



**MULTIPHASE  
POWER**

Diesel Generator Set

# MPY165P

Powered By Perkins



50 Hz / 1500 RPM



**MULTIPHASE CORPORATION CO., LTD.**

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# MPY165P



MODEL	FREQUENCY / RPM	STANDBY POWER	PRIME POWER
MPY165P Powered by Perkins	50 Hz/1500 RPM	132 kW	120 kW
		165 kVA	150 kVA

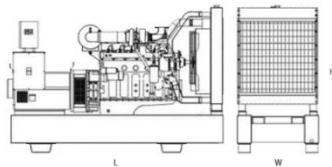
- Available for voltages 400/230V, 480/277V, 380/220V, 440/254V, 416/240V, 220/127V, 208/120V
- All datas based on ISO 3046, altitude 100m (328ft), barometric pressure 100kPa (29.53 inHg), air temperature 25 °C (77 °F), relative humidity 30%.
- Diesel generators comply with standards : ISO8528, ISO14000,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

## GENERAL CHARACTERISTICS

Model	MPY165P
Engine	Perkins 1106A-70TAG2
Alternator	Stamford UCI274F
Voltage (V)	400/230
Current (A)	217
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)	2350 mm	2800 mm
Width (W)	950 mm	1100 mm
Height (H)	1520 mm	1800 mm
Net Weight (KG)	1580 kg	2060 kg



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## STANDARD CONFIGURATION

<b>Engine</b>	Perkins, including air filters, fuel filters, oil filter, starting motor and charging alternator etc.
<b>Alternator</b>	Stamford brushless AC alternator
<b>Radiator</b>	40 °C, fan protective shroud
<b>Base Frame</b>	≤ 520 KW : base mounted fuel tank, anti-vibration pads, battery holder > 520 KW : channel steel base frame, anti-vibration pads, battery holder
<b>Circuit Breaker</b>	ABB BREAKER
<b>Control System</b>	DEEP SEA 7320
<b>Start Battery</b>	Dry charged battery, available for 6 times starts under standard condition; connection cables.
<b>Installation Accessories</b>	Bellow, Elbow and Flange, Exhaust Silencer, etc.
<b>Documents</b>	Electric drawing, Operation & Maintenance Manual, Certification etc.

## OPTIONAL CONFIGURATION

<b>Engine Accessories</b>	<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>
<b>Alternator and Accessories</b>	<ul style="list-style-type: none"> <li>• Stamford or Leroy Somer or Others</li> </ul>
<b>Cooling System</b>	<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>
<b>Control System</b>	<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>
<b>Circuit Breaker</b>	<ul style="list-style-type: none"> <li>• ¾ Poles</li> <li>• Fixed/Handcart Type</li> <li>• Electric Mechanism</li> </ul>
<b>Automatic Transfer Switch</b>	<ul style="list-style-type: none"> <li>• ATS Cabinet</li> </ul>
<b>Start Battery</b>	<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>
<b>External Fuel Tank</b>	<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	Perkins 1106A-70TAG2
Engine Power	149.1 kW.
Aspiration	Turbocharged, Air-to Air Charge Cooled
Displacement (L)	7.01
Type	Vertical In-Line
Bore x Stroke (mm)	105 x 135
No. of Cylinders	6
Compression Ratio	16 : 1
Governor Type	Mechanical
Rated Speed (RPM)	1500
Prime Power Fuel Consumption (L/h)	33.4
Standby Power Fuel Consumption (L/h)	36.1
Fuel	ASTM D975 No.2-D or BS2869 1998 Class A1, A2
Injection System	n/a
Lube Oil Capacity (L)	16.5
Lube	API CF-4 15W40
Max. Temperature (°C)	125
Coolant Capacity (L)	21
Max. Top Tank Temp. (°C)	110
Std. Thermostat (Modulating) Range (°C)	82-93
Fan Drive Method	Shaft Drive
Cooling Fan Air Flow (m <sup>3</sup> /min)	282
Combustion Air Flow (m <sup>3</sup> /min)	10.2/10.67
Maximum Air Intake Restriction (kPa)	5
Exhaust Gas Flow (m <sup>3</sup> /min)	23.78/25.53
Max. Back Pressure (kPa)	6
Exhaust Gas Temp (°C)	≤ 484
Exhaust Pipe Size (mm)	φ 72
Start Mode	DC12V Electric Start
Battery	1 x 120 Ah

## ALTERNATOR DATA

Alternator Model	Stamford UCI274F	Rate Power	128/160 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/H	Efficiency	92.3%
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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