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AP500DCE

Standby Diesel Generator

POWERED BY 
World's largest manufacturer of diesel engines

LEROY SOMER
ALTERNATOR

DSE
CONTROL PANEL

FEATURES

- Cummins 4-stroke heavy-duty high-performance industrial diesel engine
- Leroy Somer alternator for stable and efficient power output
- DSE6120 control panel with advanced monitoring and protection
- High-performance cooling
- Robust corrosion-resistant canopy for
- Industrial exhaust silencer for low noise operation
- Low vibration for stable and continuous performance
- Large fuel tank for extended running hours

Prime Power	Standby Power	Phase/Voltage	Rated Current	Hz/rpm
500kVA/400kW	550kVA/440kW	Three/400V	721.7A	50/1500

Prime Power - Unlimited hours usage with an average load factor of 80% of the published Prime power over each 24 hours period. A 10% overload is available for 1 hour in every 12 hours operation.

Standby Power - Limited to 500 hours annual usage with an average load factor of 80% of the published Standby power rating over each 24 hour period. Up to 300 hours of annual usage may be run continuously. No overload is permitted on Standby power.

DIESEL GENERATOR SET	
Engine Make / Model	Dongfeng Cummins / QSZ13-G3
Alternator Make / Model	Leroy Somer / TAL-A473-C
Control Panel	LED / DSE6120 MKIII
Base Frame / Silent Canopy	Robust Structure/ Corrosion Resistant
Built-in Base Fuel Tank Capacity	800L
Battery	Maintenance free Lead Acid

DIMENSIONS	Length(mm)	Width (mm)	Height (mm)	Weight (Kg)
	4100	1600	2400	4300Kg

ENGINE SPECIFICATIONS	
Make / Model	Dongfeng Cummins / QSZ13-G3
Rated Power	450 kW @ 1500 rpm
Number of Cylinders / Valves	6 / 24
Displacement(L)	13L
Cooling Method	Water Cooled
Fuel System	Direct Injection
Aspiration / Turbocharged & Aftercooled	Naturally aspirated
Starting Method	Electrical
Compression Ratio	1 : 17.0
Bore / Stroke	130x163 mm
Flywheel	SAE 14 / #1#
Emission Standard	Non-Emission Standard / Fire 0
Engine Dry Weight	1245 kg
Engine Noise(Acoustic Power Level)	76-79 dB(A) @ 7m

ALTERNATOR SPECIFICATIONS	
Make / Model	Leroy Somer / TAL-A473-C
Rated Power / Speed	400 kW / 1500 rpm
Insulation Class	Class H
Ingress Protection	IP23
Mode of Connection	3-Phase, 4-Wire, Y-Type
Mode of Adjust	AVR
Frequency	50Hz
Power Factor	0.8

LUBRICATION SYSTEM	
Oil Capacity Low/High	27 / 32.4 L
Oil Pressure idle speed	≥82.7 kPa
Oil Flow	22 (L/Min)

AIR SYSTEM	
Air intake restriction clean filter (kPa)	≤ 3.7 kPa
Air intake restriction dirty filter (kPa)	≤6.2 kPa
Recommended Air Flow (PRP)	100 Kg/h
Recommended Air Flow (ESP)	99 Kg/h
Min.Diameter of intake Pipe (mm)	50

EXHAUST SYSTEM	
Min.Dia of Pipe	50mm
Max. Back Pressure	≈ 5.1 mmHg (~0.68 kPa)
Exhaust flow @ PRP	104.9(kg/h)
Exhaust flow @ ESP	105.1(kg/h)

COOLING SYSTEM	
Total Coolant Capacity	48L
Ambient temperature	-15°C to 40°C
Coolant alarm temperature	98±2 °C
Min. pressure (kPa)	≈ 103 kPa
Thermostat opening temp/full open temperature (°C)	95-82°C

Note: Specifications are subject to change without prior notice due to ongoing research and product development.

Ratings Definitions	Operating Conditions
COP	<ol style="list-style-type: none"> 1. Unlimited using time per year. 2. Continuous power is the maximum power available at a constant load factor. 3. No overload capability is allowed.
PRP	<ol style="list-style-type: none"> 1. Unlimited using time per year; 2. The average load rate is no more than 70 % over 24 hours 3. Overloading 10 % for 1h within 12 hours of operation is allowed
ESP	<ol style="list-style-type: none"> 1. The annual operating time shall not exceed 200h. 2. The average load rate shall not exceed 70 % over 24hr operation cycle. 3. No overload capability is allowed 4. The acceleration of starting of diesel engines are carried out in accordance with Q/WCG136.13, and there's no engine process. From acceleration of starting to calibration speed shall be completed within 10s. Natural aspirated diesel engine, when the environment temperature is below 5°C, need to increase preheat facilities to ensure that diesel engine water temperature above 30°C. When environment temperature over 5°C, no preheating facilities are required. Supercharged diesel engine, when the environment temperature is below 10°C, need to increase preheat facilities to ensure that diesel engine water temperature above 30°C. When environment temperature over 10°C, no preheating facilities are required.
LTP	<ol style="list-style-type: none"> 1. No ability to overload. 2. The annual operating time shall not exceed 500h while supplying a variable electrical load.
DCP	<ol style="list-style-type: none"> 1. It has %10 overload capacity. 2. Annual run time is unlimited. 3. Working under variable or continuous load of less than 100 %. 4. The power load shall not exceed %70 of the calibration power when the device is running continuously.
Descriptions	<ol style="list-style-type: none"> 1. All ratings are based on operating conditions under ISO 8528-1, ISO 3046, DIN6271. Performance tolerance of $\pm 5\%$. 2. Test conditions : 100 kPa, 25°C air inlet temperature, relative humidity of 30 %, with fuel density 0.84 kg/L. Derating may be required for conditions outside these; please contact the factory for details. 3. Power output curves are based on the engine operating with fuel system, water pump and lubricating oil pump, without battery charging alternator, fan and optional equipment.



Power You Can Trust

