

CE

50Hz Standby 20KVA

PD20S

Diesel Generator



All Days | Safty | Reliable | Stability



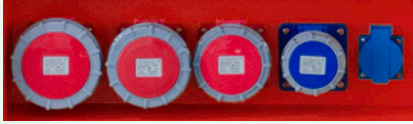
PowerSUM

FEATURE

PowerSUM

Multi socket output

Multi socket output is a standard configuration for diesel generators, which can be adapted to various power output sources



Control System

Support engine and alternator monitoring, measurement and protection. This is long-running and back-up unit to integrate the best way to control. Support Modbus standard, modem, RS232, RS485, USB and internet.

Euro 5 emission standards

Complies with Euro 5 emission standards



Silent Canopy

The generator set has good mute effect, overall compact structure, and occupies small space

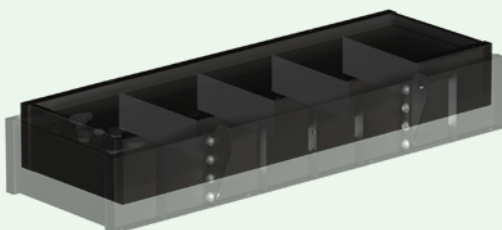
Better rust prevention treatment (electrophoresis, two layer spraying), suitable for seaside use



Anti surge Design

Bounded tank

The 12 hour operating fuel tank is a standard configuration for diesel units, and a double layer fuel tank can prevent fuel leakage.



Trailer (Optional)

Mobile generators give you dependable power anywhere, from remote construction sites to public events and storm recovery.



Forklift holes

With base frame forklift hole and generator canopy lifting hole



Design Standards

- Conformance Européenne (CE)
- ISO8528-5:2005
- GB/T2820.5-2009
- JB/T20136-2006
- YD/502-2007
- Protection devices working test
- Starting ability in normal temperature
- 50% rated power load moment capability
- Voltage deviation and speed variation
- Customizable process and color
- Optional manufacturer
- Installation place: Outdoors or indoors
- Ambient temperature: -25°C to 50°C
- Humidity: Less than 80%
- Altitude: Below 1000 meters

Features

- Excitation system: Self excited
- Key switch
- Emergency stop switch
- Mains input
- Remote communication connector
- External oil pump
- Battery isolator switch
- Powder coated canopy
- Steel base frame with forkslots
- 50°C radiator
- Dry type air filter
- Inspection lighting
- Base fuel tank for 12 hours running
- Auxiliary water tank
- Terminal output
- Euro V certificate
- Operation Manual / Specifications
- Fuel tank switching

Technical Specification

Generator	PD20S
Emission standard	EU Stage V
Tank capacity	140L
Noise level @7m	63 dBA
Dry weigh	920kg
Dimensions L×W×H	2000x1000x1355mm
Prime Power	19KVA
Prime Power	15KW
Standby Power	21KVA
Standby Power	17KW

Voltage

Steady state regulation	%	≤±0.5
Dynamic voltage renewal	%	≤+20~-15
Stable time	Sec	2.0
Waveform distortion	%	≤3
Volatility	%	≤0.5

Frequency

Steady state regulation	%	≤±1
Dynamic frequency renewal	%	≤+10~-7
Stable time	Sec	≤3
Volatility	%	≤0.5

Environment require

Temperature	°C	≤40
Humidity	%	≤60
Altitude	m	≤1000

Standard

ISO3046,ISO8528

Dimension | Weight | Sound



Length (L)	mm	2000
Width (W)	mm	1000
Height (H)	mm	1355
Weight net	Kg	920
Sound @7 meter	dB	63

Note

1. Generator continuous running at variable load for unlimited periods with 10% overload available for 1 hour in any 12 hours period
2. Every generator strictly test on 0%,25%,75%,100%,110% load, dynamic of the responsiveness ability, and all protections



DIESEL ENGINE

Powerful engine and reliable running quality

Durable running performance and was proofed by vehicle's application

Compact structure

Compact structure and metal materials saving for low cost

Low maintenance and repair cost

Air, fuel and oil tubes are silicone and stainless steel materials, which reduce leakage problems substantially

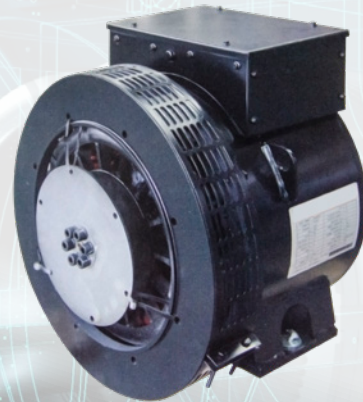
Excellent start performance

Fuel injector and pump were tested fully in Various environments, which provide excellent start and running performance

Engine	4D20G01/5
Rated power/Speed	18.5 KW / 3000 rpm
Dry Weigh (approx.)	300 kg
Number of Cylinders	4
Bore	81 mm
Stroke	97 mm
Displacement	1.99 L
Compression Ratio	16.2:1
Type of injection	Direct injection
Intake System	Natural
Intake Resistance	≤13 kPa
Cooling System	Water cooled
Fan	Pusher
Battery Voltage	12 V
Type of Fuel	Diesel
Type of Oil	15W40-CF4
Oil Capacity	5.5 L
Type of Coolant	Glycol mixture
Coolant Capacity	8 L
Back Pressure	<20 kPa
Fuel Consumption (0/25/50/75/100%)	1.4/1.5/2.6/3.7/4.7 L

ALTERNATOR

Alternator	184ES
Exciter	Brushless
Cooling Fan	Cast alloy aluminum
Windings	100% copper
Insulation Class	H
Winding Pitch	2/3
Terminals	12
Drip Proof	IP23
Altitude	≤1000m
Air Flow	0.095 m³/s
Voltage Regulation	±1.0%
Telephone Interference	THF<2%; TIF<50
Total harmonic TGH / THCat no load	<1.5%-on load<5%



Best structure

Excellent design ensures compact structure and perfect appearance

Excellent performance

Excitation enhanced system improves start and short circuit's protection performance

Economy

Less parts involved and the most market's demand lead to cheap price and fine quality

Easy maintenance and repair

Core parts won't be involved in repair job, AVR can be replaced easily, examining diode doesn't disassemble rotor.

CONTROL PANEL



ComAp AMF9

Support engine and alternator monitoring, measurement and protection. This is long-running and back-up unit to integrate the best way to control.



- 1-----Power switch
- 2-----Emergency stop button
- 3-----Circuit breaker
- 4-----32A Three phase socket 400V IP67 x1
- 5-----32A Single phase socket 230V IP67 x1
- 6-----16A Three phase socket 400V IP67 x1
- 7-----16A Single phase socket 230V IP67 x1
- 8-----16A Europe socket 400V IP44 x1

Measurement, displayment	AMF9
Genset prime power Kw	●
Power factor	●
engine speed	●
Phase to neutral voltage	●
Phase to phase voltage	●
Genset frequency	●
Genset current	●
Mains Phase to neutral voltage	○
Mains Phase to phase voltage	○
Mains frequency	○
engine oil pressure	●
engine water temperature	●
fuel level	●
battery voltage	●
genset power KVA	●
Genset running time	●
Genset output KWh	●
History file	●
Alarm, shutdown function	
Low oil pressure warning,shutdown	●
High water temperature warning,shutdown	●
Engine over and under speed shutdown	●
Low fuel level warning,shutdown	●
battery low and high voltage warning	●
battery charging failure	●
Genset low and high voltage warning, shut down	●
Alternator 3 phase voltage unbalance shut down	●
Alternator low and high frequency warning,shut down	●
Genset over load shutdown	●
Alternator 3 phase current unbalance shutdown	●
Mains low and high voltage warning	○
Mains low and high frequency warning	○
Optional	
Remote start and stop	●
RS232 card	○
USB card	●
RS485 card	○
Multi language display	●
GPRS communication	○
GPS communication	○
CAN communication	●

●Standard ○Optional × None