

50kVA



DE-W50 (N4105DS-46)

Generating set Technical Data Sheet



ISO 9001:2015



Available for purchase through auction from

whauctions.com

STANDARD SPECIFICATION

General features:

- Composed of RICARDO diesel engine and DELLENT brushless alternator
- 12V DC start motor and storage battery
- Brushless, Self-excited, IP23, insulation class H alternator
- 50°C radiator as standard
- digital auto-start panel control system as standard, key 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, 380/220V (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								
DE-W50	50	45	10	70	86	N4105DS-46	4	M	NA	DE224C

- Electric Power must be considered cooling fan loss, alternator efficiency ,altitude derating and ambient temperature.
- ESP= Standby power standby duty, operation under variable load without overload .
PRP= Prime power continuous duty operation,under variable load.Variable load should not exceed a 70% average of the Prime Power during any operating period of 24 hours. 10% overload permissible for a period of 1 hour within a 12 hours period of operation.

As the engine factories always recommend :

The operation should always avoid or reduce the time that engine being operated under light or no-load condition. If the engine must be operated under light or no-load condition, the period should be limited within 10 minutes .
Normally the load power should be no less than 30% of prime power .

- E= Electronic speed governor.
- M= Mechanical speed governor.
- Asp= Aspiration;
NA= Naturally Asp;
- TC= Turbocharged
TAC= Turbocharged air intercooled
TAAC=Turbocharged air-air intercooled
- Technical data is subject to work test conditions.

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%

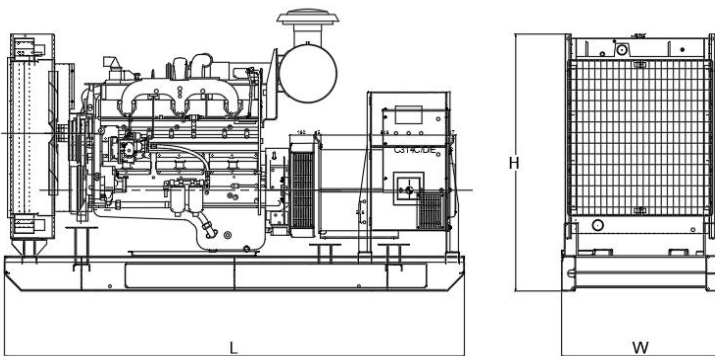
Effect factor of telecom

- 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
- ISO9001:2015 Quality Control System

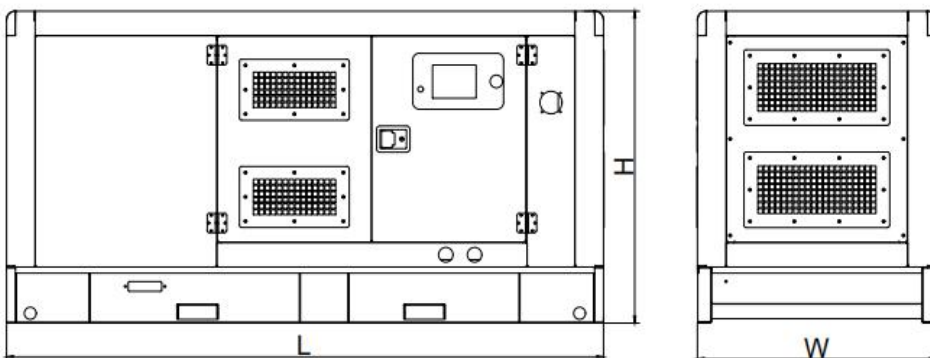
Dimension and Weight



Open Type

Overall size (L*W*H)
1750*800*1200

Weight: 840kg



Silent Type

Overall size (L*W*H)
2300*950*1280

Weight: 980kg

Engine Specification

RICARDO Diesel Engine

Technical Data

Engine Model	N4105DS-46
Number of Cylinders	4
Cylinder arrangement	in-line
Aspiration	Natural
Bore×Stroke (mm×mm)	105×120
Displacement (Liter)	4.15
Compression Ratio	17:1
Prime Power/Speed (kW/rpm)	44/1500RPM
Standby Power/Speed (kW/rpm)	48/1500RPM
Speed Governor	Mechanical
Cooling System	Water-cooled, 50°C radiator as standard
Total lubrication system capacity (L)	13
Coolant capacity (without radiator) (L)	13
Fuel Consumption	230 g/kW*h
Starter Motor	DC12V
Start type	Electrical

Alternator Specification

DELLENT Alternator (Standard)

Technical Data

Alternator Model	DE224C
Rated output power	36KW/45KVA
Exciter type	Brushless, Self-excited
Power factor	0.8
Voltage Adjust range	≥5%
Voltage Regulation NL-FL	≤±1%
Insulation Grade	H
Protection Grade	IP23

Control System

1. Standard: Deepsea DSE6020 AMF Digital Controller

Providing the standard functions as follows:

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

- * Automatic Start/Stop
- * Offer electronic(CAN) and non-electronic(magnetic pick-up/alternator sensing) engine versions
- * offer a number of flexible inputs,outputs and engine protections
- * Parameters display (V/A/Hz/Hour)
- * Engine monitoring and protection
- * Charge alternator exciting and Charge alternator fail alarm
- * Running hour counting
- * Emergency stop pushbutton
- * Monitoring speed,frequency,voltage,current,oil pressure,coolant temperature and fuel level,the modules will display warnings,shutdown and engine status information on the back-lit LCD screen and illuminated LED.
- * 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 AMF20 / AMF25 Digital Auto Start**
- 4. Option: Deepsea DSE6120 AMF Digital Auto Start**



(1) DSE6020



(2) DSE7320



(3) AMF25