

## MITSUBISHI

### Technical Specifications



#### ENGINE

- MITSUBISHI series heavy duty diesel engine
- 4 cycle, water cooled, turbocharged & air TO AIR cooled /turbocharged & air to water COOLED
- Direct injection
- Electronic governor system
- 24 volt self-starter and charger alternator
- Changeable air, fuel and oil filter
- Tropical type radiator
- Flexible fuel pipe
- Oil discharge valve and extention pipe
- Industrial type silencer, exhaust spiral or compensator
- Maintenance free battery
- Engine block water heater (in automatic models)
- Diesel gen-set maintenance and operating instructions and electrical circuit diagram

#### QUALITY STANDARD

Our generators are manufactured in compliance with VDE 0530, BSE 4999 BS5000, IEC 34, TS ISO 8528, TS EN ISO 3744, TS EN ISO 3746, TS EN 60034-1, TS EN 60204-1, TS EN 60335-1, TS EN 61439-1,

EN 61000, TS EN ISO12100 standards.

We have ISO 9001:2008, ISO 14001:2004, OHSAS 18001:2007 and ISO10002:2006 management system certificates from Kiwa & MEYER, an accredited independent quality organization.

Our generators up to 400 kw are manufactured in compliance with 2000/14/EC European noise emission directive and certified from Ente Certificazione Macchine.

We also have TS ISO 8528-4, TS ISO 8528-5, TS EN 13501-1+A1:2013 flame retardancy and TS EN ISO 9227 certificates against anti-corrosion together with CE Declaration.

#### ALTERNATOR

- Brushless, single bearing, flexible disc 4 poles alternator for harmonic failure
- H type isolation class
- IP 21-23 protection class
- Self exciter
- Electronic automatic voltage regulator
- Stator 2/3 step for harmonic failure
- The alternator windings are protected by insulating varnish against oil and acid.

#### EXTRA EQUIPMENTS

- Charge ammeter
- Moulded case circuit braker (in automatic models)
- Hospital/Critical type silencer
- Sound-proof canopy
- Mobile - trailer
- Synchronization control panel for 2-16 gensets
- 3 pole/4 pole automatic transfer panel (A.T.S.)
- Fuel and oil heater
- Alternator heater
- Automatic fuel filling system
- Fuel-water seperator filter
- PMG warning system

#### CANOPY

- Modular type sound-proof canopy
- Canopy installation executed with screw and nut, without welding process
- Epoxy and polyester powder painted canopy
- Canopy designed for easy maintenance
- Lockable doors on both sides of canopy
- Emergency stop button
- Transparent panel inspection window

#### AUTOMATIC CONTROL PANEL

- LCD display screen
- Battery charger
- Hardware and materials needed
- USB port & RS-485 output

#### GEN-SET SAFETY PROTECTION & ALARMS

- High water temperature
- Low oil pressure
- High & low engine speed
- Low radiator water level
- Over current load
- High & low genset voltage
- Start/stop failure



Easy maintenance canopy design



Refilling from the outside of the canopy



Canopy made of galvanized steel



Warning system for decreasing fuel with electronic fuel level sender

# MITSUBISHI Series

## Diesel Generator Sets

### MITSUBISHI Series Diesel Generator Sets 1385-1656 kVA

MODEL				E MH ST 1385	E MH ST 1500	E MH ST 1656	
GROUP	GEN-SET POWER	STAND BY	kVA	1350	1500	1650	
			kW	1080	1200	1320	
		PRIME	kVA	1260	1350	1500	
			kW	1008	1080	1200	
	CANOPY DIMENSION (W x L x H) mm				3565 x 7000 x 2440	3565 x 7000 x 2440	3820 x 8000 x 2440
	CANOPY WEIGHT kg				17539	17594	18779
	OPEN DIMENSION (W x L x H) mm				3260 x 4420 x 2020	3260 x 4420 x 2020	3570 x 4900 x 2240
	OPEN WEIGHT				11939	11994	12379
ENGINE	BRAND			MITSUBISHI	MITSUBISHI	MITSUBISHI	
	TYPE			S12R-PTA	S12R-PTA2	S12R-PTAA2	
	POWER	STAND BY	kW	1190	1285	1404	
			PRIME	kW	1080	1165	1277
	SPEED (rpm)			1500	1500	1500	
	CYCLE			4	4	4	
	DISPLACEMENT (lt)			49,03	49,03	49,03	
	NUMBER OF CYLINDERS			12 V	12 V	12 V	
	BORE x STROKE (mm x mm)			170 X 180	170 X 180	170 X 180	
	COMPRESSION RATIO			14,0 : 1	13,5 : 1	13,5 : 1	
	GOVERNOR TYPE			ELECTRONIC	ELECTRONIC	ELECTRONIC	
	INDUCTION			TURBOCHARGED - AIR TO WATER COOLED / AFTER COOLER	TURBOCHARGED - AIR TO WATER COOLED / AFTER COOLER	TURBOCHARGED - AIR TO AIR COOLED / INTER COOLER	
	COMBUSTION SYSTEM			DIRECT	DIRECT	DIRECT	
	COOLING SYSTEM			WATER	WATER	WATER	
	FUEL CONSUMPTION lt / h	%100 PRIME POWER		261,31	280,03	308,97	
		%75 PRIME POWER		201,75	211,41	231,73	
		%50 PRIME POWER		146,03	150,15	161,56	
TOTAL LUBRICATION SYSTEM CAPACITY (lt)			180	180	180		
TOTAL COOLANT CAPACITY (lt)			335	305	368		
FUEL TANK CAPACITY (lt)			N/A	N/A	N/A		

Emsa reserves the right to make changes in model, technical specifications, color, equipment & accessories without prior notice.