hyundai DP180LB



රා රා 18.3L / 10 CYLINDERS

DESCRIPTION

- Easy installation, high performance, fuel efficiency and durability, which engine users always look for, are in DP180 L-Series engine.
- With Hyundai's engineering expertise, DP180 L-Series engines obtain the maximum power output and fuel efficiency while maintaining mechanical type that helps customers manage an engine more easily and conveniently.
- The most appealing part is simple design minimizing an impact of installation and maintenance.

FEATURES & BENEFITS

[High Fuel Efficiency]

- Improved fuel efficiency
- Fuel consumption reduction thanks to stable combustion

[High Durability]

- New and strengthened key parts
- Improved durability with reinforced exhaust manifold
- High performance radiator

[Easy Installation]

- Redesigned engine mounting bracket
- Repositioned turbochargers
- Easy installation in cold region

OUTPUT

[Easy Maintenance]

- Mechanical type engine
- Commonality of key parts

[Safety Design]

- New belt cover and heat screen for safety and beautification
- The fuel strainer is repositioned to secure sufficient space with the turbocharger so as to prevent fire caused by overheat of an engine

	1,500 RPM (50Hz)								1,800 RPM (60Hz)								
Standby			Prime		Continuous		Standby		Prime		Continuous						
kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA
612	563	704	556	510	638	389	352	440	661	602	753	601	545	681	421	375	469

• Generator efficiency (typical) : 94.5%

 kWm= kilo Watt mechanical, Gross power; kWe= kilo Watt electric = (kWm-Fan loss) x Generator eff. kVA= kilo Volt Ampere Calculations based on a 0.8 power factor = kWe/0.8





DP180LB

GENERAL DATA

Туре	Diesel, Water cooled, Turbo charged & Intercooled			
Bore	128mm			
Stroke	142mm			
Displacement liter	18.3			
Cylinders and Arrangement	Cast iron, 10 Cylinder, Vee-Type			
Battery charging alternator	27.5V x 45A alternator			
Starting voltage	24V			
Fuel system	Mechanical Injection Pump			
Fuel filter	Full flow, Cartridge type with water drain valve.			
Lube oil filter type (s)	Full flow, Cartridge type			
Lube oil capacity (I)	Max. 34 liters , Min. 23 liters			
Flywheel dimensions	SAE NO. 1M / Clutch NO. 14 M			

COOLING SYSTEM							
Cooling method		Jacket Water and Charge Air Cooled					
Cooling ratio		50% ethylene glycol; 50% water					
Water	with radiator	91liters					
capacity (L)	Without radiator	21liters					
Fan power (kW)		40kW(50Hz), 55kW(60Hz)					
Cooling system air flow (m/min)		11.67(50Hz), 14.17(60Hz)					

FUEL CONSUMPTION

1,500 RPM (50Hz)

%	kWm	BHP	Liters/hr	USgal/hr					
Standby Power									
100	612.0	820.7	149.5	39.49					
Prime Power									
100	556.0	745.6	136.4	36.03					
75	417.0	559.2	103.8	27.42					
50	278.0	372.8	71.2	18.81					
25	139.0	186.4	38.6	10.20					
Continuous Power									
100	389.0								

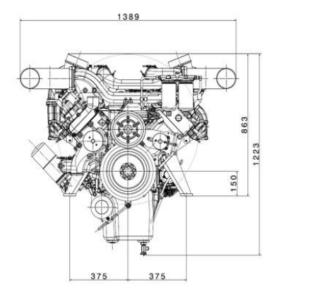
1,800 RPM (60Hz)

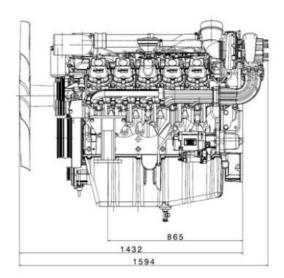
%	kWm	BHP	Liters/hr	USgal/hr					
Standby Power									
100	661.0	886.4	165.3	43.67					
Prime Power									
100	601.0	805.9	150.7	39.81					
75	450.8	604.5	114.2	30.17					
50	300.5	403.0	77.7	20.53					
25	150.3	201.5	41.2	10.88					
Continuous Power									
100	421.0								



DP180LB

DIMENSIONS





Weights and Dimensions								
Item	Length (mm)	Length (mm) Width (mm)		Dry Weight (kg)				
Engine	1,594	1,389	1,223	1,250				

POWER RATING GUIDE

The power ratings of Emergency Standby and Prime are in accordance with ISO 8528. Fuel Stop power in accordance with ISO 3046. Electric power (kWe) must be considered cooling fan loss, alternator efficiency, altitude derating and ambient temperature.

ESP(STANDBY POWER) is applicable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. A standby rated engine should be sized for a maximum of an 70% average load factor and 200 hours of operation per year. This includes less than 25 hours per year at the Standby Power rating.

PRP(PRIME POWER) is available for an unlimited number of hours per year in variable load application. Variable load should not exceed a 70% average of the Prime Power rating during any operating period of 24 hours. The Total operating time at 100% Prime Power shall not exceed 500 hours per year. A 10% overload capability is available for a period of 1 hour within a 12 hours period of operation. Total operating time at the 10% overload power shall not exceed 25 hours per year.

COP(CONTINUOUS POWER) is defined as being the maximum power which the generating set is capable of delivering continuously whilst supplying a constant electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer.

 $\ensuremath{\mathbbmm}$ Specifications are subject to change without prior notice.

