DIY POWER SYSTEM CO., LTD.



DIY-KF66

KOFO
MN4105ZDS

DIY alternator
DIY224E2

DeepSea
DSE6120

Generating Power Rates

		PRP	ESP
Power Rating	kVA	60	66
	kW	48	53
Frequency	Hz	50	
Speed	RPM	1500	
Voltage	V	400/230	
P.F.	Cos Phi	0.8	

Prime Power (PRP)

Prime power rating is applicable for supplying electric power in lieu of commercially purchased power. Prime power applications usually is the form of UNLIMITED TIME RUNNING PRIME POWER:
Prime Power is available for an unlimited number of hours per year in a variable load application. Variable load shouled not exceed a 70% average of period of 250 hours. The total operating time at 100% Prime Power shall not exceed 500 hours per year. A 10% overload capablility is available for aperiod of 1 hour within a 12 hour period of operation. Total operating time at the 10% overload power shall not exceed 25 hours per year.

Standby Power (ESP)

Standby power rating is appliable for supplying emergency power for the duration of the utility power outage. No overload capability is available for this rating. Under no condition is an engine allowed to operate in parallel with the public utility at the standby Power rating.
This rating should be applied where reliable utility power is available. A standby rated engine should be sized for a maximum of an 80% average load factor and 200 hours of operation per year. This includes less than 25 hours per year at the standby power rating. Standby ratings should never be applied except in true emergency power outages. Negotiated power outages contracted with a utility company are not considered an emergency.

DIY POWER SYSTEM CO.,LTD. reserves the right to modify the characteristics of its product at any time in order to incorporate the latest technological developments.The information contained in this document may therefore be changed without notice.

CUSTOMIZED POWER SOLUTIONS

Engine Specification — Powered by KOFO

General Data		
Engine Model		MN4105ZDS
Number of Cylinders		4L
Cycle		4-stroke
Aspiration		Turbocharged
Bore x Stroke	mm	105x120
Displacement	L	4.15
Main Power Output	kW	56
Compression Ratio		17:1
Speed	RPM	1500
Fuel consumption rate	g/kW.h	≤210
Oil consumption rate	g/kW.h	≤2.04
Exhaust temperature after turbing	℃	≤600
Max oil temperature	℃	105.0
Lubricating method		Pressure splash composite
Cooling method		Forced water cooling
Water tank capacity	L	8
Cooling water capacity in diesel engine	L	8
Starting method		Electric start

Engine Features	
Starting System	12/24 volt negative earth
	Battery charging alternator 35 amp on engine
	Cranking current 1800 amps at 0°C
Fuel System	12/24 volt fail safe actuator
	Spin-on paper element fuel filters
	Dual flexible fuel lines and connectors
	Standard fuel water separator
Filters	Air cleaner with dry element
	Spin-on full flow lube oil filter
	Standard air filter
	Standard fuel filter
Cooling	Water-cooled
	40°C ambient temperature radiator

Reference Standards:
BS-5514 and DIN-6271 standards are based on ISO-3046.
Operation At Elevated Temperatrue And Altitude:
Up to 5,000 ft.(1500m) and 104°F (40℃) without power deration.

CUSTOMIZED POWER SOLUTIONS

Alternator Specification — Powered by DIY alternator

General Data		
Alternator Manufacture		DIY alternator
Alternator Model		DIY224E2
Standby Power	kVA	69
	kW	55
Prime Power	kVA	63
	kW	50
Alternator Voltage Regulation		SX460
Voltage regulation		± 1 %
Winding Leads	Wires	6
Pitch		2/3
Alternator Insulation	Class	H
Protection Class		IP23
THD in no-load		< 3.5 %
THD in linear load		< 5 %

Alternator Specification

- Excitation Systems: short circuit capacity

- SHUNT system: without short-circuit capacity.
- AREP, PMG: 3 times the nominal current for 10 seconds.

- Transient features :

-Transient voltage dip for rated step load at 0.8 power factor is less than 18 %.

-Recovery time for a 20 % transient voltage dip is less than 0.5 s.

- Overload acceptance :

-Pole alternators can be overloaded according to NEMA

- Forms :

-4 Pole alternators can be provided in single or two bearing configurations.

- Overspeed :

-The maximum overspeed is 2250 min^{-1}

- Balancing :

-All the rotors are dynamically balanced according to ISO 1940 & NFC 51-111

-Two bearing rotors are balanced with a half key

Compliance With Internationally Recognized Standards

4P alternators are in compliance to the main international standards & regulations

-IEC 60034, NEMA MG 1.32 - 33, ISO 8528/3, CSA, UL 1446, UL 1004

-Alternators are designed, manufactured and marketed in an ISO 9001 and ISO 14001 environments. It can be integrated into a CE marked generator.

DSE6120 Controlled by DeepSea

AUTO START & AUTO MAINS (UTILITY) FAILURE CONTROL MODULES

Key Features

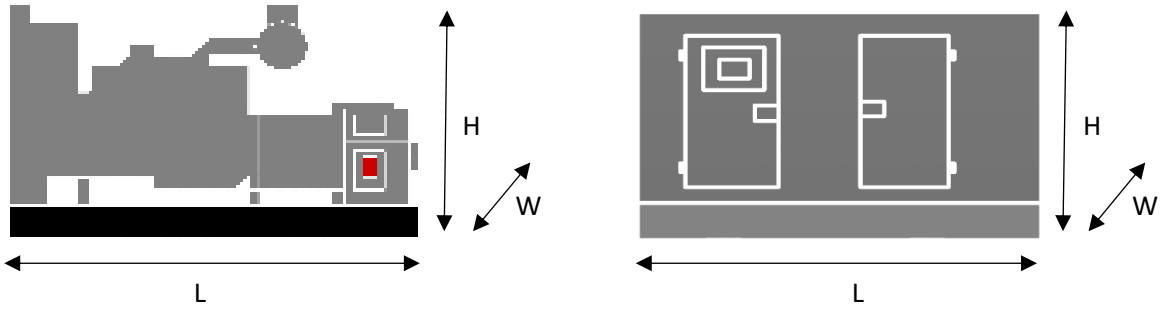
Δ Back-lit text LCD display
Δ Front panel editing
Δ LED and LCD alarm indication
Δ Power Save mode
Δ CAN and Magnetic Pick-up/Alt.versions available (specify on ordering)
Δ PC and front panel configuration
Δ 6 Digital inputs, 3 Analogue inputs
Δ 6 Outputs (4 configurable on Magnetic Pick-up/Alt., 6 configurable on CAN version)



Δ Configurable timers and alarms
Δ Alternative configuration
Δ Event Log (10)
Δ Remote Start input
Δ 3 Phase generator monitoring
Δ Current Monitoring and protection
Δ 3 Phase Mains (Utility) monitoring (DSE6120 only)
Δ Test button (DSE6120 only)
Δ Battery voltage monitoring
Δ Engine pre-heat, Hours counter
Δ Comprehensive shutdown or warning on fault condition
Δ Automatically transfers between mains (utility) and generator power (DSE6120 only)
Δ Hours counter provides accurate information for monitoring and maintenance periods
Δ User-friendly set-up and button layout
Δ Multiple engine parameters are monitored simultaneously
Δ Module can be configured to suit individual applications
Δ Compatible with a wide range of CAN engines
Δ Tier 4 engine support
Δ IP65 rating (with optional gasket) offers increased resistance to water ingress
Δ Licence-free PC software

DIY-KF66

Genset information



Dimension and Weight		Open	Silent
Length	mm	1900	2500
Width	mm	930	980
Height	mm	1500	1300
Base fuel tank	L	180	120
Shiping Weight	kg	960	1313

Canopy Features

Robust Corrosion Resistant Construction

Δ Black finish stainless stell lock and hinges
Δ body made from steel components treated with polyester powder coating

Excellent Access for Maintenance

Δ radiator fill access plate
Δ lube oil and cooling water drains pipes to exterior of the enclosure
Δ adding cooling water from top of canopy
Δ LED light will be lighting automaticlly when open the door

Security and Safety

Δ control panel viewing window in a lockable access door
Δ emergency stop push buttom (red)mounted on enclosure interior
Δ cooling fan and battery charging alternator fully guarded
Δ exhaust silencing system totally enclosed for operator safely
Δ Control panel and cable design in different directions,all the connection wiring in control panel are more neater and firmer.

DIY POWER SYSTEM CO.,LTD.
DIY POWER SYSTEM (CHINA) CO.,LIMITED

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CUSTOMIZED POWER SOLUTIONS