KAHANGAN OHM-DECREASING MATERIAL

KOM

Note:
-Carbon base (high conductivity)
-Non corrosive
-For dry & wet condition
-Fixed electrical resistance in long time
-Without any need to periodic water injection

Spec.Resistance(Ωcm)	Net weight	Spec.Weight
<2.7	30kg	1 ton/m^3



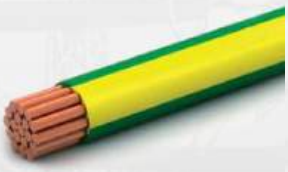
CABLE & CONDUCTOR DETAILS

PVC COVERED COPPER TAPE

Made of copper, conforming to BS 1432 C101,and used in lightning protection system network these conductors are available both bare as well as with PVC covering.

BARE STRANDED COPPER CONDUCTOR

KAHANGAN stranded copper conductors are made from soft drawn copper to BS6360.



PVC COVERED STRANDED COPPER

Stranded Copper Conductors covered by yellow - green PVC to BS6004 Standard.

HARD DRAWN COPPER BAR

High conductivity copper bars, hard drawn, manufactured to BS2874 C101 / C103

BARE COPPER TAPE

KAHANGAN bare copper tapes are manufactured from High conductivity EC grade copper to BS1432 C101/C103

Cable & Conductor Details

PVC Covered Copper Tape

High conductivity EC Grade copper Tapes.PVC Covered to BS6746 Standard

Tinned Copper Tape

High conductivity EC Grade Copper Tapes, with tin plating.PVC covered also available

Bare Aluminum Tape

Bare Aluminum Tapes, conforming to BS2898-1350 are also used for lightning protection conductors.

PVC Covered Aluminium

KAHANGAN High conductivity Aluminium tapes, PVC covered confirming to BS 6746.

TEMPORARY EARTING

KAHANGAN MEHR
H.V ELECTRIC EQUIPMENT MANUFACTURER

TAJHIZ KAVAN

SHORT CIRCUITING & EARTHING CLAMPS

Copper cables

Extra flexible braided multi-strand cables.
Transparent PVC sheath, with cable section identification.

Section (mm²)	Rating (kA/1s)	Cable Weight (kg/m)	Cable Ø (mm)
35	8	390	10.6
50	12	550	12.9
70	16	760	16.2
95	20	1000	18.2
120	30	1300	19.2
150	36	1600	20.2

For Cu: $A_{mm2} = 2.5\ I$ for $t_c = 0.5$ sec

$A_{mm2} = 3.6\ I$ for $t_c = 1$ sec

Aluminium cables

Extra flexible braided multi-strand cables.
Transparent PVC sheath, with cable section identification.

Section (mm²)	Rating (kA/1s)	Cable Weight (kg/m)	Cable Ø (mm)
150	20.0	0.650	22.5
185	31.5	0.820	27.0

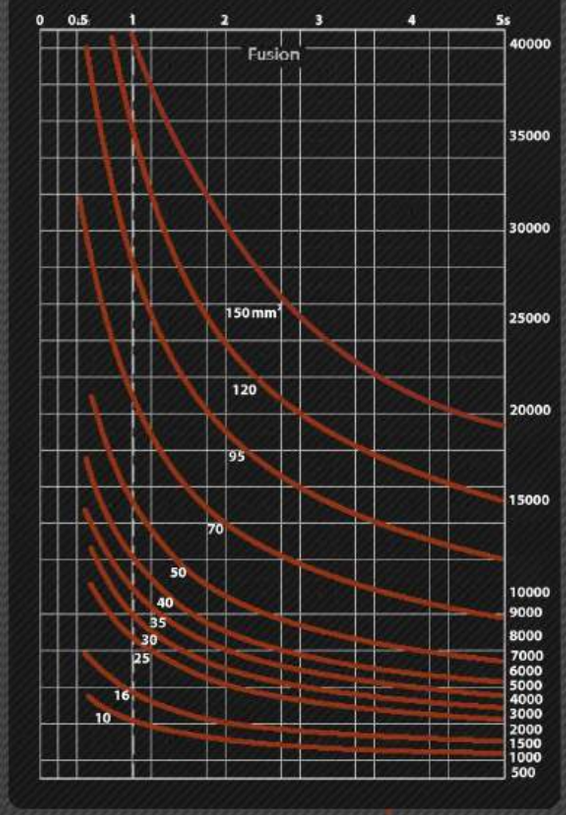
For Al: $A_{mm2} = 4.4\ I$ for $t_c = 0.5$ sec

$A_{mm2} = 6.2\ I$ for $t_c = 1$ sec

Carring & Storage Metalic Box

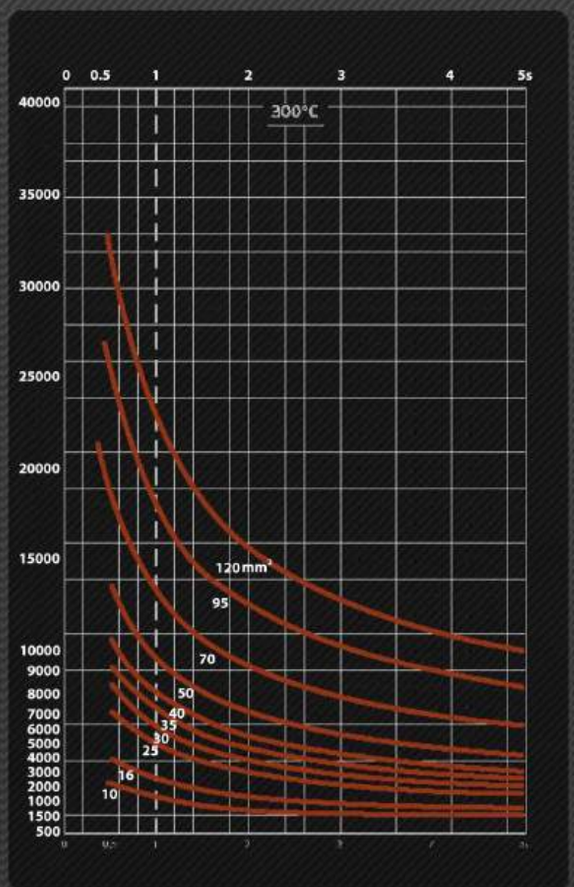
Coating: Epoxy Paint (Anti-static,Anti-scratch)

Copper cables only:
Heating curves (Gut & Grundberg method)



$$A_{kcmil} = I.K_f\sqrt{t_c}$$

I = rms fault current (KA)
K_f = material constant Acc to table 2 IEEE80
t_c = current time duration (sec.)



KAHANGAN MEHR
H.V ELECTRIC EQUIPMENT MANUFACTURER

TAJHIZ KAVAN

SHORT CIRCUITING & EARTHING CLAMPS

(FOR USE IN TEMPORARY EARTHING & SHORT CIRCUITING DEVICE)

NOTE:
- 46 mm dia. single type elements,yellow colour
- These elements allow "long length" assemblies which can support short-circuit systems with large cross-section cables.

Reference	Length (mm)	Weight (Kg)
PR 2000	2.0	2.250
PR 2500	2.5	2.650

For cables ≥ 95 mm2

JOINT

JOINT

COUPLING


SECTION VIEW


Carring Cover

KAHANGAN MEHR
H.V ELECTRIC EQUIPMENT MANUFACTURER

TAJHIZ KAVAN

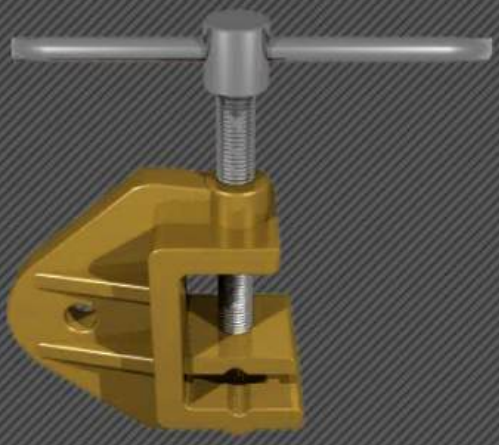
SHORT CIRCUITING & EARTHING CLAMPS

Earth clamps,

Body in bronz alloy (as BS standard)

Refrence	Rating (kA/1s)	Clamp Capacity
CATO22	25	● 5-22 ▬ 0-20
CATO45	40	● 8-40 ▬ 0-35

KATO22

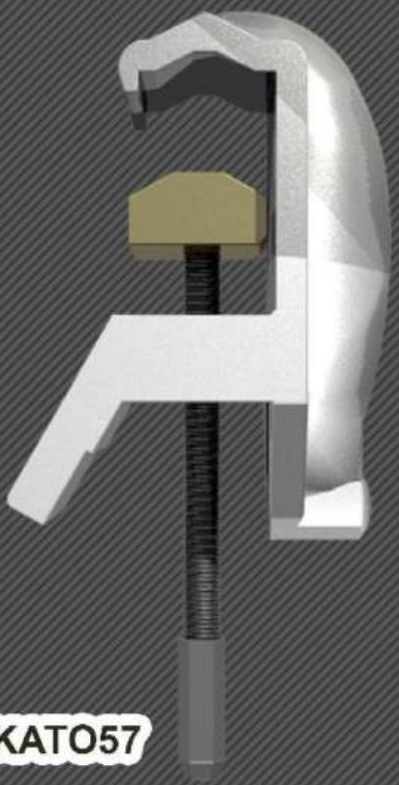


KATO45

Line end clamps:

Body in aluminium alloy (as BS standard)

Refrence	Rating (kA/1s)	Clamp Capacity
CATO57	30	● 5-45 ▬ 0-60
CATO60	40	● 5-60 ▬ 0-55



KATO57

KATO67

TAJHIZ KAVAN

Design, supply and production of:
Grounding systems, Lightning protection systems
Cathodic protection systems & KADweld

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EARTHING
AND GROUNDING