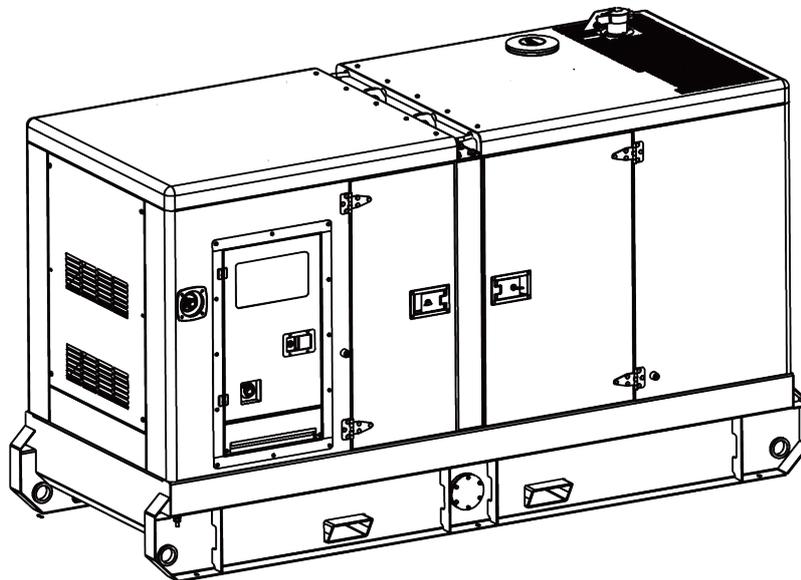


WPS100S

DIESEL GENSET SPECIFICATION

100kVA (PRP) / 110kVA (ESP)

ID: 1000008371



General technical data

Model	WPS100S	Rated voltage V	Current A
Structure	R	380	151.9
Prime power (PRP): kVA / kW	100 / 80	400	144.3
Standby power (ESP): kVA / kW	110 / 88	415	139.1
Frequency: Hz	50	440	104.9
Rotate speed: RPM	1500		
Phase: P	3		
Power factor: cosφ	0.8	Load	Fuel consumption L/h
Protection class	IP54	25%	N/A
Noise level: dB@7m	82.8	50%	11.2
Tank capacity: L	240	75%	17.1
Dimensions: mm	2888×1165×1681	100%	22.6
Dry weight: kg	1852	110%	24.9

Main Features

Advantage	Design Standards	Environmental Operating Conditions
<ul style="list-style-type: none"> • Low fuel consumption • Optimized system • High reliability • High availability 	<ul style="list-style-type: none"> • Conformance Europeenne (CE) • ISO8528-5:2005 	<ul style="list-style-type: none"> • Installation place: outdoor / indoor (well ventilated). • Ambient temperature: -25°C to 45°C (the coolant heater is needed when the temperature is below 5°C) • Humidity: Less than 80% • Altitude: Below one thousand (1000) meters.
Factory Inspection	Service Support	Performance Guarantee
<ul style="list-style-type: none"> • Protection devices working test • Starting ability in normal temperature • 50% rated power load moment capability • Load test :0, 25%, 50%, 75%, 100%, 110% 	<ul style="list-style-type: none"> • Global product service support 	<ul style="list-style-type: none"> • 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

WPS100S

Power System

Engine

Manufacturer / brand	Perkins	Intake system	Turbocharger
Model	1104C-44TAG2	Intake resistance: kPa	≅ 8.0
Cylinders	4	Exhaust back pressure: kPa	≅ 18
Bore: mm	105	Oil capacity: L	8
Stroke: mm	127	Coolant capacity: L	12.6
Displacement: L	4.4	Battery voltage: V	12
Compression ratio	18.23	Dimensions: mm	1259x721x966
Rotate speed: RPM	1500	Dry weight: kg	401
Prime power: kWm	93.6		
Standby power: kWm	103		
Rotate speed governor	EFC		
Type of fuel Injection	Direct		

Alternator

Manufacturer / brand	Leroy-somer	Insulation class	H
Model	LSA44.3S3	Protection class	IP23
Exciter	Brushless	Voltage regulation	±0.5%
Windings	100% copper	Telephone harmonic factor THF	<2%
Winding pitch	2/3	Telephone interference factor TIF	<50
Number of poles	4		
Terminals	12		

Control System

Brand	POWERLINK
Model	PLC-920

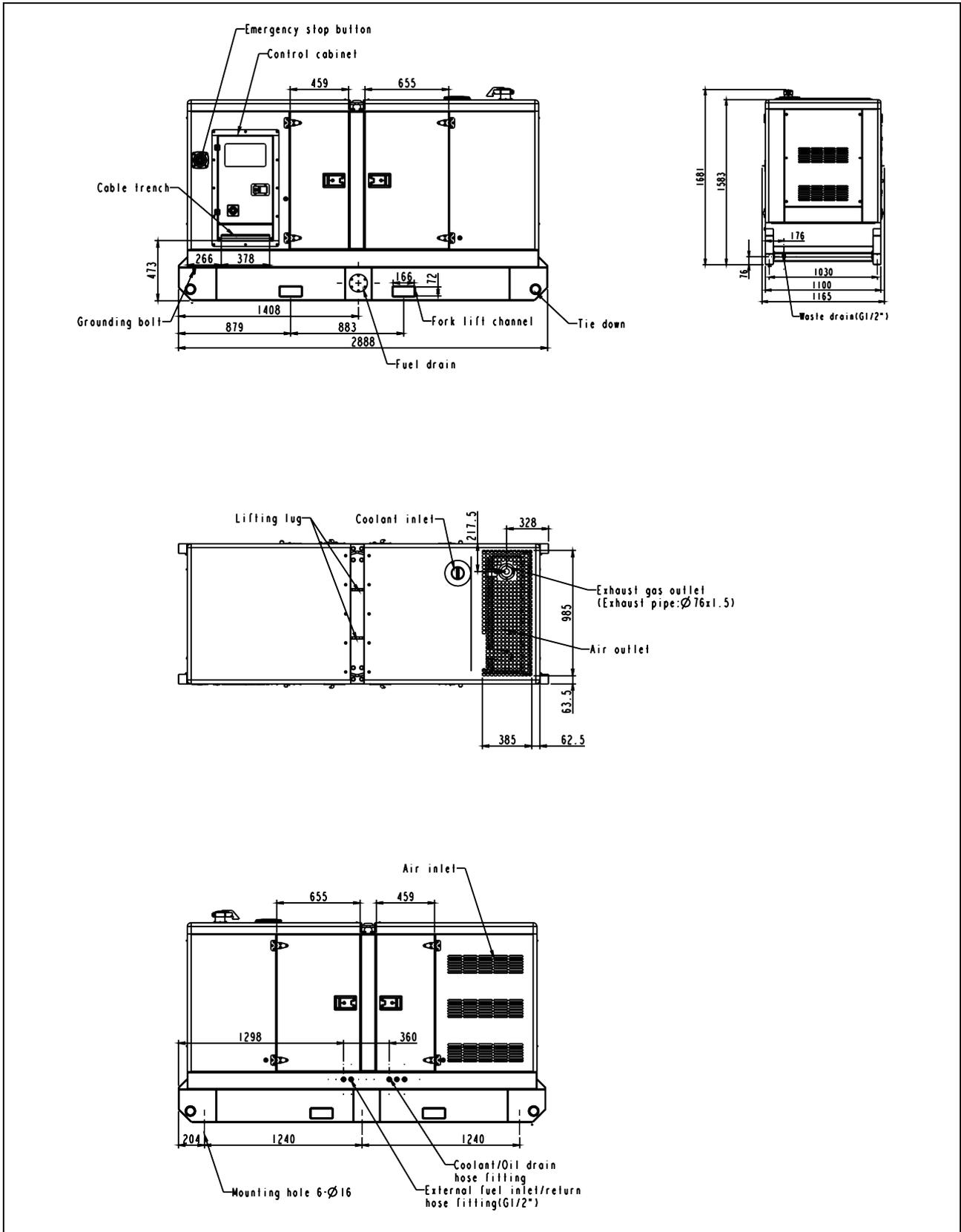
General Functions

- Automatic start / stop control
- Manual/remote start control
- Automatically start when mains are abnormal (AMF)
- 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
Turbocharger	IP23 protection	Communication connector	Stainless steel hinge	Radiator bracket
Lockable isolator switch	AVR voltage regulator	ATS connector	Sound absorbing cotton	Vibration isolators
Battery charger		Mains floating charger		
Fuel system	Lubrication system	Cooling system	Intake / exhaust system	Service documents
Base frame fuel tank	Oil pressure sensor	50°C 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		Exhaust pipe and flange	Warranty manual
	Oil drain ball valve		High temperature protective sleeve	Engine operation and maintenance manual
				Standard package

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°C
 - Altitude 100m
 - Relative humidity 30%
- Dimensions, weight and other parameters are for reference only, which shall be subject to the final design drawing.