

EQUIPMENT NAME(S)	GENERATOR SET
DOCUMENT No:	2111-DS-0200
CONTRACT PACKAGE No:	2111-0200
CONTRACT PACKAGE TITLE:	POWER STATION GENERATOR SETS
PURCHASE ORDER No:	
SUPPLIER/CONTRACTOR:	*
PLANT AREA:	GRID SUBSTATION
MODEL No. / DESIGNATION:	*/
DATA SHEET INFORMATION STATUS:	Issued for Tender
1.00 DATA BY PURCHASER	
1.01 GENERAL DESCRIPTION	
1.02 TEMPERATURE	-5°C + 45°C
1.03 RELATIVE HUMIDITY (%)	92
1.04 SITE ELEVATION (ABOVE SEA LEVEL)	730
1.05 APPLICATION	
1.06 QUANTITY	12 ( Indicative only base at 1650ekW units)
1.07 RATED POWER (PRIME, BLACK START)	1650 ekW, Continuous rated, Black start
1.08 OUTPUT VOLTAGE	V 380
1.09 PHASES	3
1.10 FREQUENCY	Hz 60
1.11 POWER FACTOR	0.8
1.12 RATED SPEED	RPM 1800
1.13 LOCATION	SHIPPING CONTAINER - OUTDOOR
1.14 ENCLOSURE	Sound Attenuated Enclosure
1.15 PROTECTION RATING	IP 56
1.16 STARTING SYSTEM	Electric
1.17 COLD START TO MAX. STARTING TIME	2 min
1.18 FAULT LEVEL SYNCHRONIZED (GRID SOURCE)	KA TBA
1.19 SYNCHRONISATION	REQUIRED
1.20 LOAD SHARING	REQUIRED
1.21 CONTROL VOLTAGE	V 24
1.22 OIL MIST DETECTOR	Vendor to specify
1.23 BELLY TANK FOR 8 Hrs (Preferred)	REQUIRED
1.24 FIRE SUPPRESSION & DETECTION SYSTEM	REQUIRED
1.25 Outgoing Circuit Breakers	Generator Mounted Electrical Panel with an outgoing 4-Pole Circuit Breaker
1.26 OUTGOING CABLE SIZE	4x1C80sq.mm/PHASE, 0.6/ 1kV, XLPE/PVC/PVC
2.00 TECHNICAL INFORMATION (SHALL BE COMPLETED BY THE SUPPLIER)	
2.01 ALTERNATOR	
2.02 MANUFACTURER	
2.03 PLACE OF MANUFACTURE	
2.04 RATED OUTPUT VOLTAGE	V
2.05 FREQUENCY	Hz
2.06 RATED OUTPUT CURRENT	A
2.07 FAULT CURRENT WITHSTAND FOR 1 Sec	KA
2.12 GENERATOR PROTECTION RELAY TYPE	
2.13 PROTECTION RELAY COMM. PROTOCOL	
2.14 SYNCHRONIZING RELAY TYPE	
2.10 INSULATION CLASS	
2.21 STATOR	
2.22 ROTOR	
2.23 EFFICIENCY @0.8 PF	
2.24 100%	%
2.25 75%	%
2.26 50%	%
2.27 RTD QTY	
2.28 RTD MAKE / MODEL	
2.29 RTD ALARM SETTING	°C
2.30 RTD TRIP SETTING	°C

EQUIPMENT NAME(S)		GENERATOR SET
2.31	MAXIMUM TEMPERATURE RISE	
2.32	STATOR	°C
2.33	ROTOR	°C
2.34	BATTERY & CHARGER	
2.35	BATTERY TYPE	
2.36	BATTERY RATED VOLTAGE	V
2.37	BATTERY CAPACITY	AH
2.38	BATTERY CHARGE TYPE	
2.39	BATTERY FAST CHARGE TIME	min
2.40	BATTERY OPERATION WITHOUT CHARGER	min
2.41	ENGINE	
2.42	ENGINE TYPE	
2.43	MANUFACTURER	
2.44	PLACE OF MANUFACTURE	
2.45	NO OF CYLINDERS	
2.46	TWO-FOUR CYCLE	
2.47	BMEP AT SITE	kPA
2.48	HEAT RADIATED AT RATED OUTPUT	KW
2.49	MAX. TEMPERATURE WITHIN ENCLOSURE	°C
2.50	COMBUSTION AIR	L/S
2.51	COCKLING AIR	L/S
2.52	FREE AIR SPL (dBA at 1m)	
2.53	FREE AIR SPL (dBA at 7m)	
2.54	FUEL CONSUMPTION AT	
2.55	25%	g/kW/Hr
2.56	50%	g/kW/Hr
2.57	75%	g/kW/Hr
2.58	100%	g/kW/Hr
2.59	OVERALL DIMENSIONS (LXHXW)	MM
2.60	TOTAL MASS	KG
2.61	HEAVIEST MAINTENANCE COMPONENT DIMENSIONS	
2.62	ENGINE PROTECTION DEVICE (LIST & FUNCTIONS)	
2.63	ENCLOSURE PROTECTION	IP
2.64	MOUNTING	
2.65	HEAT DISSIPATED IN THE ENCLOSURE	KW
2.66	ANTI-VIBRATION MONITORING (TYPE/MANUFACTURER)	
2.67	NOISE LEVEL	dba
2.68	PAINT FINISH	
2.69	PAINT COLOUR	
2.70	FUEL SUPPLY SYSTEM	
2.71	FUEL TANK MANUFACTURER	
2.72	CAPACITY	L
2.73	DIMENSIONS (LXHXW)	MM
2.74	FUEL INTAKE CONNECTION (TYPE/SIZE)	
2.75	FUEL FILTERS	
2.76	MANUFACTURER	
2.77	MODEL NO.	
2.78	LUBRICATING OIL FILTER	
2.79	MANUFACTURER	
2.80	MODEL NO.	
2.81	AUTOMATIC VOLTAGE REGULATOR	
2.82	MANUFACTURER	
2.83	TYPE/MODEL	
2.84	REGULATION FROM NO LOAD TO FULL LOAD	
2.85	CURRENT TRANSFORMERS	
2.86	RATED SHORT TIME CURRENT	
2.87	RATED SHORT TIME	
2.88	CLASS OF INSULATION	
2.89	ACCURACY CLASS	
2.90	ACCURACY LIMIT FACTOR	
2.91	RATED BURDEN	
2.92	RATED OUTPUT	
2.93	ANTI-CONDENSATION HEATER (Y/N)	
2.94	POWER	
2.95	VOLTS	
2.96	PHASES	

EQUIPMENT NAME		GENERATOR MASTER CONTROL PANEL	
DOCUMENT No:		2111-DS-0200	
DATA SHEET INFORMATION STATUS:		Issued for Tender	
1.00	Data by Purchaser		
1.03	STANDARD	AS/NZS 3439 (IEC 60439)	
1.06	SYSTEM VOLTAGE	380 V, 60 Hz, 3 Phase, 4 Wire; 220 V AC, 60 Hz, 1 Phase	
1.07	TOLERANCE	+10%, - 5%	
1.12	CONTROL VOLTAGE	24 VDC	
1.14	SUPPLY (INTERNAL/EXTERNAL)	Internal	
1.18	LOCATION (INDOOR / OUTDOOR)	Indoor	
1.19	MINIMUM IP RATING TO AS1939	IP42	
<b>2.00 CONSTRUCTION</b>			
2.06	MATERIAL (TYPE, THICKNESS)	Zinc Annealed Steel, 2.0 mm	
2.06	CABLE ENTRY	Bottom	
2.12	GLAND PLATE MATERIAL	Brass, 23.0 mm	
2.15	FINISH	Vendor Standard	
2.16	EXTERNAL COLOUR	Electrical Orange (X15)	
<b>3.00 TECHNICAL INFORMATION (SHALL BE COMPLETED BY THE SUPPLIER)</b>			
<b>3.01 MANUFACTURER'S DETAILS</b>			
3.02 MANUFACTURER			
3.03 MANUFACTURER'S CONTROL PANEL DESIGN			
3.04 PLACE OF MANUFACTURE			
<b>4.00 CONTROL PANEL DIMENSIONS</b>			
4.01	- LENGTH	mm	
4.02	- DEPTH	mm	
4.03	- HEIGHT	mm	
4.04	CONTROL PANEL APPROX TOTAL WEIGHT	kg	
4.05	DEGREE OF PROTECTION TO IEC 60529		
4.06	MAXIMUM DOOR SWING	°	
4.07	METHOD OF DOOR SEAL RETENTION		
<b>5.00 STEELWORK THICKNESS</b>			
5.01	- CUBICLES	mm	
5.02	- DOORS	mm	
5.03	- MOUNTING PLATES	mm	
5.04	- FRAMES	mm	
5.05	ZINC PLATING OF SHEET STEELWORK (YES/NO)		
5.06	PAINTING SYSTEM		
5.07	MAXIMUM CONTROL PANEL TEMPERATURE (@45°C AMBIENT)		
5.08	HEAT DISSIPATION CALC. FOR THE CONTROL PANEL		
<b>6.00 PROPOSED EQUIPMENT TYPES</b>			
6.01	- MOULDED CASE CIRCUIT BREAKERS		
6.02	- CONTROL RELAYS		
6.03	- CONTROL TRANSFORMERS		
6.04	- MINIATURE CIRCUIT BREAKERS		
6.05	- TRANSDUCERS		
6.06	- TERMINAL BLOCKS		
6.07	- SELECTOR SWITCHES		
6.09	- PUSHBUTTONS		
6.09	- INDICATING LAMPS		
6.10	- CABLE NUMBERS / CORE FERRULES		
<b>7.00 COMMENTS</b>			
7.01			
7.02			
7.03			
7.04			