



ITEM	DESCRIPTION	QTY	UNIT	DRG. NO.	REV.	STOCK CODE	BY
87	COMMUNICATIONS COAXIAL CABLE (TO BE INSTALLED BY COMMS SECTION)						
81	25mm ² Ø GREY CONDUIT (ABOVE GROUND)					78063	
80	25mm ² Ø HD ORANGE CONDUIT (BELOW GROUND)					78014	
79	EARTH STUBB MCKEOWN	820088	3			H108475	1
78	CURRENT TRANSFORMER - OUTDOOR GRAME LEAKAGE CT					144576	3
77	PARALLEL GROOVE CLAMP COVER					176472	9
76	LUG BI-METAL COMPRESSION 7/4.75					14.74.21	A/R
75	CABLE CCT 120 7/4.75 120mm ² AL					H2531	1
74	INSULATOR 22kV PIN					59899	A/R
73	CABLE 10 CORE 1.713mm					PURCHASE	2
72	CONDUIT SWEEP BEND 63mm					PURCHASE	1
71	CONDUIT 63mm ORANGE 4.0					PURCHASE	2
70	CABLE COVER TO SUIT					PURCHASE	2
69	LINK - SAG, 70KN (PLP PART No CTSLEW-070-1)					PURCHASE	3
68	COVER - STRAIN CLAMP					144543	3
67	CLAMP - CONDUCTOR STRAIN, FOR CCT120					144527	3
66	INSULATOR, PIN, POST, LONG STUD					144552	8
65	INSULATOR - STRAIN ROD					144550	3
64	INSULATOR 22kV PIN PATTERN C					75697	1
63	CLOUT - GALVANISED Ø 2.3 x 4.0					50963	A/R
62	WASHER - M10 x 21mm x 1.2mm STAINLESS STEEL					44611	20
61	WASHER - M10 SPRING STAINLESS STEEL					50120	15
60	NUT - M10 HEX STAINLESS STEEL					H39401	15
59	BOLT - M10 x 40 HEX STAINLESS STEEL					45096	15
58	WASHER - M12 CONICAL GALVANISED					H39639	14
57	WASHER - M12 SPRING GALVANISED					H12047	26
56	WASHER - M12 FLAT GALVANISED					177982	20
55	WASHER - M16 CONICAL GALVANISED					H39647	19
54	WASHER - M16 FLAT GALVANISED					177984	30
53	WASHER - M20 CONICAL GALVANISED					H39655	9
51	WASHER - M20 SPRING GALVANISED					175569	2
50	WASHER - M20 50mm SQUARE GALVANISED					H39265	8
49	WASHER - M20 75mm SQUARE GALVANISED					H39231	12
48	WASHER - M24 CONICAL GALVANISED					H39663	4
47	WASHER - M24 SPRING GALVANISED					ORDER	4
46	WASHER - M24 FLAT GALVANISED					177981	8
45	WASHER - M24 50mm SQUARE GALVANISED					H39273	4
44	COACH SCREW - M12 x 100 GALVANISED					H46484	3
43	U BOLT - M16 SIZE 3 GALVANISED					H36932	4
42	STAPLES - GALVANISED 3.15mm x 25mm					175601	A/R
41	BOLT & NUT - M12 x 50 HEX GALVANISED					46391	24
40	BOLT & NUT - M12 x 140 HEX GALVANISED					46821	16
39	BOLT & NUT - M12 x 260 HEX GALVANISED					H37637	4
38	BOLT & NUT - M16 x 200 HEX GALVANISED					83725	3
37	BOLT & NUT - M16 x 40 HEX GALVANISED					175674	8
36	BOLT & NUT - M16 x 50 HEX GALVANISED					44673	2
35	BOLT & NUT - M20 x 260 HEX GALVANISED					47126	4
34	BOLT & NUT - M20 TO SUIT POLE HEX GALVANISED	515465	8			SECT.11	5
33	BOLT & NUT - M24 x 65 HEX GALVANISED					ORDER	6
32	BOLT & NUT - M24 x 500 HEX GALVANISED	515465	8			H1538	2
31	CONNECTOR - P, CRIMP, BURNDY EARTH					H31659	A/R
30	POLE MOUNTED REGULATOR MANUFACTURED STEELWORK	181618	2				1
29	PROTECTOR COVER EARTH GRID 2700mm BLACK					157522	2
28	ROD - GROUND EARTH 1800 x 15mm COPPER/CLAD					H3631	mm3
27	EARTH BAR - 50.8mm TINNED HD COPPER (SEE DETAIL C)					173661	1
26	CLAMP - 3 BOLT PARALLEL GROOVE - ALUMINIUM					144568	3
25	PARALLEL GROOVE CLAMP 3 BOLT BI-METAL 35mm ² - 185mm ² AL/CU					176491	A/R
24	CROSSARM 2700 x 150 x 100	183394	5			H23761	1
23	LUG - 70mm ² COMPRESSION M12 HOLE					74831	26
22	CABLE - Cu EARTH 70mm ² 19/2.14 PVC INSULATED					60111	A/R
21	WIRE - TIE, PREFORMED, INSULATED FOR CCT120					144600	3
20	EYEBOLT - M20 x 200mm GALVANISED					H37881	3
19	LINK SYSTEM NUMBERS						A/R
18	BOLT & NUT M24 x 90 HEX GALVANISED					PURCHASE	2
17	COVER - CONNECTOR INSULATING SHROUD					11675	9
16	STEP - POLE 16mm DRIVE IN	517698	4			H17720	A/R
15	SIGN - "DANGER HIGH VOLTAGE"	503117	4			H47012	2
14	BRACKET - MOUNTING - 130mm GAIN BLOCK					146274	2
13	CROSSARM 2700 x 150 x 100	183394	5			H23761	1
12	(CUBICLE - FIBREGLASS PART No. F1106/EA (FULFON INDUSTRIES AUST.)					PURCHASE	1
11	LIGHTNING ARRESTER UNIT - 11kV					119948	3
10	ISOLATING LINK - SINGLE PHASE 12kV 630A					58750	3
9	COVER - PROTECTOR UNDERGROUND CABLE 150mm					151884	A/R
8	BRACKET - MOUNTING - 150mm GAIN BLOCK					144290	1
7	CROSSARM - 3300 x 150 x 100 HARDWOOD	183394	5			H23020	1
6	11kV THROUGH TERMINATION 2-11	151395	17			SEE DWG 1	
5	BRACE - CROSSARM 690 x 40 x 5mm FLAT BAR	514385	5			H17738	8
4	FIBREGLASS CABINET CONCRETE FOOTING	191227	0				1
3	REGULATOR CONTROL CUBICLE						3
2	REGULATOR UNIT - SINGLE PHASE 100A OR 200A						1
1	POLE - 15.5m TPI, 12kV, CONCRETED 2.8m IN GROUND					152868	1
						DRG. NO. REV. STOCK CODE	BY

- NOTES**
- CONNECTIONS BETWEEN 11kV LINK UNITS & THE VOLTAGE REGULATORS ARE MADE USING 7/4.75 120mm² CCT CABLE.
 - LOAD LINK NUMBER TO BE INSTALLED ON POLE 2000mm ABOVE GROUND LINE AS SHOWN IN DETAIL A. POLE NUMBER TO BE INSTALLED BETWEEN 2400mm AND 3000mm ABOVE GROUND LINE. (SEE NS148).
 - FIRST POLE STEP TO BE FITTED NO LESS THAN 3600mm FROM GROUND LEVEL AND REMAINING STEPS TO BE STAGGERED ABOVE AT 450mm CENTRES ON ALTERNATE SIDES OF POLE. HOLES TO BE 50-100mm OFF CENTRE, DEPENDING ON THE SIZE OF THE POLE.
 - PHASE LINK MARKERS TO BE INSTALLED ADJACENT TO EACH LINK AS SHOWN.
 - ALL STEELWORK TO BE SECURELY BONDED TO EARTH USING 70mm² BLACK PVC INSULATED CABLE.
 - FOR CROSSARM DRILLING DETAIL SEE DRAWING 183394.
 - REGULATOR CONTROL CUBICLE TO BE POSITIONED EITHER IN THE FOOTPATH ALLOCATED AREA OR IN THE LINE EASEMENT NO CLOSER THAN 2500 FROM THE POLE. A 1550 x 1300 CONCRETE PAD IS REQUIRED FOR THE CONTROL CUBICLE.
 - DRAW WIRE TO BE INSTALLED INSIDE CONDUIT FOR FUTURE COMMS COAXIAL CABLE.
 - CONSTRUCT CONCRETE FOOTING FOR FIBREGLASS CABINET AS PER CONSTRUCTION DRAWING 191227

CAD DRAWING
DO NOT MANUALLY AMEND

AMENDMENTS

NO	INITIAL ISSUE	DATE	BY	REASON
0	INITIAL ISSUE			
1	PHASING CORRECTED CUBICLE NOTE AMENDED POLE HEIGHT CHANGED FROM 15.5m TO 15.8m	11/04/2008	CHIED PETER STOREY	
2	COMMUNICATIONS CABLE DETAILS ADDED	05/09/2008	CHIED PETER STOREY	
3	ITEM 4 POLE CAP REPLACED WITH FIBREGLASS CABINET CONCRETE FOOTING STOCK CODES UPDATED	10/11/2008	CHIED STEPHEN ULLIUS	
4	SUPERSEDED BY 224227	20/05/2011	CHIED DANIEL DAFO	

APP'D BY: ROSS HUGHES

NO	DESCRIPTION	DATE
1	REGULATOR CONSTRUCTION POLE TOP REGULATOR GROUND MOUNTED FIBREGLASS CABINET CONCRETE FOOTING DETAILS	191227
2	REGULATOR CROSSARM DRILLING DETAIL	183394
3	NU-LCC RE-CLOSER CONTROLLING POLE REGULATOR - CONSTRUCTION DETAIL	185171
4	POLE MOUNTED REGULATOR - GENERAL ARRANGEMENT	182685

EnergyAustralia

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Enerserve A Business of EnergyAustralia

SCALE	1:25
DESIGNED	WILLIAM GRAHAM
DRAWN	NATALIE SINGLETON
CHECKED	PETER STOREY
APPROVED	ROSS HUGHES
DATE	07/01/08
PRJTRK No.	
PROJECT NUMBER	STD

STANDARD CONSTRUCTION
3 UNIT 11kV POLE MOUNTED REGULATOR
WITH GROUND MOUNTED CONTROLLER
CONSTRUCTION DETAIL

DRAWING No 185175 SHEET 01 AMD 4 SIZE B1