

## **Power Connectors**

**Electro-Mechanical connector specialists** 





WWW.CABLEJOINTS.CO.UK
THORNE & DERRICK UK
TEL 0044 191 490 1547 FAX 0044 477 5371
TEL 0044 117 977 4647 FAX 0044 977 5582
WWW.THORNEANDDERRICK.CO.UK

#### Rigid to palm connector ref. RD-PALM

Rigid Connector to suit Copper/Aluminium Conductor to Flat Palm.

Number of clamps per connector dependant on current rating or mechanical requirements. Triple clamps only used for aluminium stranded conductor.

Angle of entry and splay to be advised at time of quotation or order.

#### **Conductor clamps**

- C14 to C75 clamps are electro tinned CZ122 brass
- A40 to A90 clamps are LM6 aluminium
- UC25 universal clamps are to suit copper or aluminium stranded conductor.
   CZ122 brass/HE30T aluminium
- Transition washers will be used if aluminium clamps to copper support plate or brass/gunmetal clamps to aluminium support plate are required

Clamp Ref	Conductor	Clamp Ref	Conductor
C14	14mm dia Cu.	A40	40mm dia.Al.
C20	20mm dia Cu.	A50	50mm dia Al.
C25	25mm dia Cu.	A58	58mm dia Al.
C30	30mm dia Cu.	A60	60mm dia. Al.
C35	35mm dia Cu.	A76	76mm dia Al.
C38	38mm dia Cu.	A90	90mm dia Al.
C40	40mm dia Cu.		
C50	50mm dia Cu.	UC25CU	Up to 25mm dia Cu. Strand
C63	63mm dia Cu.	UC25AL	Up to 25mm Al. Strand
C75	76mm dia Cu.		







#### Termination details (Palm drillings)

Palms can be drilled to suit termination equipment or left undrilled to be drilled on site. Please provide termination material details.

Drilling Ref	Description
76PCDHL@45	4 holes 14mm dia on 76 PCD at 45° to centre line
76PCDHL@90	4 holes 14mm dia on 76 PCD at 90° to centre line
76PCDSL@45	4 slots 14mm dia on 76 PCD at 45° to centre line
76PCDSL@90	4 slots 14mm dia on 76 PCD at 90° to centre line
127PCDHL@45	4 holes 18mm dia on 127 PCD at 45° to centre line
127PCDHL@90	4 holes 18mm dia on 127 PCD-at 90° to centre line
127PCDSL@45	4 slots 18mm dia on 127 PCD at 45° to centre line
127PCDSL@90	4 slots 18mm dia on 127 PCD at 90° to centre line
2HLS40CNTRS	2 holes 14mm dia on 40mm centres
4HLS40CNTRS	4 holes 14mm dia on 40mm centres
4HLS40CNTRS	4holes 14mm dia on40mm centres
4HLS44CNTRS	4 holes dia on 44mm centres
4HLS50CNTRS	4 holes dia on 50mm centres









Lams 1600amp

## Expansion to palm connector ref. EXP-PALM

Expansion connector to suit copper conductor to flat palm.

Number of clamps and laminations per connector dependant on current rating or mechanical requirements.

Angle of entry and splay to be advised at time of quotation or order.

#### **Conductor clamps**

- C14 to C75 clamps are electro tinned CZ122 brass.
- C100, C112, C150 and C200 are electro tinned LG2 gunmetal
- C100, C112, C150 and C200 clamps are bored to suit conductor diameter
- Laminations are tinned copper strip 0.064mm thick 8 or 10 layers per set, 2 or 4 sets per connector

Clamp Ref	Conductor
C14	12mm dia Cu.
C20	20mm dia Cu.
C25	25mm dia Cu.
C30	30mm dia Cu.
C35	35mm dia Cu.
C38	38mm dia Cu.
C40	40mm dia Cu.
C50	50mm dia Cu.
C63	63.5mm dia Cu.
C75	76mm dia Cu.

#### Termination details (Palm drillings)

Palms can be drilled to suit termination equipment or left undrilled to be drilled on site. Please provide termination material details.

Drilling Ref	Description
76PCDHL@45	4 holes 14mm dia on 76 PCD at 45° to centre line
76PCDHL@90	4 holes 14mm dia on 76 PCD at 90° to centre line
76PCDSL@45	4 slots 14mm dia on 76 PCD at 45° to centre line
76PCDSL@90	4 slots 14mm dia on 76 PCD at 90° to centre line
127PCDHL@45	4 holes 18mm dia on 127 PCD at 45° to centre line
127PCDHL@90	4 holes 18mm dia on 127 PCD at 90° to centre line
127PCDSL@45	4 slots 18mm dia on 127 PCD at 45° to centre line
127PCDSL@90	4 slots 18mm dia on 127 PCD at 90° to centre line
2HLS40CNTRS	2 holes 14mm dia on 40mm centres
4HLS40CNTRS	4 holes 14mm dia on 40mm centres
4HLS44CNTRS	4 holes dia on 44mm centres
4HLS50CNTRS	4 holes dia on 50mm centres

#### Rigid to plain stem connector ref. RD-ST

Rigid connector to suit copper/aluminium conductor to plain stem.

Number of clamps per connector dependant on current rating or mechanical requirements.

Triple clamps only used for aluminium-stranded conductor.

Angle of entry and splay to be advised at time of quotation or order.

#### **Conductor clamps**

- C14 to C75 clamps are electro tinned CZ122 brass
- A40 to A90 clamps are LM6 aluminium
- UC25 universal clamps are to suit copper or aluminium stranded conductor.
   C2122 brass/HE30T aluminium
- Transition washers will be used if aluminium clamps to copper support plate or brass/gunmetal clamps to aluminium support plate are required

Clamp Ref	Conductor	Clamp Ref	Conductor
C14	14mm dia Cu.	A40	40mm dia.Al.
C20	20mm dia Cu.	A50	50mm dia Al.
C25	25mm dia Cu.	A58	58mm dia Al.
C30	30mm dia Cu.	A60	60mm dia. Al.
C35	35mm dia Cu.	A76	76mm dia Al.
C38	38mm dia Cu.	A90	90mm dia Al.
C40	40mm dia Cu.		
C50	50mm dia Cu.	UC25CU	Up to 25mm dia Cu. Strand
C63	63.5mm dia Cu.	UC25AL	Up to 25mm Al. Strand
C75	76mm dia Cu.		







#### Stem clamps

- C14 to C75 clamps are electro tinned
- C100, C112, C150 and C200 are electro tinned
- A40 to A90 clamps are LM6 aluminium
- A100, A112, A150 and A200 are LM6 aluminium
- C/A100, C/A112, C/A150 and C/A200 clamps are bored to suit conductor diameter
- Transition washers will be used if aluminium clamps to copper support plate or brass/ gunmetal clamps to aluminium support plate are required

#### Termination details (Stem)

Copper or aluminium plain stems as per transformer, surge arresters and circuit breakers.

Clamp Ref	Conductor	Clamp Ref	Conductor
C14	14mm dia Cu.	A40	40mm dia.Al.
C20	20mm dia Cu.	A50	50mm dia Al.
C25	25mm dia Cu.	A58	58mm dia Al.
C30	30mm dia Cu.	A60	60mm dia. Al.
C35	35mm dia Cu.	A76	76mm dia AI.
C38	38mm dia Cu.	A90	90mm dia Al.
C40	40mm dia Cu.	Cl00 + Al00	Up to 25mm dia Cu./Al.
C50	50mm dia Cu.	C112+ A112	26 - 32mm dia Cu./Al.
C63	63.5mm dia Cu.	C150 + A150	33 - 40mm dia Cu./Al.
C75	76mm dia Cu.	C200 + A200	41 - 50mm dia Cu./Al.









#### Expansion to plain stem connector ref. EXP-ST

Expansion connector to suit copper conductor to plain stem.

Number of clamps and laminations per connector dependant on current rating or mechanical requirements.

Angle of entry and splay to be advised at time of quotation or order.

#### **Conductor clamps**

- C14 to C75 clamps are electro tinned CZ122 brass
- Laminations are tinned copper strip 0,064mm thk 8 or 10 layers per set. 2 or 4 sets per connector

Clamp Ref	Conductor
C14	14mm dia Cu.
C20	20mm dia Cu.
C25	25mm dia Cu.
C30	30mm dia Cu.
C35	35mm dia Cu.
C38	38mm dia Cu.
C40	40mm dia Cu.
C50	50mm dia Cu.
C63	63.5mm dia Cu.
C75	76mm dia Cu.

#### Termination details (Stem)

Copper or aluminium plain stems as per transformer, surge arresters and circuit breakers.

Clamp Ref	Conductor	Clamp Ref	Conductor
C14	14mm dia Cu.	A40	40mm dia.Al.
C20	20mm dia Cu.	A50	50mm dia Al.
C25	25mm dia Cu.	A58	58mm dia Al.
C30	30mm dia Cu.	A60	60mm dia. Al.
C35	35mm dia Cu.	A76	76mm dia Al.
C38	38mm dia Cu.	A90	90mm dia Al.
C40	40mm dia Cu.	Cl00 + Al00	Up to 25mm dia Cu./AI.
C50	50mm dia Cu.	C112+ A112	26 - 32mm dia Cu./Al.
C63	63.5mm dia Cu.	C150 + A150	33 - 40mm dia Cu./Al.
C75	76mm dia Cu.	C200 + A200	41 - 50mm dia Cu./AI.

#### Stem clamps

- C14 to C75 clamps are electro tinned. CZ122 brass
- C100, C112, C150 and C200 are electro tinned LG2 gunmetal
- A40 to A90 clamps are LM6 aluminium
- A 100, A112, A150 and A200 are LM6 aluminium
- C/A100, C/A112, C/A150 and C/A200 clamps are bored to suit conductor diameter
- Transition washers will be used if aluminium clamps to copper support plate or brass/gunmetal clamps to aluminium support plate are required

#### Tee connector ref. T

Tee connector to suit copper/aluminium conductor through and branch.

Number of clamps per connector dependant on current rating or mechanical requirements.

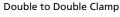
Triple clamps only used for aluminium stranded conductor.

#### Through conductor clamps

- C14 to C75 clamps are electro tinned CZ122 brass
- A40 to A90 clamps are LM6 aluminium
- UC25 Universal clamps are to suit copper or aluminium stranded conductor
- Transition washers will be used if aluminium clamps to copper support plate or brass/gunmetal clamps to aluminium support plate are required

Clamp Ref	Conductor	Clamp Ref	Conductor
C14	14mm dia Cu.	A40	40mm dia.Al.
C20	20mm dia Cu.	A50	50mm dia Al.
C25	25mm dia Cu.	A58	58mm dia Al.
C30	30mm dia Cu.	A60	60mm dia. Al.
C35	35mm dia Cu.	A76	76mm dia Al.
C38	38mm dia Cu.	A90	90mm dia Al.
C40	40mm dia Cu.		
C50	50mm dia Cu.	UC25CU	Up to 25mm dia Cu. Strand
C63	63.5mm dia Cu.	UC25AL	Up to 25mm Al. Strand
C75	76mm dia Cu.		









#### **Branch conductor clamps**

- C14 to C75 clamps are electro tinned. CZ122 brass
- A40 to A90 clamps are LM6 aluminium
- UC25 universal clamps are to suit copper or aluminium stranded conductor. CZ122brass/HE30T aluminium
- Transition washers will be used if aluminium clamps to copper support plate or brass gunmetal clamps to aluminium support plate are required

Clamp Ref	Conductor	Clamp Ref	Conductor
C14	14mm dia Cu.	A40	40mm dia.Al.
C20	20mm dia Cu.	A50	50mm dia AI.
C25	25mm dia Cu.	A58	58mm dia Al.
C30	30mm dia Cu.	A60	60mm dia. Al.
C35	35mm dia Cu.	A76	76mm dia AI.
C38	38mm dia Cu.	A90	90mm dia Al.
C40	40mm dia Cu.		
C50	50mm dia Cu.	UC25CU	Up to 25mm dia Cu. Strand
C63	63.5mm dia Cu.	UC25AL	Up to 25mm Al. Strand
C75	76mm dia Cu.		



Universal Rigid Connector for 60mm dia Aluminium Busbar - UR60



Universal Expansion Connector for 60mm dia Aluminium Busbar - UE60



Universal Rigid Connector for 90mm dia Aluminium Busbar - UR90



Universal Expansion Connector for 90mm dia Aluminium Busbar - UE90

#### **Universal Connector**

The universal connector is to suit 60mm dia and 90mm dia aluminium busbar tube and is fully adjustable in the vertical and horizontal planes. This design will make it easier for on-site erection. This connector replaces the previous ESI41 - 11 range and has been tested for short time current up to 40kA for 3 seconds.

# Termination details Palm

Drilling Ref	Description
76PCDHL@45	4 holes 14mm dia on 76 PCD at 45° to centre line
127PCDHL@45	4 holes 18mm dia on 127 PCD at 45° to centre line
4HLS40CNTRS	4 holes 14mm dia on 40mm centres
4HLS40CNTRS	4holes 14mm dia on40mm centres
4HLS44CNTRS	4 holes dia on 44mm centres
4HLS50CNTRS	4 holes dia on 50mm centres

#### Stem (not shown)

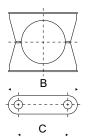
Copper or aluminium plan stems as per transformer, surge arresters and circuit breakers.

Clamp Ref	Conductor	Clamp Ref	Conductor
C14	14mm dia Cu.	A40	40mm dia.Al.
C20	20mm dia Cu.	A50	50mm dia Al.
C25	25mm dia Cu.	A58	58mm dia Al.
C30	30mm dia Cu.	A60	60mm dia. Al.
C35	35mm dia Cu.	A76	76mm dia Al.
C38	38mm dia Cu.	A90	90mm dia Al.
C40	40mm dia Cu.	C100 + A100	Up to 25mm dia Cu/Al.
C50	50mm dia Cu.	C112 + A112	26-32mm dia Cu/Al.
C63	63.5mm dia Cu.	C150 + A150	33-40mm dia Cu/Al.
C75	76mm dia Cu.	C200 + A200	41-50mm dia Cu/Al.

- C14 to C75 clamps are electro tinned. CZ122 brass
- C100, C112, C150 and C200 are electro tinned LG2 gunmetal
- A40 to A90 clamps are LM6 aluminium
- A100, A112, A150 and A200 are LM6 aluminium
- C/A100, C/A112, C/A150 and C/A200 clamps are bored to suit conductor diameter
- Transition washers will be used when brass/gunmetal clamps are required

### Clamps for copper and aluminium conductor

Clamps are smooth bored to suit diameter of conductor, standard finish for brass and gunmetal clamps is electro tin plate, aluminium are a natural finish. All clamps are provided with mild steel galvanized bolts, stainless steel bolts can be provided on request.





**Brass Pressings** 

Clamp Ref	Cond Dia (mm)	Dim A (mm)	Dim B (mm)	Dim C (mm)	Dim D (mm)
C14	12	25	73	41	25
C20	20	25	73	41	25
C25	25	25	73	41	25
C30	30	32	80	48	29
C35	35	32	82	50	30
C38	38	32	80	54	32
C40	40	32	83	58	32
C50	50	32	98	66	38
C63	63.5	32	111	80	48
C75	76	38	124	92	55
UC25CU	Up to 25mm dia	50	92	50	n/a

Gunmetal/Aluminium Castings (Bored To Suit)

Clamp Ref	Cond Dia (mm)	Dim A (mm)	Dim B (mm)	Dim C (mm)	Dim D (mm)
C100	Up to 25	32	73	41	25
C112	Up to 32	32	80	48	30
C150	Up to 40	32	86	54	32
C200	Up to 50	32	98	66	38

**Aluminium Castings** 

Clamp Ref	Cond Dia (mm)	Dim A (mm)	Dim B (mm)	Dim C (mm)	Dim D (mm)
A40	40	32	86	54	31
A50	50	32	108	76	46
A58	58	32	108	76	46
A60	60	32	108	76	46
A76	76	32	138	106	63
A90	90	32	138	106	63
UC25A	Up to 25mm dia	50	92	50	n/a



WWW.CABLEJOINTS.CO.UK
THORNE & DERRICK UK
TEL 0044 191 490 1547 FAX 0044 477 5371
TEL 0044 117 977 4647 FAX 0044 977 5582
WWW.THORNEANDDERRICK.CO.UK



www.lucyswitchgear.com