



800 kW



Accessories shown are not part of standard equipment.

Lowest Life Cycle Cost

The Series design features have made Cummins diesel, the standard for comparison of operating economy, reliability and long life. When all cost factors like initial purchase, fuel, lube oil, maintenance and overhaul are considered, the bottom line will show that this **Cummins 'Q23 Series'** will deliver the lowest life cycle cost.

Single Source Power Assurance

Design, manufacture and testing of engine and Alternator, enclosure and other accessories is from Cummins Group of companies for that optimum performance integrity and backed by countrywide product support network with single source responsibility for the entire package.

Heavy Duty, Durable and Emission Compliant

The Genset powered by the reliable **Cummins 'Q23Series'** series diesel engine meets stringent exhaust emission tests as per MOEF norms without sacrificing fuel efficiency at normal operating loads. **Cummins 'Q23 Series'** series diesel engine comes with heavy duty features, optimum size camshaft, optimized turbo-matching, premium Injectors and is yet compact in size with optimum power to weight ratio making it the obvious choice for your long-term power needs.

STANDARD SCOPE

ENGINE

Cummins 'Q' series direct injection, water cooled engine, 6 cylinder, 4 stroke, rated at 1800 RPM, conforming to ISO 3046 / BS 5514 has the following specifications:

- ☒ Cummins PT fuel pump
- ☒ Cummins Heavy Duty injectors
- ☒ Holset turbocharger, Pulse tuned exhaust manifold, Stainless steel exhaust flexible connections
- ☒ Radiator or Heat exchanger, Coolant inhibitor,
- ☒ Shell and tube type lube oil cooler
- ☒ Full flow paper element filters - fuel, lube oil and by-pass
- ☒ Dry type replaceable paper element air cleaner with restriction indicator
- ☒ Flywheel housing & flywheel to suit single bearing alternator
- ☒ Starting motor – Electric, Battery charging alternator
- ☒ ~~Electronic control panel with Electronic Governor (ECPG)~~
- ☒ Engine protections (trip)
 - High water temperature
 - Low lube oil pressure
 - Overspeed
 - Low coolant oil level (alarm)
- ☒ First fill lube oil

ALTERNATOR

Stamford brushless alternator

- ☒ Self-excited, self-regulated
- ☒ Class 'H' insulation
- ☒ Salient pole revolving field
- ☒ Single bearing
- ☒ Automatic voltage regulator

ACCESSORIES

- ☒ Silencer suitably optimized to meet stringent sound emission standards laid down by MOEF / CPCB
- ☒ Base rail with integral fuel tank is provided with drain plug, air vent, inlet and outlet connection, level indicator, manhole etc.
- ☒ 2 x 12 V dry, uncharged batteries with connecting leads and terminals

CONTROL PANEL

Powder coated control panel manufactured with 14 / 16 gauge CRCA sheet and provides:

- ☒ MCCB /ACB of suitable rating with overload and short circuit protection
- ☒ Voltmeter and Ammeter with selector switch
- ☒ KW / PF meters
- ☒ Frequency meter
- ☒ KWh meter
- ☒ Indicating lamps for "Load On" and "Set Running"
- ☒ Current transformers
- ☒ Aluminium busbars of suitable capacity with incoming and outgoing terminations
- ☒ Instrument fuses duly wired and ferruled

OPTIONALS

☒ **Engine**

Heavy duty air cleaner, Lube oil / Coolant heater with thermostatic switch

☒ **Alternator**

Thermistors, PMG excitation, Space heater

☒ **Control Panel**

"Power Command Control Panel" for micro processor based metering, monitoring & auto synchronising control system, AMF control panel, Battery charger, Remote/Auto start panel, Auto/Manual synchronizing panel, Audio/Visual annunciation for faults

☒ **Others**

Acoustic enclosure, Mobile sets with canopy

TECHNICAL DATA

Genset model	OC 800 Tier 1	OC 800 Tier 2
Standby power rating	895 kWm	910 kWm
Output voltage and frequency	60 Hz	60 Hz
Power factor	0.8 (lag)	0.8 (lag)
No. of phases	3 phase	3 phase
Engine make	Cummins	Cummins
Engine model	QSK 23 G3	QST 23 G7
No. of cylinders	In Line 6	In Line 6
Aspiration	Turbocharged - Aftercooled	Turbocharged - Aftercooled
Bore x stroke	170 x 170 mm	170 x 170 mm
Displacement	23.15 liter	23.15 liter
Engine output-prime	809 KWm	809 KWm
Fuel consumption @75% load	121 liter / hr	145 liter / hr
Fuel consumption @ 100% load	161 liter / hr	186 liter / hr
Typical lube oil consumption @ full load		
Total wet weight (engine + radiator & Fan)		
Length x width x height (engine)		
Compression ratio	16.0 : 1	16.0 : 1
Piston speed	10.3 m / s	10.3 m / s
Governor / class	Electronic	Electronic
Lubricating oil system capacity	74 - 103 liter	74 - 103 liter
Coolant capacity (engine + radiator)		
Combustion air intake @ 100% load (+or-5%)		
Fan air flow across radiator		
Exhaust temperature	514 °C	500 C
Alternator make	Stamford	Stamford
Frame size / model No.		
Alternator voltage regulation	±1.0%	±1.0%
Insulation	Class H	Class H
Standard enclosure	IP23	IP23
Winding pitch	2/3 Pitch	2/3 Pitch
Stator winding	Double layer lap	Double layer lap
Rotor	Dynamically balanced	Dynamically balanced
Wave form distortion	No load <1.5%, non distorting balanced linear load <5%	No load <1.5%, non distorting balanced linear load <5%
Telephone interference factor	Better than 50	Better than 50
Total harmonic factor	Better than 2%	Better than 2%
Battery capacity / rating	180AH, 2 x 12V	180AH, 2 x 12V

Due to continuous product development, all specifications are subject to change without notice