

440V / 1800RPM / 60HZ

FOR INDUSTRIAL PURPOSES

306KW



ESP
Standby Power

306kVA

PRP
Prime Power

280kVA

ENGINE

DCEC Cummins
6LTAA8.9-G3

ALTERNATOR

STAMFORD
UCDI274J1

GENERAL FEATURES

Engine: DCEC Cummins 6LTAA8.9-G3

Alternator: single bearing, IP23, insulation class H

50°C radiator, fans are driven by belt, with safety guard

Dry type air filter, fuel filter & oil filter

Vibration damper

Standard control panel

24V charging alternator

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	368	245kW/306kVA	224kW/280kVA
460/266	60	3	0.8	384	245kW/306kVA	224kW/280kVA
440/254	60	3	0.8	402	245kW/306kVA	224kW/280kVA
416/240	60	3	0.8	425	245kW/306kVA	224kW/280kVA



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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 duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

ENGINE SPECIFICATION

Manufacturer / Model	DCEC Cummins 6LTAA8.9-G3
Air intake system	Turbocharged, Air/Air Cooling
Fuel system	P7100 type fuel pump
Cylinder arrangement	6 in line
Displacement	8.9L
Bore and stroke	114×145 mm
Compression ratio	16.6
Rated speed	1800rpm
Max. Standby power at rated speed	282kW
Governor type	Electronic

EXHAUST SYSTEM

Exhaust gas flow	50.3 m ³ /min
Exhaust temperature	520°C
Max back pressure	10kPa

AIR INTAKE SYSTEM

Max intake restriction	6.2kPa
Combustion air flow	18.9 m ³ /min
Air flow required for radiator	372 m ³ /min

FUEL SYSTEM

Fuel Consumption @ 100% (Prime Power) Load	201g/kWh	59.4L/h
Fuel Consumption @ 75% (Prime Power) Load	197g/kWh	44.1L/h
Fuel Consumption @ 50% (Prime Power) Load	202g/kWh	31.0L/h



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OIL SYSTEM

Total oil capacity	27.6L
Oil sump capacity	24L

COOLING SYSTEM

Coolant capacity	38L
Max water temperature	104°C

ALTERNATOR SPECIFICATION

Industrial alternators meet the requirements of the relevant parts of the BS 5000, VDE 0530, NEMA MG1-22, 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	281kVA
Alternator Efficiency	92.8%

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:	2610x1000x1850 mm
Weight:	2060kg

Soundproof Type

Overall Dimensions:	3590x1150x12050 mm
Weight:	2940 kg

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