

# 6BTAA5.9-G6



> Specification sheet

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## Description

The B5.9 engine has established an unrivalled reputation for reliability, incorporating features designed to maximise engine integration within OEM installation. The 6BTAA5.9-G6 CoolPac utilises the latest Cummins manufacturing processes and Quality Standards.



This engine has been built to comply with CE certification.



This engine has been designed in facilities certified to ISO9001 and manufactured in facilities certified to ISO9001 or ISO 9002 or TS16949.

## Features

**Single Poly Vee belt drive** for fan, alternator and water pump, with self-tensioning idler for minimum maintenance.

**Rotary-type Bosch pump** operates at high injection pressures for cleaner combustion and lower emissions.

**Spin-on fuel filter** and full-flow lubricating oil filter.

**Top mounted Holset HX35 turbocharger** for increased power, fuel economy, and lower smoke and noise levels.

**CoolPac Integrated Design** - Products are supplied complete with cooling package and air cleaner kit for a complete power package. Each component has been specifically developed and rigorously tested for G-Drive products, ensuring high performance, durability and reliability.

**Service and Support** - G-Drive products are backed by an uncompromising level of technical support and after sales service delivered through a world class service network.

## 1500 rpm (50 Hz Ratings)

| Gross Engine Output |         |         | Typical Generator Set Output |     |             |     |
|---------------------|---------|---------|------------------------------|-----|-------------|-----|
| Standby             | Prime   | Base    | Standby (ESP)                |     | Prime (PRP) |     |
| kWm/BHP             |         |         | kWe                          | kVA | kWe         | kVA |
| 145/195             | 135/180 | 135/180 | 120                          | 150 | 109         | 136 |

## 1800 rpm (60 Hz Ratings)

| Gross Engine Output |         |         | Typical Generator Set Output |     |             |     |
|---------------------|---------|---------|------------------------------|-----|-------------|-----|
| Standby             | Prime   | Base    | Standby (ESP)                |     | Prime (PRP) |     |
| kWm/BHP             |         |         | kWe                          | kVA | kWe         | kVA |
| 160/215             | 150/205 | 145/195 | 135                          | 169 | 123         | 153 |

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## General Engine Data

|                             |  |
|-----------------------------|--|
| Type                        | 4- cycle, In-line, 6- cylinder, Turbocharged and Charge Air Cooled, Diesel |
| Bore mm                     | 102 mm (4.02 in.)  |
| Stroke mm                   | 120 mm (4.72 in.)  |
| Displacement Litre          | 5.9 litre (360.0 in. <sup>3</sup> )  |
| Cylinder Block              | Cast iron, 6 cylinder  |
| Battery Charging Alternator | 55 amps  |
| Starting Voltage            | 12 volt, 55 Amp negative ground  |
| Fuel System                 | Direct injection   |
| Fuel Filter                 | Venturi Combo Stratapore Filter  |
| Lube Oil Filter Type(s)     | Venturi Combo Stratapore Filter  |
| Lube Oil Capacity (l)       | 16.4   |
| Flywheel Dimensions         | SAE3/11.5  |

## Coolpac Performance Data

|   |  |
|---|--|
| Cooling System Design                         | Charged Air Cooled                                 |
| Coolant Ratio                                 | 50% ethylene glycol; 50% water                     |
| Total Coolant Capacity (l)                    | 21.4   |
| Limiting Ambient Temp**                       | 50 Degrees   |
| Fan Power (kWm)                               | 10   |
| Cooling System Air Flow (m <sup>3</sup> /s)** | 3.7 for 60Hz & 2.7 for 50Hz                        |
| Air Cleaner Type (heavy duty)                 | Dry replaceable element with restriction indicator |

\*\* @ 13 mm H<sub>2</sub>O

## Weight and Dimensions

|         | Length | Width | Height | Weight (dry) |
|---------|--------|-------|--------|--------------|
|         | mm     | mm    | mm     | kg           |
| CoolPac | 1723   | 896   | 1380   | 718          |

## Ratings Definitions

### Emergency Standby Power (ESP):

Applicable for supplying power to varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

### Limited-Time Running Power (LTP):

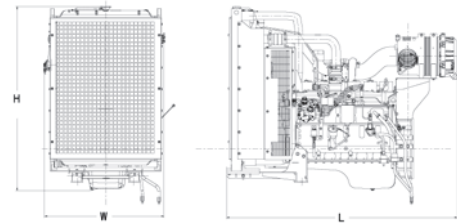
Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528.

### Prime Power (PRP):

Applicable for supplying power to varying electrical load for unlimited hours. Prime Power (PRP) is in accordance with ISO 8528. Ten percent overload capability is available in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

### Base Load (Continuous) Power (COP):

Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) in accordance with ISO 8528, ISO 3046, AS 2789, DIN6271 and BS 5514.



## Fuel Consumption 1500 (50 Hz)

| %                       | kWm | BHP | L/ph  | US gal/ph |
|-------------------------|-----|-----|-------|-----------|
| <b>Standby Power</b>    |     |     |       |           |
| 100                     | 145 | 195 | 37.05 | 9.89      |
| <b>Prime Power</b>      |     |     |       |           |
| 100                     | 135 | 180 | 35.16 | 9.46      |
| 75                      | 101 | 165 | 26.58 | 7.14      |
| 50                      | 68  | 91  | 17.92 | 4.80      |
| 25                      | 34  | 46  | 9.43  | 2.50      |
| <b>Continuous Power</b> |     |     |       |           |
| 100                     | 135 | 180 | 35.16 | 9.46      |

## Fuel Consumption 1800 (60 Hz)

| %                       | kWm | BHP | L/ph  | US gal/ph |
|-------------------------|-----|-----|-------|-----------|
| <b>Standby Power</b>    |     |     |       |           |
| 100                     | 160 | 215 | 41.14 | 10.86     |
| <b>Prime Power</b>      |     |     |       |           |
| 100                     | 150 | 205 | 36.46 | 10.42     |
| 75                      | 113 | 152 | 31.47 | 8.31      |
| 50                      | 75  | 101 | 20.71 | 5.46      |
| 25                      | 38  | 51  | 11.71 | 3.09      |
| <b>Continuous Power</b> |     |     |       |           |
| 100                     | 145 | 195 | 36.59 | 9.66      |

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