# HYUNDAI DP086CE



**CYLINDERS** 



## DESCRIPTION

- HD Hyundai Infracore introduced new generator electronic engines DP086C- Series.
- When compared to other engines of equivalent capacity, it displays a higher output, better fuel efficiency, higher safety, and easier maintenance.
- Achieving precise fuel delivery with common rail system and electronic control unit(ECU), it allows optimal injection timing and pressure based on engine's current operating conditions.



### **FEATURES & BENEFITS**

#### [High Performance & Durability]

- G3 Class(ISO 8528-5)
- HVO/GTL : Usable up to 100%
- Robust main structure parts
- Oil maintenance interval: 1,000hrs without replenishment
- Operates without power derating up to an altitude of 1,000 meters
- Longer warranty period through strict verification

#### [Convenience & Safety]

- 50/60 Hz switchable -
- Maintenance free through auto tensioning belt drive system
- Cold Startability@-25℃ without supplementary device
- Radiator to cover a wide range of usage condition
- Safety guard for hazard parts
- Meet REACH & RoHS regulations -

### OUTPUT

1,500 RPM (50Hz)							1,800 RPM (60Hz)										
Standby		у	Prime/DCP		Continuous		Standby		Prime/DCP		Continuous						
kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA
294	269	336	267	244	305	187	169	211	335	304	380	305	276	345	214	191	239

• Generator efficiency (typical) : 93.5%

• 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



# DP086CE

# GENERAL DATA

Diesel, Water cooled, Turbo charged & Intercooled			
110mm			
132mm			
7.5 liter			
Cast iron, 6 Cylinder, In-line			
24V x 45A			
24V			
Common rail, Direct injection controlled by ECU			
Full flow, Cartridge type			
Full flow, Cartridge type			
Max. 35 liters , Min. 18 liters			
SAE NO.1M / Clutch NO.14"			

COOLING SYSTEM						
Cooling method		Fresh water forced circulation				
Cooling ratio		50% ethylene glycol; 50% water				
Mator conscitu (I)	with radiator	42 liters				
Water capacity (L)	without radiator	18.0 liters				
Fan power (kW)		6.5 kW (1,500 rpm), 11.0 kW (1,800 rpm)				
Cooling system air flo	ow (mႆ/min)	270 m³/min (1,500 rpm), 330 m³/min (1,800 rpm)				

# FUEL CONSUMPTION

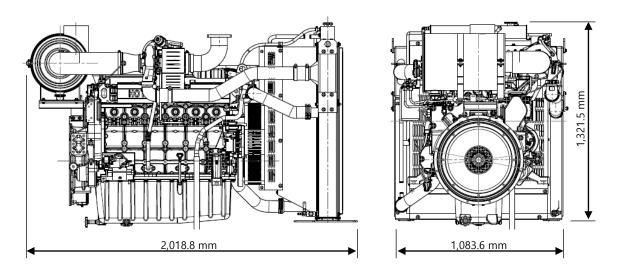
1,500 RPM (50Hz)							
%	kWm	Liters/hr					
Standby							
100	294.0	68.9					
Prime	Prime						
100	267.0	62.3					
75	200.3	45.7					
50	133.5	30.9					
25	66.8	16.6					
Continuous							
100	187.0	42.6					

1,800 RPM (60Hz)							
%	kWm	Liters/hr					
Standby							
100	335.0	80.7					
Prime	Prime						
100	305.0	73.1					
75	228.8	53.1					
50	152.5	36.1					
25	76.3	19.7					
Continuous							
100	214.0	49.6					



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# DIMENSIONS



Weights and Dimensions (G-Pack)							
Length (mm)	Width (mm)	Height (mm)	Dry Weight (kg)				
2,018.8	1,083.6	1,321.5	820				

# 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.

**DCP(DATA CENTRE POWER)** is available for variable or continuous electrical loads in a data centre application. Up to 100 percent load factor is permitted for unlimited time. DCP power definition relies on ISO 8528-1 2018 standard to be followed by generator set manufacturer, and will support Tier I to Tier IV classifications of data centres as per UPTIME institute guidelines. This definition is only back up a reliable utility. Continuous operation at load is available as after approval of Engine manufacturer (HDI).

% Specifications are subject to change without prior notice.

