

440V / 1800RPM / 60HZ

MODEL: EBK180 - D

FOR INDUSTRIAL PURPOSES

144KW



ESP
Standby Power

180kVA

PRP
Prime Power

168kVA

ENGINE

DCEC Cummins
6BTAA5.9-G12

ALTERNATOR

STAMFORD
UCI274E1

GENERAL FEATURES

Engine: DCEC Cummins 6BTAA5.9-G12
50°C radiator, fans are driven by belt, with safety guard

Alternator: single bearing, IP23, insulation class H

Dry type air filter, fuel filter & oil filter

Vibration damper
24V charging alternator

Standard control panel

Exhaust bellows, elbows, flange & muffler

Lead-acid batteries, rack and cables

User manual

GENERATOR RATINGS

VOLTAGE	Hz	Phase	PF (COS)	Standby Amps	Standby Ratings (8kW/kVA)	Prime Ratings (8kW/kVA)
480/277	60	3	0.8	217	144kW/180kVA	134kW/168kVA
460/266	60	3	0.8	226	144kW/180kVA	134kW/168kVA
440/254	60	3	0.8	236	144kW/180kVA	134kW/168kVA
416/240	60	3	0.8	250	144kW/180kVA	134kW/168kVA



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Prime Power (PRP): Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820 (eqv ISO 8528); A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

Standby Power Rating (ESP): The standby power rating is applicable for supplying emergency power for the

ENGINE SPECIFICATION

Manufacturer / Model	DCEC Cummins 6BTAA5.9-G12
Air intake system	Turbocharged, Air/Air Cooling
Fuel system	P7100 fuel pump
Cylinder arrangement	6 in line
Displacement	5.9L
Bore and stroke	102×120 mm
Compression ratio	17.3
Rated speed	1800rpm
Max. Standby power at rated speed	165kW
Governor type	Electronic

EXHAUST SYSTEM

Exhaust gas flow	26.3 m ³ /min
Exhaust temperature	458°C
Max back pressure	10kPa

AIR INTAKE SYSTEM

Max intake restriction	6.2kPa
Combustion air flow	11.8 m ³ /min
Air flow required for radiator	348 m ³ /min

FUEL SYSTEM

Fuel Consumption @ 100% (Prime Power) Load	208g/kWh	6.2kPa
Fuel Consumption @ 75% (Prime Power) Load	205g/kWh	11.8m ³ /min
Fuel Consumption @ 50% (Prime Power) Load	214g/kWh	348m ³ /min



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OIL SYSTEM

Total oil capacity	16.4L
Oil sump capacity	12.3-14.2L

COOLING SYSTEM

Coolant capacity	37L
Max water temperature	104°C

ALTERNATOR SPECIFICATION

Industrial alternators meet the requirements of the relevant parts of the BS5000, VDE 0530, NEMA MG1-2 IEC34, CSA 22.2-100 and AS1359.

ALTERNATOR DATA

Number of Phase	3
Connecting Type	3 Phase and 4 Wires, Y type connecting
Number of Bearing	1
Power Factor	0.8
Protection Class	IP23
Altitude	≤1000m
Exciter Type	Brushless exciting
Insulation Class/Temperature Rise	H/H
Telephone Influence Factor (TIF)	<50
THF	<2%
Alternator Capacity	167.5kVA
Alternator Efficiency	91.7%

GENERATING SET DATA

Related range of voltage setting	≥±5%
Steady-state voltage deviation	≤±1%
Transient voltage deviation (100 % sudden power decrease)	≤+25%
Transient voltage deviation (sudden power increase)	≤-20%
Voltage recovery time (100 % sudden power decrease)	≤6S
Voltage recovery time (sudden power increase)	≤6S
Related range of frequency setting	0-5% adjustable
Steady-state frequency band	≤1.5%
Transient frequency deviation (100 % sudden power decrease)	≤+12%
Transient frequency deviation (sudden power increase)	≤-10%
Frequency recovery time (100 % sudden power decrease)	≤5S
Frequency recovery time (sudden power increase)	≤5S



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STANDARD FEATURES

Standard auto control system	Exhaust system (including until muffler)	Documents
Oil drain valve	Starting batteries (maintenance-free & watering-free) with connective wires	MCCB
Base fuel tank		

OPTIONS

Daily fuel tank	Rainproof type	Remote control panel
Alternator heater	Soundproof type	Paralleling system
Spare parts	Trailer type	Switch box
Automatic transfer switch		

DIMENSIONS & WEIGHT

Standard Configuration (open type)

Overall Dimensions:	2450x900x1700 mm
Weight:	1360 kg

Soundproof Type

Overall Dimensions:	3230x1170x1800 mm
Weight:	2140 kg

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