

PART 4

ORANGE SECTION

OVERHEAD LINE

FITTING &

HARDWARE

Contents

OVERHEAD LINE FITTING & HARDWARE

ALUMINIUM CLAMPS

<i>AERIAL CONNECTORS</i>	3
--------------------------------	---

SPLIT BOLTS

<i>SPLIT BOLTS</i>	7
--------------------------	---

CABLE CLAMPS

<i>CABLE CLAMPS</i>	8
---------------------------	---

<i>PARALLEL GROOVE CLAMPS</i>	9
-------------------------------------	---

<i>RISING MAINS PARALLEL</i>	10
------------------------------------	----

<i>RISING MAINS CONNECTORS</i>	11
--------------------------------------	----

<i>CABLE DROPPER SUPPORT CLAMP</i>	12
--	----

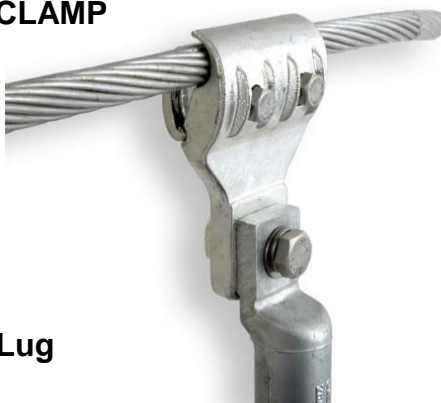
ALUMINIUM SERVICE TAP



Catalogue No.	Conductor Range				Units per pack	Weight per unit (kg)
	Run	Diameter	Tap	Diameter		
SL-4/12	7/3.00 to 7/4.75	9mm to 14.3mm	7/1.75 to 7/3.75	5.25mm to 11.3mm	10	0.1
SL-7/19	7/4.5 to 19/3.75	13.5mm to 18.8mm	7/2.25 to 7/3.75	6.75mm to 11.3mm	10	0.2

Service Tap is made for unequal conductors. Mains to tee-off clamp is made from virgin ingot aluminium. Available with stainless steel hardware. Made to order only. Minimum quantity applies.

TODL-7/19 DISCONNECT TEE CLAMP



Aluminium Lug

- Used LV Overhead Mains to Underground Mains

Catalogue No.	Conductor Range	Diameter	Weight (kg)
TODL-7/19	7/2.5 to 19/3.75	7mm to 19mm	0.375
TODL-7/19ET* PAWA P/N: 2295	7/2.5 to 19/3.75	7mm to 19mm	0.375

*Bright Electro-tin plated to 8 microns

Purpose: Overhead to Underground conductor connection. Flat palm aluminium crimp lug to be bolted to tapped hole. Provides easy means of connection and disconnection.

See aluminium crimp lug Catalogue No. CLA150M on Page 1-31. Connector is made from virgin ingot aluminium. Available with stainless steel hardware. Lug not included as part of TODL7/19 disconnect clamp

ALUMINIUM CLAMPS

AERIAL CONNECTORS

“SC” SERIES Aluminium Service Connectors



Catalogue No.	Copper Loop*	Run Conductor Range		Weight (kg)
		MIN	MAX	
SC1-6/19 one-bolt	19/2.00	7/2.25 Ø6.75mm	19/3.75 Ø18.75mm	0.2
SC2-6/19 two-bolt	19/2.00	7/2.25 Ø6.75mm	19/3.75 Ø18.75mm	0.4

B24T



Electro -tinned Split Bolt

* Copper Loop available in 10mm diameter Solid Copper, electro-tinned.

* A range of Split Bolts also available.

Castings are made from high conductivity virgin ingot aluminium alloy. These connectors take a wide range of aluminium conductors therefore are used widely for connections to consumer mains. Available with stainless steel hardware, and supplied with Jointing Compound and packed in individual plastic bags. Bail only available in Solid Copper, electro-tinned.

“CTC” SERIES Consumer Tee Connectors



CTC-1



CTC-2

Catalogue No.	Run Conductor Range		Service Connector Range	Weight (kg)
	MIN	MAX		
CTC - 1	7/2.25 Ø6.75mm	19/3.75 Ø18.75mm	3 CONDUCTORS 7/1.70 COPPER	0.175
CTC - 2	7/2.25 Ø6.75mm	19/3.75 Ø18.75mm	3 CONDUCTORS 7/1.70 EACH LEG	0.26

These connectors offer a simple method of connecting copper service conductors to overhead mains. Cast from high conductivity virgin ingot aluminium alloy. Available with stainless steel hardware and supplied with Jointing Compound. Packed in individual bags. Made to order. minimum quantity applies

“TO” SERIES – Aluminium ‘Tee-Off’ Connectors



Catalogue No.	Conductors		Length (millimetres)	Weight (kg)
	Run and Tap	Diameter		
TO-4/12	7/1.35 TO 7/3.75	4mm to 12mm	35	0.2
TO-7/19	7/2.5 TO 19/3.75	7mm to 19mm	47.5	0.237
TOD-4/12	7/1.35 TO 7/3.75	4mm to 12mm	70	0.4
TOD-7/19 TOD-7/19 "SP" TODSC-7/19	7/2.5 TO 19/3.75	7mm to 19mm	95	0.475
TOT-7/19	7/2.5 TO 19/3.75	7 to 19mm	108	0.8

These connectors are made from virgin ingot aluminium and are for equal and unequal conductors of aluminium, steel-cored aluminium and copper. Clamps are available with stainless steel hardware. All clamps are supplied with Jointing Compound and sealed in plastic bags.

TOD-7/19 “SP” - Contains compression spring between castings.



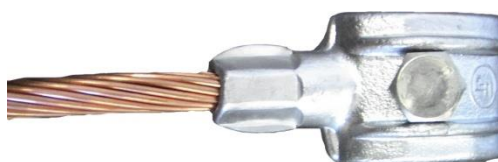
TOD-7/19 “SP”

This style of TOD-7/19 is used by Essential Energy (Country Energy) and can be tightened/loosened by a Hotstick.

“CTC” Series – Consumer Tee Connector

These connectors allow for multiple consumer connection to be made where a number of split bolt clamps can be connected to the tinned copper conductor, which is compressed into the main aluminium connector body. Connector is cast in virgin ingot aluminium alloy. Available with stainless steel hardware and supplied with Jointing Compound. Made to order. Minimum quantity apply

Catalogue No.	Copper Conductor	Run Conductor Range		Weight (kg)
		MIN	MAX	
CTC-1-250	7/2.75	7/2.25	19/3.75	0.225
2CTC-1-250	7/2.75	7/2.25	19/3.75	0.35



CTC-1-250

Copper Service Tap



Catalogue No.	Conductor Range	Conductor Diameter	Weight (kg)
CTO-3/11	10mm ² to 70mm ²	3-11mm	0.12
DCTO-3/11	10mm ² to 70mm ²	3-11mm	0.24

High Strength copper forging for connection of copper consumer tee. Top section is supplied with copper keeper for even pressure under head of hexagon head set-screw. Hardware is made from high grade stainless steel.

SPLIT BOLT CLAMPS

Split Bolt Clamps are designed to accommodate up to a maximum of two conductors, as specified in Table below. Split Bolt Clamps can be ordered as Natural Brass or Brass with Electro-Tin Plating. All Split Bolt Clamps are made to Electrical Supply Association of Australian Standards (E.S.A.A). The 'Type' is the Reference Code for E.S.A.A.

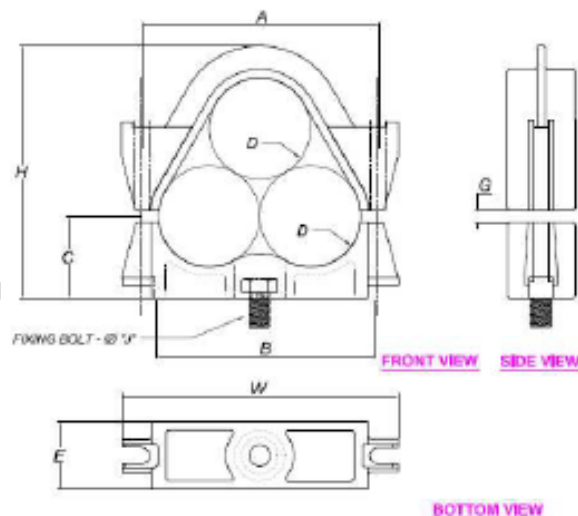


Type	Catalogue No		Maximum Conductor			Width of Slot
	Brass	Brass - Electro-Tinned	Area (mm ²)	Overall Diameter	Wire Size	
A	B22	B22T	16	5.1	7/.064	5.3
B	B24	B24T	35	8.3	7/.104	8.3
C	B25	B25T	70	10.7	19/.083	10.9
D	B26	B26T	95	12.6	19/.101	12.9
E	B28	B28T	185	17.64	37/.130	18.5

Cast Aluminium Trefoil Cable Clamps

Cast Aluminium Trefoil Clamps are designed for strength and ease of installation and provide tested bursting strength cable fixing at economic prices. Features of widely specified 54 series include:

1. Cables can be laid directly onto fixed bases - reducing cable installation time.
2. Simple clamping with bolts which fit into side slots in base and top.
3. Manufactured from silicon aluminium alloy AC601 which combines high strength, ductility and outstanding corrosion resistance. Also available in manganese bronze.
4. Designed and tested for high bursting strength ranging to over 20kN. Test reports available upon request.
5. Cable diameters outside those shown below can be accommodated by our design and build service.
6. Neoprene Inserts - designated NI after the clamp number - provide additional range taking and provide a compressible cable bearing surface.



Clamp Dimensions - millimetres

Catalogue No.	Cable O.D (mm)	A	B	C	E	G	H	FIXING BOLT ¹	SIDE BOLT ²	W
TCC5420	19-20	58	73	16	35	4	51	3	M8	81
TCC5427	25-27	68	80	22	38	5	71	3	M8	89
TCC5429	27-29	70	80	22	38	5	73	3	M8	89
TCC5435	33.5-35	87	76	30	38	5	97	M10	M8	108
TCC5437	35-37	87	80	32	38	5	97	M12	M10	111
TCC5440	34-40	98	88	35	40	6.5	104	M12	M10	118
TCC5442	40.5-42.5	102	94	35	41	6.5	111	M12	M10	124
TCC5446	44.5-46.5	108	100	35	45	6.5	113	M12	M10	130
TCC5448	46-48	113	104	40	45	6.5	122	M12	M10	134
TCC5449	48-50	114	110	42	45	6.5	125	M12	M10	136
TCC5452	50-52	122	112	40	45	6.5	127	M12	M10	143
TCC5454	52-54	126	116	42	45	6.5	131	M12	M10	148
TCC5456	54-56	130	121	45	47	6.5	135	M12	M10	151
TCC5459	56.5-59	130	121	45	48	6.5	137	M16	M12	152
TCC5466	63.5-66	152	-	52	60	4	150	^{3,4}	M12	182
TCC5472	66-72	166	-	55	62	6.5	160	^{3,4}	M12	198
TCC5478	75-78	194	-	55	62	9.5	179	^{3,4}	M12	225
TCC5482	79-82	191	180	62	62	9.5	199	M16	M12	228
TCC5488	84-88	202	190	66	65	10	201	M16	M12	235
TCC5495	93-95	218	204	71	67	12	223	M16	M12	253

1. Fixing Bolt is customer supplied. 2. Side bolts are supplied with clamps. Standard bolt type is G304 S/Steel.
3. No Central fixing bolt hole J. Fixing by means of 2 side mounted bolts.
4. Adapter plate for central fixing is available. Neoprene Inserts add NI to the end of the Part Number. e.g. TCC5420NI. Standard NI inset is 3mm thick. Other sizes are available upon request. Cable OD range is reduced by 3mm i.e. 5454 range becomes 49-51mm.

PLEASE RING FACTORY FOR OTHER STYLES AND VARIATIONS OF CABLE CLAMPS.

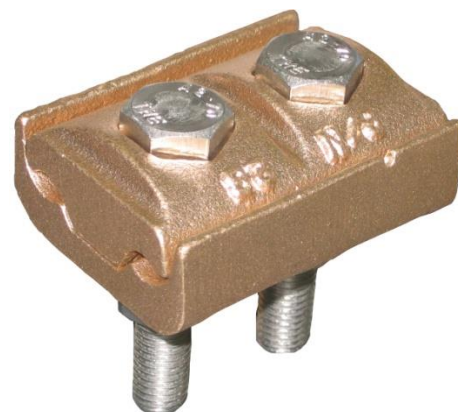
PARALLEL GROOVE CLAMPS FOR COPPER TO COPPER



CT03/11



SCTO25



DCTO25

Catalogue No.	Description	Weight (kg)
CTO3	CTO3/11 M8 Single Bolt PG Clamp for joining Copper Conductor 10-70mm ² Cap forged using high copper content alloy/ copper keeper from high copper content extrusion. Length:25mm	0.12
DCTO3	DCTO3/11 M8 Double Bolt PG Clamp for joining Copper Conductor 10-70mm ² . Cap forged using high copper content alloy/ copper Keeper from high copper content extrusion. Length: 51mm	0.24
SCTO25	SCTO25 M12 Single Bolt PG Clamp for joining Copper Conductor 35-150mm ² Conductor to 6mm Flat Surface. Two Cables. Cast from high copper content alloy. Length: 34mm	0.4
DCTO25	DCTO25 M12 Double Bolt PG Clamp for joining Copper Conductor 35-150mm ² Conductor to 6mm Flat Surface. Two Cables. Cast from high copper content alloy. Length: 71mm	0.79

Set Screws, nuts and spring washers manufactured using G304 Stainless Steel.

RIISING MAIN PARALLEL OR RIGHT ANGLE TEE OFF CONNECTORS



Catalogue No.	CABLE RANGE							
	MAIN				TAP			
	AREA (mm ²)		O.D. (mm)		AREA (mm ²)		O.D. (mm)	
	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.
CV3	50	95	8.9	12.6	50	95	8.9	12.6
CV4	120	240	14.21	20.25	16	35	5.1	7.65
CV5	120	300	14.21	22.68	35	95	7.65	12.6
CV6	120	240	14.21	20.25	120	240	14.21	20.25
CV8	300	800	22.68	37.05	50	95	8.9	12.6
CV9	240	500	20.25	28.8	120	240	14.21	20.25

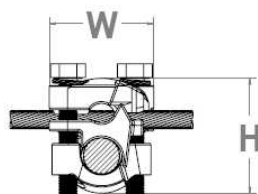
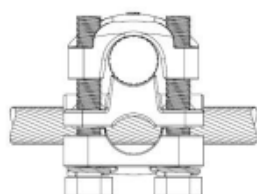
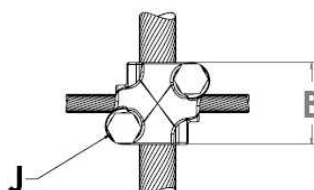
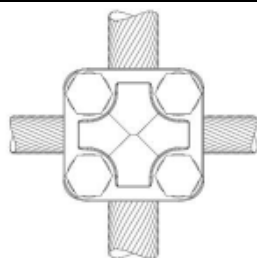


Fig. 1

Fig. 2

Catalogue No.	Figure No.	Dimensions			
		B	H	J	W
CV3					
CV4	1	38	58	8	50
CV5	1	45	58	10	48
CV6	2	54	70	10	57
CV8	1	49	77	10	65
CV9					

A three-piece multi-purpose clamp providing Parallel and Tee Connections over a wide range of cable sizes. Castings are copper alloy. Hardware is G304 Stainless Steel. Please add "P" to a Catalogue Number for TIN Plating; Add 'A' for Aluminium and G for Gunmetal. e.g. CV4-P.

RISING MAIN TEE OFF CONNECTORS



RMC.55A



RMC.86G



RMC.104G

Catalogue No.	Aluminium Main		Tee Off Aluminium	
	MIN.	MAX.	MIN.	MAX.
RMC.55A	19/1.53	37/2.03	7/1.35	19/1.53
	35mm ²	120mm ²	10mm ²	35mm ²
	Ø7.65mm	Ø14.21mm	Ø4.05mm	Ø7.65mm
RMC.86A	37/2.25	61/2.25	7/1.35	19/2.14
	150mm ²	240mm ²	10mm ²	70mm ²
	Ø15.75mm	Ø20.25mm	Ø4.05mm	Ø10.7mm
RMC.104A	61/2.52	61/2.85	7/1.35	19/2.14
	300mm ²	400mm ²	10mm ²	70mm ²
	Ø22.68mm	Ø25.65mm	Ø4.05mm	Ø10.7mm

Catalogue No.	Copper Main		Tee Off Copper	
	MIN.	MAX.	MIN.	MAX.
RMC.55G	19/1.53	37/2.03	7/1.35	19/1.53
	35mm ²	120mm ²	10mm ²	35mm ²
	Ø7.65mm	Ø14.21mm	Ø4.05mm	Ø7.65mm
RMC.86G	37/2.25	61/2.25	7/1.35	19/2.14
	150mm ²	240mm ²	10mm ²	70mm ²
	Ø15.75mm	Ø20.25mm	Ø4.05mm	Ø10.7mm
RMC.104G	61/2.52	61/2.85	7/1.35	19/2.14
	300mm ²	400mm ²	10mm ²	70mm ²
	Ø22.68mm	Ø25.65mm	Ø4.05mm	Ø10.7mm

Used in multi-level buildings where a tee-off from a main conductor is connected to the main switchboard of each floor, used for both Aluminium and Copper Mains to Aluminium and Copper Tee. Made from High Strength Aluminium and Gunmetal, fitted with stainless steel hardware.

Belleville washers fitted when cast in aluminium.

Note: Please nominate Aluminium or Gunmetal when ordering by adding an “A” or “G” to the end of the Catalogue Number.

CABLE DROPPER SUPPORT CLAMP - SMALL

CATALOGUE NO: ASC1



APPROVED BY ESSENTIAL (COUNTRY) ENERGY
APPROVAL NO. 292254

SUPPLIED WITH
- M16 x 70 GAL HEX HEAD BOLT
- M16 x 50 GAL HEX HEAD BOLT
& FLAT WASHER, SPRING WASHER, & NUT