ATP Baudouin - Leroy Somer Series

		\$ [®] ATL
		🖗 ATLANTIC POWEF
	V C Renergy	8

ATP100-BDN/LS

Main Features



Standby Power (STP)	100 kVA	80 kW
Continuous Power (PRP)	94 kVA	75 kW
Continuous Power (COP)	- kVA	- kW

Soundproof

Length (L)	2450 mm	
Height (H)	1000 mm	
Width (W)	1590 mm	I I I I I I I I I I I I I I I I I I I
Weight	1400 kg	
Daily deposit	145	WL
	60 Hz	
Sound pressure level @1m		72 dB(A)

Installation in room

Exhaust System		60 Hz	
	COP	PRP	STP
Max. exhaust temperature after turbocharger (°C)	-	-	570
Exhaust gas flow (m³/sec)	-	20,85	23,05
Heat dissipated (kW)	-	-	-
Max. bending moment of the exhaust outlet flange (Nm) 10			
Max. exhaust pipe diameter (mm)	70		
Max. exhaust pressure (Bar)		50	

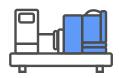
Fuel System	60 Hz		
	COP	PRP	STP
Maximum fuel inlet restriction (Bar)	-	-	0,09
Maximum fuel return restriction (Bar)		0,12	
Maximum fuel inlet temperature (°C)			50

Electrical system	60Hz		
	COP	PRP	STP
Electrical system voltage (Vdc)	12		
Starting power (kW)	3,8		
Max. electrical resistance of the starting circuit $\left(\Omega\right)$	rting circuit 0,004		
Min. wire cross-sectional area (mm ²)	50		
Battery charger current (A)		80	



Engine specifications

General specifications	60 Hz
Model	4M10G83/6
Emissions	Not applicable
Operating method	Four-stroke
Fuel type	Diesel
Cooling system	Liquid (water + 50% antifreeze)
Aspiration system	Turbocharged
Injection system	Mechanical pump
Number and arrangement of cylinders	4 in-line
Displacement (L)	4,087
Cylinder bore (mm)	105
Cylinder stroke (mm)	118
Compression ratio	17.5:1
Regulation	Electronic
Rotation speed	1800
Oil capacity (L)	13
Gross power COP (kWm)	-
Gross power PRP (kWm)	85
Gross power STP (kWm)	95
Coolant capacity (L)	9,4
Net power COP (kWm)	-
Net power PRP (kWm)	82
Net power STP (kWm)	92



Consumptions		60 Hz	
Fuel consumption	Burden	lt/h	g/kWh
STP	100%	24,54	217
	100%	21,57	212
PRP	75%	16,46	211
РКР	50%	10,99	220
	25%	6,75	265
Fuel supply flow (L/h)		100,2	
Reference conditions			
Temperature (°C)		25	
Atmospheric temperature (kPa)		100	
Starting system			
Voltage (V)		12	
Standard thermostat	range (°C)	76-89)

Alternator specifications

General specifications	
Model	TAL A44 C
Number of phases	Three-phase
Protection	IP23
Isolation	н
Heating	н
IEC Waveform = THF	<2,0%
NEMA Waveform = TIF	<50
Excitation system	SHUNT
AVR Model	R120
Support	Monopalier



Overspeed: rpm	2250
Voltage regulation: (steady state)	+/- 1.0%
Air flow rate 60 Hz (m3/s)	0,3
Radio interference:	Deletion in accordance with the standard European EN61000-6
AREP+ Short circuit current	2.7 ln: 5 seg.

Starter Battery

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

Certifications





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)	X
Number of available departures [2]	6
Engine running hours	*
Alarm i ndication on LCD	*
Total number of LED indicators	8
No. of LED alarms	X
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)	X
CAN port (Max. 40m)	*
PLC function	*

Grid	DSE6110/20
Tension (F-F / F-N)	*
Intensity [1]	X
Frequency	*
kVA,kW, cos Ø (a)	X
Network-group switching control	*
Protections and alarms	DSE6110/20
High/low battery voltage	Ģ
Battery charging alternator failure	Ģ
Stop failure	\mathcal{Q} / \otimes
Boot failure	$Q \otimes$
Low fuel level	\mathcal{Q} / \otimes
Overload	Q/\otimes
Ground fault	₽/⊗
Asymmetry between phases	₽/⊗
Maintenance	₽/⊗
High/Low Generator Frequency	₽/⊗
Engine overspeed	\bigcirc / \otimes
Low engine speed	₽/⊗
Surge	₽/⊗
Low voltage in generator	₽/⊗
ECU Alert (if applicable)	₽/⊗
Low oil pressure	₽/⊗
Low water I evel in radiator [f]	Q/\otimes
High engine temperature	₽/⊗
Fuel leak/theft	Q
Aplications	DSE6110/20
Automatic or manual start	*
Remote start by dry contact NA	*
Automatic due to network failure	*
Alternation with distributed time	X
Multi-generators in synchronism with load (Max 32 generators) (m)	X
Generator-grid i n synchronism and with load sharing (1 generator and 1 grid) (m)	X
Optional Expansions	DSE6110/20
DSE2130 (8 digital inputs) I G-IOM (8 digital inputs/outputs + 4 analog inputs)I G-08 (8 ent. dig.)	*
DSE2157 I -RB8 G-06 (8 relay outputs)	*
DSE2548 IGL-RA15 - (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



Legend

*	Available	[4]	Needs an additional ammeter
-	Optional	[5]	If the information is provided by the engine ECU
X	Not available	[6]	Requires an additional sensor
Q	Warning alarm	[7]	Need to include an additional IL-NT-S-USB module
⊗	Stop alarm	[8]	Need to include an additional IL-NT-RS232-485 module
[1]	Need an additional IT	[9]	DeepSea: Needs to include an additional DSE891 module/ComAp: Needs to include an additional IB-LITE module
[2]	Number of outputs available for standard configuration. Outputs do not include relays or additional wiring to terminals.	[10]	DeepSea: Needs to include an additional DSE890 module/ComAp: Needs to include an additional IL-NT-GPRS module
[3]	If the information is not provided by the engine ECU, an additional sensor needs to be included.	[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.

