



## M1100

50Hz/1500 rpm/380V

POWER RATING (0.8 P.F.)

PRIME 1000 kVA

## DIESEL ENGINE: MITSUBISHI S12H-PTA-S

V-12, 4 stroke-cycle water-cooled, turbocharged and aftercooled

### VOLTAGE VARIATION

- Standard Voltage 3Phase 4 Wires 380V
- Voltages Available 3Phase 4 Wires 380, 400, 415, 440, 190, 200, 208 and 220V

Note: Outputs for optional voltages may differ from standard output mentioned above.

### CONDITIONS & DEFINITIONS

#### Prime [PRP] :

Applicable for supplying power with varying load instead of the utility for an unlimited time. +10% overload is allowed in accordance with ISO3046/1. Prime power in accordance with ISO15550, ISO3046/1, JIS8002-1, DIN6271 and BS5514. Prime power in accordance with ISO8528.

#### Conditions:

Engine ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046/1, DIN6271 and BS5514 standard conditions. Fuel rates are based on fuel oil of 35° API (16°C or 60° F) gravity having a LHV of 42,780 kJ/kg (18,390 Btu/lb.) when used at 29°C (85° F) and weighing 838.9 g/liter (7.001lbs./U.S. gal.).

Note: \* Please consult with your nearest dealer for overload and additional rating requirements.

### DIMENSION (Reference Data)

Length (L) mm	Width (W) mm	Height (H) mm	Dry kg	Wet kg
4100	1650	2545	8400	9000

Dry = With Lube Oil

Wet = With Lube Oil and Coolant

### ENGINE STANDARD EQUIPMENT

Aftercooler	Jacket water heater
Air filter, paper element type	Jacket water pump, gear driven
Structure steel base	Lubricating oil filter, full flow paper element
Crankcase breather	Lubricating oil pump, gear driven
Charging alternator	Exhaust dry manifold
Lubricating oil cooler	Radiator, blower fan, fan drive
Fuel filters, full flow paper element	Manual shutoff
Fuel transfer pump, gear driven, plunger type	24V DC electric starting motor
Electronic type governor	

### ENGINE SPECIFICATIONS & TECHNICAL DATA

Bore	mm	150
Stroke	mm	175
Displacement	L	37.1
Piston speed	m/sec.	8.8
Compression ratio		14
Lubricating oil capacity	L	200
Coolant capacity without radiator	L	100
Coolant pump external resistance	m water	5.0
Coolant pump flow rate	L/min	1200
Cooling fan airflow rate	m <sup>3</sup> /min	1800
Cooling fan air flow restriction	kPa	0.1
Ambient air temperature	°C	40
Allowable exhaust back pressure	kPa	6.0
Exhaust flange size (internal diameter)	mm	200

### ENGINE OPERATING DATA

Gross Engine Power*	kWm	890
Brake mean effective pressure	MPa	2.0
Regenerative absorption	kW	78
Noise Level at 1 m (excluding: intake, exhaust & fan)	dB(A)	105
Fuel consumption load 100%*	L/hr.	228
Fuel consumption load 75%*	L/hr.	171
Combustion air inlet flow rate	m <sup>3</sup> /min	78
Exhaust gas flow rate	m <sup>3</sup> /min	206
Exhaust gas temperature	°C	515
Heat rejection to coolant	kW	568
Heat rejection to exhaust	kW	707
Heat rejection to atmosphere from engine	kW	68
Heat rejection to atmosphere from generator	kW	44

\* WITH FAN basis.

Deration for engine

Altitude: 2.5% per 300m (1000ft) above 1,500m

Temperature: 2% per 5 (9°F) above 40°C

**2 YEARS  
WARRANTY**

