

3 PHASE OUTPUTS			
GENERATOR SET MODEL	RATING	50HZ	
		400-230 V, 1500 rpm	
		KVA	KW
CM-1650	PRIME	1650	1320
	STAND-BY	1825	1460



POWERED BY:



Power  
Generation



### ALTERNATOR DATA

Make	LEROY SOMER
Model	LSA50.2 VL10
No. of bearings	1
Insulation Class	H
Total Harmonic Content	<3.5 %
Wires / Poles	12 / 4
Ingress Protection	IP23
Excitation System	Self-Excited
Winding Pitch	2/3 (n° 6S)
Overspeed	2250 mn <sup>-1</sup>
Voltage Regulation	AVR
Coupling	Flexible Disc

\* Ratings at 0.8 pf - Generator designed to operate in ambient temperatures up to 55 °C

\* Generating Set photo is for reference only.

### ENGINE / TECHNICAL DATA

Engine Make	Cummins	
Engine Model	QSK50G7	
Governing Type	Electronic	
Cylinder Block	Cast Iron	
Number of Cylinders	16	
Bore and Stroke	159 mm x 159 mm	
Displacement Litre	50.3 L	
Induction System	Turbocharged and Aftercooled	
Cycle	4 stroke	
Fuel System	Direct injection Cummins MCRS	
Air Cleaner Type	Dry replaceable element	
Rotation	Anti-clockwise (viewed from flywheel end)	
Cooling System	Water-Cooled	
Frequency and Engine Speed	50Hz & 1500rpm	
	<b>Prime</b>	<b>Standby</b>
Gross Engine Power kW		
FUEL CONSUMPTION (L/hr):	50%	189
	75%	265
	100%	349
		394
Total Lubrication System Capacity [liters]	235	235
Total Coolant Capacity [liters]	294	294
Coolant Ratio	50% ethylene glycol; 50% water	
Limiting Ambient Temperature °C	50	50
Cooling system air flow (m3/s)	35	35
Fan Power (kWm)	40	40
Fuel Tank Capacity	N/A	N/A

### CONTROL PANEL

Make	Deep Sea
<b>DeepSea Control Panel</b> is an Auto Mains (Utility) Failure Control Module. It is operated via the STRT, STOP, AUTO, and MANUAL soft touch membrane buttons on the front panel. DSE7320 can be controlled remotely using either GDM Modem, Ethernet via DSE860/865 or via RS485.	
<b>PROTECTION:</b>	
-Fail to start -Low oil pressure -High engine temperature -U/O Voltage shutdown -U/O Frequency shutdown -Under speed, Overspeed -Loss of speed engine detection -High/Low battery voltage -kW overload -Unbalanced load -Low fuel alarm (if fitted) -Battery charger failure (if fitted)	

### Dimension and Weight

DIMENSION	OPEN	SILENT
Length (L)	5500 mm	12000 mm
Width (W)	2200 mm	2320 mm
Height (H)	2500 mm	2900 mm
Net Weight	11400 kg	4000 kg*
	*container without genset	(40' ISO)

### RATING DEFINITIONS:

**Prime Power** - These ratings are applicable for supplying continuous power (at variable load) in lieu of commercially purchased power. There is no limitation to the annual hours of operation and this model can supply 10% overload power for 1 hour in 12 hours.

**Standby Power** - These ratings are applicable for supplying continuous electrical power (at variable load) in the event of a utility power failure. No overload is permitted on these rating. When used at standby Rating the alternator will be peak continuous rated (according to ISO3046)

### STANDARD SPECIFICATIONS

#### 1. ENGINE

Cummins heavy duty diesel engine.

##### 1.1 GOVERNOR

Electronic

#### 2. COOLING RADIATOR

Radiator and cooling fan complete with protection guards, designed to cool the engine in ambient temperatures up to 55° C. The radiator is mounted on the base frame to avoid vibrations coming from the engine.

#### 3. FILTRATION SYSTEM

Cartridge type air filter with security element. Cartridge fuel filter and full lube oil filter. All filters have replaceable elements.

#### 4. EXHAUST SYSTEM

Heavy-duty industrial silencer.

#### 5. ELECTRICAL SYSTEM

24 Volts system with battery charging alternator, Starter motor, High capacity maintenance free lead acid battery, battery rack mounted on the generating set base frame, and heavy duty interconnecting cables with terminations.

#### 6. ALTERNATOR

Screen protected and drip-proof, self-exciting, self-regulating brush-less alternator. Four poles, STAR winding connection, suitable for tropical, humid and saline climates. H class insulation.

#### 7. AUTOMATIC VOLTAGE REGULATOR (AVR)

Static electronic design voltage regulator. Steady voltage precision within + 1 % from no load to full load including cold and hot variations, at any Power factor between 0.8 and unity.

#### 8. MOTOR STARTING

An overload capacity equivalent to between 160% to 300% (depending on alternator frame size) of full load impedance at zero power factor can be sustained for 10 seconds.

#### 9. MOUNTING ARRANGEMENT

##### 9.1 BASE FRAME

The complete generating set is mounted on heavy duty steel fabricated base frame Which is anti rust coated.

##### 9.2 COUPLING

Engine and alternator are directly coupled by means of SAE flange so there is no possibility of misalignment after prolong use. The engine fly wheel is flexibly coupled to the alternator rotor.

##### 9.3 ANTI VIBRATION MOUNTING PADS

Anti vibration pads are fitted between engine-alternator base frame ensuring complete vibration isolation of rotating assemblies.

#### 10. DOCUMENTATION

A full set of operation and maintenance manual are provided.

#### 11. FACTORY TESTS

Generating set is subject to a strict load test before delivery. A test certificate can be provided as optional.

#### 12. QUALITY STANDARDS

Generating set meets the following standards ISO 8528, IEC 34.1, CEI 2.3, VDE 0530, BS 4999-5000, NF51-100.

#### 13. WARRANTY

Generating set is guaranteed for a period of 12 months from date of commissioning or 18 months from date of shipment which ever occurs earlier. (check warranty statement for more details, as it may vary for different countries)

In line with our policy of continuous product development, we reserve right to change specification without notice

### AVAILABLE OPTIONS & ACCESSORIES

We offer a range of optional features and accessories to tailor our generating sets to meet your needs.

#### OPTIONS

- Generator Set control and synchronizing panels
- Additional Protection alarms and shutdowns
- Water fuel separator
- Water jacket heater
- Battery charger

Distributed and Serviced by:



#### ACCESSORIES

- Genuine spare parts
- Fuel Tanks
- Manual and Automatic Transfer Switches

#### STANDARD REFERENCE CONDITIONS

Fuel consumption data at various loads, diesel fuel with a specific gravity of 0.85kg/L. De-ration may apply, please consult Adpower for specific site ratings.

*Some of the specifications are not standard on all Genset Models.*

