



宾士动力
BS POWER

GB/T9001-2008 idt ISO9001:2008
GB/T24001-2004 idt ISO14001:2004



Cummins Diesel Generator Set

Model No.: BCS280

Standby Power 280KW/350KVA



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Powered by

Cummins: QSM11-G2

Standby 350KVA at 50Hz, 400V



Genset Technical Data:

Genset Model:	BCS280
Prime Power:	250 KW /313KVA
Standby Power:	280 KW / 350KVA
Frequency/Speed:	50Hz/1500rpm
Rated Voltage:	400V
Power Factor:	0.8
Fuel consumption (100% load):	69 L/h
Oil tank:	600 L
Phase:	three-phases, four-wires
Engine:	Cummins
Alternator:	Stamford
Controller:	DeepSea
Dimensions (LxWxH):	3200x1200x1800 mm
Net Weight:	3200 kgs

- (1) PRP: Prime Power is available for an unlimited number of annual operating hours in variable load applications, in accordance with ISO8528-1. A 10% overload capability is available for a period of 1 hour within 12-hour period of operation. In accordance with ISO 3046-1.
- (2) ESP: The Standby Power Rating is applicable for supplying emergency power in variable load applications for up to 200 hours per year in accordance with ISO8528-1. Overload is not allowed.

Advantages:

1. **Unique engine injection pressure and construction:** Unique Cummins fuel system, 4 valves per cylinder, direct injection, turbocharged & intercooled.
2. **Advanced production technology:** higher strengthen and reliability because of alloy cast iron cylinder body & cover and complete equilibrium structure crankshaft.
3. **Advanced electrical control technology:** full control system design, use advanced ECU intelligent control patch, with real-time monitoring for engine. With fault reserve function.
4. **High operating reliability:** high strength cast cylinder and crankcase provide solid crankshaft support and reduce weight. The engine has enough safety power reserve to cope with 50% over-speed.
5. **Economy:**
 - 1) The engine set consumes less fuel and oil, so the operating costs are low, fuel consumption rate is 195-2D8 g / kWh.
 - 2) With the world's longest working time before first overhaul.

Cummins Engine

Model: QSM11-G2

Manufacture: CCEC, China



General features:

- ◆ Water cooled, turbocharged & intercooled.
- ◆ Direct injection fuel system
- ◆ 24V D.C starter
- ◆ Cooling radiator and fan with safety guard.
- ◆ Replaceable fuel filter, oil filter and dry element air filter.
- ◆ Fuel and water separator as optional.

Main Technical Data:

Prime/standby power:	292KW/321KW
Rated Voltage:	400V
Frequency/Speed:	50Hz/1500rpm
Cylinders no. & Type:	6 cylinders in line, 4-cycle
Aspiration:	Turbocharging, Air to Air intercooling
Bore x Stroke:	125x147mm
Displacement:	10.8 L
Compression ratio:	16.3: 1

Exhaust System

Max. back pressure	10.1 kPa
Maximum Bending Moment to the Turbo Flange	15 N.m

Air Intake System

Max. air intake resistance	
--Dirty filter	6.2 kPa
--Normal air cleaner and clean filter	3.7 kPa
Maximum Temperature Rise Between Engine Air Inlet and Intake Manifold	25°C

Cooling System

Coolant capacity--engine only	9.5 L
Max. coolant cycling resistance exterior engine	55 kPa
Thermostat adjusting temperature (range)	82-93℃
Min. opening pressure of radiator cap	69 kPa
Maximum Top Tank Temperature for Standby / Prime Power	104/100℃

Lubrication System

Oil pressure	
----Low idle speed	69 kPa
----Rated speed(cold)	414-483 kPa
---Rated speed(hot)	242-276 kPa
Max. oil temperature permitted in oil pan	135℃
Oil pan capacity (Max/Min)	34/30 L
Lubrication system capacity (oil pan + oil filter)	36.7 L

Fuel System

Fuel injection pump model	Direct injection Cummins PT
Maximum Fuel Flow to Injection Pump	284 L/H
Maximum Fuel Inlet Temperature	71℃
Maximum Return Fuel Flow	276 L/H
Return Fuel Temperature @ 104°F (40℃) Fuel Inlet Temperature	80℃

Electric System

Starter	24V
Battery charging system	35A
Max. starting circuit resistance	0.002Ω
Min. battery capacity -18℃ to 0℃ (CCA: Cold Cranking Ampere)	900CCA

Dimension & Weight

Dimensions (LxWxH):	1428.3x877.3x1149.8mm
Weight	973kg

Stamford Alternator

Model: HCI 444ES

Origin: Wuxi, China



General Features:

- ◆ Meet world-leading alternator standard requirement
- ◆ 2/3 winding pitch can restrain overmuch neutral current
- ◆ 12 stator leading-out terminal can be reconnected
- ◆ H insulation grade can meet the requirements at hostile environment
- ◆ Self-excited control, provide continuous short-circuit current capacity
- ◆ Single bearing or double bearings structure
- ◆ Easy installation and maintenance
- ◆ Standard protection class IP23

Main Technical Data:

Prime power	276KW/345KVA
Rated Voltage:	400V
Frequency/Speed:	50Hz/1500rpm
Power Factor:	0.8
Efficiency:	93%
Design:	Brushless single bearing, revolving field
Regulator:	AVR self-regulation
Stator:	2/3 winding pitch
Rotor:	Single bearing , flexible disc
Exciter Type:	Brushless excitation
Windings:	100% copper
Voltage regulation:	± 1%
Overspeed:	2250min-1
Indication of protection:	IP23
Insulation class	H
Total Harmonic Distortion:	NO LOAD < 1.5% NON-DISTORTING BALANCED LINEAR LOAD < 5.0%
Telephone Influence Factor(TIF):	<50
Telephone Harmonic Factor(THF):	<2%
Dimensions (LxWxH):	1140 x626x 852mm
Weight	1024 kg

DeepSea Control System

Model: DSE7320

Origin: Shanghai, China



Operating Environment:

Operating temperature:	-20℃~60℃
Relative humidity:	95%
Operating voltage:	DC24V(range: 18-30V, withstand voltage: 50V/5mm)

General Features:

- ◆ Compact size, reliable performance, easy to operation.
- ◆ Automatic detection function and multi-protection function, protect the generator operating safety and steady.
- ◆ Multi-interface display generator's working and alarm condition, visualized and clear to watch.
- ◆ Microcomputer control panel: set parameters such as input, output, alarm and time delay.
- ◆ Multiple operating modes: maintenance mode, manual mode and automatic mode.
- ◆ Start automatically when main supply is abnormal (over-tension, voltage too low, voltage loss).
- ◆ LCD can show all the parameters for the diesel generator.
- ◆ Protective cutoff function when the generator set failed.
- ◆ LCD alarm display, sound-light alarm control output.
- ◆ Manual/automatic/three-remotes function and electric supply/generate electricity automatic switch on-off control.
- ◆ Support RS232/RS485 communication mode (MODBUS protocol).

Protection:

- ◆ High/low voltage & frequency.
- ◆ Revolving speed lack of /exceed.
- ◆ Low oil pressure.
- ◆ High water temperature.
- ◆ Over current/ short trouble, emergency stop

DeepSea Paralleling Module (Optional)

Full Automatic Paralleling Control Cabinet

- ◆ Self-starting, safety protection, alarm.
- ◆ It can realize parallel operation by manual or automatic.
- ◆ Self-load distribution.
- ◆ Self- reactive power distribution.
- ◆ Self-put into or logout gen-set per load.
- ◆ It can at most control 16 sets gen-set parallel operation.
- ◆ Provide open type MODBUS protocol, RS232 and RS485 communication interface for monitoring function.
- ◆ It has manual, automatic, three-remote function, monitor by computer to reach three – remote.



Features:

- ◆ Sheet steel lockable enclosure with hinged door,
- ◆ Removable base gland plate for cable entry/exit on all ratings
- ◆ Voltmeter (0-500) across L1-L2 on load output
- ◆ Load transfer push buttons
- ◆ 22.5mm multi-head LED indicators for “mains on load” and “generator on load”
- ◆ Interface to BS Power generator control panel
- ◆ Suitably rated earth bar

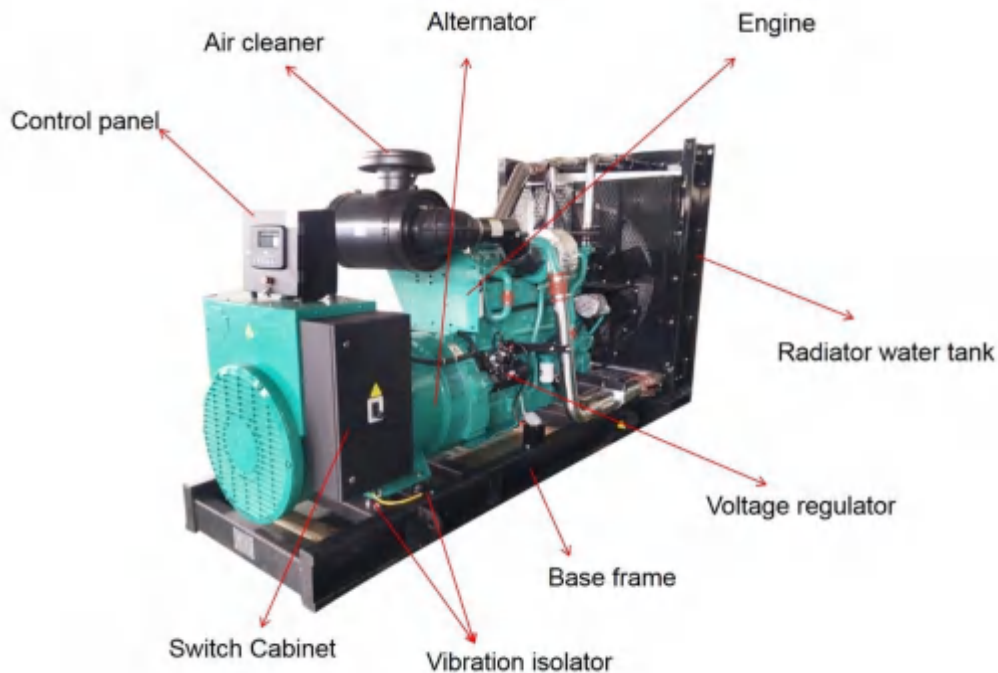
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Circuit Breaker

Brand:	Mingyang
Capacity:	630A

Genset Outlook



Standard Supply Scope:

- ◆ Drive fan for engine and 40°C heat radiating water tank.
- ◆ Moulded case circuit breaker
- ◆ Battery and battery cable
- ◆ Float battery charger
- ◆ Base frame with vibration isolator
- ◆ Daily fuel tank
- ◆ Exhaust elbow, exhaust bellows, exhaust muffler
- ◆ Fuel filter, oil filter, air filter
- ◆ Tool kits
- ◆ Plastic membrane packing
- ◆ English testing report, quality certificate, service manual and warranty card

Optional Supply Scope:

- ◆ Water jacket pre-heater
- ◆ Fuel and water separator
- ◆ Fuel pre-heater
- ◆ External daily fuel tank
- ◆ ATS
- ◆ Synchronization system
- ◆ Standard container
- ◆ Rain-proof canopy
- ◆ Sound-proof canopy
- ◆ Trailer



Binshi Sales Promise

1. **Pre-sales service:** Our professional engineers give **reasonable suggestions** about selection, room design to all the technical solutions.
2. **Selling service:** we provide the **technical support** for the genset installation, test, room noise reduction, dust pollution ect.
3. We have **24 hours Standby** after-sales engineers and **sufficient original plant components** system.
4. **Quality Warranty** is according to our standard conditions: 12 months from BL date or 1,000 running hours. (whichever comes first.)

