# **APD2750M**





2750 kVA / 2200 kW POWERED by MITSUBISHI

# DIESEL GENERATING SET 400/230 V - 50 Hz - 3 phase

MODEL			APD2750M
Power Pf. 0.8	Standby	kVA	2750
		kW	2200
	Prime	kVA	2500
		kW	2000

Standby: Continuous running at variable load for duration of an emergency. No overload is permitted on these ratings. In accordance wth ISO 3046. Prime: Prime limited running time (500hr/yr or lower) application only. Cannot be used for unlimited running time.

- $\checkmark$  High quality, reliable and complete power unit
- √ Compact design
- √ Easy start and maintenance possibility
- ✓ Every generating set is subject to a comprehensive test program which includes full load testing, checking and provision of all control and safety shut down functions testing
- ✓ Fully engineered with a wide range of options and accessories: Canopy, sound proof canopy and on-road trailer











# ENGINE

MITSUBISHI						
Model		S16R2-PTAW2-E				
Engine Power Output	kWm	2430				
at rated rpm	HP	3257				
Aspiration and Cooling		Turbocharged & Aircooler(Fresh Water)				
Total Displacement	Litre	79.90				
No. of Cylinders and Build		16V				
Engine Speed	Rpm	1500				
Bore and Stroke	mmxmm	170x220				
Compression Ratio		14.0:1				
Governor		Electronic				
Fuel Consumption at full load	L/hr	528				
Fuel Tank Capacity	Litre	N/A				
Oil Capacity	Litre	290				
Coolant Capacity	Litre	740				
Radiator Cooling Air	m³/min	3300				
Air Intake – Engine	m³/min	212				
Exhaust Gas Flow	m³/min	562				

- ✓ Heavy duty Mitsubishi diesel engine
- ✓ Four stroke, water cooled, turbocharged & aircooler
- ✓ Direct injection fuel system
- ✓ Electronic Governor system
- ✓ 12/24 V D.C. starter and charge alternator
- ✓ Replaceable fuel filter, oil filter and dry element air filter
- Cooling radiator and fan
- Starter battery (with lead acid) including Rack and Cables
- Flexible fuel connection hoses and manual oil sump drain valve
- Industrial capacity exhaust silencer and steel bellows
- ✓ Jacket water heater(at automatic models)
  ✓ Operation manuals and circuit diagram documents

# **ALTERNATOR**

Design	Brushless double bearing, revolving field
Stator	2/3 pitch
Rotor	double bearing, flexible coupling
Insulation System	Class H
Standard Temperature Rise	125 - 163°C Continuous
Exciter Type	Self Excited
Phase Rotation	A (U), B (V), C (W)
Alternator Cooling	Direct drive centrifugal blower fan
AC Waveform Total Harmonic Distortion	No load < 1.5%. Non distorting balanced linear load < 5%
Telephone Influence Factor (TIF)	<50 per NEMA MG1-22.43
Telephone Harmonic Factor (THF)	<2%

- ✓ Brushless, double bearing system, flexible coupling , 4 poles
- ✓ Insulation class H
- ✓ Standard degree of protection IP23
- ✓ Self-exciting and self-regulating

- ✓ Impregnation with tropicalised epoxy varnish
- Solid state Automatic Voltage Regulator
- ✓ Stator winding with 2/3 pitch for improved harmonics

### **CONTROL SYSTEM**

Control supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

#### 1. Auto Mains Failure Control Panel

Panel equipments:

- ✓ Control with AMF module
- √ Static battery charger
- ✓ Emergency stop push button

#### a) Generating set control module DSE 7320 features:

- $\checkmark \text{The module}$  is used to monitor a mains supply and starts and stops a standby generating set
- √ Micro-processor based design
- ✓ Automatic control of mains and generator contactors
- √Monitors engine performance and AC power output
- ✓ LED alarm indication
- ✓ Front panel configuration of timers and alarm trip points
- ✓ Easy push button control

STOP/RESET - MANUAL -TEST- AUTO - MUTE ALARM - START

#### b) Metering via LED display:

- ✓ Generator Volts (L-L / L-N)
- √ Engine oil pressure (PSI-Bar)
- ✓ Generator Ampere (L1,L2,L3)
- ✓ Engine temperature (° C&° F)
- ✓ Generator Frequency (Hz)
- ✓ Plant battery volts
- ✓ Engine hours run ✓ Mains Volts (Ph-Ph/Ph-N)
- ✓ Generator kVA, kWh
- ✓ Generator kW as % of rated kW setting
- ✓ Generator Cos (σ)



DSE 7320

#### c) Alarms:

- ✓ Over and Under Speed
- ✓ Low and High Battery Volt.
- √ Start and Stop Failure
- √ Charge fail
- ✓ Over Current
- ✓ Under / Over Generator Voltage
- ✓ Low Oil Pressure
- √ Emergency stop
- √ High engine temperature
- √ kW overload
- ✓ Unbalanced load
- ✓ Independent earth fault trip

#### d) LED indications

Four configurable LED's like:

- √ Mains available
- √ Generator available
- ✓ Mains on load
- √ Generator on load

## **OPTIONAL EQUIPMENTS**

### **Diesel Engine**

✓ Oil heater

#### **Alternator**

- √ 3/4 Pole Output Circuit Breaker
- ✓ Anti-condensation Heater

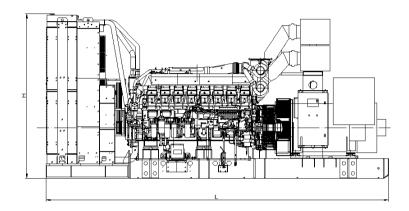
#### **Pane**

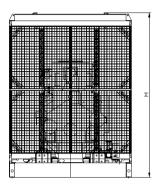
- √ Charge ammeter
- ✓ Transfer Switch 3 Pole
- ✓ Transfer Switch 4 Pole
- ✓ Earth Fault ,single set

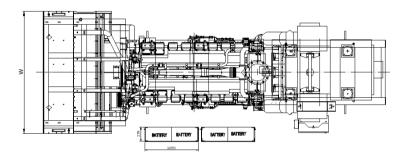
#### **Accessories**

- ✓ Bulk fuel tank
- ✓ Automatic filling system
- ✓ Fuel-water separator filter
- ✓ Low fuel level alarm
- √ Residential silencer
- ✓ Enclosure or sound proof canopy
- ✓ Trailer
- ✓ Manual oil drain pump
- ✓ Tool kit for maintenance

# **CHASSIS**







- ✓ The complete gen-set is mounted as whole on a heavy-duty fabricated, steel base frame
- ✓ Anti-vibration pads are fixed under the base frame
- ✓ Base frame design incorporates an integral fuel tank (Up to 1000 kVA)
- ✓ The generating set can be lifted or carefully pushed / pulled by the base frame
- ✓ Dial type fuel gauge and drain plug on the fuel tank
- ✓ Forklift pockets within base frame (up to 500kVA)

## **DIMENSIONS**

OPEN TYPE					
DIMENSIONS (LxWxH)	mm	6840x2440x3283			
DRY WEIGHT	kg	18900			