

CONSTRUCTION NOTES :-

- Cubicle constructed from 2mm zinc seal mild steel.
- Powdercoat - Orange Ripple Finish
- Gland plates are 6mm switch panel.
- Cable entry/exit via top.
- Degree of protection is IP43.
- Form 4b & 4a (Tier 2) separation to IPXXB
- Board is 880mm deep.
- Switchboard is extendable on both sides.
- Labels -
General - black lettering / white background
Safety Services - white lettering / red background
All Safety Services to have additional label -
IN THE EVENT OF FIRE, DO NOT SWITCH OFF.

BUS BAR NOTES :-

- Minimum clearances between live parts, & live parts to earth as per AS3439.1 Table 16. 500V Pollution Degree 2 Non Conductive Dry, occasional condensation 5mm.
- This switchboard is rated at 5000 amps at 80kA.
- Temperature rise calculations for Busbar are based on AS 60890 Table ZA.5 and ZA8 temperature rise of 50°C a room ambient of 40°C a micro ambient around Busbars of 55°C
- Main Busbars are supported by use of Stainless Cleats on Fibon Insulation. Type Tested to 80kA Report 1496/2.
- Vertical Busbars are supported by use of Fibon Supports Type Tested to 63kA Report 1497/1

COPPER BUSBAR CURRENT RATINGS HAVE BEEN DETERMINED BY ONE OF THE FOLLOWING METHODS:-

- ACB connections onto tags - Manufacturers Busbar sizing Installation recommendations. Verified by DRC type test report No. 19301137 002
- Main horizontal busbar - DRC temperature rise test report No. 19301137 007
- Vertical Droppers - DRC temperature rise test report No. 19301137 005
- Other copper such as connection tags - AS60890 Table ZA.5 & ZA.8

FINISHING PROCESS INCLUDES THE FOLLOWING:-

- Welds ground smooth, spats cleaned and scales removed.
- Scum wash all visually detected imperfections.
- 5 stage iron phosphate cleaning system.
Stage 1 Alkaline wash
Stage 2 Cold water rinse
Stage 3 Phosphate wash Grease and rust removed.
Stage 4 Cold water rinse
Stage 5 Chrome rinse
- Powdercoat & oven bake at 180-200°C

TYPE TEST SUMMARY TABLE

Report Number	Vertical Bars Fault Level kA/Seconds	Horizontal Bars Fault Level kA/Seconds	Incoming Connections Ongoing Connections	Short Circuit Withstand Functional Unit MCCB Size	Arc Fault Containment ZD Functional unit MCCB Size	Temperature Rise Main Bus	Temperature Rise Distribution Bus	Temperature Rise Functional Units/Size	IP Test	Insulated bus system Horizontal and Vertical Bus	Rated Insulation	Form of Separation	Notes
103448	100/1	100/1	100/1	250A/100kA	250A/100kA								ASNZS 3439
				630A/100kA	630A/100kA								ASNZS 3439
1496/1		50/3											ASNZS 3439
1496/2		80/1											ASNZS 3439
1497/1	50/3			100A/63kA									ASNZS 3439
	63/1												ASNZS 3439
	80/0.1												ASNZS 3439
1497/2		63/1											ASNZS 3439
			63/1										ASNZS 3439
1497/3				100A/63kA									ASNZS 3439
				160A/63kA									ASNZS 3439
				250A/63kA									ASNZS 3439
				400A/63kA									ASNZS 3439
				630A/63kA									ASNZS 3439
1497/4					100A/63kA								ASNZS 3439
					160A/63kA								ASNZS 3439
					250A/63kA								ASNZS 3439
					400A/63kA								ASNZS 3439
					630A/63kA								ASNZS 3439
													ASNZS 3439
1497/5						4000A		1600A					ASNZS 3439
						1700A							ASNZS 3439
1497/6							2274	400A					ASNZS 3439
								630A					ASNZS 3439
1497/7								250A					ASNZS 3439
								160A					ASNZS 3439
								100A					ASNZS 3439
1308		50/1											ASNZS 3439
1007	63/1												ASNZS 3439
65607C	50/1	50/1		4KWDOL /50kA								3	AS1136
				18.5KWDOL /50kA								3	AS1136
				37KWDOL /50kA								3	AS1136
65608					37KWDOL/50kA							3	AS1136
19301137 001	63/1									1000V			IEC 61439
19301137 002						3200A		3200A				4B	IEC 61439
19301137 003						5700A							IEC 61439
19301137 004						3200A		3200A				4B	IEC 61439
19301137 005							2400A						IEC 61439
19301137 006								1000A				4B	IEC 61439
								1600A				4B	IEC 61439
19301137 007						3524							IEC 61439
19301137 008								250A				4B	10 Functional units in Vertical Tier IEC 61439
								2500A					IEC 61439
19301137 009									IP43				IEC 61439
19301137 010				250A/63kA								4B	AS/NZS 61439
				630A/63kA								4B	AS/NZS 61439
50079099 001								2600A					2600Amps 2500 amp Non Auto ACB
50079099 002								3100A					3100Amps 2500 amp Non Auto ACB
50062587 001								350 KVAR PFC Unit					IEC 61439
19301495 001										IP XXB			IEC 61439 AS/NZS 60529
19301137 021	63/1									1000V			AS/NZS 61439
19301137 022						3200A		3200A				4B	AS/NZS 61439
19301137 023						5700A							AS/NZS 61439
19301137 024						3200A		3200A				4B	AS/NZS 61439
19301137 025							2400A						AS/NZS 61439
19301137 026								1000A				4B	AS/NZS 61439
								1600A				4B	AS/NZS 61439
19301137 027						3524							AS/NZS 61439
19301137 028								250A				4B	10 Functional units in Vertical Tier
								2500A					AS/NZS 61439
19301137 029									IP43				AS/NZS 61439
19301137 030				250A/63kA								4B	AS/NZS 61439
				630A/63kA								4B	AS/NZS 61439

Other testing requirements such as creepage, basic protection, markings, labeling, Isolation, Impulse, whilst not specifically nominated above are included in the body of the Test Reports