

16.5 KVA PERKINS DIESEL GENERATOR SET

Model: KH-16.SGF
 Engine: PERKINS
 Alternator: LEROY SOMER

Control Panel: UK DEEPSEA
 Prime Power: 16.5KVA/16.5KW
 Standby Power: 18KVA/18KW



PRP Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97; A 10% overload capability is available for a period of 1 hour within a 12-hour of operation.

ESP The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

Warranty time KAIHUA diesel generator sets are covered by an express written 1-year/1000hour (whichever occurs first) limited warranty.

Standard Specification

Genset model	KH-16.5GF
Voltage	240
Frequency	50HZ
Phase	1
Power Factor	1.0(lagging)
Protection Class	IP23
Insulation Grade	H

Engine and genset output rating

Engine model	404D-22G
Engine Speed (RPM)	1500
Prime (KW/HP)	18.7/25.4
Standby (KW/HP)	20.6/28
Genset Model	KH-16.5GF
Prime (KVA/KW)	16.5/16.5
Standby (KVA/KW)	18/18

Scope of standard supply

Engine:	PERKINS brand new
Alternator:	LEROY SOMER brand new
Controller:	Remote controller DSE7420MKII with DSE890
Breaker:	ABB breaker 3-pole, ABB motor-operated
Radiator:	Brand new 50°C
Vibration:	Vibration damper between engine/alternator and base frame
Base:	Heavy duty steel channel base frame
Silencer:	Heavy duty Residential type silencer with flexible bellow, elbow
Battery:	High capacity sealed free maintenance battery C/W battery cables
Manuals:	Standard tools, operator's manual of engine, alternator, controller, breaker

Optionals

Soundproof cabinet	Synchronisation system
Heater preservation cabinet	Breaker brand (ABB, Simens, Schneider)
Rainproof cabinet	Anti condensation heater
Standard container cabinet (20GP/20HC/40HC)	Daily fuel tank
Trailer (10-500KVA)	Output cable
Oil/ Water/Fuel heating system	Maintenance spare parts
Automatic Transfer Switch (ATS)	Plywood case packing
Remote control system	

DIMENSIONS(L*W*H) and Weight

PROCESS FLOW: Drawing → Cutting → Bending → Welding → Spraying → Assembling → Testing

Open Type

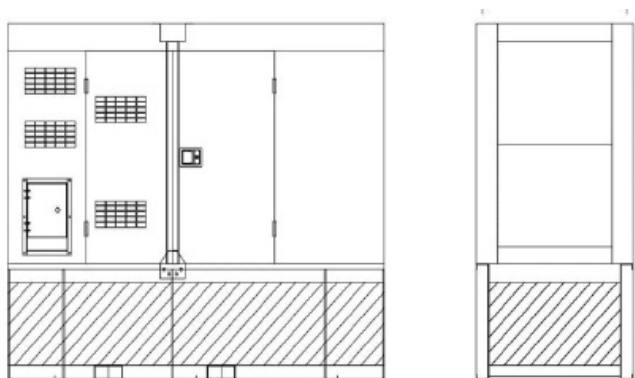
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Silent Type

1350KG

2000*1000*1880mm



Silent cabinet Features

Nice shape and rational structure.

Perfect sealing: Rainproof, anti-snow, dust-proof and could work under the rugged environment.

Excellent security: The totally-enclosed box is made of 2 mm high quality cold-rolled steel plates.

Adequate ventilation: The temperature won't easily get high, which could guarantee the running power of gen-set.

Superb sound insulating: Protected gen-sets also have the function to lower the noise. Anti-drumming treatment could effectively lower the sectional noise during the running of the gen-sets.

The inner box uses high frequency, medium frequency and low frequency type of PUR anti-flaming and sound-absorbing cotton, which could reduce the noise produced by the genset.

The door uses the EPDM type sealing strips to seal.

Mufflers adopt high efficient appliances, which could reduce the noise of the smoker vent.

Good operability: The designers adhere to the principle of individual-oriented ideas. In addition, they give full consideration to the convenience and safety of the operation.

Crane: In order to make the field-transport convenient, the box will install four lifting appliances. Mufflers adopt high efficient appliances, which could reduce the noise of the smoker vent.

Warranty

Warranty is according to our standard conditions: 12 months or 1,000 running hours, subject to the earlier one (artificial damage to be an exception).

Certification

European Safety Standard: CE Certificate.

ISO9001:2015 Quality Control System.

PERKINS OEM CERTIFICATE

LEROY SOMER OEM CERTIFICATE

Perkins Diesel Engine



Engine Brand	Perkins
Engine Manufacturer	Perkins (China) Power Technology Co.,Ltd
Engine Model	404D-22G
Engine Rated Power	18.7KW @1500RPM
Cylinder Arrangement	3 in line
Cycle	Four stroke
Aspiration	Naturally Aspirated
Fuel System	Indirect injection
Bore×Stroke (mm×mm)	84x100
Displacement(L)	2.216
Compression Ratio	23.3:1
Speed Governor	Electrical
Cooling System	Forced Water Cooling Cycle
Starter Motor	DC12V electrical starting

Exhaust System

Exhaust Gas Flow (L/min)	3.94
Exhaust Temperature(°C)	TBA
Standby Power	505
Prime Power	445
Max Back Pressure(kPa)	10.2

Air Intake System

Max Intake Restriction (kPa)	TBA
Dirty Element	6.4
Clean Element	3
Air Flow(m3/min)	1.45

Fuel System

Type Injection System	Indirect injection
110%(Standby Power) Load(L/H)	6.1
100%(Prime Power) Load(L/H)	6.3
75%(Prime Power) Load(L/H)	4
50%(Prime Power) Load(L/H)	2.9

Oil System

Maximum Oil Temperature(°C)	125
Minimum Oil Pressure	120
Lube System Capacity (L)	10.6

Cooling System

Coolant Capacity – with radiator(L)	7
Thermostat range (%)	82-95
Max Water Temperature Standby/ Prime(°C)	112

Specification of Leroy Somer Alternator



Alternator Brand	Leroy Somer
Engine Manufacturer	Leroy Somer Generator Technologies (FUZHOU) Co., Ltd
Alternator Model	TALA42A-S
Alternator Rated Power	16.6KVA
Rated Voltage	240V
Rated frequency	50HZ
Connecting Type	1 Phase
Number of Bearing	1
Protection Grade	IP23
Altitude	≤1000m
Exciter Type	Brushless, Self-exciting, AVR automatic voltage regulating, 100% Copper winding wire
Insulation Class	H
Telephone Influence Factor (TIF)	50
THF	12%
Voltage Regulation, Steady State	+1%
Transient State Voltage	-15% +20%

Specification of control System (Deepsea DSE7320MKII Module)

The DSE7420 MKII is an intelligent, powerful auto mains (utility) failure control module with high-level features and functionality. The control module is the first module in the DSE range to include in-built SNMP. The module is suitable for a wide range of single-set gas and diesel applications.

Main Features

- SNMP GET, SET & TRAP support built-in.
- Simultaneous use of RS485, RS232 & Ethernet ports.
- Support for 0 V to 20 V and 4 mA to 20 mA sensors.
- Support for 3 kCl resistive sensors.
- True dual mutual standby with load balancing timer.
- CAN, MPU & alternator speed sensing (selectable depending on engine type).
- Fuel usage monitor and low level alarms.
- Integral PLC editor.
- Power monitoring (kW h, kVAr, kv Ah, kV Ar h), reverse power protection, kW overload protection.
- Configurable digital inputs (8).
- Configurable analogue / digital inputs (6)
- Configurable outputs (8)
- Data logging facility (20 parameters).
- 4-line back-lit LCD text display provides comprehensive and clear indication of operation and parameters.
- Configurable CAN instruments.
- Ratiometric inputs.
- Comprehensive monitoring of the mains (utility) supply and auto changeover.
- Automatic load transfer control.
- Customisable power up text and images Company logo can be uploaded to the start up splash screen.
- Customisable front panel editor.
- Configurable CT positioning.



Specification of control System (Deepsea DSE890MKII Module)

The Gateway connects to the DSE data server by integral Ethernet connection or GPRS(DSM or 3G mobile internet) and includes GPS (satellite location) functionality. This is most suited to remote and/or mobile locations.

Key Features

Gateway devices for DSEWebNetO communications

Sophisticated Ethernet/GSM web-based remote communications for supported DSE controllers

Low cost solution for secure and effective remote monitoring and control for multiple users and multiple sites

Comprehensive on-screen information presented in clear, graphical and numerical formats

Global mapping shows multiple site locations

Comprehensive aerial screen views show detailed site information

Multiple or single site generator event recording & monitoring

Real-time instrumentation and control

Event log tables

Automatic system alerts which are sent to multiple DSEWebNet users via email and SMS

