

Mahindra&Mahindra

Model : 2806D-E18TAG1A

Frequency: 50 Hz

Diesel Generator Set

625 KVA

Model	Engine	Alternator	Voltage	PH	Frequency	Prime Rating		Power factor
						KVA/kW	Amps	
625KVA	2806D-E18 TAG1A	LSA49.1 S4	415V	3	50 Hz	625 /500	868	0.8
Rating		Prime Power – KW(KVA)						
		500 (625)						
Load	50%		75%		100%			
Liters/ hr	70		102		130			
g/Kwh	219		213		204			

Engine	Prime Power Rating
Engine Manufacturer	Perkins UK
Engine Model	2806D-E18TAG1A
Configuration	6, Vertical In-line
Aspiration	Turbo Charged and After Cooled
Gross Engine Power output, kWm / BHP	540 / 724
Net Engine power output, kWm / BHP	522 / 700
BMEP @ rated load, kPa	2385
Displacement, L	18.1
Bore , mm	145
Stoke, mm	183
Rated Speed, rpm	1500
Piston Speed, m/s	9.0
Compression Ratio	18: 1
Lub oil capacity Max, L	71
Lub oil capacity Min, L	56
Governor Type	Electronics
Starting Voltage, V- DC	24

Fuel System

Recommended fuel to conform to	BS2869 1998 Class A1, A2
Type of injection system	Direct injection
Fuel injection pump	Combined unit injector
Fuel injector	Combined unit injector
Delivery/hour at 1500 rev/min, L	370
Fuel lift pump pressure, kPa	621
Fuel lift pump maximum suction head, m	3.0
Fuel filter spacing, microns	10

Air

Maximum air intake restriction of engine clean filter	3.7 KPa
Maximum air intake restriction of engine, dirty filter	6.2 KPa
Air filter type	PAPER ELEMENT 18" DIAMETER
Combustion air flow, m ³ /min	40.2

Exhaust

Maximum back pressure for total system	7 KPa
Exhaust gas temperature, after turbo, °C	518
Exhaust gas flow maximum after turbo, m ³ /min	108.6

Standard set –mounted radiator cooling

Ambient design, °C	50
Fan Load, KW	9
Coolant Capacity with radiator, L	56
Engine Coolant Flow, L/s	5.3
Cooling system air flow, m ³ /sec	374

Weights*

	open DG SET
Unit dry weight kgs	5797
Unit wet weight kgs	5936

- Weight represent a set with standard feature

Dimension	Length	Width	Height
Standard open set dimension	4000	1800	2400

Test conditions

Air temperature	25 °C
Barometric pressure	100 kPa
Relative humidity	30%
Air inlet restriction at maximum power (nominal)	3.7 kPa
Exhaust back pressure (nominal)	7.0 kPa

Alternator

Specification	625kVA - 3ph
Model	LSA49.1 –S4
Rated Voltage	415V
Type	4 pole
Exciter type	Brushless
Insulation	Class - H
Temperature rise	125 °C
Enclosure Protection	IP23
Bearing	Single
Voltage regulation	± 0.5%
Efficiency	94.6

Prime power is available for an unlimited number of annual operating hours in variable load applications, in accordance with IS 8528-1.

A 10% overload capability is available for a period of 1 hour within 12-hour period of operation, in accordance with ISO3046-1.

Standby Power Rating is applicable for supplying emergency power for the duration of utility power interruption. No Overload, utility parallel or negotiated outage operation capability is available at this rating.

In installations served by unreliable utility sources (where outage last longer or occur more frequently), where operation is likely to exceed 2000 hours per year, the prime power should be applied. All ratings are based on the following reference conditions: Ambient temperature -27°C (Altitude above sea Level-150metres) Relative humidity-60%

Power rating as per Standard reference condition as per BS 5514/ ISO 3046 / ISO 8528

Reference condition 27 °C ambient Temp, 100KPA (750mm of Hg) Atmospheric Condition and 60% humidity – as per IS10002, ISO 3046 Fuel consumption of DG set is considering specific gravity of fuel as 0.85 at NTP condition, Tolerance will be +5%

