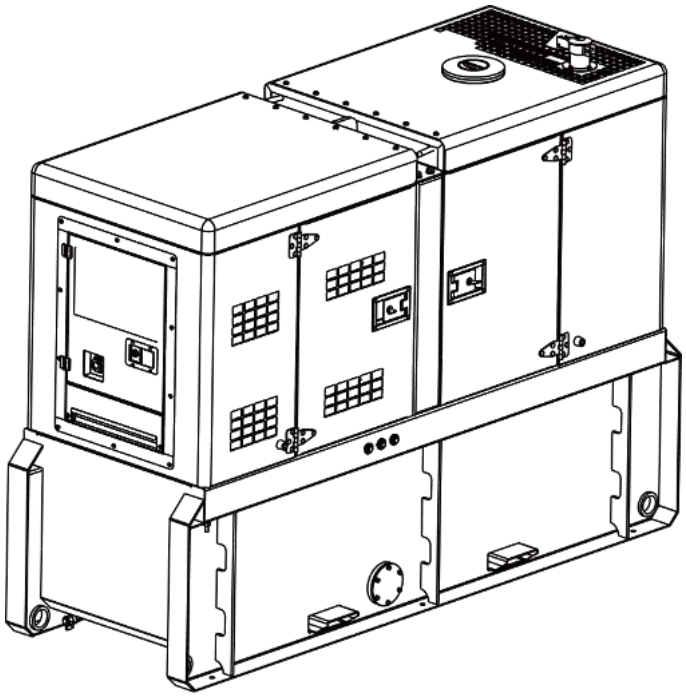
PP21D6S

DIESEL GENSET SPECIFICATION

27 kVA (ESP)

ID：1000037413



Diesel Genset Specification

PP21D6S

General technical data

Model	PP21D6S
Structure	R
Prime power (PRP)：kVA / kW	N/A
Standby power (ESP)：kVA / kW	27 / 21
Frequency: Hz	60
Rotate speed: RPM	1800
Phase: P	1
Power factor: cosφ	0.8
Protection class	IP54
Noise level: dB@7m	62.8
Tank capacity: L	400
Dimensions: mm	2300×848×1689
Dry weight: kg	938

Rated voltage V	Current A
240	112.5

Load	Fuel consumption L/h
25%	N/A
50%	3.5
75%	4.8
100%	6.2
110%	6.9

Main Features

Advantage

- Low fuel consumption
- Optimized system
- High reliability
- High availability

Design Standards

- Conformite Europeenne (CE)
- ISO8528-5:2005

Environmental Operating Conditions

- Installation place: outdoor / indoor (well ventilated).
- Ambient temperature: -25℃ to 45℃ (the coolant heater is needed when the temperature is below 5℃)
- Humidity: Less than 80%
- Altitude: Below one thousand (1000) meters.

Factory Inspection

- Protection devices working test
- Starting ability in normal temperature
- 50% rated power load moment capability
- Load test :0, 25%, 50%, 75%, 100%, 110%

Service Support

- Global product service support

Performance Guarantee

- Product design, manufacturing and performance have been verified by standards
- Generator set has passed transient response test according to ISO8528-5
- Both engine and alternator have passed prototype factory testing.

Diesel Genset Specification

PP21D6S

Power System

Engine

Manufacturer / brand	Perkins	Intake system	Naturally aspirated
Model	404D-22G	Intake resistance: kPa	≦6.4
Cylinders	4L	Exhaust back pressure: kPa	≦10.2
Bore: mm	84	Oil capacity: L	10.6
Stroke: mm	100	Coolant capacity: L	7.0
Displacement: L	2.2	Battery voltage: V	12
Compression ratio	23.3	Dimensions: mm	915×477×840
Rotate speed: RPM	1800	Dry weight: kg	242
Prime power: kWm	22		
Standby power: kWm	24.3		
Rotate speed governor	Mech		
Type of fuel Injection	Indirect		

Alternator

Manufacturer / brand	Leroy-somer	Insulation class	H
Model	LSA42.3S4	Temperature rising class	H
Exciter	Brushless	Protection class	IP23
Windings	100% copper	Voltage regulation	±0.5%
Winding pitch	2/3	Telephone harmonic factor THF	<2%
Number of poles	4	Telephone interference factor TIF	<50
Terminals	12		

Control System

Brand	POWERLINK
Model	PLC-920

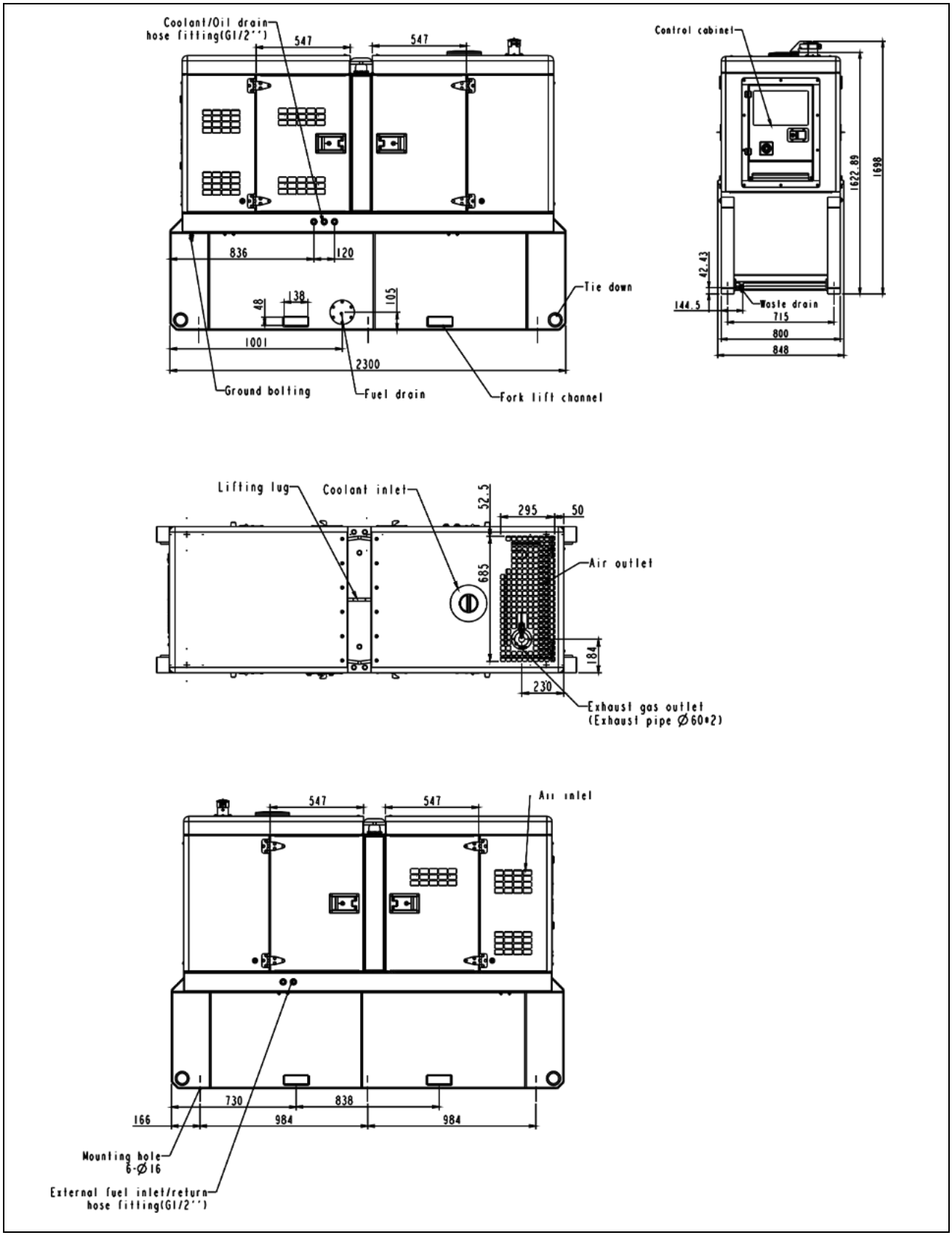
General Functions

- Automatic start / stop control
- Manual/remote start control
- Real time monitoring and display of multiple parameters
- RS232, RS485 interface and Ethernet can be used simultaneously
- CAN and Modbus communication
- Provide complete control solutions

Monitoring and protection

Oil pressure	Over load
Water temperature	Over current
Rotate speed	Over voltage
Start	Under voltage
Running time	Over frequency
Battery voltage	Under frequency
……	……

Product Appearance



Product Configuration

Standard configuration

Engine	Generator	Control switchgear	Canopy (sound-proof)	Base Frame
Electrical start motor	Alternator	PLC control system	SECC Electrogalvanized sheet	Steel base frame
Battery system	H class insulation	Main circuit breaker	Corrosion-resistant coating	Engine bracket
Speed control system	H class temperature rising	Breaker cabinet	Access door	Alternator bracket
Lockable isolator switch	IP23 protection	Communication connector	Stainless steel hinge	Radiator bracket
Battery charger	AVR voltage regulator	ATS connector	Sound absorbing cotton	Vibration isolators
		Mains floating charger		

Fuel system	Lubrication system	Cooling system	Intake / exhaust system	Service documents
Base frame fuel tank	Oil pressure sensor	50℃ radiator	Air filter	Installation and operation manual
Fuel level sensor	Oil temperature sensor	Water level sensor	Exhaust muffler	Test report
Flexible connection pipe	Oil filter	Jacket water pipe	Exhaust bellow	Circuit diagram
Fuel filter	Manual oil drain pump	Intercooling pipe	Exhaust pipe and flange	Warranty manual
	Oil drain ball valve		High temperature protective sleeve	Engine operation and maintenance manual
				Standard package

Optional configuration

Engine	Alternator	Control switchgear	Fuel system	Lubrication system
Jacket water preheater	Anti-condensation heater	ATS cabinet	Fuel three-way valve	Electric oil drain pump
Oil preheater	Treatments against humidity and corrosion		Daily fuel tank	

Power Class Definition

- Prime Power (PRP): the unit runs continuously with variable load, the number of operating hours is not limited, and 1h overload 10% operation is allowed per 12h, and the average load factor is less than 70% per 24h.
- Standby Power (ESP): operating time does not exceed 500h per year, continuous operating time does not exceed 300h, the average load factor is less than 80% per 24h. Overload operation is not allowed.

Product Statement

- The data of specifications is based on the following standard environmental test conditions.
  - Ambient temperature 25℃
  - Altitude 100m
  - Relative humidity 30%
- Dimensions, weight and other parame0ters are for reference only, which shall be subject to the final design drawing.

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Data is subject to change without prior notice as new products are always developed.

Please contact PowerLink or local agent with any doubts or for more information.