# HYUNDAI DP222CA









## **Description**

- HD Hyundai Infracore, which has been engaged in engine production and development since 1958, introduces a new generator electronic engine DP222 C-Series.
- When compared to other engines of equivalent capacity, it displays a higher output, better fuel efficiency, higher safety, and easier maintenance and is expected to become the key product of HD Hyundai Infracore.



### **Features**

### [High Power & Economy]

- High performance & Low fuel/oil consumption
- 50/60 Hz switchable without Power De-rating
- G3 Class(ISO 8528-5)

#### [High Durability]

- · High strength design for main structure parts
- Higher warranty period through sufficient verification
  - 1000hrs /5years (ESP), Unlimited /1year (PRP)

### [Convenience & Safety]

- Oil maintenance interval: 500hrs without replenishment
- · Auto tensioning belt drive system
- Radiator to cover a wide range of usage condition
- Safety guard for hazard parts
- Meet REACH & RoHS regulations

#### **Power**

	50 Hz / 1500 rpm							60 Hz / 1800 rpm										
	Standby Power		wer	Prime Power		<b>Continuous Power</b>		Standby Power		Prime Power		Continuous Power						
	kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA	kWm	kWe	kVA
DP222CA	727	667	834	663	608	758	471	425	532	836	755	944	762	685	856	554	489	611

Generator efficiency (typical):

kWm= kiloWatt mechanical, net with fan\*; kWe= kiloWatt electrical = kWm x Generator eff.; kVA= kiloVoltAmpere calculations based on a 0.8 power factor = kWe/0.8

1kW= 1 hp x 1.36; 1hp= 1kW x 0.7355



<sup>\*</sup>Based upon technical data

# DP222CA

## Generator Diesel Engine



## **General Data**

Туре	Diesel, water cooled, Turbo charged & intercooled				
Bore	128mm				
Stroke	142mm				
Displacement liter	21.9				
Cylinders and Arrangement	Cast iron, 12 cylinder, Vee-Type				
Battery charging alternator	24V x 45A alternator				
Starting voltage	24V				
Fuel System	Common Rail Direct Injection Controlled by ECU				
Fuel Filter	Main(On Engine): Full flow, High efficiency dust in fuel filter, cartridge type Pre(Loosed Part): Full flow, cartridge type with water drain valve				
Lube oil filter type(s)	Full flow, cartridge type				
Lube oil capacity (I)	Max. 75 liters , Min. 23 liters				
Flywheel dimensions	Clutch No. 18 M				

## **Coolpac Data**

Cooling method		Jacket Water and Charge Air Cooled			
Cooling ratio		50% ethylene glycol;50% water			
Water capacity (I)	with radiator	66liters			
Water capacity (L)	without radiator	24liters			
Fan power (kWm)		21kW(50Hz), 37kW(60Hz)			
Cooling system air flow(m³/s	)	21.1(50Hz), 25.2(60Hz)			

## **Fuel Consumption**

## **Fuel Consumption 1500 (50Hz)**

%	kWm	ВНР	Liters/hr	USgal/hr					
Standby Power									
100	727.0	974.9	179.0	47.29					
Prime Power									
100	663.0	889.1	158.0	41.74					
75	479.3	666.8	118.0	31.17					
50	331.5	444.5	94.0	24.83					
25 165.8		222.3	50.0	13.21					
Continuous Power									
100 471		631.6	119.0	31.44					

## Fuel Consumption 1800 (60Hz)

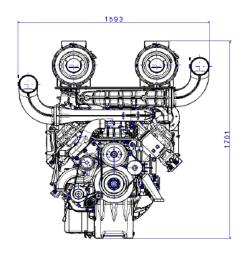
%	kWm	ВНР	Liters/hr	USgal/hr					
Standby Power									
100	836.0	1121.1	204.0	53.89					
Prime Power									
100	762.0	1021.8	180.0	47.55					
75	572.0	766.4	133.0	35.13					
50	381.0	510.9	107.0	28.27					
25 191.0		255.5	60.0	15.85					
Continuous Power									
100	544.0	729.5	135.0	35.66					

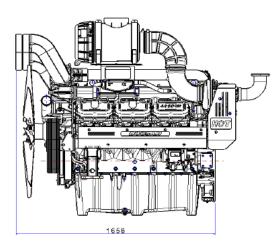


## Generator Diesel Engine



## **Dimensions**





#### **Weights and Dimensions**

Length mm	Width mm	Height mm	Weight (dry) kg		
1,658	1,593	1,701	1,676		

## **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 hour 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.

X Specifications are subject to change without prior notice.



