



KP-76S(N4105ZLDS)

Generating set Technical Data Sheet



ISO9001:2000



Powered by
RICARDO Engine

N4105ZLDS

STANDARD SPECIFICATION

General features:

- Composed of RICARDO diesel engine and KEYPOWER brushless alternator
- 24V DC start motor and storage battery
- Brushless, Self-excited, IP23, insulation class H alternator
- 50°C radiator as standard
- Key start panel control system as standard, digital auto-start panel is optional
- Fuel tank in base frame
- Optional open type or silent type
- All generator sets are gone through rigorous testing before being released to the market place, including 50% load, 75% load, 100% load , 110% load and all protection function (overspeed stop, high water temperature, low oil pressure, battery charging fail, emergency stop)



Genset Main Technical Data

3-PH, 50Hz@1500RPM, 220/380V (Can Be Made According To Customers' Special Requirements)

GENSET MODEL	Genset Specification					Engine Specification				Alternator Model
	KVA		Cons 100% (L/H)	dB(A) @7m	Tank (L)	Model	Cyl.	Gov.	Asp.	
	ESP	PRP								
KP-68P	75	68	16	75	125	N4105ZLDS	6	M	TW	KP224F
KP-76S	75	68	16	75	125	N4105ZLDS	6	M	TW	KP224F

1) Available in various voltages

2) To show KEYPOWER Generating Sets Model

KP-76S, it is the Standby power 76kva generation set.

KP-68P, it is the Prime power 68kva generating set.

3) ESP=Standby power standby duty, operation under variable load, without overload.

PRP=Prime power continuous duty operation, under variable load, 10% overload permissible 1/12hr.

4) E=Electronic speed governor;

M=Mechanical speed governor

5) Asp=Aspiration;

NA=Naturally Asp;

TC=Turbocharged;

TW=Turbocharged after cooled;

TCA= Turbocharged air-air after cooled

6) Technical data is subject to work test conditions

Page: 2/5 Specifications may change without Notice

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Reliable Performance

Voltage regulation

Voltage regulation maintained within $\pm 0.5\%$ as follow:

- Power factor Between 0.8~1.0 lag
- From no load to full load, any steady load
- Speed droop variation under 4.5%

Frequency/Speed undulation

- Change load from 0-100%, Frequency/Speed Droop Ratio within 5%.
- Load from 25-100%, any steady load Frequency/Speed undulation within 0.25%

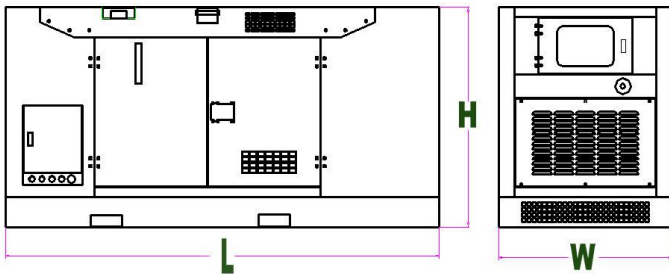
Effect factor of telecom

- TIF(MA MG1-22) better than 50
- THF(BS EN60034) better than 2%

Criterion

- ISO8528, GB/T2820
- EN12601:2001, EN60034-22:1997, EN60204-1:2006
- ISO9001:2000 Quality Control System

Dimension and Weight



Silent Type

Overall size (L*W*H)

2600*960*1450

Weight: 1230kg

ENGINE SPECIFICATION

RICARDO Diesel Engine

Technical Data

Engine Model	N4105ZLDS
Number of Cylinders	4
Cylinder arrangement	Vertical in-line
Cycle	Four stroke
Aspiration	Turbocharged after cooled
Bore×Stroke (mm×mm)	105*120
Displacement (Liter)	4.15
Compression Ratio	18:1
Prime Power/Speed (kW/rpm)	60/1500RPM
Standby Power/Speed (kW/rpm)	66/1500RPM
Speed Governor	Mechanical
Cooling System	Water-cooled, 50°C radiator as standard
Speed Stability (%)	≤5%
Total lubrication system capacity (L)	13
Coolant capacity (without radiator) (L)	15
Fuel Consumption at 100% Load (L/H)	16
Starter Motor	DC24V
Start type	Electrical

Alternator SPECIFICATION

KEYPOWER Alternator (Standard)

Technical Data

Alternator Model	KP224F
Exciter type	Brushless, Self-excited
Power factor	0.8
Voltage Adjust range	≥5%
Voltage Regulation NL-FL	≤±0.5%
Insulation Grade	H
Protection Grade	IP23

Control System

1. Standard: Deepsea DSE 4520 AMF Digital Controller

Providing the standard functions as follows:

(Also can be made according to the customers' special requirements)

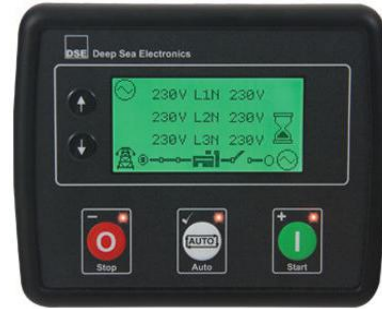
- * Automatic Start/Stop
- * Settings can be adjustable via key buttons on front panel
- * 3 start attempts failure and Automatic Crank Disconnect
- * Parameters display (V/A/Hz/Hour)
- * Engine monitoring and protection
- * Charge alternator exciting and Charge alternator fail alarm
- * Running hour counting
- * Emergency stop pushbutton
- * Alarm System: Over speed、High Engine Temperature
Low Oil Pressure、Charge Fail
- * Protection System: Over speed、High Engine Temperature、Low Oil
Pressure、Emergency Stop. And the other protection function
pre-setting

Digital Auto-start Generator controller integrating digital, intelligent and network techniques is used for automatic control system of diesel generator. It can carry out functions including automatic start/stop, data measure and alarming. Optionally assembled with the ATS, it can carry out auto-switching between the outer power and generating set power. (AMF)

2. Option: Deepsea DSE7320 AMF Digital Auto Start

3. Option: ComAp AMF25 Digital Auto Start

4. Option: Deepsea DSE6120 AMF Digital Auto Start



(1) DSE4520



(2) DSE7320



(3) AMF25



(4) DSE6120