# Generator set data sheet

Cummins

| Model: | C825 D5 |
|---|---|
| Frequency: | 50 Hz |
| Fuel type: | Diesel |

| Spec sheet: | SS12-CPGK |
|---|---|
| Sound Data Sheet | MSP-3098 |
| Cooling System Data | MCP-2095 |

## Fuel consumption

| | Standby | | | | Prime | | | |
|---|---|---|---|---|---|---|---|---|
| | kVA (kW) | | | | kVA (kW) | | | |
| Ratings | 825 (660) | | | | 750 (600) | | | |
| Load | 1/4 | 1/2 | 3/4 | Full | 1/4 | 1/2 | 3/4 | Full |
| US gph | 14.0 | 23.7 | 33.1 | 43.7 | 13.0 | 22.0 | 30.5 | 39.6 |
| L/hr | 53.0 | 89.9 | 125.3 | 165.3 | 49.2 | 83.4 | 115.4 | 149.8 |

## Engine

| | Standby rating | Prime rating |
|---|---|---|
| Engine manufacturer | Cummins | |
| Engine model | QSK23-G3 | |
| Configuration | Cast iron, in-line 6 cylinder | |
| Aspiration | Turbocharged and after-cooled | |
| Gross engine power output, kWm | 768 | 701 |
| BMEP at set rated load, kPa | 2350 | 2441 |
| Bore, mm | 170 | |
| Stroke, mm | 170 | |
| Rated speed, rpm | 1500 | |
| Piston speed, m/s | 8.6 | |
| Compression ratio | 16:1 | |
| Lube oil capacity, L | 103 | |
| Overspeed limit, rpm | 1800 | |
| Regenerative power, kW | 72 | |
| Governor type | Electronic | |
| Starting voltage | 24 Volts DC | |

## Fuel flow

| Maximum fuel flow, L/hr | 684 |
|---|---|
| Maximum fuel inlet restriction, mm Hg | 203 |
| Maximum fuel inlet temperature, °C | 70 |

www.famcocorp.com
E-mail: info@famcocorp.com
@famco_group

Tel:۰۲۱- ۴ ۸ ۰ ۰ ۰ ۰ ۴ ۹
Fax:۰۲۱ - ۴۴۹۹۴۶۴۲

تهران، کیلومتر۲۱ بزرگراه لشگری (جاده مخصوص کرج)
روبـروی پالایشگاه نفت پـارس، پلاک ۱۲

## Air

| Air | Standby rating | Prime rating |
|---|---|---|
| Combustion air, $m^3/min$ | 53.3 | 48.7 |
| Maximum air cleaner restriction, kPa | 6.2 | |

## Exhaust

| Exhaust | | |
|---|---|---|
| Exhaust gas flow at set rated load, $m^3/min$ | 147.78 | 135.54 |
| Exhaust gas temperature, °C | 543 | 532 |
| Maximum exhaust back pressure, kPa | 10.2 | |

## Standard set-mounted radiator cooling

| Standard set-mounted radiator cooling | | |
|---|---|---|
| Ambient design, °C (open genset at 12.7mm $H_2O$) | 40 | |
| Fan load, $kW_m$ | 24.9 | |
| Coolant capacity (with radiator), L | 136.5 | |
| Cooling system air flow, $m^3/sec$ @ 12.7 mm $H_2O$ | 8.2 | |
| Total heat rejection, Btu/min | 12636 | 12252 |
| Maximum cooling air flow static restriction mm $H_2O$ | 25.4 | 25.4 |

## Standard set-mounted radiator cooling when IBC is selected

| Standard set-mounted radiator cooling when IBC is selected | | |
|---|---|---|
| Ambient design, °C | 40 | |
| Fan load, $kW_m$ | 14.3 | |
| Coolant capacity (with radiator), L | 109.5 | |
| Cooling system air flow, $m^3/sec$ @ 12.7 mm $H_2O$ | 11.6 | |
| Total heat rejection, Btu/min | 12636 | 12252 |
| Maximum cooling air flow static restriction mm $H_2O$ | 25.4 | 25.4 |

## Optional set-mounted radiator cooling (All config)

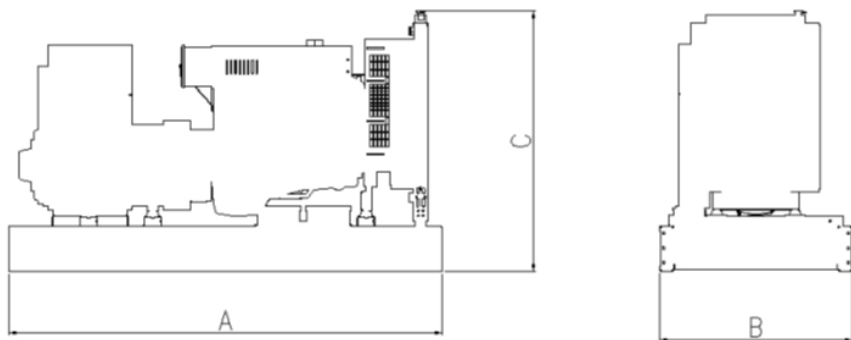| Optional set-mounted radiator cooling (All config) | | |
|---|---|---|
| Ambient design, °C (open genset at 12.7mm $H_2O$) | 50 | |
| Fan load, $kW_m$ | 14.3 | |
| Coolant capacity (with radiator), L | 109.5 | |
| Cooling system air flow, $m^3/sec$ @ 12.7 mm $H_2O$ | 11.6 | |
| Total heat rejection, Btu/min | 12636 | 12252 |
| Maximum cooling air flow static restriction mm $H_2O$ | 25.4 | 25.4 |

## Weights

| Weights | Open | Enclosed |
|---|---|---|
| Unit dry weight kgs | 6091 | 9868 |
| Unit wet weight kgs | 6289 | 9984 |

## Dimensions

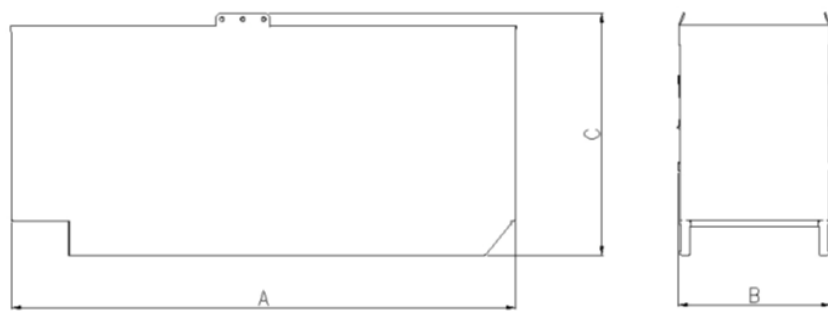| Dimensions | Length | Width | Height |
|---|---|---|---|
| Standard open set dimensions mm | 4340 | 1763 | 2095 |
| Enclosed set standard dimensions mm | 5708 | 2108 | 2467 |

Note: Weights and dimensions represent a set with standard features.  See outline drawing for weights of other configurations.

🌐 w w w . f a m c o c o r p . c o m
✉ E-mail: info@famcocorp.com
📷 @famco_group

📞 Tel:۰۲۱- ۴ ۸ ۰ ۰ ۰ ۰ ۴ ۹
🖨 Fax:۰۲۱ – ۴۴۹۹۴۶۴۲

تهران، کیلومتر۲۱ بزرگراه لشگری (جاده مخصوص کرج)
روبـروی پالایشگاه نفت پارس، پلاک ۱۲

# 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 ⁰C | Duty | Alternator | Voltage |
|---|---|---|---|---|
| Wye, 3-phase | 163 | S/P | S6L1D-C4/D4 | 380-440 V |

## Ratings definitions

| Emergency Standby Power (ESP): | Limited-Time Running Power (LTP): | Prime Power (PRP): | Base Load (Continuous) Power (COP): |
|---|---|---|---|
| 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. | 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, AS 2789, DIN 6271 and BS 5514. | Applicable for supplying power continuously to a constant electrical load for unlimited hours. Continuous Power (COP) is in accordance with ISO 8528, ISO 3046, AS 2789, DIN 6271 and BS 5514. |

## Formulas for calculating full load currents:

| Three phase output | Single phase output |
|---|---|
| $$\dfrac{kW \times 1000}{Voltage \times 1.73 \times 0.8}$$ | $$\dfrac{kW \times SinglePhaseFactor \times 1000}{Voltage}$$ |

www.famcocorp.com

E-mail: info@famcocorp.com

@famco_group

Tel:021- ۴ ۸ ۰ ۰ ۰ ۰ ۴ ۹

Fax:۰۲۱ - ۴۴۹۹۴۶۴۲

تهران ، کیلومتر۲۱ بزرگراه لشگری (جاده مخصوص کرج)

روبـروی پالایشگاه نفت پارس ، پلاک ۱۲