



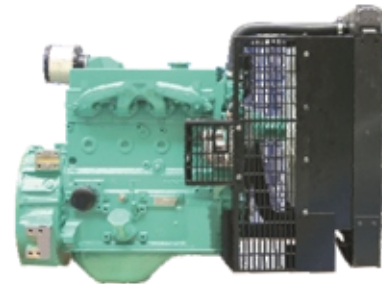
شرکت مهندسی کاراسهند

Engineering KARA SAHAND



# 4BT3.3-G3

**Emissions Compliance:**  
EU Stage II at 50 Hz  
Unregulated Emissions at 60Hz



## > Specification sheet

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### Description

The B3.3 has all the strength and reliability the genset industry has come to expect from the B Series range but in a smaller, lighter and more economical package. The B3.3 features direct fuel injection, resulting in cleaner, quieter and more fuel efficient performance. With a highly compact 4 cylinder envelope and extremely low heat-rejection, the engine offers a high degree of installation flexibility.



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 ISO9002.

### Features

**Bosch-Zexel VE** - Direct injection in-line pump for cleaner, more efficient fuel consumption.

**Parent Bore Block** - Deep, stiff crankcase and optimised rib arrangement to enhance strength and reduce noise.

**12 volt electrics package** as standard, with starter, alternator and fuel solenoid.

**Minimal derate** for high altitude or high ambient applications.

**Shallow oil pan** and single spin-on oil filter.

**SAE '4'** flywheel housing.

**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 |       |       | Net Engine Output |       |       | Typical Generator Set Output |     |             |     |            |     |
|---------------------|-------|-------|-------------------|-------|-------|------------------------------|-----|-------------|-----|------------|-----|
| Standby             | Prime | Base  | Standby           | Prime | Base  | Standby (ESP)                |     | Prime (PRP) |     | Base (COP) |     |
| kWm/BHP             |       |       | kWm/BHP           |       |       | kWe                          | kVA | kWe         | kVA | kWe        | kVA |
| 51/68               | 46/62 | 37/50 | 50/67             | 46/61 | 36/48 | 44                           | 55  | 40          | 50  | 32         | 40  |

### 1800 rpm (60 Hz Ratings)

| Gross Engine Output |       |       | Net Engine Output |       |       | Typical Generator Set Output |     |             |     |            |     |
|---------------------|-------|-------|-------------------|-------|-------|------------------------------|-----|-------------|-----|------------|-----|
| Standby             | Prime | Base  | Standby           | Prime | Base  | Standby (ESP)                |     | Prime (PRP) |     | Base (COP) |     |
| kWm/BHP             |       |       | kWm/BHP           |       |       | kWe                          | kVA | kWe         | kVA | kWe        | kVA |
| 60/80               | 54/72 | 43/58 | 59/79             | 53/71 | 42/56 | 50                           | 63  | 45          | 56  | 36         | 45  |

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(09/11) (GDSS159)



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## General Engine Data

|                             |   |  |
|-----------------------------|---|--|
| Type                        | 4 cycle, in-line, turbocharged            |  |
| Bore mm                     | 95 mm (3.74 in.)                          |  |
| Stroke mm                   | 115 mm (4.53 in.)                         |  |
| Displacement Litre          | 3.3 litre (199 in. <sup>3</sup> )         |  |
| Cylinder Block              | Cast iron, 4 cylinder                     |  |
| Battery Charging Alternator | 45 amps                                   |  |
| Starting Voltage            | 12 volt, negative ground                  |  |
| Fuel System                 | Direct injection                          |  |
| Fuel Filter                 | Spin-on fuel filters with water separator |  |
| Lube Oil Filter Type(s)     | Spin-on full flow filter                  |  |
| Lube Oil Capacity (l)       | 7.5                                       |  |
| Flywheel Dimensions         | 4/11                                      |  |

## Coolpac Performance Data

|   |  |                |
|---|--|----------------|
| Cooling System Design                         | Jacket Water                                       |                |
| Coolant Ratio                                 | 50% ethylene glycol; 50% water                     |                |
| Coolant Capacity (l)                          | 9.1  |                |
|   | 50Hz (1500rpm)                                     | 60Hz (1800rpm) |
| Limiting Ambient Temp (°C)**                  | 40   | 50             |
| Fan Power (kWm)**                             | 0.7  | 1.2            |
| Cooling System Air Flow (m <sup>3</sup> /s)** | 1.18   | 1.6            |
| Air Cleaner Type                              | Dry replaceable element with restriction indicator |                |

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

## Coolpac Weight & Dimensions

| Length | Width | Height | Weight (dry) |
|--------|-------|--------|--------------|
| mm     | mm    | mm     | kg           |
| 1069   | 625   | 870    | 299          |

## Fuel Consumption 1500 (50 Hz)

| %                    | kWm | BHP | L/ph | US gal/ph |
|----------------------|-----|-----|------|-----------|
| <b>Standby Power</b> |     |     |      |           |
| 100                  | 51  | 68  | 13   | 3.4       |
| <b>Prime Power</b>   |     |     |      |           |
| 100                  | 46  | 62  | 11   | 3.0       |

## Fuel Consumption 1800 (60 Hz)

| %                    | kWm | BHP | L/ph | US gal/ph |
|----------------------|-----|-----|------|-----------|
| <b>Standby Power</b> |     |     |      |           |
| 100                  | 60  | 80  | 15   | 4.0       |
| <b>Prime Power</b>   |     |     |      |           |
| 100                  | 54  | 72  | 13   | 3.5       |

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