Generator set data sheet



Model: C170 D5
Frequency: 50 Hz
Fuel type: Diesel

| Spec sheet: | SS28-CPGK |
|---------------------|-----------|
| Noise data sheet: | MSP-4161 |
| Airflow data sheet: | AF50-550 |

| | Standby | Standby | | | Prime | | | |
|------------------|----------|-----------|-------|-------|-----------|-------|-------|-------|
| Fuel consumption | kVA (kW | kVA (kW) | | | kVA (kW |) | | |
| Ratings | 170 (136 | 170 (136) | | | 155 (124) | | | |
| Load | 1/4 | 1/2 | 3/4 | Full | 1/4 | 1/2 | 3/4 | Full |
| gph | 4.0 | 6.1 | 8.3 | 10.5 | 3.2 | 5.3 | 8.1 | 9.5 |
| L/hr | 15.20 | 23.20 | 31.50 | 39.60 | 12.10 | 20.00 | 30.60 | 36.00 |

| Engine | Standby rating | Prime rating | | |
|--------------------------------|----------------------------|-----------------|--|--|
| Engine manufacturer | Cummins Inc. | Cummins Inc. | | |
| Engine model | 6BTAA5.9-G7 | 6BTAA5.9-G7 | | |
| Configuration | 4-cycle, in-line, 6-cyline | der | | |
| Aspiration | Turbocharged and cha | rged air-cooled | | |
| Gross engine power output, kWm | 160 | 145 | | |
| BMEP at set rated load, kPa | 2178 | 1972 | | |
| Bore, mm | 102 | 102 | | |
| Stroke, mm | 120 | | | |
| Rated speed, rpm | 1500 | 1500 | | |
| Piston speed, m/s | 6 | 6 | | |
| Compression ratio | 16.5 :1 | | | |
| Lube oil capacity, L | 16.4 | | | |
| Overspeed limit, rpm | 1800 | 1800 | | |
| Regenerative power, kW | N/A | N/A | | |
| Governor type | Electronic | Electronic | | |
| Starting voltage | 12 V | 12 V | | |

Fuel flow

| Maximum fuel flow, L/hr | 45 |
|---------------------------------------|------------------------------|
| Maximum fuel inlet restriction, mm Hg | 101/203 (clean/dirty filter) |
| Maximum fuel inlet temperature, °C | 71 |

| Air | Standby rating | Prime rating |
|--------------------------------------|----------------|--------------|
| Combustion air, m ³ /min | 12.43 | 11.81 |
| Maximum air cleaner restriction, kPa | 4 | |

Exhaust

| Exhaust gas flow at set rated load, m³/min | 32.37 | 31.12 |
|--|-------|-------|
| Exhaust gas temperature, °C | 533 | 517 |
| Maximum exhaust back pressure, kPa | 10.25 | |

Standard set-mounted radiator cooling

| Ambient design, °C | 50 | |
|---|------|------|
| Fan load, kWm | 9.8 | |
| Coolant capacity (with radiator), L | 22.1 | |
| Cooling system air flow, m³/sec @ 12.7 mm H ₂ O | 3.77 | |
| Total heat rejection, Btu/min | 3128 | 2900 |
| Maximum cooling air flow static restriction mm H ₂ O | 12.7 | |

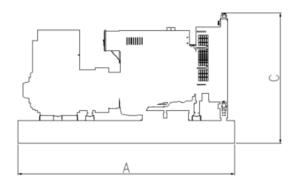
| Weights* | Open | Enclosed |
|---------------------|------|----------|
| Unit dry weight kgs | 1635 | 2390 |
| Unit wet weight kgs | 1650 | 2400 |

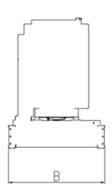
^{*} Weights represent a set with standard features. See outline drawing for weights of other configurations.

| Dimensions | Length | Width | Height |
|-------------------------------------|--------|-------|--------|
| Standard open set dimensions mm | 2537 | 1090 | 1846 |
| Enclosed set standard dimensions mm | 3460 | 1090 | 2387 |

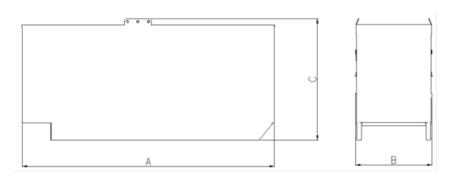
Genset outline

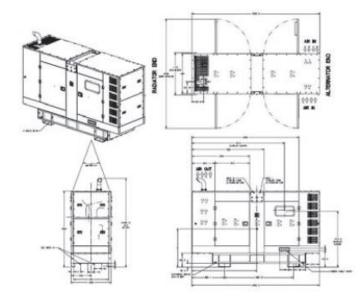
Open set





Enclosed set





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

Alternator data

| Connection | Temp rise °C | Duty | Alternator | Voltage |
|------------|--------------|------|------------|-------------------------|
| Wye | 163 | ESP | UCI274F | 190 - 208 & 380 - 416 V |
| Wye | 150 | ESP | UCI274G | 190 - 208 & 380 - 416 V |
| Wye | 125 | PRP | UCI274F | 190 - 208 & 380 - 416 V |
| Wye | 105 | PRP | UCI274G | 190 - 208 & 380 - 416 V |

Ratings definitions

| Emergency Standby Power (ESP): | Limited-Time Running Power (LTP): | Prime Power (PRP): | Base Load (Continuous) Power (COP): |
|---|--|--|---|
| Applicable for supplying power continuously to varying electrical loads for the duration of power interruption of a reliable utility source. Emergency Standby Power (ESP) is in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550). | Applicable for supplying power to a constant electrical load for limited hours. Limited-Time Running Power (LTP) is in accordance with ISO 8528. | 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 3046-1. | Applicable for supplying power continuously to a constant load up to the full output rating for unlimited hours. No sustained overload capability is available for this rating. Consult authorized distributor for rating. (Equivalent to Continuous Power in accordance with ISO 8528 and ISO 3046-1, obtained and corrected in accordance with ISO 15550). This rating is not applicable to all generator set models. |

Formulas for calculating full load currents:

Three phase output

kW x 1000

Voltage x 1.73 x 0.8

Single phase output

kW x Single Phase Factor x 1000

Voltage

For more information contact your local Cummins distributor or visit power.cummins.com

