



**MULTIPHASE
POWER**

Diesel Generator Set

MPY50P

Powered By Perkins



50 Hz / 1500 RPM



MULTIPHASE CORPORATION CO., LTD.

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MPY50P



MODEL	FREQUENCY / RPM	STANDBY POWER	PRIME POWER
MPY50P Powered by Perkins	50 Hz/1500 RPM	40 kW	36 kW
		50 kVA	45 kVA

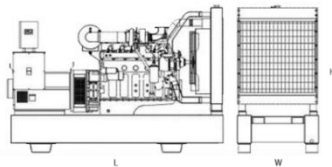
- Available for voltages 400/230V, 480/277V, 380/220V, 440/254V, 416/240V, 220/127V, 208/120V
- All datas based on ISO 3046, altitude 100m (328ft), barometric pressure 100kPa (29.53 inHg), air temperature 25 °C (77 °F), relative humidity 30%.
- Diesel generators comply with standards : ISO8528, ISO14000,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

GENERAL CHARACTERISTICS

Model	MPY50P
Engine	Perkins 1103A-33TG1
Alternator	Stamford UCI224D
Voltage (V)	400/230
Current (A)	65
Connection	3P 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)	1500 mm	2300 mm
Width (W)	800 mm	1100 mm
Height (H)	1200 mm	1240 mm
Net Weight (KG)	700 kg	1200 kg



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STANDARD CONFIGURATION

Engine	Perkins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.
Alternator	Stamford brushless AC alternator
Radiator	40 °C, fan protective shroud
Base Frame	≤ 520 KW : base mounted fuel tank, anti-vibration pads, battery holder > 520 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"> • Heavy-Duty Air Filter • Coolant Heater • Lube Oil Heater • Fuel and Water Separator
Alternator and Accessories	<ul style="list-style-type: none"> • Stamford or Leroy Somer or Others
Cooling System	<ul style="list-style-type: none"> • High Voltage ___ kV • 50 °C Radiator • Heat Exchanger + Water Cooling Tower + External Water Circulation Pumping System • Remote Horizontal Water Tank System
Control System	<ul style="list-style-type: none"> • AMF • Parallel • Practical Type in Low Temperature Environment • Control Screen Heater • Other
Circuit Breaker	<ul style="list-style-type: none"> • ¾ Poles • Fixed/Handcart Type • Electric Mechanism
Automatic Transfer Switch	<ul style="list-style-type: none"> • ATS Cabinet
Start Battery	<ul style="list-style-type: none"> • Nickel-Cadmium Battery • Maintenance-Free Battery • Power Charger and Selector • Charging Current Meter
External Fuel Tank	<ul style="list-style-type: none"> • 500 L, 1000 L, 1500 L, 2000 L, 2500L, 3000L, 4000L, 5000L

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ENGINE DATA

Engine Model	Perkins 1103A-33TG1
Engine Power	45.6 kW.
Aspiration	Turbocharged
Displacement (L)	3.3
Type	Vertical In-Line
Bore x Stroke (mm)	105 x 127
No. of Cylinders	3
Compression Ratio	17.25 : 1
Governor Type	Mechanical
Rated Speed (RPM)	1500
Prime Power Fuel Consumption (L/h)	10.8
Standby Power Fuel Consumption (L/h)	11.7
Fuel	ASTM D975 No.2-D or BS2869 1998 Class A1, A2
Injection System	n/a
Lube Oil Capacity (L)	7.9
Lube	API CF-4 15W40
Max. Temperature (°C)	125
Coolant Capacity (L)	10.2
Max. Top Tank Temp. (°C)	112
Std. Thermostat (Modulating) Range (°C)	82-93
Fan Drive Method	Shaft Drive
Cooling Fan Air Flow (m ³ /min)	53
Combustion Air Flow (m ³ /min)	2.9/3.1
Maximum Air Intake Restriction (kPa)	8
Exhaust Gas Flow (m ³ /min)	7.0/7.7
Max. Back Pressure (kPa)	10
Exhaust Gas Temp (°C)	≤ 537
Exhaust Pipe Size (mm)	φ 56
Start Mode	DC12V Electric Start
Battery	1 x 120 Ah

ALTERNATOR DATA

Alternator Model	Stamford UCI224D	Rate Power	44/55 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	88.2%
Tel. Influence	TIF < 50	Voltage Regulation	±1.0%
Harmonic Coefficient	THF < 2%	AVR	AS440
Voltage Adjust Scope	≥±5%	Excitation System	Self Excited

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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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