

Diesel Generator Set

MPL2500C

Powered By Cummins 50 Hz / 1500 RPM





MULTIPHASE CORPORATION CO., LTD.

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MPL2500C



MODEL	FREQUENCY / RPM	STANDBY POWER	PRIME POWER
MPL2500C	EO U-/1EOO DDM	2500 kVA	2250 kVA
Powered by Cummins	50 Hz/1500 RPM	2000 kW	1800 kW

Model: MPLxxCS - S Suffix for silent type

General Technical Data	
Model	MPL2500C
Engine	Cummins QSK60-G8
Standard Voltage	400/230V
Phase	3 Phase
Stamford Alternator	S7L1D-H41
Leroy Somer Alternator	LSA52.3L9
Other Alternator	LA454G1800
Speed Control Type	ECM
Controller Model	DSE7320

Generator Set Fuel Consumption (L/hr)

Load-Standby Power (110%)	500.0
Load-Prime Power (100%)	368.0
Load-Prime Power (75%)	252.0
Load-Prime Power (50%)	140.0

Multiphase Power Generators are in conformity with certification ISO 9001/ ISO14001/ISO18001 and our gensets are compliant with CE Standard. Best quality of electricity, high starting and loading capacity according to ISO8528-5. Ambient conditions of reference according to ISO 8528-1:2018 normative: 1000 mbar, 25°C, 30% relative humidity.

Prime Power (PRP):

According to ISO 8528-1:2018, Prime power is the maximum power which a generating set is capable of delivering continuously whilst supplying a variable electrical load when operated for an unlimited number of hours per year under the agreed operating conditions with the maintenance intervals and procedures being carried out as prescribed by the manufacturer. The permissible average power output (Ppp) over 24 h of operation shall not exceed 70 % of the PRP.

Emergency Standby Power (ESP):

According to ISO 8528-1:2018, Emergency standby power is the maximum power available during a variable electrical power sequence, under the stated operating conditions, for which a generating set is capable of delivering in the event of a utility power outage or under test conditions for up to 200 h of operation per year with the maintenance intervals and procedures being carried out as prescribed by the manufacturers. The permissible average power output over 24 h of operation shall not exceed 70 % of the ESP

Continuous Power (COP):

According to Standard ISO 8528-1:2018, this is the maximum power available for continuous loads for unlimited running hours a year between the maintenance times recommended by the manufacturer under the environmental conditions established by the same.

Generator Set Ratings						
Voltage Phase	Standby Rating			Prime Rating		
	KVA	KW	AMPS	KVA	KW	
415/240v	3	2500	2000	3478.1	2250	1800
400/230v	3	2500	2000	3608.5	2250	1800
380/220v	3	2500	2000	3798.5	2250	1800

Operating Environmental Requirement

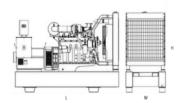
- Abmient Temperature: -25°C 50°C (Heater must be included when in low temperature)
- Himidity: Less than 80%
- Altitude: Up to 1000meters (For higher altitude application, please consult with Our Team)





DIMENSIONS

Weight And Dimensions	Open Type	Silent Type
Length (mm)	5720	12032
Width (mm)	2250	2352
Height (mm)	2660	2690
Net Weight (kg)	14000	17500
Fuel Tank Capacity (L)	n/a	n/a
Running Hours - 100% Load	n/a	n/a





DIESEL ENGINE SPECIFICATION

Manufacturer	Cummins	Engine Design	Standby Power	Prime Power
Engine Model	QSK60-G8	Engine Idle Speed (rpm)	700-900	n/a
Cylinders No./Arrangement	16 / V-Line	Gross Engine Output (KW)	2145	n/a
Compression Ratio	14.5:1	Piston Speed (m/s)	9.5	n/a
Injection Type	Direct	Engine Water Flow (L/s)	26.5	n/a
Aspiration Type	Turbocharged & Low Temperature Aftercooled	Intake Air Flow (L/s)	2605	n/a
Bore x Stroke	159x190 mm	Exhaust Gas Flow (L/s)	6315	n/a
Displacement	60.2 L	Exhaust Gas Temp (°C)	485	n/a



	Diesel Engine Specifications					
	Max. Intake Air Restriction with Heavy Duty Air Cleaner					
Air Intake System	Dirty Element (in H20)	25				
	Clean Element (in H20)	15				
	Engine Oil Pressure for Engine Protection Devices	Engine Oil Pressure for Engine Protection Devices				
	Idle Speed (Minimum) (kPa)	135				
Lubrication System	Governed Speed (kPa)	345-483				
	Max. Allowable Oil Temperature (°C)	121				
	Total system capacity (L)	195				
	Type Injection System	Cummins HPI-PT				
Fuel System	With Clean Fuel Filter (in HG)	4				
r der System	With Dirty Fuel Filter (in HG)	8				
	Max. Fuel Flow to Injection Pump (L/hr)	1515				
	Coolant Capacity (L)	159				
	Max. Coolant Friction Head External to Engine (kPa)	48				
Cooling System	Standard Thermostat (Modulating) Range (°C)	82-93				
Cooling System	Max. Allowable Top Tank Temperature (°C)	104				
	Max. Allowable Coolant Temperature (°C)	n/a				
	Min. Pressure Cap (kPa)	76				
	Minimum Recommended Battery Capacity (V)	24				
Electrical System	Cold Soak CCA (0~10°C or Above)	1800				
	Cold Soak CCA (-18~0°C or Above)	2200				
Exhaust System	Max. Back Pressure (mmHg)	51				

ALTERNATOR SPECIFICATION

Poles	4
Insulation	Class H
Protection Rating	IP23
Exciter System	P.M.G
AVR Regulatorion Range	±0.5%
Number Of Bearing	Single Bearing
Coupling System	Flexible Disc
Winding Pitch	2/3
Overspeed Protection	2250 R.P.M.

ALTERNATOR STANDARD FEATURES

- All models are brushless, rotating-field alternators
- Alternator meet the main international standard of IEC 60034, NEMA MG 1.32-33, BS 5000 Part 99, VDE 0530, ISO 8528/3
- The AVR voltage regulator provides superior short circuit capability
- Self-ventilated and dip proof construction
- Superior voltage waveform

Note: See Alternator Data Sheets for application data and ratings, efficiency curves, voltage dip with motor starting curves, and short circuit decrement curves

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CONTROL SYSTEM DATA (DSE7320)



Main Feature

The DSE7320 will also monitor the mains (utility) supply. The modules include USB, RS232 and RS485 ports as well as dedicated DSENet® terminals for system expansion.

Key Function

- 4-Line back-lit LCD text display
- Five key menu navigation
- Front panel editing with PIN protection
- · Customisable status screens
- Power save mode
- · Support for up to three remote display units
- 9 configurable inputs
- 8 configurable outputs
- Flexible sender inputs
- Configurable timers and alarms
- 3 configurable maintenance alarms
- Multiple date and time scheduler
- Configurable event log (250)
- Integral PLC editor

- · Easy access diagnostic page
- · CAN and Magnetic Pick-up/Alt. sensing
- Fuel usage monitor and low fuel alarms
- Charge alternator failure alarm
- Manual speed control (on compatible CAN engines)
- Manual fuel pump control
- Power monitoring (kWh, kVAr, kVAh, kVArh)
- Load switching (load shedding and dummy load outputs)
- Automatic load transfer (DSE7320)
- Backed up real time clock
- · Start & stop capability via SMS messaging
- · USB connectivity
- Tier 4 CAN engine support
- DSENet ® expansion compatible etc.





OPTIONAL

Genset Optional Specifications		
Engine	Water Jacket Pre-Heater	
	Oil Pre-Heater	
	Fuel-Water Separator	
	Winding and Bearing Temperature Detector (RTD)	
Alternator	Anti-Condensation Heater (Space Heater)	
Arternator	PMG / AREP	
	Anti-Damp and Anti-Corrosion Treatment	
	ATS	
Electrical System	Remote Control and Monitoring	
Liedu dai System	Synchronizing System	
	3/5 Pin sockets with RCBO protection	
	Bunded Double Wall Base Fuel Tank	
	Extended To Larger Capacity Base Tank	
Fuel System	Free-stand Daily Fuel Tank	
	Automatic Fuel Feeding System	
	Fuel T-valves	
Conony	Trailer	
Canopy	Rental Type Design	

Optional Controller Model		
ComAp Controller for Single Genset Application	ComAp Nano MRS3	
	ComAp AMF20	
	ComAp AMF25	
ComAp Controller for Multi Genset	ComAp IG200	
Application	ComAp IG-NT	
	DSE4520 MKII	
Deepsea Controller for Single Genset Application	DSE6020 MKII	
	DSE7320 MKII /DSE7420MKII	
Deepsea Controller for Multi Genset Application	DSE8610 MKII	
	DSE8810 MKII	

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