



LABEL DETAILS

LABEL	LABEL SIZE	COLOUR	TEXT LINE	TEXT HEIGHT	ENGRAVING	QTY
1	C4	GRAVOPLY No.200 WHITE/BLACK	LINE 1 LINE 2 LINE 3	2.5 2.5 2.5	ESSENTIAL SERVICES STANDBY SUPPLY CHANGEOVER SWITCH	1
2	C23	GRAVOPLY No.259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3	4.0 2.5 2.5	A B C N TRANSFORMER # 415V AC METERING SUPPLY	3
3	C23	GRAVOPLY No.259 PINE GREEN/WHITE	LINE 1 LINE 2 LINE 3	4.0 2.5 2.5	A B C N CUSTOMER OC No.1 & No.2 415V AC METERING SUPPLY	1
4	C3	GRAVOPLY No.200 WHITE/BLACK	LINE 1 LINE 2 LINE 3	2.5 2.5 2.5	FAN CONTROL SWITCH	1
5	C23	GRAVOPLY No.200 WHITE/BLACK	LINE 1 LINE 2 LINE 3	4.0 4.0 2.5	FAN FAIL INDICATION LAMP ON - NORMAL LAMP OFF - SIGNAL	1

LABEL CONSTRUCTION AND DRILLING DETAILS REFER DRAWINGS 50996 TYPICAL LABEL ENGRAVING DETAILS REFER DRAWING 64825
SEE NOTE 5

MATERIAL LIST

ITEM No.	DESCRIPTION	REMARKS	No. OFF
1	WALL MOUNTED ENCLOSURE	B&R N8063	1
2A	TERMINAL MOUNTING RAIL	UTILUX H2233A - 1 METRE MOUNTING RAIL	1
2B	MOUNTING RAIL	DIN 35mm MOUNTING RAIL - 100mm LENGTH	1
3	NEUTRAL LINK	CLIPSAJ TYPE L18	1
4	EARTH LINK	CLIPSAJ TYPE L18	1
5	10A DOUBLE GPO	HPM TYPE 777	1
6	MOUNTING BLOCK	HPM TYPE 140	1
7	4 STEP CHANGEOVER SWITCH	KRAUS & NAMER TYPE C42 A231 603 E	1
7A	TERMINAL COVERS	KRAUS & NAMER TYPE S1 M160/B03	2
8	50A 3 PHASE, 5 PIN SOCKET	CLIPSAJ CAT No. 5650550	1
9	18 MODULE SURFACE MOUNT SWITCHBOARD	HPM HE18S	1
10	10A SINGLE POLE SWITCH	HPM TYPE A770/1	1
11	MOUNTING BLOCK	HPM TYPE 141	1
12	LINK BACK CONNECTED 2 STUDS	SAFECLIP SC32PW (WHITE)	4
13	FUSE BACK CONNECTED	SAFECLIP SC32BW (BLACK)	12
14A	AIR FLOW AUXILIARY RELAY	REFER AUSGRD DRAWING 254134-1	1
14B	TRUE DELAY OFF TIMER	REFER AUSGRD DRAWING 254134-1	1
14C	PANEL INDICATION LAMP	REFER AUSGRD DRAWING 254134-1	1
15	5kW/75HP D.O.L. MOTOR STARTER	SCHNEIDER LE1-D1231R2-D1316	1
CB1	50A 3P 10kA MINATURE C/B (3P POWER)	SCHNEIDER TYPE SINARF54350	1
CB2	20A 1P 10kA MINATURE C/B (GPO)	SCHNEIDER TYPE SINARF54120	1
CB3	16A 1P 10kA MINATURE C/B (LIGHTS)	SCHNEIDER TYPE SINARF54116	1
CB4	10A 1P 10kA MINATURE C/B (1A' BATTERY CHARGER)	SCHNEIDER TYPE SINARF54110	1
CB5	10A 1P 10kA MINATURE C/B (1A' BATTERY CHARGER)	SCHNEIDER TYPE SINARF54110	1
CB6	20A 1P 10kA MINATURE C/B (CONTROL POINT)	SCHNEIDER TYPE SINARF54120	1
CB7	20A 1P 10kA MINATURE C/B (1st Tx SUPPLY DRY TYPE ONLY)	SCHNEIDER TYPE SINARF54120	1
CB8	20A 1P 10kA MINATURE C/B (2nd Tx SUPPLY DRY TYPE ONLY)	SCHNEIDER TYPE SINARF54120	1
CB9	20A 1P 10kA MINATURE C/B (3rd Tx SUPPLY DRY TYPE ONLY)	SCHNEIDER TYPE SINARF54120	1
CB10	20A 3P 10kA MINATURE C/B (3P FAN)	SCHNEIDER TYPE SINARF54320	1
CB11	6A 1P 10kA MINATURE C/B (FAN CONTROL)	SCHNEIDER TYPE SINARF54106	1
S	TERMINAL STRIP (S1-2)	WEDMULLER SAK 2.5/EN - RAIL MOUNTED TERMINAL	2
TA	TERMINAL STRIP (TA1-4)	WEDMULLER SAK 16/EN - RAIL MOUNTED TERMINAL	9
TB	TERMINAL STRIP (TB1-18)	WEDMULLER SAK 2.5/EN - RAIL MOUNTED TERMINAL	18
TC	TERMINAL STRIP (TC1-16)	WEDMULLER SAK 2.5/EN - RAIL MOUNTED TERMINAL	16

- NOTES:**
- THIS SERVICE BOARD IS DESIGNED FOR CITY DISTRIBUTION SUBSTATIONS WHERE OPTICAL ARC FLASH DETECTION AND CUSTOMER OC PROTECTION IS INSTALLED. THE VENTILATION FAN SYSTEM INVOLVING ITEMS 10, 11, 14, 16, & RELATED WIRING IS ONLY TO BE INSTALLED WHERE REQUIRED.
 - THIS DRAWING IS TO BE READ IN CONJUNCTION WITH RELEVANT NETWORK STANDARDS. ALL DIMENSIONS ARE IN MILLIMETRES. DRILLING DETAILS FOR REFERENCE ONLY. CAN FILE TO BE PRODUCED FROM THIS DRAWING FOR MACHINE MANUFACTURE.
 - THE EARTH AND NEUTRAL LINK CONNECTIONS DESIGNATED BY (E) & (N) MUST BE INDIVIDUALLY CONNECTED AS SEPARATE CABLES TO THEIR RESPECTIVE LINK.
 - FOR LABELS WITH "M" SUBSTITUTE THE RELEVANT TRANSFORMER NUMBER.
 - CABLE TO BE OF ADEQUATE SIZE TO PREVENT VOLTAGE DROP, REFER TO AS 3000 FOR CABLE SIZE.
 - FOR LABEL CONSTRUCTION, DRILLING AND ENGRAVING DETAILS REFER TO DRAWINGS 50996 & 64825.
 - CABLE NAMES ARE SHOWN THUS [XX] REFER TO DWG 227386 SH1 & SH2
 - COMPRESSION TYPE CABLE LUGS ARE TO BE USED FOR TERMINATIONS ONTO ITEMS 12
 - WHERE SAK 16/EN IS NOT CONVENIENTLY AVAILABLE FOR WORKSHOP SAK 35/EN MAY BE USED.
 - ALL PANEL WIRING TO BE CSA AS SHOWN, 0.6V GRADE PVC INSULATED COLOURED BY PHASE. A&B TO BE RED, B&P TO BE WHITE, C&Q TO BE BLUE AND NEUTRAL TO BE BLACK. ALL EARTH WIRING TO BE COLOURED GREEN/YELLOW.
 - STANDARD WARNING LABEL TO HIGHLIGHT THE 415V AC HAZARD TO BE MOUNTED AS SHOWN. ANY EXPOSED TERMINALS ARE TO BE APPROPRIATELY COVERED AND THE HAZARD LABELLED.
 - ALL SWITCHBOARD CIRCUIT BREAKERS TO BE CLEARLY AND APPROPRIATELY LABELLED.
 - WIRING SHOWN THUS (L/L) TO HAVE THE ASSOCIATED WIRE FERRULE NAME FITTED TO BOTH ENDS OF THE WIRE

CAD DRAWING
DRAWN BY: L. MARTINUZZI
CHECKED BY: M. BENNETT
DATE: 24/06/2015

REVISIONS

NO.	DESCRIPTION	DATE
1	ISSUED FOR CONSTRUCTION	24/06/2015

APPROVED
L. MARTINUZZI
M. BENNETT

REFERENCE DRAWINGS

DWG No.	DESCRIPTION
254134-1	CITY DISTRIBUTION SUBSTATIONS SUBSTATION FAN CONTROL SCHEMATIC
227380 SH1	CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OPTICAL ARC FLASH DETECTION AC SCHEMATIC
227384 SH1	CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD, DRY TYPE TX, & DAFD, TRANSFORMER PROTECTION PANEL CABLE CONNECTION DIAGRAM
227384 SH2	CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD, OIL TYPE TX, & DAFD, TRANSFORMER PROTECTION PANEL CABLE CONNECTION DIAGRAM
227386 SH1	CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND OPTICAL ARC FLASH DETECTION CABLING DIAGRAM
227387 SH1	CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD AND DAFD 1500VA TX'S AND VENTILATION FAN AC SERVICE BOARD LAYOUT, WIRINGS, & CONNECTIONS

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ISSUED FOR CONSTRUCTION

AS SHOWN

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DRAWN BY: L. MARTINUZZI
CHECKED BY: M. BENNETT
APPROVED BY: M. BENNETT
DATE: 24/06/2015
TRIM REF: -
PROJECT NUMBER: OPEX-6923-1

CITY DISTRIBUTION SUBSTATIONS WITH E TYPE LV BOARD, OPTICAL ARC FLASH DETECTION, & 1500kVA TRANSFORMERS SERVICE BOARD LAYOUT, WIRING & CABLING

DRAWING No: 227387 SHEET 1 AMD 3 SIZE A0