ATP Baudouin - Leroy Somer Series

ATP563-BDN/LS

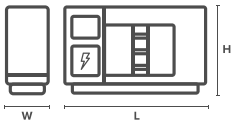
Main Features

T	Three-phase	Hz	60 Hz
	Diesel		1800 r.p.m.
	Baudouin / 6M26G450/6	V	277V/480V
	Leroy somer / TAL A473 B	cosφ	0,8
	DSE6110/20		ABB 4x800A

Standby Power (STP)	563 kVA	450 kW
Continuous Power (PRP)	500 kVA	400 kW
Continuous Power (COP)	- kVA	- kW

Soundproof

Length (L)	3700 mm
Height (H)	1700 mm
Width (W)	2230 mm
Weight	4100 kg
Daily deposit	850



	60Hz
Diesel engine noise	119.3 dB(A)

Noise test performed at 100% of ESP power, at a distance of 1 m, with the engine without a radiator, without a cooling fan, and without a silencer.

Installation in room

Exhaust System	50Hz		
	COP	PRP	STP
Max. exhaust temperature after turbocharger (°C)	-	-	580
Exhaust gas flow (m^3/sec)	-	2,16	2,38
Heat dissipated (kW)	-	-	-
Max. bending moment of the exhaust outlet flange (Nm)	10		
Max. exhaust pipe diameter (mm)	200		
Max. exhaust pressure (Bar)	0,075		

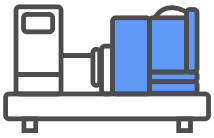
Fuel System	60Hz		
	COP	PRP	STP
Maximum restriction on lift pump (KBar)	-	-	0,15
Maximum fuel inlet temperature (°C)	0,13		
Total drainage flow (L/hr)			45

Electrical system	60Hz		
	COP	PRP	STP
Electrical system voltage (Vdc)	24		
Starting power (kW)	8,5		
Max. electrical resistance of the starting circuit (Ω)	0,002		
Min. wire cross-sectional area (mm^2)	70		
Battery charger current (A)	55		

Copyright © 2021 Atlantic Power Energy - All rights reserved

Engine specifications

General specifications	60 Hz
Model	6M26G450/6
Emissions	Not applicable
Operating method	Four Times
Fuel type	Diesel
Refrigeration system	Liquid (water + 50% antifreeze)
Suction system	Turbocharged
Injection system	Mechanical Pump
Number and arrangement of cylinders	V6
Displacement (l)	15,90
Cylinder diameter (mm)	150
Cylinder stroke (mm)	150
Compression ratio	15.7:1
Regulation	Electronic
Rotational speed	1800
Refrigerant capacity (L)	55
Gross power COP (kWm)	404
Gross power PRP (kWm)	505
STP gross power (kWm)	556
Oil capacity (L)	110,7
Net power COP (kWm)	-
Net PRP power (kWm)	-
STP net power (kWm)	-



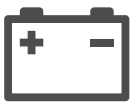
Consumptions		60Hz	
Fuel consumption	Burden	lt/h	g/kWh
STP	100%	126	209,2
PRP	100%	112,9	206,1
	75%	84,1	204,8
	50%	58	211,9
	25%	33	241,1
Min. Allowable fuel flow to fuel pump (L/h)		240	
Reference conditions			
Temperature (ºC)		25	
Atmospheric temperature (kPa)		100	
Starting system			
Voltage (V)		24	
Standard thermostat range (°C)		77-87	

Alternator specifications

General specifications	
Model	TAL A473 B
Number of phases	Three-phase
Protection	IP23
Isolation	H
Heating	H
IEC Waveform = THF	<2,0%
NEMA Waveform = TIF	<50
Excitation system	SHUNT
AVR Model	R150

Overspeed: rpm	2250
Voltage regulation: (steady state)	+/- 0.8%
Air flow rate 60 Hz (m3/s)	1,1
Radio interference:	Deletion in accordance with the standard European EN61000-6
AREP+ Short circuit current	2.7 In: 5 seg.

Batería de arranque

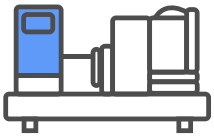


Battery voltage	12V
Battery Capacity	
Amount	
Battery type	Maintenance free, sealed lead-acid type

Certifications

Copyright © 2021 Atlantic Power Energy - All rights reserved

Control Panel



Generator	DSE6110/20
Tension (F-F / F-N)	★ / ★
Intensity	★
Frequency	★
RMS values	★
Generator phase sequence	★
Generator ground current [1]	★
Number of events registered	250
Integrated clock	★
PIN protection	★
kWh, kVAr, kVAh, kVArh, cos Ø	★
Synchronoscope (m)	■
Number of available departures [2]	6
Engine running hours	★
Alarm i ndication on LCD	★
Total number of LED indicators	8
No. of LED alarms	☒
Acoustic alarm signaling	■
Programmer	★
Fuel level	★
Engine	**DSE6110/20**
Engine speed	★
Low oil pressure protection	★
Oil pressure reading [3]	■
High engine temperature protection	★
Engine temperature reading[3]	■
Battery voltage	★
Battery Intensification [4]	■
Fuel consumption [5]	★
Low water level in radiator [6]	■
Scheduled maintenance for engine	★
Communication	**DSE6110/20**
USB Type B Female Port (Max. 6m)	★
[7] USB Type A Female Port (n)	☒
CAN port (Max. 40m)	★
PLC function	★

Grid	DSE6110/20
Tension (F-F / F-N)	★
Intensity [1]	☒
Frequency	★
kVA,kW, cos Ø (a)	☒
Network-group switching control	★
Protections and alarms	**DSE6110/20**
High/low battery voltage	🔔
Battery charging alternator failure	🔔
Stop failure	🔔 / ⊗
Boot failure	🔔 / ⊗
Low fuel level	🔔 / ⊗
Overload	🔔 / ⊗
Ground fault	🔔 / ⊗
Asymmetry between phases	🔔 / ⊗
Maintenance	🔔 / ⊗
High/Low Generator Frequency	🔔 / ⊗
Engine overspeed	🔔 / ⊗
Low engine speed	🔔 / ⊗
Surge	🔔 / ⊗
Low voltage in generator	🔔 / ⊗
ECU Alert (if applicable)	🔔 / ⊗
Low oil pressure	🔔 / ⊗
Low water l evel in radiator [f]	🔔 / ⊗
High engine temperature	🔔 / ⊗
Fuel leak/theft	🔔
Aplications	**DSE6110/20**
Automatic or manual start	★
Remote start by dry contact NA	★
Automatic due to network failure	★
Alternation with distributed time	☒
Multi-generators in synchronism with load (Max 32 generators) (m)	☒
Generator-grid i n synchronism and with load sharing (1 generator and 1 grid) (m)	☒
Optional Expansions	**DSE6110/20**
DSE2130 (8 digital inputs) I I G-IOM (8 digital inputs/outputs + 4 analog inputs)I G-08 (8 ent. dig.)	★
DSE2157 I I -RB8 I G-06 (8 relay outputs)	★
DSE2548 I IGL-RA15 I - (expansion with 8 Additional LEDs	★
DSE2510/20 (mirror controller, max distance 1km)	★
Rules	
Working temperature	-30 -> 70°C
Protection index (when mounted with sealing gasket)	IP65
Maximum humidity level (for 48 h)	93% / 40°C

Copyright © 2021 Atlantic Power Energy - All rights reserved

Legend

★	Available
■	Optional
☒	Not available
🔔	Warning alarm
⊗	Stop alarm
[1]	Need an additional IT
[2]	Number of outputs available for standard configuration. Outputs do not include relays or additional wiring to terminals.
[3]	If the information is not provided by the engine ECU, an additional sensor needs to be included.

[4]	Needs an additional ammeter
[5]	If the information is provided by the engine ECU
[6]	Requires an additional sensor
[7]	Need to include an additional IL-NT-S-USB module
[8]	Need to include an additional IL-NT-RS232-485 module
[9]	DeepSea: Needs to include an additional DSE891 module/ComAp: Needs to include an additional IB-LITE module
[10]	DeepSea: Needs to include an additional DSE890 module/ComAp: Needs to include an additional IL-NT-GPRS module
[11]	DeepSea: Needs to include an additional DSE892 module/ComAp: Needs to include an additional IB-LITE module

Emergency Standby Power (ESP)

Emergency standby power is the maximum power available to a variable load during a main power grid failure. The average load factor over 24 hours of operation must not exceed 70% of the motor's ESP rated power. Typical motor operating hours are 200 hours per year, with a maximum usage of 500 hours per year.

This includes an annual maximum of 25 hours per year at the ESP power rating. Overload capability is not permitted. The motor must not be used for sustained utility parallel applications.

Main Power (PRP)

Prime Power is the maximum power available for unlimited hours of use in a variable load application. The average load factor must not exceed 70% of the motor's PRP rating during any 24-hour period. A 10% overload capability is available; however, it is limited to 1 hour within each 12-hour period.

1. All ratings are based on operating conditions according to ISO 8528-1, ISO 3046, DIN6271. Performance tolerance ±5%.
2. Test conditions: 100 kPa, 25°C air inlet temperature, 30% relative humidity, with fuel density of 0.84 kg/L. Derating may be required for conditions outside these, contact factory for details.
3. Power output curves are based on engine operation with fuel system, water pump and lubricating oil pump; battery charging alternator, fan and optional equipment are not included.

Copyright © 2021 Atlantic Power Energy - All rights reserved