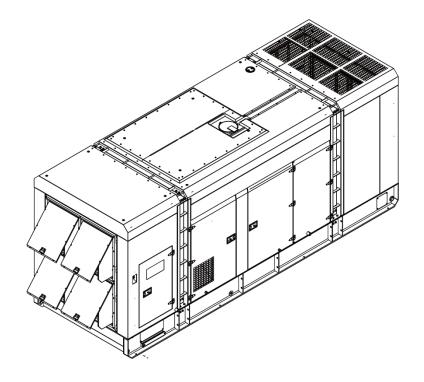


# QSV650CS DIESEL GENSET SPECIFICATION

650kVA (PRP) / 715kVA (ESP)

ID: 1000037172







Diesel Genset Specification QSV650CS

# General technical data

Model	QSV650CS	Rated voltage V	Current A
Structure	PT	380	988.0
Prime power (PRP): kVA / kW	650 / 520	400	938.0
Standby power (ESP): kVA/kW	715 / 572	415	904.0
Frequency: Hz	50		
Rotate speed: RPM	1500		
Phase: P	3		
Power factor: cosq	0.8	Load	Fuel consumption L/h
Protection class	IP54	25%	35.0
Noise level: dB@7m	77.9	50%	68.0
Tank capacity: L	1650	75%	101.0
Dimensions: mm	4592×2016×2661	100%	137.0
Dry weight: kg	6810	110%	N/A

## **Main Features**

Advantage	Design Standards Environmental Operating Conditions	
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°C)
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 performance have been verified by standards</li> </ul>	
Starting ability in normal temperature		Generator set has passed transient	
• 50% rated power load m	oment capability	response test according to ISO8528-5	
<ul> <li>Load test :0, 25%, 50%, 75%, 100%, 110%</li> </ul>		<ul> <li>Both engine and alternator have passed prototype factory testing.</li> </ul>	



# **Power System**

## Engine

Manufacturer / brand	Cummins
Model	KTA19-G8
Cylinders	6L
Bore: mm	159
Stroke: mm	159
Displacement: L	19.0
Compression ratio	13.9
Rotate speed: RPM	1500
Prime power: kWm	460
Standby power: kWm	575
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	50.0
Coolant capacity: L	30.3
Battery voltage: V	24
Dimensions: mm	2142×880×1734
Dry weight: kg	1690

## Alternator

Manufacturer / brand	Stamford
Model	S5L1D-F4
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** 

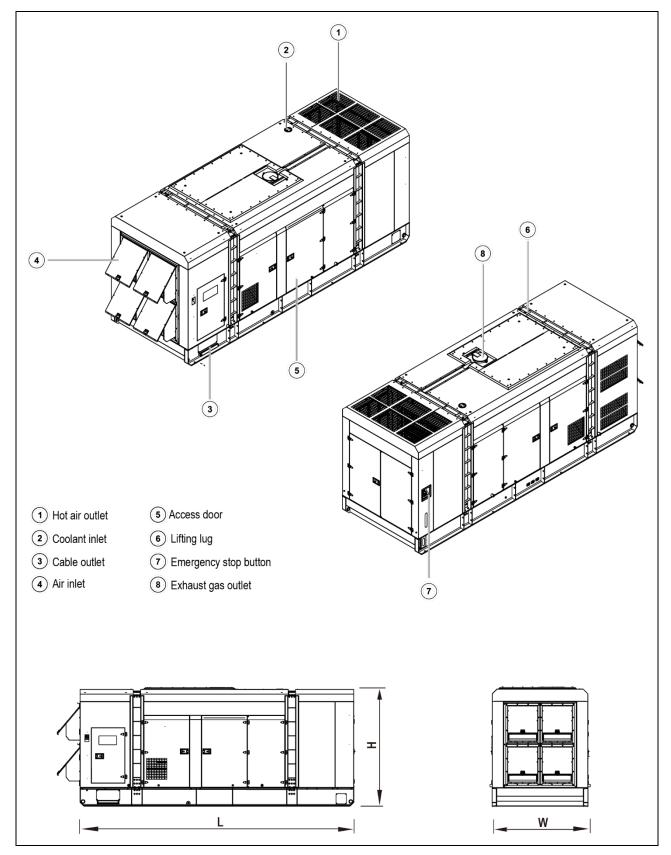
- Automatic start / stop control
- Manual/remote start control
- Real time monitoring and display of multiple parameters
- RS232, RS485 interface and Ethernet can be used simultaneously
- CAN and Modbus communication
- Provide complete control solutions

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 QSV650CS



# **Product Appearance**





# **Product Configuration**

## Standard configuration

•				
Engine	Generator	Control switchgear	Canopy (sound-proof)	Base Frame
Electrical start motor Battery system Speed control system Turbocharger Lockable isolator switch Battery charger	Alternator H class insulation H class temperature rising IP23 protection AVR voltage regulator	PLC control system Main circuit breaker Breaker cabinet Communication connector ATS connector Mains floating charger	Steel plate Corrosion-resistant coating Access door Stainless steel hinge Sound absorbing cotton	Steel base frame Engine bracket Alternator bracket Radiator bracket Vibration isolators
Fuel system Base frame fuel tank Fuel level sensor Flexible connection pipe Fuel filter	Lubrication system Oil pressure sensor Oil temperature sensor Oil filter Manual oil drain pump Oil drain ball valve	Cooling system 50°C radiator Water level sensor Jacket water pipe Intercooling pipe	Intake / exhaust system Air filter Exhaust muffler Exhaust bellow Exhaust pipe and flange High temperature protective sleeve	Service documents Installation and operation manual Test report Circuit diagram Warranty manual Engine operation and maintenance manual
				Standard package

#### **Optional configuration**

Engine	Alternator	Control switchgear	Fuel system	Lubrication system
Jacket water preheater Oil preheater	Anti-condensation heater Treatments against humidity and corrosion	4P circuit breaker ATS cabinet Paralleling control system	Fuel three-way valve 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.