

Diesel Generator Set

# MPL33XC

**Powered By FAWDE** 

50 Hz / 1500 RPM



## MULTIPHASE CORPORATION CO., LTD.

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# **MPL33XC**



MODEL	FREQUENCY / RPM	STANDBY POWER	PRIME POWER
MPL33XC	EO U-/1EOO DDM	33 kVA	30 kVA
Powered by FAWDE	50 Hz/1500 RPM	26.4 kW	24 kW

Model: MPLxxCS - S Suffix for silent type

General Technical Data	
Model	MPL33XC
Engine	FAWDE 4DW92-39D
Standard Voltage	400/230V
Phase	3 Phase
Stamford Alternator	n/a
Leroy Somer Alternator	Leroy Somer TAL-A42-C
Leega Alternator	Leega LA184G25
Speed Control Type	Mechanical
Controller Model	DSE6020
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#### Generator Set Fuel Consumption (L/hr)

Load-Standby Power (110%)	
Load-Prime Power (100%)	7.9
Load-Prime Power (75%)	6
Load-Prime Power (50%)	4

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 \$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						
V. II. de	Standby Rating		Prime Rating			
Voltage	Phase	KVA	KW	AMPS	KVA	KW
240v	3	33	26.4	45.9	30	24
230v	3	33	26.4	47.6	30	24
220v	3	33	26.4	50.1	30	24

## **Operating Environmental Requirement**

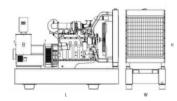
- Abmient Temperature: -25°C 50°C (Heater must be included when in low temperature)
- Himidity: Less than 80%
- Altitude: Up to 1000meters (For higher altitude application, please consult with Our Team)





## **DIMENSIONS**

Weight And Dimensions	Open Type	Silent Type
Length (mm)	1800	2250
Width (mm)	730	850
Height (mm)	1260	1140
Net Weight (kg)	640	860
Fuel Tank Capacity (L)	160	73
Running Hours - 100% Load	20.3	9.2





# **DIESEL ENGINE SPECIFICATION**

Manufacturer	FAWDE	Engine Design	Standby Power	Prime Power
Engine Model	4DW92-39D	Gross Engine Output (KW)	32	29
Cylinders No./Arrangement	4 / In-Line	Fan Power (KW)	1.5	5
Compression Ratio	17.5:1	Mean Piston Speed (m/s)	-	
Injection Type	Direct	Engine Water Flow (L/min)	-	
Aspiration Type	Supercharged	Intake Air Flow (m³/min)	2.5	i i
Bore x Stoke	90x100 mm	Exhaust Gas Flow (m³/min)	7.1	L
Displacement	2.545 L	Exhaust Gas Temp (°C)	460	)



Diesel Engine Specifications		
Lubrication System	Lubricating oil capacity (with filter) (L)	8
	Lubricating oil consumption (L/h)	0.05
	Oil pressure sensor parameter (MPa)	0.08
	Oil flow at rated speed (L/min)	n/a
Fuel System	Fuel System	Electronic
	Speed regulation rate in steady state	3%
	Average effective pressure (MPa)	0.91
Cooling System	Water pump flow rate-lift (L/s-mH2o)	2655 rpm 71-6.3 m
	Water temperature sensor parameter	97°C ±2°C
Electrical System	Alternator	750W, 14 volts
	Start Motor	3.5KW, 12 volts
	Recommended battery capacity (Ah)	n/a
Exhaust System	Maximum Back Pressure (kPa)	6.7

## **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





## **CONTROL SYSTEM DATA (DSE6020)**



## **Main Feature**

The DSE6020 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 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	
у при	DSE7320 MKII /DSE7420MKII	
Deepsea Controller for Multi Genset Application	DSE8610 MKII	
	DSE8810 MKII	

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