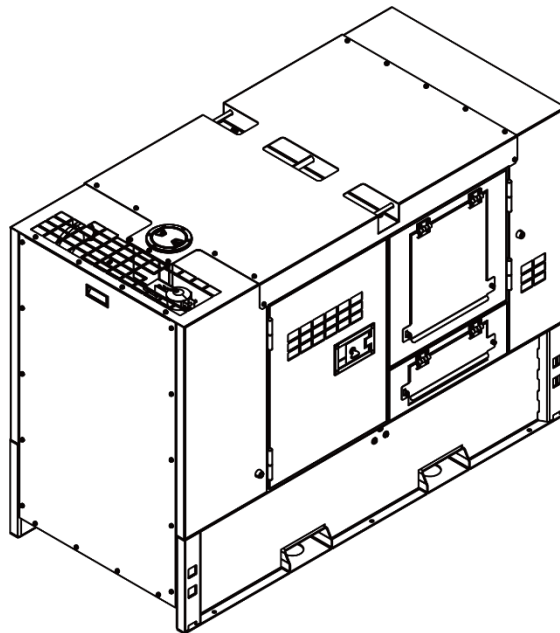


SG15KS

DIESEL GENSET SPECIFICATION

15kVA (PRP) / 17kVA (ESP)

ID: 1000033689



Diesel Genset Specification

SG15KS

General technical data

| | | | |
|-------------------------------|---------------|-----------------|----------------------|
| Model | SG15KS | Rated voltage V | Current A |
| Structure | PT | 220 | 68.2 |
| Prime power (PRP): kVA / kW | 15 / 12 | 230 | 65.2 |
| Standby power (ESP): kVA / kW | 17 / 13 | 240 | 62.5 |
| Frequency: Hz | 50 | | |
| Rotate speed: RPM | 1500 | | |
| Phase: P | 3 | | |
| Power factor: $\cos\phi$ | 0.8 | Load | Fuel consumption L/h |
| Protection class | IP54 | 25% | N/A |
| Noise level: dB@7m | 61.0 | 50% | 2.0 |
| Tank capacity: L | 50 | 75% | 3.0 |
| Dimensions: mm | 1600x750x1090 | 100% | 3.9 |
| Dry weight: kg | 900 | 110% | 4.3 |

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"> Conformite 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

SG15KS

Power System

Engine

| | | | |
|------------------------|----------|----------------------------|-------------------|
| Manufacturer / brand | Kubota | Intake system | Natural aspirated |
| Model | D1703-BG | Intake resistance: kPa | ≤1.96 |
| Cylinders | 3L | Exhaust back pressure: kPa | ≤7.07 |
| Bore: mm | 87 | Oil capacity: L | 7.1 |
| Stroke: mm | 92 | Coolant capacity: L | 7.6 |
| Displacement: L | 1.65 | Battery voltage: V | 12 |
| Compression ratio | 23.0 | Dimensions: mm | 608×548×642 |
| Rotate speed: RPM | 1500 | Dry weight: kg | 148 |
| Prime power: kWm | 12.8 | | |
| Standby power: kWm | 15.1 | | |
| Rotate speed governor | Mech | | |
| Type of fuel Injection | Direct | | |

Alternator

| | | | |
|----------------------|-------------|-----------------------------------|-------|
| Manufacturer / brand | Leroysoner | Insulation class | H |
| Model | LSA42.3VS1 | Temperature rising class | H |
| Exciter | Brushless | Protection class | IP23 |
| Windings | 100% copper | Voltage regulation | ±1.0% |
| 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 |

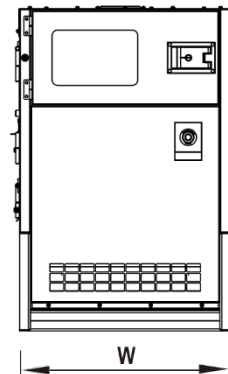
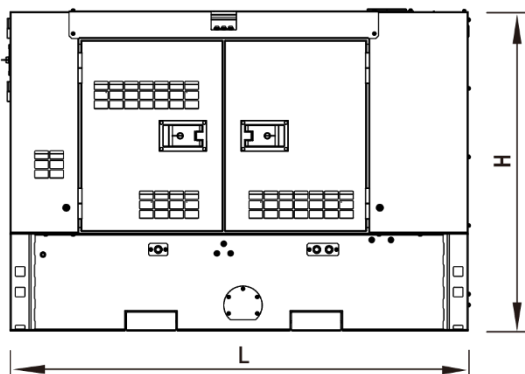
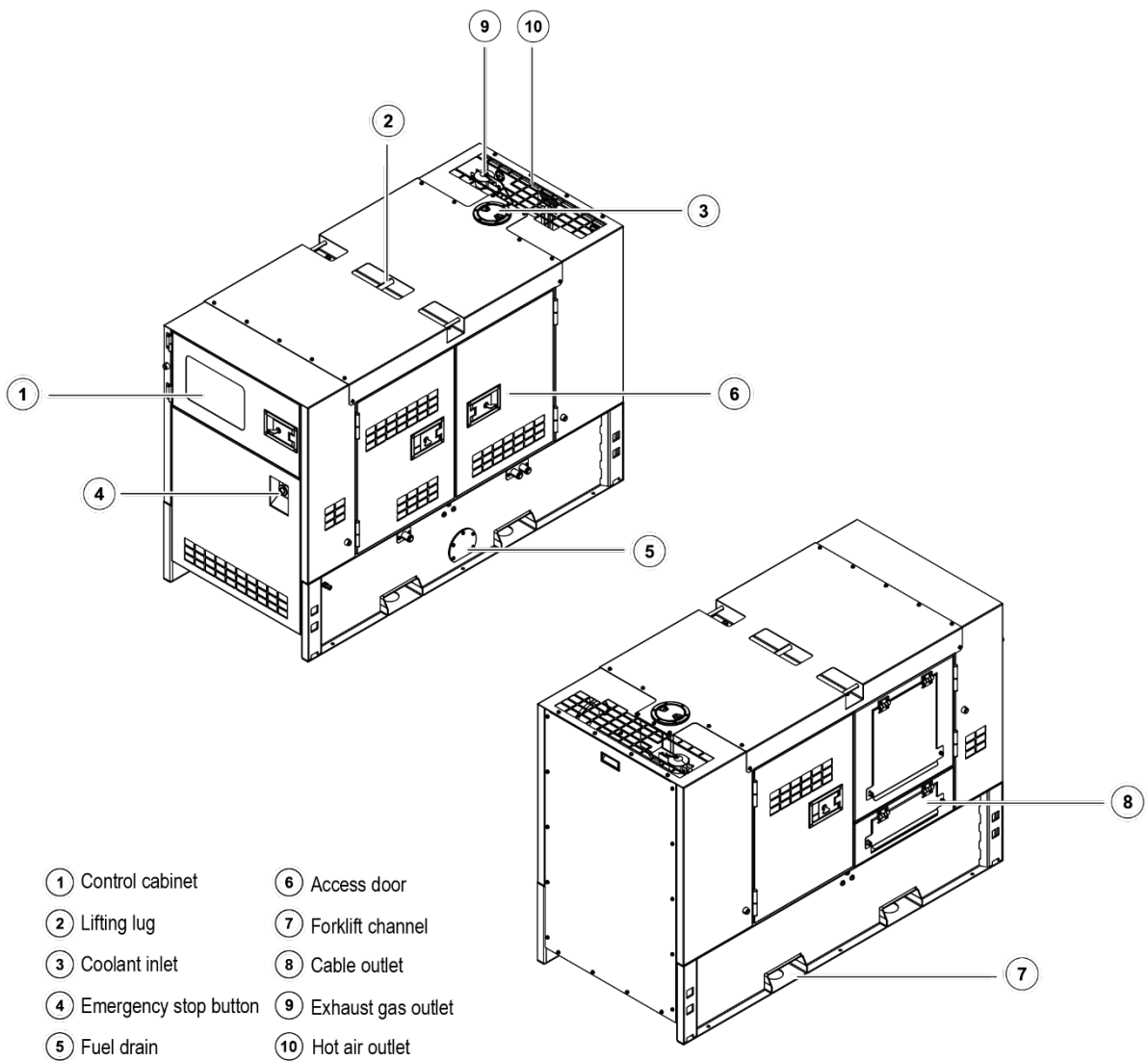
General Functions

- 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 | Steel plate | 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 |
| Natural aspirated | 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 | 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 | 4P circuit breaker | Fuel three-way valve | Electric oil drain pump |
| Oil preheater | Treatments against humidity and corrosion | ATS cabinet | Daily fuel tank | |
| | | Paralleling control system | | |
| | | Grid-connection system | | |

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.