

Generator set
Containerized type
HVM1500S

SPECIFICATIONS





1 Standards & Conditions

Design Standards

The designs and the productions are in conformity with:

- Conformite Europeenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009

Environmental Operating Conditions

- Installation place: Outdoors or indoors (well ventilated).
- Ambient temperature: -25℃ to 50℃. The coolant heater is needed when the temperature is below 5℃
- · Humidity: Less than 80%.
- Altitude: Below one thousand (1000) meters.

Factory Inspection

- Inspection items.
- Protection devices working test.
- · Starting ability in normal temperature.
- 50% rated power load moment capability.
- Voltage deviation and speed variation: 0%, 25%, 50%, 75%, 100%, 110% Load.

Painting Process

- Painting process specifications and colors are based on the manufacturer's standard.
- The customer could also choose the color which the manufacturer offers.

2 General Features

- MITSUBISHI engine S12R-PTAA2-C
- Close coupled to Leroy Somer alternator LSA52.2XL65
- Microprocessor control module PLC-500
- HV Switchgear Panel: ABB 630A
- PT Cabinet
- DC Power Cabinet
- · Rotate speed governor: Electrical governor
- Excitation System: AREP
- A.V.R. Model: R448
- Key switch
- · Emergency stop switch

- 4x12V/150AH sealed for life maintenance free battery
- · Lockable battery isolator switch
- Powder coated canopy
- 50°C radiator
- · Fire extinguisher
- Heat exchanger
- Coolant heater
- Oil pump on the engine
- Steel base frame with forkslots
- Vibration isolators between the engine/alternator and base frame
- · Dry type air filter
- Fuel tank for 6 hours running
- · Drain points for fuel tank
- Fuel inlet pump and it's control box for the fuel tank
- · Added fuel-water separator for fuel tank
- · Operation Manual / Specifications

3 Equipment Specification

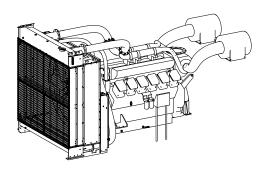
General technical data



Model	HVM1500S
Structure type	C
Fuel tank	1450L
Dry weight	21150kg
Noise level @7m	83dAB
Dimensions L×W×H	12192×2438×3153mm
Standby Power	1650kVA/1320kW
Prime Power	1500kVA/1200kW
Voltage/Ampere	6300V/137A

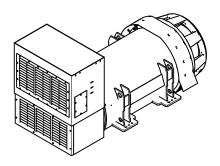
Genset Fuel Consumption						
Frequency/Load	25%	50%	75%	100%	110%	
50Hz (L/h)	83	160	238	317	350	

Diesel Engine



Engine Manufacturer/Brand	MITSUBISHI
Engine Model	S12R-PTAA2-C
Dimensions L×W×H	3750×1985×2270mm
Dry Weigh (approx.)	5300kg
Number of Cylinders	12
Bore	170mm
Stroke	180mm
Displacement	49L
Type of injection	Direct injection
Intake System	Turbocharged
Intake Resistance	≤6.2kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	24V
Type of Fuel	No. 2 diesel or ASTM D2
Type of Oil	15W40 to API CG4
Oil Capacity	180L
Type of Coolant	Glycol mixture
Coolant Capacity	202L
Back Pressure	≤6.8kPa
Standby Power	1404kW
Prime Power	1277kW

HV Alternator



Alternator Manufacturer/Brand	Leroy Somer
Alternator Model	LSA52.2XL65
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% copper
Insulation Class	H
Winding Pitch	2/3
Terminals	6
Drip Proof	IP23
Altitude	≤1000m
Overspeed	2250rpm
Air Flow	2.5m³/s
Voltage Regulation	±0.5%
Total harmonic TGH / THC	< 3.5%
Telephone Interference	FHT<2%;TIF<50

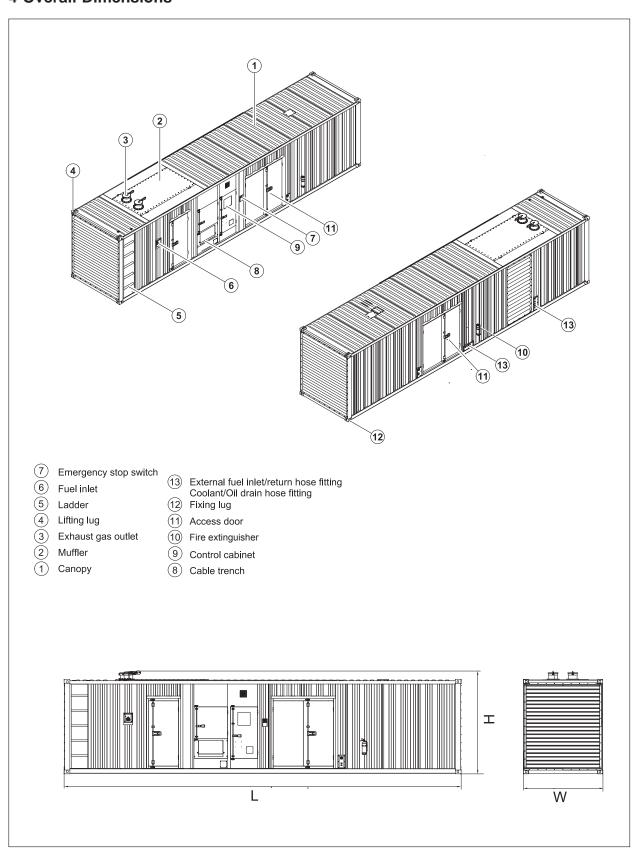
PLC-500 Control System



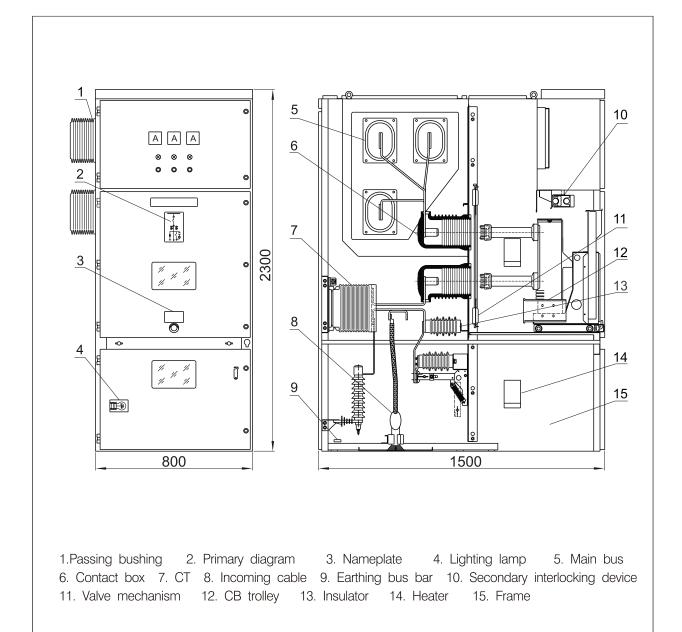
PLC-500 is a microprocessor based control unit containing all necessary functions for protection of the genset and the breaker control. Furthermore, it contains all necessary three-phase measuring circuits and presents all values and alarms on the LCD display. The module has the function of load sharing which enables the module to share the active load (kW) equally when operating in parallel with other gensets. The load sharing is performed so each genset takes a portion of the load that is calculated in percent according to the nominal power.

- · Microprocessor control, with high stability and credibility
- Monitoring and measuring operational parameters of the genset
- Indicating operation status, fault conditions, all parameters and alarms
- Multiple protections; multiple parameters display, like pressure, temp. etc.
- Manual, automatic and remote work mode selectable
- RS232 & RS485 can be used at the same time
- Real time clock for time and date display, overall runtime display, 250 log entries

4 Overall Dimensions



5 Switchgear Panel



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