

Diesel Generator Set

MPL630C

Powered By Cummins 50 Hz / 1500 RPM





MULTIPHASE CORPORATION CO., LTD.

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MPL630C



MODEL	FREQUENCY / RPM	STANDBY POWER	PRIME POWER
MPL630C	EO U-/1EOO DDM	630 kVA	575 kVA
Powered by Cummins	50 Hz/1500 RPM	504 kW	460 kW

Model: MPLxxCS - S Suffix for silent type

General Technical Data		
Model	MPL630C	
Engine	Cummins KTAA19-G6	
Standard Voltage	400/230V	
Phase	3 Phase	
Stamford Alternator	HCI544E or S5L1D-E41	
Leroy Somer Alternator	LSA47.2L9 or TAL-A47-E	
Other Alternator	n/a	
Speed Control Type	Electronic	
Controller Model	DSE7320	
Generator Set Fuel Consumption (L/hr)		

Generator Set Fuel Consumption (L/hr)

Load-Standby Power (110%)	145.2
Load-Prime Power (100%)	133.1
Load-Prime Power (75%)	98.9
Load-Prime Power (50%)	66.6

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						
V. II. de Blance	Standby Rating		Prime Rating			
Voltage	Phase	KVA	KW	AMPS	KVA	KW
415/240v	3	630	504	876.5	575	460
400/230v	3	630	504	909.4	575	460
380/220v	3	630	504	957.2	575	460

Operating Environmental Requirement

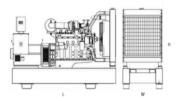
- Abmient Temperature: -25°C 50°C (Heater must be included when in low temperature)
- Himidity: Less than 80%
- Altitude: Up to 1000meters (For higher altitude application, please consult with Our Team)





DIMENSIONS

Weight And Dimensions	Open Type	Silent Type
Length (mm)	3450	4950
Width (mm)	1340	2000
Height (mm)	2240	2514
Net Weight (kg)	4000	6560
Fuel Tank Capacity (L)	630	1100
Running Hours - 100% Load	4.7	8.3







DIESEL ENGINE SPECIFICATION

Manufacturer	Cummins	Engine Design	Standby Power	Prime Power
Engine Model	KTAA19-G6	Engine Idle Speed (rpm)	725-775	725-775
Cylinders No./Arrangement	6 / In-Line	Gross Engine Output (KW)	570	520
Compression Ratio	13.9:1	Piston Speed (m/s)	7.9	7.9
Injection Type	Direct	Engine Water Flow (L/s)	162	162
Aspiration Type	Turbocharged & Air-Air Cooled	Intake Air Flow (L/s)	703	623
134	159x159 mm	Exhaust Gas Flow (L/s)	1985	1860
Displacement	19 L	Exhaust Gas Temp (°C)	457	433



	Diesel Engine Specifications				
	Max. Intake Air Restriction with Heavy Duty Air Cleaner	Max. Intake Air Restriction with Heavy Duty Air Cleaner			
Air Intake System	Dirty Element (kPa)	n/a			
	Clean Element (kPa)	3.73			
	Engine Oil Pressure for Engine Protection Devices	Engine Oil Pressure for Engine Protection Devices			
	Idle Speed (Minimum) (kPa)	138			
Lubrication System	Governed Speed (kPa)	345-483			
	Max. Allowable Oil Temperature (°C)	151.4			
	Total system capacity (L)	50			
	Type Injection System	Cummins PT			
Final Creations	With Clean Fuel Filter (kPa)	13.55			
Fuel System	With Dirty Fuel Filter (kPa)	30.48			
	Min. Allowable Fuel Tank Vent Capability (L/h)	425			
	Coolant Capacity - Engine Only (L)	23			
	Max. Coolant Friction Head External to Engine (kPa)	68.9			
On all and Ourstons	Standard Thermostat (Modulating) Range (°C)	82-93			
Cooling System	Max. Allowable Top Tank Temperature (°C)	104/100			
	Max. Allowable Coolant Temperature (°C)	96.1			
	Max. Raw water Inlet Friction (kPa)	254			
Electrical System	Minimum Recommended Battery Capacity (V)	24			
	Cold Soak CCA (0~10 °C or Above)	640			
	Cold Soak CCA (18~0 °C or Above)	900			
Exhaust System	Max. Back Pressure (kPa)	10			

ALTERNATOR SPECIFICATION

Poles	4
Insulation	Class H
Protection Rating	IP23
Exciter System	Self-Excited, Brushless
AVR Regulatorion Range	±1%
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)	
Alternator	PMG / AREP	
	Anti-Damp and Anti-Corrosion Treatment	
	ATS	
Electrical System	Remote Control and Monitoring	
Electrical 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 Nano MRS3	
ComAp Controller for Single Genset Application	ComAp AMF20	
у фринципа	ComAp AMF25	
ComAp Controller for Multi Genset	ComAp IG200	
Application	ComAp IG-NT	
	DSE4520 MKII	
Deepsea Controller for Single Genset Application	DSE6020 MKII	
- Солостиризации	DSE7320 MKII /DSE7420MKII	
Deepsea Controller for Multi Genset Application	DSE8610 MKII	
	DSE8810 MKII	

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