

QSV100CS

DIESEL GENSET SPECIFICATION

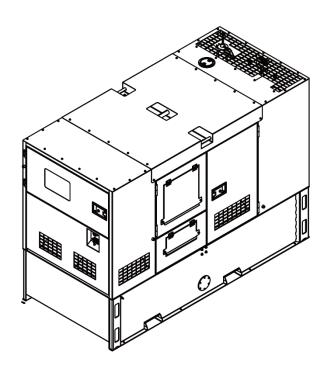
100kVA (PRP) / 110kVA (ESP)

ID: 1000033647











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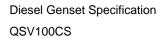
General technical data

Model	QSV100CS	Rated voltage V	Current A
Structure	PT	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		
Rotate speed: RPM	1500		
Phase: P	3		
Power factor: cosφ	0.8	Load	Fuel consumption L/h
Protection class	IP54	25%	5.6
Noise level: dB@7m	63.0	50%	11.0
Tank capacity: L	180	75%	16.3
Dimensions: mm	2850×1100×1550	100%	21.7
Dry weight: kg	3800	110%	23.9

Main Features

Advantage	Design Standards	Environmental Operating Conditions
Low fuel consumption	Conformite Europeenne (CE)	Installation place: outdoor / indoor (well ventilated).
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%
		 Altitude: Below one thousand (1000) meters.

Factory Inspection		Service Support	Performance Guarantee	
•	Protection devices working test	Global product service support	 Product design, manufacturing and performance have been verified by standards 	
•	Starting ability in normal te	mperature	Generator set has passed transie	nt
•	50% rated power load mon	nent capability	response test according to ISO8528-5	
	Load test :0, 25%, 50%, 75	5%, 100%, 110%	 Both engine and alternator have passe prototype factory testing. 	ed





Power System

Manufacturer / brand	Cummins	Intake system	Turbo charged
Model	6BT5.9-G2	Intake resistance: kPa	≦6.28
Cylinders	6L	Exhaust back pressure: kPa	≦10.1
Bore: mm	102	Oil capacity: L	14.2
Stroke: mm	120	Coolant capacity: L	29.7
Displacement: L	5.9	Battery voltage: V	12/24
Compression ratio	16.8	Dimensions: mm	N/A
Rotate speed: RPM	1500	Dry weight: kg	411
Prime power: kWm	86		
Standby power: kWm	92		
Rotate speed governor	EFC		
Type of fuel Injection	Direct		

Alternator

Manufacturer / brand	Stamford	Insulation class	Н
Model	UCI274C	Temperature rising class	Н
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

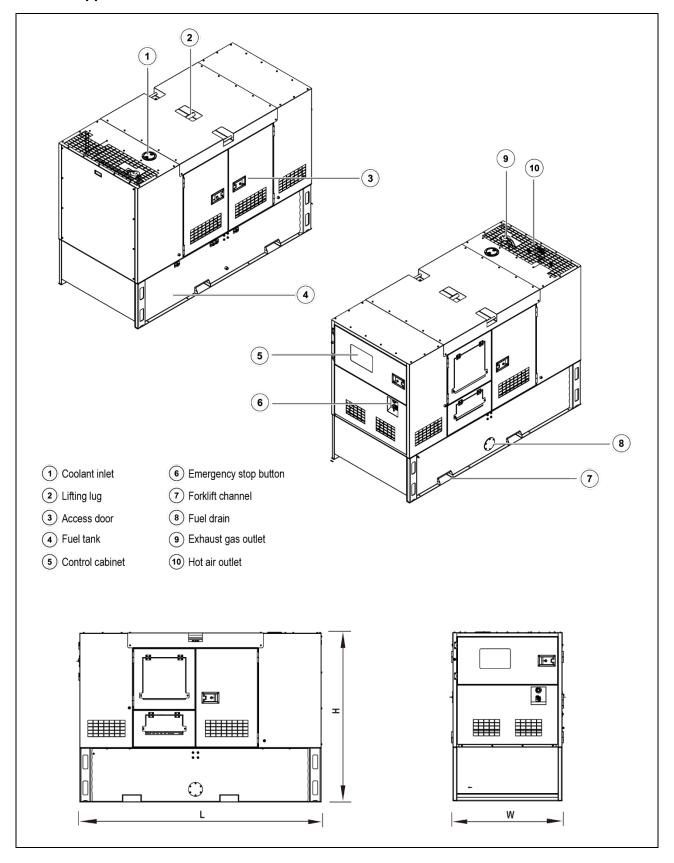
General Functions

	- ·	
 Automatic start / stop control 	Oil pressure	Over load
 Manual/remote start control 	Water temperature	Over current
- Real time monitoring and display of multiple parameters	Rotate speed	Over voltage
- RS232, RS485 interface and Ethernet can be used	Start	Under voltage
simultaneously	Running time	Over frequency
 CAN and Modbus communication 	Battery voltage	Under frequency
 Provide complete control solutions 		

Monitoring and protection



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	Anti-condensation	4P Circuit breaker	Fuel three-way valve	Electric oil drain pump
Oil preheater Tr	heater 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 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.