Model: C275 D5 Frequency: 50 Fuel Type: Diesel

> Power Generation

» Generator set data sheet

275 kVA Standby



| | Stand | by | | | Prime | | | |
|--|------------------------------|-----|-------------------------------------|------------------------------|-------|-------|--------|------|
| Fuel consumption | kW (kVA) 220 (275) | | | kW (kVA) 200 (250) | | | | |
| Ratings | | | | | | | | |
| Load | 1/4 | 1/2 | 3/4 | Full | 1/4 | 1/2 | 3/4 | Full |
| US gph | 4.5 | 8.1 | 12.0 | 16.5 | 3.8 | 6.8 | 10.1 | 13.9 |
| L/hr | 17 | 31 | 46 | 63 | 14 | 26 | 38 | 53 |
| Engine | | | Stand | by rating | | Prime | rating | |
| Engine manufacturer | | | Cummi | ns | | | | |
| Engine model | | | QSL90 | 5 | | | | |
| Configuration | | | 4 Cycle; In-line; 6 Cylinder Diesel | | | | | |
| Aspiration | | | Turbocharged and Charge Air Cooled | | | | | |
| Gross engine power output, kWm | | 310 | 310 268 | | | | | |
| BMEP at set rated load, kPa | | | 2785 2413 | | | | | |
| Bore, mm | | | 114 | | | | | |
| Stroke, mm | | | 145 | | | | | |
| Rated speed, rpm | | | 1500 | | | | | |
| Piston speed, m/s | Piston speed, m/s | | 7.2 | | | | | |
| Compression ratio | | | 16.8:1 | | | | | |
| Lube oil capacity, L | | | 26.5 | | | | | |
| Overspeed limit, rpm | | | 1800 ± | 50 | | | | |
| Regenerative power, kWm | | | 26 | | | | | |
| Governor type | | | Electronic | | | | | |
| Starting voltage | | | 24 Volts DC | | | | | |
| Fuel flow | | | | | | | | |
| Maximum fuel flow, L/hr | | 165 | | | | | | |
| Maximum fuel inlet restriction, mm Hg | | 152 | | | | | | |
| Maximum fuel inlet temperature (°C) | | 70 | | | | | | |
| Air | | | | | | | | |
| Combustion air, m ³ /min | | | 20.3 | | | 18.7 | | |
| Maximum air cleaner restriction, mm H ₂ O |) | | 635 | | | | | |

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| Exhaust | Standby rating | Prime rating |
|---|----------------|--------------|
| Exhaust gas flow at set rated load, m ³ /min | 31.1 | 29.2 |
| Exhaust gas temperature, °C | 560 | 500 |
| Maximum exhaust back pressure, mmHg | 76 | |

| Standard set-mounted radiator | | | |
|---|-------|----------|------|
| Ambient design, °C | 50 | | |
| Fan load, KW _m | 9 | | |
| Coolant capacity (with radiator), L | 28.6 | | |
| Cooling system air flow, m ³ /min @ 12.7mmH ₂ O | 479 | | |
| Total heat rejection, BTU/min | 10190 | | 8415 |
| Maximum cooling air flow static restriction mmH_2O | 12.7 | | |
| Weights* | Open | Enclosed | ł |
| | | | |

 Unit dry weight kgs
 2119
 3872

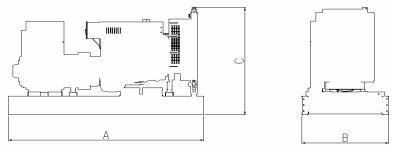
 Unit wet weight kgs
 2684
 4511

* Weights represent a set with standard features. See outline drawing for weights of other configurations

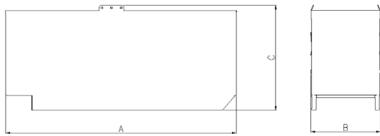
| Dimensions | Length "A" | Width "B" | Height "C" |
|--------------------------------------|------------|-----------|------------|
| Standard open set dimensions, mm | 3135 | 1100 | 1928 |
| Enclosed set standard dimensions, mm | 4248 | 1360 | 2216 |

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

| Feature code | Connection ¹ | Temp rise degrees C | Duty ² | Alternator | Voltage |
|--------------|-------------------------|------------------------|-------------------|------------|----------|
| - | Wye, 3 Phase | 163/125 | S/P | UC274K | 380-415V |

Ratings definitions

| Standby: | Limited Time Running: | Prime (unlimited running time): | Base Load (Continuous): |
|---|---|---|---|
| varying electrical load for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in | power to a constant electrical load for limited hours. Limited Time Running Power is in accordance with ISO 8528. | to varying electrical load for unlimited hours. Prime Power is in accordance with ISO 8528. Ten percent overload capability is available in accordance with | Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous power in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514. |

Notes:

- 1. 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.
- 2. Standby (S) and Prime (P) ratings.

Formulas for calculating full load currents:

Three phase output

Single phase output

kW x 1000 Voltage x 1.732 x 0.8 <u>kW x 1000</u> Voltage

See your distributor for more information.

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