

Spec Sheets:

Cummins 1000KW KTA38-G4 Diesel Generating Set:

- Standby Power(60Hz) 1000KW / 1250KVA
- Prime Power(60Hz) 900KW / 1125KVA

General Features:

- Engine (CCEC Cummins KTA38-G4)
- Radiator 40OC max, fans are driven by belt, with safety guard
- 24V charge alternator
- Alternator: single bearing alternator IP23, insulation class H/H
- Absorber
- Dry type air filter, fuel filter, oil filter
- Main line circuit breaker
- Permanent Magnet Generator(PMG)
- Standard control panel
- Four12V batteries, rack and cable
- Ripple flex exhaust pipe, exhaust siphon, flange, muffler
- User manual

<u>Generator Ratings</u>					<u>Standby</u>	<u>Prime</u>
Voltage	HZ	Phase	P.F		Ratings	Ratings
				Amps	(KW/KVA)	(KW/KVA)
• 480/277	60	3	0.8	1503	1000/1250	900/1125
• 460/266	60	3	0.8	1569	1000/1250	900/1125
• 440/254	60	3	0.8	1640	1000/1250	900/1125
• 416/240	60	3	0.8	1734	1000/1250	900/1125

Prime Power1800 (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97(eqv ISO8528); A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

Standby Power Rating (ESP): The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

Diesel Generating Set

ENGINE DATA:

- Manufacturer / Model: CCEC Cummins KTA38-G4
- Air Intake System: Turbo, Water/Air Cooling
- Fuel System: PT type fuel pump
- Cylinder Arrangement: 12 in V
- Displacement: 37.8L

- Bore and Stroke: 159*159(mm)
- Compression Ratio: 13.9:1
- Rated RPM: 1800rpm
- Standby Power at Rated RPM: 1112KW/1490BHP
- Governor Type: Electronic

Exhaust System:

- Exhaust Gas Flow: 3967L/s
- Exhaust Temperature: 524°C
- Max Back Pressure: 10kPa

Air Intake System:

- Max Intake Restriction: 6.35kPa
- Intake Air Flow: 1435L/s

Fuel System:

- 100%(Prime Power) Load: 207 g/Kw.h
- 75%(Prime Power) Load: 214 g/Kw.h
- 50%(Prime Power) Load:: 229 g/Kw.h

Total Oil Capacity:

- 135L
- Engine Oil Tank Capacity: 114L
- Oil Pressure at Rated RPM: 310-448kPa

Cooling System:

- Engine Coolant Capacity: 124L
- Thermostat Range: 82-93°C
- Max Water Temperature: 104°C

ALTERNATOR SPECIFICATION

GENERAL DATA:

- Compliance with GB755, BS5000, VDE0530, NEMAMG1-22, IED34-1, CSA22.2 and AS1359 standards.
- Alternator Data
- Number of Phase: 3
- Connecting Type: 3 Phase and 4 Wires, "Y" type connecting
- Number of Bearing: 1
- Power Factor: 0.8
- Protection Grade: IP23
- Altitude: ≤1000m
- Exciter Type: Brushless, self-exciting
- Insulation Class, Temperature Rise: H/H

- Telephone Influence Factor (TIF): <50
- THF: <2%
- Voltage Regulation, Steady State: $\leq \pm 1\%$
- Alternator Capacity: 1200KVA
- Alternator Efficiencies: 95.1%
- Air Cooling Flow: 1.961m³/s

GENERATING SET DATA:

- Voltage Regulation: $\geq \pm 5\%$
- Voltage Regulation, Stead State: $\leq \pm 1\%$
- Sudden Voltage Warp (100% Sudden Reduce): $\leq +25\%$
- Sudden Voltage Warp (Sudden Increase): $\leq -20\%$
- Voltage Stable Time (100% Sudden Reduce): $\leq 6S$
- Voltage Stable Time (Sudden Increase) $\leq 6S$
- Frequency Regulation, Stead State: $\leq 5\%$
- Frequency Waving: $\leq 0.5\%$
- Sudden Frequency Warp (100% Sudden Reduce): $\leq +12\%$
- Sudden Frequency Warp (Sudden Increase): $\leq -10\%$
- Frequency Recovery Time (100% Sudden Reduce): $\leq 5S$
- Frequency Recovery Time (Sudden Increase): $\leq 5S$

Control System:

- Heater 2KW & 4KW
- Battery Charger 3.5A & 7A
- Water Separator
- Fuel Level Sensor
- Daily Fuel Tank
- Base Fuel Tank
- Auto Transfer Switch (ATS)
- Paralleling System
- Auto Control Panel
- Remote Control Panel

Alternator:

- Anti Condensation Heater
- Drop CT(For Paralleling)

Standard Control Panel:

Standard Control Panel uses micro processing technique integrating digital, intelligent and network techniques which can carry out functions including auto start/stop, data measure, alarming and communication to PC with RS485 port. The controller uses LCD display, optional Chinese and English display interface with operation easy and reliable. It can be widely used in all types of generator automatic control system for compact structure, advanced circuits, simple connections and high reliability.

Auto Parallel Control Panel:

Automatic Parallel Control Panel This new automatic parallel system adopts intelligent modules, inserted and folded installed, no need the peripheral relay and logic circuit. The main switch adopts electronic breaker or frame breaker, combined together with the generator, which is very reliable. One generator, one panel. The panel can be used both for singly and parallel. It is only need to parallel generator with such panel when the capability needs to be enlarged in the future.