



# 1250 - 1500 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,

purchase, fuel, lube oil, maintenance and overhaul are considered, the bottom line will show that this **Cummins 'Q50 Series'** will deliver the lowest life cycle cost.

## **Heavy Duty, Durable and Emission Compliant** \_\_\_\_\_

The Genset powered by the reliable **Cummins 'Q50Series'** series diesel engine meets stringent exhaust emission tests as per MOEF norms without sacrificing fuel efficiency at normal operating loads. **Cummins 'Q50 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.

---

## **Silent Power** \_\_\_\_\_

**Cummins 1250-1500 kW** enclosure is so designed as to have optimum performance and serviceability over the

with integral fuel tank and is designed for ease in maintenance. The powder coated enclosure is manufactured on latest CNC machines to ensure superior finish and durability.

## **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.

## 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



### ENCLOSURE

---

- ☒ Acoustic enclosure specially designed to meet stringent MOEF / CPCB norms of 75 dBA @ 1mtr.
- ☒ Enclosure is designed to have optimum serviceability
- ☒ Air inlet louvers specially designed to operate at rated load even at 50 deg C enclosure temp.
- ☒ Made on special purpose CNC machines for consistency in quality and workmanship
- ☒ Powder coated for long lasting service life and superior finish
- ☒ With UV resistant powder coating, can withstand extreme environments
- ☒ Use of stainless steel hardware
- ☒ Insulation material meets exacting IS 8183 specs for better attenuation

### 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 1250	OC 1500
Standby power rating	1380 kW	1656 kW
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 50 G3	QST 50 G9
No. of cylinders	16 V	16 V
Aspiration	Turbocharged - Aftercooled	Turbocharged - Aftercooled
Bore x stroke	159 x 159 mm	159 x 159 mm
Displacement	50.3 liter	50.3 liter
Engine output-prime	1300 KWm	1384 KWm
Fuel consumption @75% load	199 liter / hr	257 liter / hr
Fuel consumption @ 100% load	261 liter / hr	330 liter / hr
Typical lube oil consumption @ full load		
Total wet weight ( engine + radiator & Fan)		
Length x width x height ( engine )		
Compression ratio	13.9 : 1	13.9 : 1
Piston speed	9.5 m / s	11.4 m / s
Governor / class	Electronic	Electronic
Lubricating oil system capacity	177 liter	280 liter
Coolant capacity ( engine + radiator )		
Combustion air intake @ 100% load ( +or-5% )		
Fan air flow across radiator		
Exhaust temperature	475 °C	515 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