

**Diesel Generator Set** 

# **MPL2030P**

Powered By Perkins



50 Hz / 1500 RPM



## MULTIPHASE CORPORATION CO., LTD.

90 CW Tower, Room No.A2102, 21st Floor, Ratchadapisek Road, Kwaeng Huai Khwang, Khet Huai Khwang, Bangkok 10310 Tel: +66 02 168 3193-5 #109 Fax: +66 02 168 3192 Email: marketing@multiphase-corp.com Website: www.multiphase-power.com Facebook: www.facebook.com/MultiphasePower Line ID: @multiphasepower



# **MPL2030P**



MODEL	FREQUENCY / RPM	STANDBY POWER	PRIME POWER
MPL2030P	50 Hz/1500 RPM	2030 kVA	1850 kVA
Powered by Perkins		1624 kW	1480 kW

Model: MPLxxCS - S Suffix for silent type

General Technical Data			
Model	MPL2030P		
Engine	Perkins 4016TAG1A		
Standard Voltage	400/230V		
Phase	3 Phase		
Stamford Alternator	S7L1D-F4		
Leroy Somer Alternator	LA454G1520		
Other Alternator	n/a		
Speed Control Type	Electronic		
Controller Model	DSE7320		
Generator Set Fuel Consumption (L/hr)			
Load-Standby Power (110%)	424		

# Load-Standby Power (110%) 424 Load-Prime Power (100%) 383

Load-Prime Power (75%) 277 Load-Prime Power (50%) 185 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.

Multiphase Power Generators are in conformity with certification ISO

#### Prime Power (PRP):

According to ISO \$528-1:2018, 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	2030	1624	2824.2	1850	1480
400/230v	3	2030	1624	2930.1	1850	1480
380/220v	3	2030	1624	3084.4	1850	1480

## **Operating Environmental Requirement**

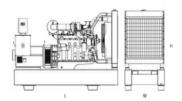
- Abmient Temperature : -25°C 50°C (Heater must be included when in low temperature)
- Himidity: Less than 80%
- Altitude: Up to 1000meters (For higher altitude application, please consult with Our Team)





# **DIMENSIONS**

Weight And Dimensions	Open Type	Silent Type
Length (mm)	6000	12032
Width (mm)	2200	2352
Height (mm)	2740	2690
Net Weight (kg)	12300	22000
Fuel Tank Capacity (L)	n/a	n/a
Running Hours - 100% Load	n/a	n/a







# **DIESEL ENGINE SPECIFICATION**

Manufacturer	Perkins	Engine Design	Standby Power	Prime Power
Engine Model	4016TAG1A	Gross Engine Output (KW)	1741	1588
Cylinders No./Arrangement	16 / V-Line	Net Engine Output (KW)	1690	1537
Compression Ratio	13.6:1	Mean piston speed (m/s)	9.	5
Cycle	Four Stroke	Engine Water Flow (L/s)	19	)
Aspiration Type	Turbocharged	Intake Air Flow (m³/min)	140	132
Bore x Stoke	160x190 mm	Exhaust Gas Flow (m³/min)	34	3
Displacement	61.123 L	Exhaust Gas Temp (°C)	43	9



	Diesel Engine Specifications	
Lubrication System	Lubricating oil capacity (L)	214
	Oil pressure at Rated Speed (mPa)	0.34
	Normal Oil Temperature (°C)	105
	Type Injection System	Direct Injection
	Fuel injection pump	n/a
	Maximum fuel flow (L/hr)	1380
Fuel System	Fuel delivery pump pressure (kPa)	300
	Maximum suction head (m)	2.5
	Governor Type	Electronic
	Coolant Capacity – Engine Only (L)	95
Cooling System	Shutdown switch setting (°C)	101
ooding dystem	Thermostat operation range (°C)	71-85
Electrical System	Alternator	55 amps, 28 volts
	Starter Motor	16.4 kW, 24 volts
	Cold start recommendations to 0 °C (CCA)	957
Exhaust System	Max. Back Pressure (kPa)	5
Industion System	Clean Filter (mm H20)	127
	Dirty Filter (mm H20)	3880
	Air Filter Type	MF&T 5000-00-00

## **ALTERNATOR SPECIFICATION**

Poles	4
Insulation	Class H
Protection Rating	IP23
Exciter System	PMG/AREP
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	
	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	
Liectrical 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	
Canopy	Trailer	
σαποργ	Rental Type Design	

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

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