Diesel Generator Set

MPL2750C

Powered By Cummins

50 Hz / 1500 RPM

POWERED BY Cummins G·DRIVE

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MPL2750C

MULTIPHASE POWER

MODEL	FREQUENCY / RPM	STANDBY POWER	PRIME POWER
MPL2750C Powered by Cummins	50 Hz/1500 RPM	2750 kVA	2500 kVA
		2200 kW	2000 kW

- Model : MPLxxC**S** – **S** Suffix for silent type

General Technical Data

Model	MPL2750C
Engine	Cummins QSK78-G18
Standard Voltage	400/230V
Phase	3 Phase
Stamford Alternator	P80 LVSI804S
Leroy Somer Alternator	LSA52.3L12
Other Alternator	n/a
Speed Control Type	ECM
Controller Model	DSE7320

Generator Set Fuel Consumption (L/hr)

Load-Standby Power (110%)	542.0
Load-Prime Power (100%)	494.0
Load-Prime Power (75%)	383.0
Load-Prime Power (50%)	273.0

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	2750	2200	3825.9	2500	2000
400/230v	3	2750	2200	3969.4	2500	2000
380/220v	3	2750	2200	4178.3	2500	2000

Operating Environmental Requirement
- Abmient Temperature: -25ºC - 50ºC (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)
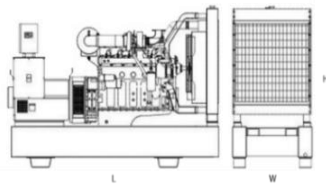
DIMENSIONS

Weight And Dimensions	Open Type	Silent Type
Length (mm)	7200	12032
Width (mm)	2750	2352
Height (mm)	3700	2690
Net Weight (kg)	21000	30000
Fuel Tank Capacity (L)	n/a	n/a
Running Hours - 100% Load	n/a	n/a

DIESEL ENGINE SPECIFICATION

			Standby Power	Prime Power
Manufacturer	Cummins	Engine Design		
Engine Model	QSK78-G18	Engine Idle Speed (rpm)	700-900	700-900
Cylinders No./Arrangement	18 / V-Line	Gross Engine Output (KW)	2383	2151
Compression Ratio	15:1	Brake Mean Effective Pressure (kPa)	2455	2221
Injection Type	Direct	Engine Water Flow (L/m)	1984	1984
Aspiration Type	Turbocharged & Low Temperature Aftercooled	Intake Air Flow (L/s)	3143	2975
134	170x190 mm	Exhaust Gas Flow (L/s)	7018	6621
Displacement	77.6 L	Exhaust Gas Temp (ºC)	423	415

Diesel Engine Specifications		
Air Intake System	Max. Intake Air Restriction with Heavy Duty Air Cleaner	
	Dirty Element (in H2O)	25
	Clean Element (in H2O)	15
Lubrication System	Engine Oil Pressure for Engine Protection Devices	
	Idle Speed (Minimum) (kPa)	206.8
	Governed Speed (kPa)	414-482.6
	Max. Allowable Oil Temperature (°C)	121
	Total system capacity (L)	465.6
Fuel System	Type Injection System	Cummins HPI-PT
	With Clean Fuel Filter (in HG)	5
	With Dirty Fuel Filter (in HG)	9
	Max. Return Fuel Flow (L/hr)	1893
Cooling System	Coolant Capacity (L)	167
	Max. Coolant Friction Head External to Engine (kPa)	48.3
	Standard Thermostat (Modulating) Range (°C)	82-93
	Max. Allowable Top Tank Temperature (°C)	104
	Max. Allowable Coolant Temperature (°C)	n/a
	Min. Pressure Cap (kPa)	69
Electrical System	Minimum Recommended Battery Capacity (V)	24
	Cold Soak CCA (0~10°C or Above)	1800
	Cold Soak CCA (-18~0°C or Above)	2200
Exhaust System	Max. Back Pressure @Standby Power (kPa)	6.8

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

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

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

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