

METCL DP100GFS Generator Set

Prime 72kW (90kVA) 50Hz 3-P

Powered by



Image shown may not reflect actual configuration.

METCL GENSET DECIBELLEVES

Revolving field, self-ventilated weatherproof Normal conversation allows lower operating noise levels than competitive designs. METCL Genset good for home, construction sites, residential, hospital, etc.

90 db(A)---Subway / Truck

80 db(A)---Average city traffic

70 db(A)---Inside Car at 60 mph

➔ **METCL Genset at 7m**

60 db(A)---Air conditioner at 6m

50 db(A)--- Conversation

66 db(A)

Specification of DP100GFS Generator

| Frequency | Voltage | Prime kW (kVA) | Standby kW (kVA) | Speed rpm | Current Amps |
|-----------|----------|----------------|------------------|-----------|--------------|
| 50 Hz | 380/220V | 72 (90) | 80 (100) | 1500 | 136.7 |
| | 400/230V | 72 (90) | 80 (100) | 1500 | 129.6 |
| | 415/240V | 72 (90) | 80 (100) | 1500 | 139.1 |

| Fuel Consumption | Prime kW (kVA) | | | |
|------------------|----------------|------|------|------|
| | 72 (90) | | | |
| Rating | 1/4 | 1/2 | 3/4 | Full |
| US gph | 1.58 | 2.8 | 4.2 | 5.7 |
| L/hr | 6.0 | 10.6 | 15.9 | 21.6 |

| | |
|--------------------|----------------------------------|
| Fuel Tank | 38.3 Gallons (145 Litres) |
| Continuous Running | 8-12 Hrs |
| Fuel Tank Type | Integrated base |

ENGINE PERFORMANCE

| | |
|----------------------------|--------------------------------------|
| Engine Manufacturer | DEUTZ |
| Engine Model | BF4M2012C G2 |
| Configuration | 4 Cycle; 4 Cylinder Vertical In-line |
| Aspiration | Turbocharger, CAC |
| Engine Gross Standby Power | 93 kW (110.6HP) |
| Bore × Stroke, mm | 101 × 126 |
| Rated Speed, rpm | 1500 |
| Compression ratio | 18.1:1 |
| Displacement L | 4.04 |
| Governor regulation % | ≤5% |
| Starting voltage | 24 Volts |

EXHAUST SYSTEM

| | |
|---|------|
| Maximum exhaust back pressure- mbar | 30 |
| Exhaust gas flow (at above temp) —m ³ /h | 1087 |
| Maximum exhaust gas temperature - °C | 600 |

AIR INTAKE SYSTEM

| | |
|---|-----|
| Max.intake depression (Switch setting)—mbar | 25 |
| Combustion air volume—m ³ /h | 320 |

LUBRICATION SYSTEM

| | |
|---|-----|
| Max. permissible oil temperature-% | 125 |
| Mini. Oil pressure (warning)- bar | 1.8 |
| Mini. Oil pressure (shutdown)- bar | 1.5 |
| Total Lube System Oil Capacity (Sump)-Litre | 8.5 |

FUEL SYSTEM

| | |
|-----------------------|------------------------|
| Type Injection System | Single Injection pumps |
| Governor type | Electronic governor |

COOLING SYSTEM

| | |
|---|-------|
| Coolant Capacity- With radiator- Litre | 15.9 |
| Coolant Capacity- Without radiator- Litre | 6.0 |
| Maximum coolant outlet temperature- °C | 105 |
| Standard Thermostat operating Range-°C | 82-93 |

ELECTRICAL SYSTEM

| | |
|---|-----------------|
| Type | Negative ground |
| Alternator | 24V 35A |
| Cranking Motor(Heavy Duty,Positive Engagement)-Volt | 24V 6kW |

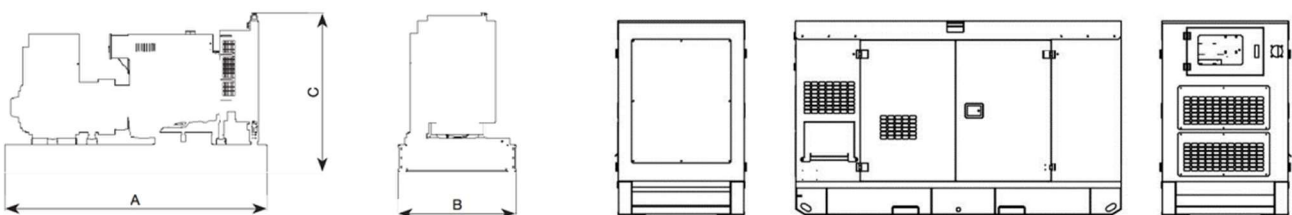
AC ALTERNATOR

| | | |
|-------------------------|---|--------------------|
| Alternator Manufacturer | MECC ALTE | |
| Alternator Model | ECP34 1S4C | |
| Winding Pitch | 2/3 | |
| Excitation | Static regulated, brushless, self-excited | |
| Number of bearings | Single bearing, close coupled | |
| Insulation Class | Class H | |
| Protection Class | IP23 | |
| Temperature rise °C | 150/40 (125/40) | |
| Power Rating | | |
| | KVA | 93 (87.5) |
| | KW | 74 (70) |
| Maximum Overspeed | 2250 | |
| Rated Power Factor | 0.8 | |
| Voltage regulator | DSR | |
| Pole number | 4 | |
| Phase number | 3 | |
| Number of wires | 12 | |
| Voltage regulation | Less than ± 1.0% | |
| Wave form deviation | 10 | |
| | Telephone Influence Factor (TIF) % | Less than 2% |
| | Harmonic Distortion (THD) % | Less than 2.5-2.9% |

| WEIGHT | Open | Enclosed |
|---------------------|------|----------|
| Unit dry weight kgs | 900 | 1600 |
| Unit wet weight kgs | 1040 | 1740 |

| DIMENSIONS | Length | Width | Height |
|----------------------------------|--------|-------|--------|
| Standard open set dimensions | 1900 | 800 | 1300 |
| Enclosed set standard dimensions | 2700 | 1050 | 1600 |

GENSET OUTLINE



Rating Definitions and Conditions

Emergency Standby Power (ESP)- 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.

Prime Power (PRP)- Applicable for supplying continuous electrical power (at variable load) in lieu of commercially purchased power. There is no limitation on the annual hours of operating and the generator can supply 10% overload power.

Designed to Meet Specifications: ISO 8528, EN12601, EN 60204-1, ISO 3046, IEC 60034.

Ratings are based on SAE J1349 standard conditions. These ratings also apply at ISO3046 standard conditions.

Fuel rates are based on fuel oil of 35 API {16(60F)} gravity having an LHV of 42 780 kJ/kg (18,390 Btu/lb) when use at 29 (85F) and weighing 838.9 g/liter (7.001 lbs/U.S.gal)

Additional ratings may be available for specific customer requirements, contact your METCL representative for details.

Formulas for calculating fuel load currents.

Three phase output

$$\frac{\text{kW} \times 1000}{\text{Voltage} \times 1.73 \times 0.8}$$

Single phase output

$$\frac{\text{kW} \times \text{SinglePhaseFactor} \times 1000}{\text{Voltage}}$$

See your distributor for more information.

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