

20KW Perkins silent diesel generator【404D-22G】



KEY SPECIFICATIONS

PRIME POWER	20KW
PHASE	3
DRY WEIGHT	700kg
LENGTH	2100mm
WIDTH	900mm
HEIGHT	1250mm
FUEL TANK CAPACITY	>8 hours

FEATURES & BENEFITS

- 20KW@ 60Hz Perkins engine
- High quality and reliable 4 cylinder diesel engine
- All copper brush-less generator
- With Fireproof, soundproof, rainproof canopy

- High temperature and low oil, water and fuel protection to protect against engine damage
- Easy to use 6110 digital controller with auto and manual start options
- All sets under go a comprehensive testing / before delivery inspection prior to delivery
- Peace of mind of earlier of one year/1000 hour warranty

GENSET SPECIFICATIONS

ENGINE

Perkins diesel engine:404D- 22G
 cylinder, water cooled
 Electronic governor control system
 DC starter and charge alternator
 Replaceable fuel filter oil filter and dry element air filter
 Cooling radiator and fan
 Fuel connection hoses and manual sump oil drain valve
 Exhaust silencer
 Maintenance free battery including rack and cables
 Perkins engine manual

ALTERNATOR

Full copper, brushless
 Single bearing system, four poles
 Insulation class H with circuit breaker protection
 Standard degree of protection IP21-23
 Self-exciting and self-regulating
 AVR included
 Screen protected and drip proof
 Stator winding with 2/3 pitch for improved harmonics
 Close voltage regulation

CHASSIS

Steel chassis and anti-vibration pads
 Base frame incorporates integral fuel tank
 The generator can be lifted or pushed/pulled by the base frame
 Includes diesel level sensor information to the controller

CANOPY

Easy maintenance and operation
 Easy lifting and moving
 Insulated engine exhaust system
 Exterior emergency stop push button
 48 hours build in fuel tank

CONTROL SYSTEM

Control supervision and protection panel is mounted on the genset base frame. The control panel is equipped as follows:

AUTO MAINS FAILURE CONTROL PANEL

6110 electronic controller
Emergency stop push button
Static battery charger

GENERATING SET CONTROL MODULE 6110N FEATURES

This module is used to monitor a mains supply and automatically start a standby generating set
Microprocessor based design
Monitors engine performance and AC power output
LCD and LED alarm indication; GSM SMS input slot (as optional extra)
Front panel configuration of timers and alarm trip points
Provides signal to change over switch panel
Event logging and shutdown alarms
Remote communication via RS232 port or RS485 output
Easy push button control
STOP/RESET-MANUAL-AUTO-TEST-START
Operation indicators accessed by the LCD display
Scroll push button

METERING VIA LCD DISPLAY

Generator volts (L-L/L-N); mains volts (L-L/L-N)
Generator amps (L1, L2, L3, N); generator (kVA and kW)
Generator frequency
Engine hours run; plant battery (volts)
Engine oil pressure (psi and bar)
Engine speed (rpm)
GSM SMS signal
Phase rotation
Engine temperature (°C)

AUTOMATIC SHUTDOWN AND FAULT CONDITIONS

Under/over speed; fail to start
High engine temperature; fail to stop
Low oil pressure; charge fail
Under/over generator volts; over current
Under/over generator frequency; emergency stop
Under/over mains frequency
Under/over mains voltage
Low/high battery volts

20KW Silent Diesel generator set technical parameters

Diesel generator set	GENERATOR	LEROY SOMER TAL-A40-G
	Model	DGS-PK20S
	Power	20KW
	Current	75 A)
	Rated frequency	60 (Hz)
	Start-up time	5~6 (S)
	Power factor	0.8
	Rated voltage	110/220(V)
Perkins Engine	Model	404D-22G
	Gross Mechanical Output	31.6KW/38KW
	Rated speed	1800 (r/min)
	Cycle way	4-stroke
	Cylinders	4
	Displacement	2.2L
	Bore×Stroke	105*127(mm)
	Compression ratio	17.3:1
	speed control mode	Electronic
	Starting	DC
	Intake system	Naturally aspirated
	Exhaust gas temperature	≤650°C
	Maximum exhaust back pressure	100kPa
	100% Prime Power Load	< 203g/kwh
	50% Prime Power load	< 210g/kwh
	Oil capacity	8L
	Rated speed hydraulic	286-484kPa
	Cooling	Closed cycle water cooling
	Coolant capacity	08L
	Open temperatures	380-410°C
Maximum temperature	95°C	
Alternator	Phase	1 phase 3 wires
	Generating capacity	20KW
	Generator efficiency	95%
	Overload	10% overload can run 1h/2h
	Protection class	IP21-23
	Insulation class/ level rise	H/H
	Telephone influence factor THF	< 50
	Altitude	≤1000m
GENSET	Voltage setting range	≥±5%
	Transient frequency deviation	≤ - 10%
	Frequency Recovery time	≤5S
Silent type	Dimensions	2100 (mm) *900(mm)*1250(mm)
	Weight	700(kg)

Package List (1 Package for 1 set only)

● With, ○ without

STANDARD ACCESSORIES	Open Type ()	Silent Type (●)
Soft pipe for fuel and handle for lube going-out	●	●
High-efficient silencer (*2)	●	●
Cooling water tank	●	●
Exhaust elbow	●	●
Storage battery system	●	●
Steel base-frame against vibration	●	●
Sound-proof & Weather-proof Canopy (super silent type)	○	●
Single-bearing generator again drops	●	●
Intelligent LED display control panel	●	●
Operation& Maintenance manual.	●	●
Speed governor		
Electric start and 12V charger system	●	●
Standard air filter, oil filter, fuel filter	●	●
ATS	○	○
Base frame fuel tank	○	>8H

