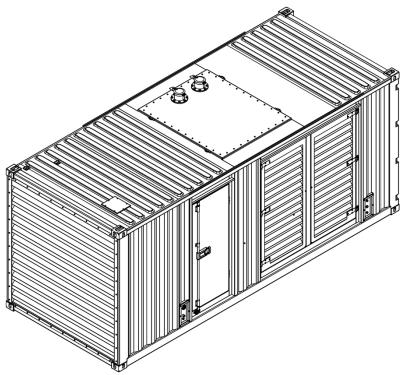


# QSV900CS DIESEL GENSET SPECIFICATION

900kVA (PRP) / 990kVA (ESP)

ID: 1000037175







Diesel Genset Specification QSV900CS

# General technical data

| Model                       | QSV900CS       | Rated voltage | V Current A          |
|-----------------------------|----------------|---------------|----------------------|
| Structure                   | PT             | 380           | 1367.4               |
| Prime power (PRP): kVA / kW | 900 / 720      | 400           | 1299.1               |
| Standby power (ESP): kVA/kW | 990 / 792      | 415           | 1252.1               |
| Frequency: Hz               | 50             |               |                      |
| Rotate speed: RPM           | 1500           |               |                      |
| Phase: P                    | 3              |               |                      |
| Power factor: cosq          | 0.8            | Load          | Fuel consumption L/h |
| Protection class            | IP54           | 25%           | 46.5                 |
| Noise level: dB@7m          | 79.3           | 50%           | 93.0                 |
| Tank capacity: L            | 1450           | 75%           | 139.6                |
| Dimensions: mm              | 6058×2438×2591 | 100%          | 181.4                |
| Dry weight: kg              | 12500          | 110%          | 204.2                |

## **Main Features**

| Advantage            | Design Standards Environmental Operating Condition |   |
|----------------------|--|---|
| Low fuel consumption | Conformite Europeenne (CE)                         | <ul> <li>Installation place: outdoor / indoor (well ventilated).</li> </ul> |
| Optimized system     | • ISO8528-5:2005                                   | • Ambient temperature: -25°C to 45°C (the                                   |
| High reliability     |  | coolant heater is needed when the temperature is below 5℃)                  |
| High availability    |  | Humidity: Less than 80%   |
|                      |  | <ul> <li>Altitude: Below one thousand (1000) meters.</li> </ul>             |

| Factory Inspection Service Support        |                                | Performance Guarantee   |  |
|---|--------------------------------|---|--|
| Protection devices     working test       | Global product service support | <ul> <li>Product design, manufacturing and<br/>performance have been verified by<br/>standards</li> </ul> |  |
| Starting ability in normal temperature    |                                | Generator set has passed transient  |  |
| 50% rated power load moment capability    |                                | response test according to ISO8528-5  |  |
| • Load test :0, 25%, 50%, 75%, 100%, 110% |                                | <ul> <li>Both engine and alternator have passed<br/>prototype factory testing.</li> </ul>                 |  |



# **Power System**

## Engine

| Manufacturer / brand   | Cummins   |
|------------------------|-----------|
| Model                  | KTA38-G2A |
| Cylinders              | 12L       |
| Bore: mm               | 159       |
| Stroke: mm             | 159       |
| Displacement: L        | 37.5      |
| Compression ratio      | 14.5      |
| Rotate speed: RPM      | 1500      |
| Prime power: kWm       | 813       |
| Standby power: kWm     | 895       |
| Rotate speed governor  | EFC       |
| Type of fuel Injection | Direct    |

| Intake system              | Turbo charged  |
|----------------------------|----------------|
| Intake resistance: kPa     | ≦6.23          |
| Exhaust back pressure: kPa | ≦10.1          |
| Oil capacity: L            | 135            |
| Coolant capacity: L        | 194            |
| Battery voltage: V         | 24             |
| Dimensions: mm             | 2265×1379×2232 |
| Dry weight: kg             | 3723           |

## Alternator

| Manufacturer / brand | Stamford    |
|----------------------|-------------|
| Model                | S6L1D-D4    |
| Exciter              | Brushless   |
| Windings             | 100% copper |
| Winding pitch        | 2/3         |
| Number of poles      | 4           |
| Terminals            | 12          |

| Insulation class                  | Н     |
|-----------------------------------|-------|
| Temperature rising class          | Н     |
| Protection class                  | IP23  |
| Voltage regulation                | ±1.0% |
| Telephone harmonic factor THF     | <2%   |
| Telephone interference factor TIF | <50   |

## **Control System**

| Brand | POWERLINK |
|-------|-----------|
| Model | PLC-7420  |

**General Functions** 

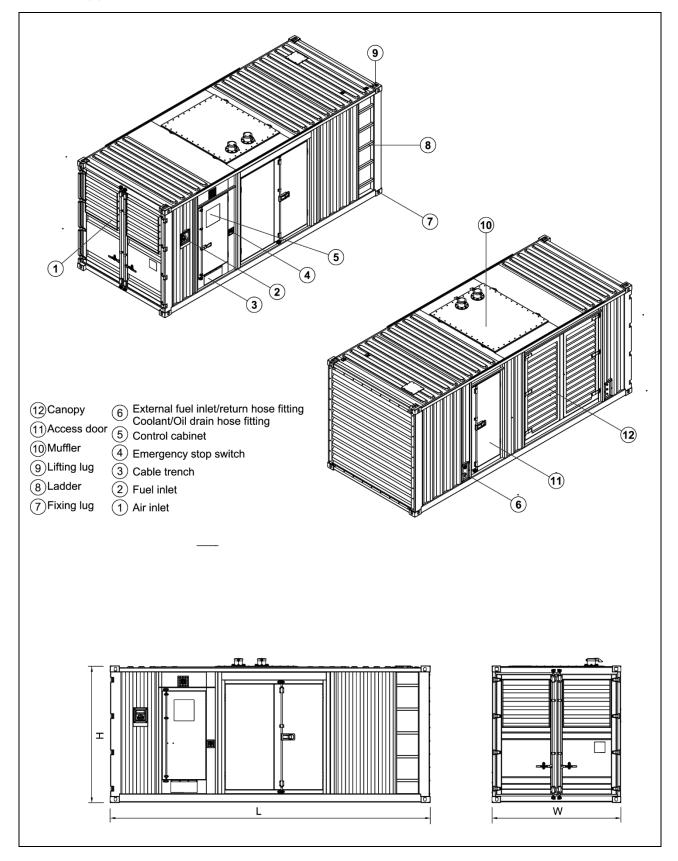
- Automatic start / stop control
- Manual/remote start control
- Real time monitoring and display of multiple parameters
- RS232, RS485 interface and Ethernet can be used simultaneously
- CAN and Modbus communication
- Provide complete control solutions

| 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 |
|                           |                 |

Diesel Genset Specification QSV900CS



# **Product Appearance**





# **Product Configuration**

## Standard configuration

| Generator   | Control switchgear  | Canopy (sound-proof)   | Base Frame   |
|---|---|--|--|
| Alternator<br>H class insulation<br>H class temperature<br>rising<br>IP23 protection<br>AVR voltage regulator | PLC control system<br>Main circuit breaker<br>Breaker cabinet<br>Communication<br>connector<br>ATS connector<br>Mains floating charger  | Steel plate<br>Corrosion-resistant coating<br>Access door<br>Stainless steel hinge<br>Sound absorbing cotton   | Steel base frame<br>Engine bracket<br>Alternator bracket<br>Radiator bracket<br>Vibration isolators  |
| Lubrication system  | Cooling system  | Intake / exhaust system  | Service documents  |
| Oil pressure sensor<br>Oil temperature sensor<br>Oil filter<br>Manual oil drain pump<br>Oil drain ball valve  | 50°C radiator<br>Water level sensor<br>Jacket water pipe<br>Intercooling pipe   | Air filter<br>Exhaust muffler<br>Exhaust bellow<br>Exhaust pipe and flange<br>High temperature<br>protective sleeve  | Installation and<br>operation manual<br>Test report<br>Circuit diagram<br>Warranty manual<br>Engine operation and<br>maintenance manual<br>Standard package  |
|   | Alternator<br>H class insulation<br>H class temperature<br>rising<br>IP23 protection<br>AVR voltage regulator<br>Lubrication system<br>Oil pressure sensor<br>Oil temperature sensor<br>Oil filter<br>Manual oil drain pump | AlternatorPLC control systemH class insulationMain circuit breakerH class temperature<br>risingBreaker cabinet<br>Communication<br>connectorIP23 protectionAVR voltage regulatorAVR voltage regulatorATS connector<br>Mains floating chargerLubrication systemCooling systemOil pressure sensor50°C radiatorOil temperature sensorJacket water pipe<br>Intercooling pipe | AlternatorPLC control systemSteel plateH class insulationMain circuit breakerSteel plateH class temperature<br>risingBreaker cabinet<br>Communication<br>connectorAccess doorIP23 protection<br>AVR voltage regulatorATS connector<br>Mains floating chargerSound absorbing cottonLubrication systemCooling systemIntake / exhaust systemOil pressure sensor50°C radiatorAir filterOil temperature sensorJacket water pipe<br>Intercooling pipeExhaust pipe and flange<br>High temperature |

#### **Optional configuration**

| Engine                                  | Alternator  | Control switchgear  | Fuel system                             | Lubrication system      |
|---|---|---|---|-------------------------|
| Jacket water preheater<br>Oil preheater | Anti-condensation<br>heater<br>Treatments against<br>humidity and corrosion | 4P circuit breaker<br>ATS cabinet<br>Paralleling control system | Fuel three-way valve<br>Daily fuel tank | Electric oil drain pump |
|   |   | 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 parame0ters are for reference only, which shall be subject to the final design drawing.



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.