B2500E3C

Diesel Generator Set，Powered by Baudouin

Main technical data

Rated voltage		380	400	415	440
Prime power	kVA/kW	2500 / 2000	2500 / 2000	2500 / 2000	2500 / 2000
Standby power	kVA/kW	2750 / 2200	2750 / 2200	2750 / 2200	2750 / 2200
Ampere	A	3798.5	3608.5	3478.1	3280.5
Frequency	Hz	50			
Rotate speed	RPM	1500			
Phase	P	3			
Power factor	cosφ	0.8			

Structure		Containerized type
Model		B2500E3C
Tank capacity	L	2400
Dimensions	mm	12192 ×3000 ×3000
Dry weight	kg	25680
Noise Level	dBA@7m	85

Load		25%	50%	75%	100%	110%
Fuel consumption	L/h	163.6	305.7	427.7	527.3	587.2

Main Specification

Advantage

- Low fuel consumption
- Optimized system
- High reliability
- High availability
- Long maintenance cycle

Design standards

- Conformite Europeene CE)
- ISO8528-5:2005
- GB/T2820.5-2009

Environmental operating conditions

- Installation place: indoor (well ventilated)
- Ambient temperature: -25℃ to 50℃ (the coolant heater is needed when the temperature is below 5℃)
- Humidity: Less than 90%
- Altitude: Below one thousand (1000) meters.

Performance guarantee

- Product design, manufacturing and performance integrity verified by standards
- Generator set passed transient response test according to ISO8528-5
- Both engine and alternator are prototype and factory tested

Service support

- Provide global product service support

Factory inspection

- Protection devices working test
- Starting ability in normal temperature
- 50% rated power load moment capability
- Voltage deviation and speed variation: 0, 25%, 50%, 75%, 100%, 110%

Power System

Engine

Manufacturer	Baudouin
Model	12M55G4D3/5
Cylinders and arrangement	12V
Bore: mm	180
Stroke: mm	215
Displacement: L	66.65
Compression ratio	16.5
Rotate speed: RPM	1500
Prime power: kWm	2200
Standby power: kWm	2450
Rotate speed governor	ECU
Type of injection	Direct
Intake system	Turbocharged
Intake resistance: kPa	≦7.0
Back power: kPa	≦15
Oil capacity: L	480
Coolant capacity: L	306
Battery voltage: V	24
Dimensions: mm	2958×1544×2616
Dry weight: kg	9550

Alternator

Manufacturer	Powerlink
Model	PL7H
Exciter	PMG
AVR model	MX321
Windings	100% copper
Winding pitch	2/3
Number of poles	4
Terminals	12
Insulation class	H
Temperature rising class	H
Drip proof	IP23
Overspeed: RPM	2250
Voltage regulation	±0.5%
Telephone harmonic factor THF	<2%
Telephone interference factor TIF	<50

Control System

Manufacturer	POWERLINK
Model	PLC500

General functions

- Automatic start/stop control
- Manual/remote start control
- Automatically start when mains is abnormal (AMF)
- Real time monitoring and display of multiple parameters
- RS232, RS485 port and ethernet can be used
- CAN and Modbus communication
- Provide complete control solutions

Monitoring and protection

Oil pressure	Overload
Water temperature	Overcurrent
Rotate speed	Overvoltage
Start	Undervoltage
Running time	Overfrequency
Battery voltage	Underfrequency
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Product Configuration

Standard Configuration

Engine	Alternator	Control switchgear	Canopy (Container)	Base frame
Electrical start motor	Insulation class H	PLC control system	Electrogalvanized sheet	Steel base frame
Battery system	Temp. rising class H	GCB, 3P	Anti-corrosion coating	Engine bracket
Speed control system	Drip proof class IP23	Breaker cabinet	Access door	Alternator bracket
Turbocharger	AVR	Communi. connector	Stainless steel hinge	Radiator bracket
Lockable isolator switch		ATS connector	Sound absorbing cotton	Vibration isolators
Battery charger		Mains floating charger		

Fuel system	Lubrication system	Cooling system	Intake/exhaust system	Documents
Base frame fuel tank	Oil pressure sensor	50℃ radiator	Air filter	Installation and operation manual
Fuel level sensor	Oil temp. sensor	Coolant level sensor	Muffler	Test report
Flexible pipe	Oil filter	Jacket water pipe	Exhaust bellows	Wiring diagram
Fuel filter	Manual drain pump	Intercooling pipe	Exhaust pipe and flange	Warranty manual
Fuel inlet	Oil drain ball valve		High temperature protective sleeve	Engine manual
				Standard package

Optional Configuration

Engine	Alternator	Control system	Fuel system	Lubrication system
Jacket water preheater	PMG	GCB, 4P	Fuel-water separator	Electric drain pump
Oil preheater	Anti-condensation heater	ATS cabinet	Fuel three-way valve	
		Paralleling control	Daily fuel tank	
	Treatments against humidity & corrosion			

Power Class Definition

- Prime Power (PRP): the genset 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 80% 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 conditions test
  - Ambient temperature 25℃
  - Altitude 100m
  - Relative temperature 30%
- Dimensions, weight and other parameters are for reference only, please refer to the final design drawing.