Model: C550 D5 Frequency: 50 Fuel Type: Diesel

# » Generator set data sheet 550 kVA Standby



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|  | Standby<br>kW (kVA) |                |                                     | Prime<br>kW (kVA)                   |              |      |      |      |
|--|---------------------|----------------|-------------------------------------|-------------------------------------|--------------|------|------|------|
| Fuel consumption                                     |                     |                |                                     |                                     |              |      |      |      |
| Ratings  | 440 (5              | 440 (550)      |                                     |                                     | 400 (500)    |      |      |      |
| Load   | 1/4                 | 1/2            | 3/4                                 | Full                                | 1/4          | 1/2  | 3/4  | Full |
| US gph   | 8.7                 | 15.6           | 23.8                                | 32.5                                | 8.0          | 14.5 | 20.8 | 27.2 |
| L/hr   | 33                  | 59             | 90                                  | 123                                 | 30           | 55   | 79   | 103  |
| Engine   |                     | Standby rating |                                     |                                     | Prime rating |      |      |      |
| Engine manufacturer                                  |                     |                | Cummi                               | ns                                  |              |      |      |      |
| Engine model   | Engine model        |                |                                     | G8                                  |              |      |      |      |
| Configuration  |                     |                | 4 Cycle; In-Line; 6 Cylinder Diesel |                                     |              |      |      |      |
| Aspiration   | Aspiration          |                |                                     | Turbo Charged and Charge Air Cooled |              |      |      |      |
| Gross engine power output, kWm                       |                     |                | 500                                 | 500 444                             |              |      |      |      |
| BMEP at set rated load, kPa                          |                     |                | 2675 2371                           |                                     |              |      |      |      |
| Bore, mm   | Bore, mm            |                |                                     | 137                                 |              |      |      |      |
| Stroke, mm   |                     |                | 169                                 |                                     |              |      |      |      |
| Rated speed, rpm                                     |                     |                | 1500                                |                                     |              |      |      |      |
| Piston speed, m/s                                    |                     |                | 8.4                                 |                                     |              |      |      |      |
| Compression ratio                                    |                     |                | 17:1                                |                                     |              |      |      |      |
| Lube oil capacity, L                                 |                     |                | 83                                  |                                     |              |      |      |      |
| Overspeed limit, rpm                                 |                     |                | 1800 ±50                            |                                     |              |      |      |      |
| Regenerative power, kWm                              |                     |                | 37                                  |                                     |              |      |      |      |
| Governor type  |                     |                | Electronic                          |                                     |              |      |      |      |
| Starting voltage                                     |                     |                | 24 Volts DC                         |                                     |              |      |      |      |
| Fuel flow  |                     |                |                                     |                                     |              |      |      |      |
| Maximum fuel flow, L/hr                              |                     |                | 424                                 |                                     |              |      |      |      |
| Maximum fuel inlet restriction, mm Hg                |                     |                | 127                                 |                                     |              |      |      |      |
| Maximum fuel inlet temperature (°C)                  |                     |                | 60                                  |                                     |              |      |      |      |
| Air  |                     |                |                                     |                                     |              |      |      |      |
| Combustion air, m³/min                               |                     |                | 36.3 32.5                           |                                     |              |      |      |      |
| Maximum air cleaner restriction, mm H <sub>2</sub> O |                     | 635            |                                     |                                     |              |      |      |      |

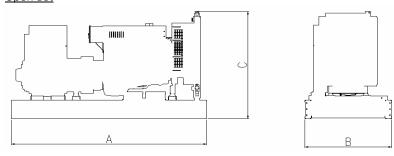
| Exhaust  | Standby rating | Prime rating |  |
|--|----------------|--------------|--|
| Exhaust gas flow at set rated load, m³/min                     | 82.2           | 75.4         |  |
| Exhaust gas temperature, °C                                    | 515            | 488          |  |
| Maximum exhaust back pressure, mmHg                            | 76             |              |  |
| Standard set-mounted radiator                                  |                |              |  |
| Ambient design, °C   | 40             |              |  |
| Fan load, KW <sub>m</sub>                                      | 17             |              |  |
| Coolant capacity (with radiator), L                            | 65.9           |              |  |
| Cooling system air flow, m³/min @ 12.7mmH <sub>2</sub> O       | 626            |              |  |
| Total heat rejection, BTU/min                                  | 16700          | 13700        |  |
| Maximum cooling air flow static restriction mmH <sub>2</sub> O | 12.7           |              |  |
| Weights*   | Open           | Enclosed     |  |
| Unit dry weight kgs  | 3850 7130      |              |  |
| Unit wet weight kgs  | 4010 8340      |              |  |

<sup>\*</sup> Weights represent a set with standard features. See outline drawing for weights of other configurations

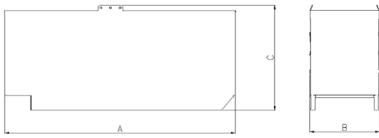
| Dimensions                           | Length "A" | Width "B" | Height "C" |
|--------------------------------------|------------|-----------|------------|
| Standard open set dimensions, mm     | 3494       | 1500      | 1807       |
| Enclosed set standard dimensions, mm | 5300       | 2100      | 2700       |

#### Genset outline

#### Open set



#### **Enclosed set**



Outlines are for illustrative purposes only. Please refer to the genset outline drawing for an exact representation of this model.

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#### Alternator data

|              |                         | Temp rise |                   |            |          |
|--------------|-------------------------|-----------|-------------------|------------|----------|
| Feature code | Connection <sup>1</sup> | degrees C | Duty <sup>2</sup> | Alternator | Voltage  |
| -            | Wye, 3 Phase            | 125/105C  | S/P               | HC5E       | 380-415V |

#### **Ratings definitions**

| Standby:   | Limited Time Running:           | Prime (unlimited running time):   | Base Load (Continuous):    |
|--|---------------------------------|---|----------------------------|
| 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 8528. Fuel Stop power in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514. | is in accordance with ISO 8528. | to varying electrical load for<br>unlimited hours. Prime Power is<br>in accordance with ISO 8528.<br>Ten percent overload capability<br>is available in accordance with | hours. Continuous power in |

#### Notes:

- Limited single phase capability is available from some three phase rated configurations. To obtain single phase rating, multiply the three phase kW rating by the single phase factor. All single phase ratings are at unity power factor.
- Standby (S) and Prime (P) ratings.

### Formulas for calculating full load currents:

Three phase output Single phase output

kW x 1000 kW x 1000 Voltage x 1.732 x 0.8 Voltage

See your distributor for more information.

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