



**MULTIPHASE  
POWER**

Diesel Generator Set

# MPY1000C

Powered By Cummins

50 Hz / 1500 RPM



**MULTIPHASE CORPORATION CO., LTD.**

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# MPY1000C



MODEL	FREQUENCY / RPM	STANDBY POWER	PRIME POWER
MPY1000C Powered by Cummins	50 Hz/1500 RPM	800 kW	728 kW
		1000 kVA	910 kVA

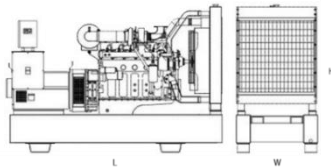
- Available for voltages 400/230V, 480/277V, 380/220V, 440/254V, 416/240V, 220/127V, 208/120V
- All datas based on ISO 3046, altitude 100m (328ft), barometric pressure 100kPa (29.53 inHg), air temperature 25 °C (77 °F), relative humidity 30%.
- Diesel generators comply with standards : ISO8528, ISO14000, ISO3046, GB755, BS5000, VDE0530, IEC34-1
- Model : MPYxxCS – S Suffix for silent type

## GENERAL CHARACTERISTICS

Model	MPY1000C
Engine	Cummins KTA38-G2A
Alternator	Leroy Somer TAL-A49-D
Voltage (V)	400/230
Current (A)	1314
Connection	3 Phase, 4W/Y
Frequency	50 Hz
Engine Speed (RPM)	1500
Rated Power Factor	0.8
Controller Model	DSE7320

## DIMENSIONS

DIMENSIONS	OPEN TYPE	SILENT TYPE
Length (L)	4400 mm	20ft Container
Width (W)	1850 mm	
Height (H)	2380 mm	
Net Weight (KG)	7200 kg	8800 kg



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## STANDARD CONFIGURATION

Engine	Cummins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.
Alternator	Leroy Somer brushless AC alternator
Radiator	Silent Type 50 °C (Open Type 40 °C), fan protective shroud
Base Frame	≤ 550 KW : base mounted fuel tank, anti-vibration pads, battery holder > 550 KW : channel steel base frame, anti-vibration pads, battery holder
Circuit Breaker	ABB BREAKER
Control System	DEEP SEA 7320
Start Battery	Dry charged battery, available for 6 times starts under standard condition; connection cables.
Installation Accessories	Bellow, Elbow and Flange, Exhaust Silencer, etc.
Documents	Electric drawing, Operation & Maintenance Manual, Certification etc.

## OPTIONAL CONFIGURATION

Engine Accessories	<ul style="list-style-type: none"> <li>• Heavy-Duty Air Filter</li> <li>• Coolant Heater</li> <li>• Lube Oil Heater</li> <li>• Fuel and Water Separator</li> </ul>
Alternator and Accessories	<ul style="list-style-type: none"> <li>• Stamford or Leroy Somer or Others</li> </ul>
Cooling System	<ul style="list-style-type: none"> <li>• High Voltage ___ kV</li> <li>• 50 °C Radiator</li> <li>• Heat Exchanger + Water Cooling Tower + External Water Circulation Pumping System</li> <li>• Remote Horizontal Water Tank System</li> </ul>
Control System	<ul style="list-style-type: none"> <li>• AMF</li> <li>• Parallel</li> <li>• Practical Type in Low Temperature Environment</li> <li>• Control Screen Heater</li> <li>• Other</li> </ul>
Circuit Breaker	<ul style="list-style-type: none"> <li>• ¾ Poles</li> <li>• Fixed/Handcart Type</li> <li>• Electric Mechanism</li> </ul>
Automatic Transfer Switch	<ul style="list-style-type: none"> <li>• ATS Cabinet</li> </ul>
Start Battery	<ul style="list-style-type: none"> <li>• Nickel-Cadmium Battery</li> <li>• Maintenance-Free Battery</li> <li>• Power Charger and Selector</li> <li>• Charging Current Meter</li> </ul>
External Fuel Tank	<ul style="list-style-type: none"> <li>• 500 L, 1000 L, 1500 L, 2000 L, 2500L, 3000L, 4000L, 5000L</li> </ul>

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## ENGINE DATA

Engine Model	Cummins KTA38-G2A
Engine Power	896 kW.
Aspiration	Turbocharged & Aftercooled
Displacement (L)	38
Type	60° Vee
Bore x Stroke (mm)	159 x 159
No. of Cylinders	12
Compression Ratio	14.5 : 1
Governor Type	Electronic Governor
Rated Speed (RPM)	1500
Prime Power Fuel Consumption (L/h)	194
Standby Power Fuel Consumption (L/h)	215
Fuel	ASTM D975 No.2-D or BS2869 1998 Class A1, A2
Injection System	PT
Lube Oil Capacity (L)	135.1
Lube	API CF-4 15W40
Max. Temperature (°C)	121
Coolant Capacity (L)	240.8
Max. Top Tank Temp. (°C)	104
Std. Thermostat (Modulating) Range (°C)	82-93
Fan Drive Method	Shaft Drive
Cooling Fan Air Flow (m <sup>3</sup> /min)	1400
Combustion Air Flow (m <sup>3</sup> /min)	60.06/64.02
Maximum Air Intake Restriction (kPa)	3.7
Exhaust Gas Flow (m <sup>3</sup> /min)	165.54/179.7
Max. Back Pressure (kPa)	13
Exhaust Gas Temp (°C)	≤ 521
Exhaust Pipe Size (mm)	φ 150 x 2
Start Mode	DC24V Electric Start
Battery	4 x 200 Ah

## ALTERNATOR DATA

Alternator Model	Leroy Somer TAL-A49-D	Rate Power	808/1010 kW/kVA
PF.	0.8	Voltage	400/230 V
Phase	3	Frequency	50 Hz.
Connection	3P 4W/Y	Bearing	1
Winding Pitch	2/3	Protection Class	IP23
Insulation Class	H	Efficiency	94%
Tel. Influence	TIF < 50	Voltage Regulation	±0.5%
Harmonic Coefficient	THF < 2%	AVR	R150
Voltage Adjust Scope	≥±5%	Excitation System	SHUNT

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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.

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