

FUJIAN EPOS ELECTRIC MACHINERY CO., LTD

EMEAN
POWER



ENGINE MODEL: 6LTAA8.9-G2
CURVE & DATASHEET: FR92516
FR92996

EMEAN POWER

www.emeanpower.com
Email: sale5@fjepos.com
Phone: +86 19890349907

WHATSAPP



WECHAT





Generator Engine Performance Data

DONGFENG CUMMINS ENGINE Co.,LTD

Xiangfan, Hubei Province, China
<http://www.dcec.com.cn>

Basic Engine Model:

6LTAA8.9-G2

**FR92516
FR92996**

**FR92516 @ 1500 RPM &1800RPM
FR92996 @ 1500 RPM &1800RPM**

**Configuration
D563015GX03**

**CPL Code
CPL: 3079**

**Revision
2009-4-15**

| | | | |
|-------------------------|---------------------|-------------------|--|
| Compression Ratio: | 16.6:1 | Aspiration: | Turbocharged and Charge Air Cooled |
| Bore: | 114 mm | Displacement: | 8.9 L |
| Stroke: | 145 mm | No. of Cylinders: | 6 |
| Emission Certification: | MEP STAGE II | Fuel System: | FR92516: BYC P7100/GAC FR92996: BYC P7100/SEGMA |
| Governor Regulation: | ≤3% | | |

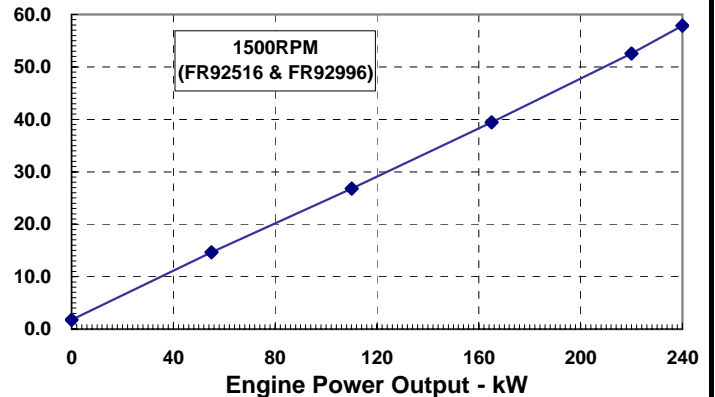
All data is based on the engine operating with fuel system, water pump, and 10 in H₂O (2.488 kPa) inlet air restriction with 5.98 in (152mm) inner diameter, and with 2.01 in Hg (7 kPa) exhaust restriction with 4.02 in (102 mm) inner diameter; not included are alternator, fan, optional equipment and driven components. Coolant flows and heat rejection data based on coolants as 50% ethylene glycol/50% water. All data is subject to change without notice.

| Engine Speed RPM | Standby Power | | Prime Power | | Continuous Power | |
|---------------------|---------------|-----|-------------|-----|------------------|-----|
| | kW | HP | kW | HP | kW | HP |
| 1500 | 240 | 322 | 220 | 295 | 180 | 241 |
| 1800 | 258 | 346 | 235 | 315 | 190 | 255 |

Engine Performance Data @ 1500 RPM

| OUTPUT POWER | | | FUEL CONSUMPTION | |
|-------------------------|-----|-----|------------------|-----|
| % | kW | HP | g/kW.h | L/h |
| STANDBY POWER | | | | |
| 100 | 240 | 322 | 199 | 58 |
| PRIME POWER | | | | |
| 100 | 220 | 295 | 197 | 53 |
| 75 | 165 | 221 | 197 | 39 |
| 50 | 110 | 147 | 201 | 27 |
| 25 | 55 | 74 | 220 | 15 |
| CONTINUOUS POWER | | | | |
| 100 | 180 | 241 | 196 | 43 |

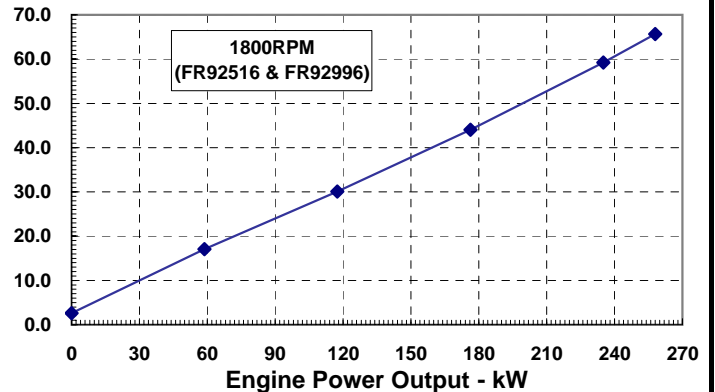
Litre/hour



Engine Performance Data @ 1800 RPM

| OUTPUT POWER | | | FUEL CONSUMPTION | |
|-------------------------|-----|-----|------------------|-----|
| % | kW | HP | g/kW.h | L/h |
| STANDBY POWER | | | | |
| 100 | 258 | 346 | 210 | 66 |
| PRIME POWER | | | | |
| 100 | 235 | 315 | 208 | 59 |
| 75 | 176 | 236 | 206 | 44 |
| 50 | 118 | 157 | 211 | 30 |
| 25 | 59 | 79 | 240 | 17 |
| CONTINUOUS POWER | | | | |
| 100 | 190 | 255 | 206 | 47 |

Litre/hour



Curves shown above represent gross engine performance capabilities obtained and corrected in accordance with GB/T18297 conditions of 100kPa (29.61 in. Hg) barometric pressure [80 m (263 ft.) altitude], 25°C (77°F) inlet air temperature, and 1 kPa (0.30 in. Hg) water vapor pressure with No.0 diesel fuel. The engine may be operated without changing the fuel setting up to 2200 m (7218ft.) altitude.

GENERAL ENGINE DATA

| | | |
|--|--------------------|-------------|
| Approximate Engine Weight (wet)..... | -kg | 650 |
| Mass Moment of Inertia of Rotating Components (No Flywheel)..... | -kg·m ² | 0.72 |
| Center of Gravity from Front Face of Block..... | -mm | 427 |
| Center of Gravity above Crankshaft Centerline..... | -mm | 163 |
| Engine Idle Speed..... | -RPM | 800-1000 |
| Fire Order..... | | 1-5-3-6-2-4 |

ENGINE MOUNTING

| | | |
|--|------|------|
| Maximum (Static) Bending Moment at Rear Face of Block..... | -N.m | 1356 |
|--|------|------|

EXHAUST SYSTEM

| | | |
|----------------------------|------|----|
| Maximum Back Pressure..... | -kPa | 10 |
|----------------------------|------|----|

AIR INTAKE SYSTEM

| | | |
|--|------|---|
| Maximum Intake Air Restriction with Heavy Duty Air Cleaner | | |
| — Dirty Element..... | -kPa | 6 |
| — Clean Element..... | -kPa | 4 |

CHARGE AIR COOLING SYSTEM

| | | |
|--|------|------|
| Maximum Temp. Rise Between Engine Air Intake and Intake Manifold | -°C | 25 |
| Maximum Air Pressure Drop from Turbo Air outlet to Intake Manifold | | |
| — 1500RPM..... | -kPa | 8.5 |
| — 1800RPM..... | -kPa | 13.5 |
| Maximum Intake Manifold Temperature Differential (Ambient to IMT) (IMTD)..... | -°C | 50 |
| Maximum Intake Manifold Temperature for engine protection (Warning Threshold)..... | -°C | 93 |

LUBRICATION SYSTEM

| | | |
|--|--------|---------|
| Minimum Engine Oil Pressure for Engine Protection Devices: | | |
| — Idle Speed..... | -kPa | 103 |
| — Governed Speed..... | -kPa | 276-414 |
| Maximum Oil Temperature..... | -°C | 121 |
| Minimum Required Lube System Capacity - Sump plus Filters..... | -litre | 27.6 |

FUEL SYSTEM

| | | |
|--|-----------|----------------------------|
| Type Injection System..... | | BYC P7100 Direct Injection |
| Maximum Restriction at Lift Pump..... | -kPa | 20.3 |
| Maximum Fuel Flow on the Supply Side of the Fuel Pump..... | -litre/hr | 83 |
| Maximum Fuel Inlet Temperature..... | -°C | 70 |
| Total Drain Flow (constant for all loads)..... | -litre/hr | 30 |

COOLING SYSTEM

| | | |
|--|--------|-----------|
| Coolant Capacity - Engine Only..... | -litre | 11.1 |
| Maximum Coolant Friction Head External to Engine... -1800 rpm..... | -kPa | 35 |
| — -1500 rpm..... | -kPa | 28 |
| Maximum Static Head of Coolant Above Engine Crank Centerline..... | -m | 18.3 |
| Standard Thermostat (Modulating) Range..... | -°C | 82 - 93 |
| Minimum Pressure Cap..... | -kPa | 103 |
| Maximum Top Tank Temperature for Standby / Prime Power..... | -°C | 110 / 104 |

ELECTRICAL SYSTEM

| | | | |
|---|----------|-------|-------|
| Cranking Motor (Heavy Duty, Positive Engagement)..... | -volt | 12V | 24V |
| Battery Charging System, Negative Ground..... | -ampere | 100 | 70 |
| Maximum Allowable Resistance of Cranking Circuit..... | -ohm | 0.001 | 0.002 |
| Minimum Recommended Battery Capacity | | | |
| —Cold Soak @ 0 to 32-F (-18 to 0-C)..... | -0°F CCA | 1500 | (750) |

EMISSIONS

Gaseous Emissions per GB 20891-2007, at 1500rpm:

| | | |
|------------------------------------|--------|-----|
| —Weight-Specific NOx..... | g/kW.h | 6.0 |
| —Weight-Specific HC..... | g/kW.h | 1.0 |
| —Weight-Specific CO..... | g/kW.h | 3.5 |
| —Weight-Specific Particulates..... | g/kW.h | 0.2 |

Gaseous Emissions per GB 20891-2007, at 1800rpm:

| | | |
|------------------------------------|--------|-----|
| —Weight-Specific NOx..... | g/kW.h | 6.0 |
| —Weight-Specific HC..... | g/kW.h | 1.0 |
| —Weight-Specific CO..... | g/kW.h | 3.5 |
| —Weight-Specific Particulates..... | g/kW.h | 0.2 |

Fuel Rating Option used for these Data: **FR92516** and **FR92996**

| | STANDBY POWER | | PRIME POWER | | |
|---|---------------|------------|-------------|------------|-----|
| | 1800 | 1500 | 1800 | 1500 | |
| Governed Engine Speed..... | -rpm | 800 - 1000 | 800 - 1000 | 800 - 1000 | |
| Engine Idle Speed..... | -rpm | 800 - 1000 | 800 - 1000 | 800 - 1000 | |
| Gross Engine Power Output..... | -kW | 258 | 240 | 235 | 220 |
| Piston Speed..... | -m/s | 8.7 | 7.3 | 8.7 | 7.3 |
| Friction Horsepower..... | -kW | 35 | 26 | 35 | 26 |
| Engine Water Flow to Engine:..... | -litre/sec. | 4.0 | 3.3 | 4.0 | 3.3 |
| Intake Air Flow..... | -litre/sec. | 286 | 254 | 280 | 248 |
| Exhaust Gas Temperature..... | -°C | 520 | 470 | 500 | 430 |
| Exhaust Gas Flow..... | -litre/sec. | 762 | 634 | 726 | 584 |
| Radiated Heat to Ambient..... | -kW | 30 | 23 | 26 | 22 |
| Heat Rejection to Coolant..... | -kW | 110 | 105 | 102 | 95 |
| Heat Rejection to Fuel..... | -kW | 1.1 | 1.1 | 1.1 | 1.1 |
| Turbocharger Compressor Outlet Pressure..... | -kPa | 185 | 170 | 183 | 165 |
| Turbocharger Compressor Outlet Temperature..... | -°C | 174 | 165 | 165 | 155 |

ALL DATA CERTIFIED WITHIN 5%

TBD = To Be Decided

N/A = Not Applicable

N.A. = Not Available

All data is subject to change without notice, sorry for inform.

Dongfeng Cummins Engine Co., Ltd.