Model:M300D5

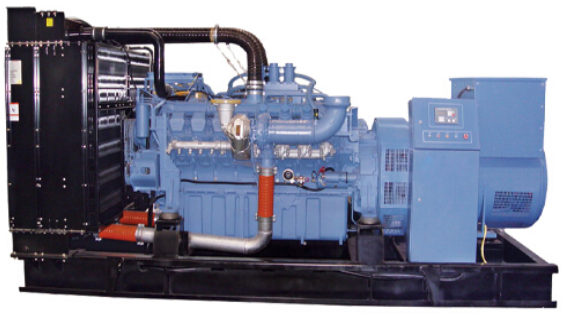
Powered by MTU

Output Rating

MODEL		Power rating		Voltage available
		PRIME(1)	STANDBY(2)	
M300D5	400V/50HZ	220KW	240KW	380/220V 400/230V 415/240V
	PF:0.8	275KVA	300KVA	

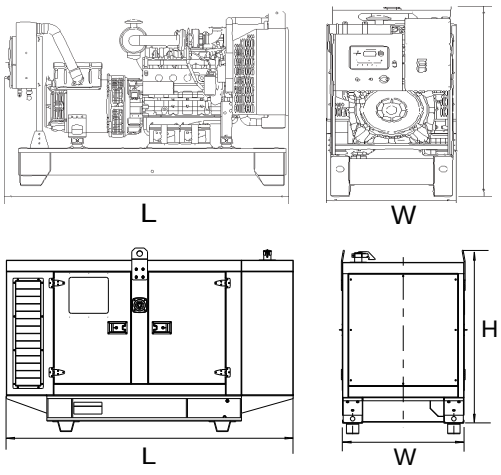
General Information

Model		M300D5
Engine		6R1600G10F
Speed control type		ADEC
Phase		3
Control System		Digital
System voltage		24V
Frequency		50HZ
Engine Speed(RPM)		1500
Fuel Consumption (L/h)	Standby power(2)	N/A
	Prime Power(1)	59.35
	75% prime power	46.69
	50% prime power	34.17



Dimension and Weight

Dimension	Open	Silent
Length (L)	3000mm	3980mm
Width (W)	1335mm	1420mm
Height (H)	1880mm	2050mm
Net Weight	2795KG	N/A



AGG POWER gensets are compliant with EC mark which include the following directives:

* 2006/42/EC Machinery safety.
* 2006/95/EC Low voltage
* EN 60204-1: 2006+A1:2009, EN ISO 12100:2010, EN ISO 13849-1: 2008, EN 12601: 2010

(1)Prime Power(PRP):

According to ISO 8528-1:2005, Prime power is the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operation conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output (Ppp) over 24h of operation shall not exceed 70% of the PRP.

(2) Standby Power (ESP):

According to ISO 8528-1:2005, standby power is the maximum power available during a variable electrical power sequence, under the stated operation conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200h of operation per year with the maintenance intervals and procedures being caried out as prescribed by the manufacturers. The permissible average power output over 24h of operation shall not exceed 70% of the ESP.

Engine Specification

BASIC TECHNICAL DATA

Operating method----------Four stroke Diesel
Combustion system----------Direction Injection
Bore/Stroke----------122/150mm
Displacement,Total----------10.5Liter
Number of cylinders----------4
Compression ratio----------17.5:1
Flywheel housing flange----------SAE 01
Flywhell interface----------14"
Number of intercooler----------N/A
Number of Turbocharger----------2

STARTER SYSTEM

Starter,rated voltage----------24V
Starter,rated requirement max----------800A
Starter,power requirement at firing speed----------250A

COOLANT SYSTEM

Coolant temperature(at engine outlet to cooking equipment)-------95 °C
Coolant temperature after engine,alarm----------105°C
Coolant temperature after engine,shutdown----------109°C
Coolant antifreeze content,max.permissible----------50%
Cooling equipment:coolant flow rate----------23.3**m3/h**
Coolant pump:inlet pressure,min----------1.4bar
Coolant pump:inlet pressure,max.----------3.50bar
Pressure loss in off-engine cooling system,max.permissible-------0.7bar
Cooling equipment:height above engine max.permissible----------15.0m
Cooling equipment:design pressure----------N/A

Recommended coolant:
Recommended coolant: 50% anti freeze / 50% water. For complete details of recommended coolant specifications, refer to the Operation and Maintenance Manual for this engine model.

COMBUSTION AIR

Combustion air volume flow----------0.45**m³/sec**
Intake air depression----------230mbar

FUEL SYSTEM

Fuel supply flow,max.----------5.7l/min
Fuel temperature,max.----------55 °C
Fuel pressure at supply connection on engine,max.admissibl---+2.0 bar
Fuel pressure at supply connection on engine,min.admissible -0.1 bar

FUEL SPECIFICATION

USA Fed Off Highway - EPA2D 89.330-96
Europe Off Highway - CEC RF-06-99
Note: For further information on fuel specifications and restrictions, refer to the OMM Fuels section for this engine model.

FUEL CONSUMPTION

Power rating %			
L/h			
110	100	75	50
N/A	59.35	46.69	34.17

EXHAUST SYSTEM

Exhaust volume flow----------0.93**m³/sec**
Exhaust temperature after turbocharger----------490 °C
Exhause backpressure limit value----------15mbar

HEAT DISSIPATION

Engine coolant dissipation 100% load----------210kw
Charge-air heat dissipation 100% load----------47kw
Radiation and convection heat,engine----------21kw

Alternator

Alternator		
Poles	Num	4
Winding Connections (standard)		Star-serie
Insulation	Class	H class
Enclosure (according IEC-34-5)		IP23
Exciter System		Brushless
Voltage Regulator		A.V.R. (Electronic)
Bearing		Single bearing
Coupling		Flexible disc
Coating type		Standard (Vacuum impregnation)

Options

Engine	Alternator	Generator Sets	Fuel System	Canopy
●Water Jacket Preheater ●Oil Preheater	●Winding Temperature measuring Instrument ●Alternator Preheater ●PMG ●Anti-damp and anti-corrosion treatment ●Anti-condensation heater	●Tools with the machine	● Low fuel level alarm ●Automatic fuel feeding system ●Fuel T-valves	●Rental Type Canopy ●Trailer
Lubricating System	**Exhaust System**	**Cooling System**	**Control Panel**	**Voltages**
●Oil with the machine	●Protection board from hotness	● Front heat protection ● Coolant (-30°C)	●Remote control panel ● ATS ● Remote controller ● Synchronizing controller	● 415/240V ● 380/220V ● 220/127V ● 220/127V ● 200-115V

Control Panel

Product description

- Single gen-set controller for Stand-by and Prime-power applications
- Direct communication with EFI engines
- Total remote monitoring and control

Key features

- Easy to install, configure and use
- Wide range of communication capabilities including:
  - connection via RS232, RS485, CAN and on board USB
  - internet access using Ethernet or GPRS
  - support for Modbus and SNMP protocols
- Cloud-based monitoring and control
- Active SMS and emails in different languages
- 2x 5 A binary outputs for cranking and fuel solenoid
- Option for up to 16 additional binary inputs/outputs
- Flexible event based history with up to 350 events
- Load shedding, dummy load capability
- Automatic temperature based cooling/heating
- Comprehensive gen-set protections
- Multipurpose flexible timers
- True RMS measurement

Available extension modules

Product	Description	Order code
CM-Ethernet	Ethernet interface	CM2ETHERXBX
CM-GPRS	GSM modem / wireless internet	CM2GPRSXXBX
CM-RS232-485	Dual port interface	CM223248XBX
EM-BIO8-EFCP	8 additional binary inputs/outputs	EM2BIO8EXBX

Functions and protections

Description	ANSI code	Descritption	ANSI code
Over voltage	59	**Load shedding**	32P
Under voltage	27	**Overload**	32
Voltage asymmetry and Phase rotation**	47	**Power factor**	55
Over frequency	81H	**Temperature**	49T
Under frequency	81L	**Gas (fuel) level**	71
Over current*	50 + 51	**Earth fault current**	50N + 64
Current unbalance	46		

* Short current only

** Fixed setting