

HYUNDAI SP344CC



50/60Hz
MULTI
FREQUENCY
GENERATOR



GENERATOR



Fuel
Optimized

Description

- HD Hyundai Infracore's compact electronic engines SP344 series is one of the key products which is produced in HDI's China factory and has the same hardware of DM03 produced in Korea.



Features

[Performance & Fuel Economy Improvement]

- Bosch 1,800bar common rail system
- Ultra low fuel consumption
- Air management improved through optimization of valve timing & turbocharger matching

[Convenience & TCO]

- Maintenance free for valve clearance
- Auto tensioner belt drive system
- Oil level sensor option for 1,000hrs exchange interval

Power

| | 50 Hz / 1500 rpm | | | | | | | | | 60 Hz / 1800 rpm | | | | | | | | |
|---------|------------------|-----|-----|-------------|-----|-----|------------------|-----|-----|------------------|-----|-----|-------------|-----|-----|------------------|-----|-----|
| | Standby Power | | | Prime Power | | | Continuous Power | | | Standby Power | | | Prime Power | | | Continuous Power | | |
| | kWm | kWe | kVA | kWm | kWe | kVA | kWm | kWe | kVA | kWm | kWe | kVA | kWm | kWe | kVA | kWm | kWe | kVA |
| SP344CC | 81 | 71 | 88 | 73 | 63 | 79 | | | | 92 | 79 | 99 | 83 | 71 | 89 | | | |

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

*Based upon technical data



General Data

| | |
|-----------------------------|--|
| Type | Diesel, water cooled, Turbo charged & intercooled |
| Bore | 98mm |
| Stroke | 113mm |
| Displacement liter | 3.4 |
| Cylinders and Arrangement | Cast iron, 4 cylinder, In-line Type |
| Battery charging alternator | 12V x 110A |
| Starting voltage | 12V |
| Fuel System | Mechanical Injection Pump |
| Fuel Filter | Full flow, spin-on type (Pre-filter with water in fuel sensor) |
| Lube oil filter type(s) | Full flow, spin-on type |
| Lube oil capacity (l) | Max. 12.6 liters , Min. 6liters |
| Flywheel dimensions | SAE J620 11.5" |

Coolpac Data

| | | |
|--|--|------------|
| Cooling method | Coolant forced circulation by centrifugal pump on engine | |
| Cooling ratio | 50% ethylene glycol; 50% water | |
| Water capacity (L) | with radiator | 14.2liters |
| | without radiator | 4liters |
| Fan power (kWm) | 1.8kW(50Hz), 3.5kW(60Hz) | |
| Cooling system air flow(m ³ /s) | 1.98 | |

Fuel Consumption

Fuel Consumption 1500 (50Hz)

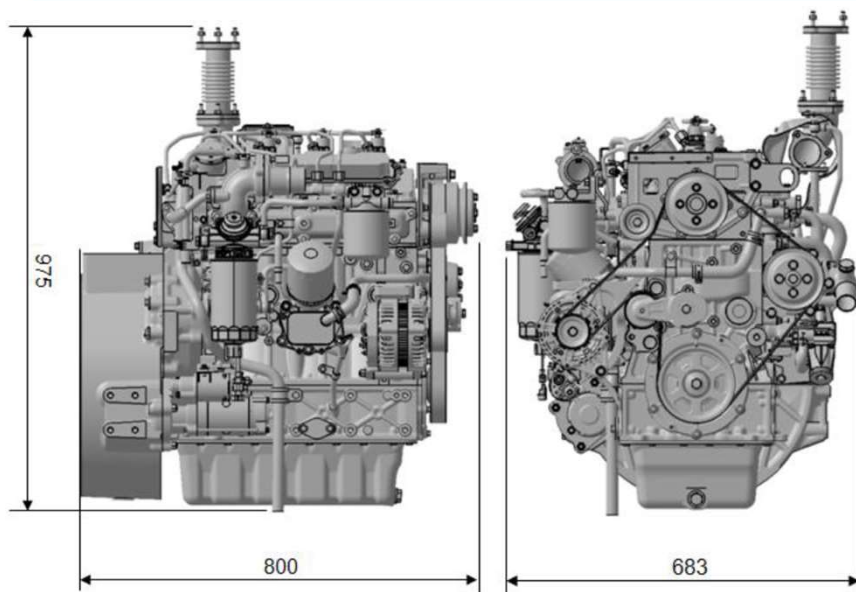
| % | kWm | BHP | Liters/hr | USgal/hr |
|-------------------------|------|-------|-----------|----------|
| Standby Power | | | | |
| 100 | 81.4 | 109.2 | 20.2 | 5.34 |
| Prime Power | | | | |
| 100 | 73.3 | 98.3 | 18.1 | 4.78 |
| 75 | 55.0 | 73.7 | 13.6 | 3.59 |
| 50 | 36.7 | 49.1 | 9.4 | 2.48 |
| 25 | 18.3 | 24.6 | 5.6 | 1.48 |
| Continuous Power | | | | |
| 100 | | | | |

Fuel Consumption 1800 (60Hz)

| % | kWm | BHP | Liters/hr | USgal/hr |
|-------------------------|------|-------|-----------|----------|
| Standby Power | | | | |
| 100 | 92.2 | 123.6 | 23.0 | 6.08 |
| Prime Power | | | | |
| 100 | 83.0 | 111.3 | 20.7 | 5.47 |
| 75 | 62.3 | 83.5 | 15.7 | 4.15 |
| 50 | 41.5 | 55.7 | 11.3 | 2.99 |
| 25 | 20.8 | 27.8 | 6.7 | 1.77 |
| Continuous Power | | | | |
| 100 | | | | |



Dimensions



Weights and Dimensions

| Length mm | Width mm | Height mm | Weight (dry) kg |
|-----------|----------|-----------|-----------------|
| 800 | 683 | 975 | 365 |

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.

※ Specifications are subject to change without prior notice.

