# ABATO<sup>®</sup> Motoren

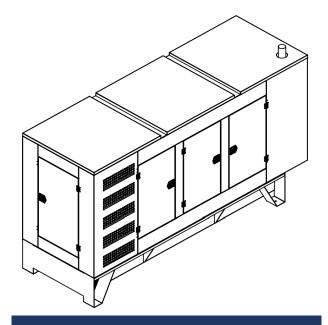
# Innovation in Power Generation®



#### AB600-OPEN

Dimensions L x W x H 4100 x 1790 x 2000 mm

Weight 4700 kg



#### AB600-CANOPY

Dimensions L x W x H 4500 x 1800 x 2980 mm Weight 7085 kg

# General information

**Alternator** 

Voltage Frequency

Genset power PRP	600 kVA	Engine power (PRP)	480 kW
Genset power ESP	660 kVA	Rated current	864 A

#### **Engine**

Fuel	Diesel
Fuel tank capacity	1000 L
Autonomy with 100% load	8,1 h
Engine speed	1500 rpn

### Prime Power (PRP)

Prime Power is the maximum power available for unlimited hours of usage in a variable load application. The average load factor should not exceed 70% of the engine's PRP power rating during any 24 hour period. An overload capability of 10% is available, however, this is limited to 1 hour within every 12 hour period.

# Rated power factor 0,8 Efficiency 94,9%

### Emergency Standby Power (ESP)

400 V

50 Hz

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Emergency Standby Power is the maximum power available for a varying load for the duration of a main power network failure. The average load factor over 24 hours of operation should not exceed 70% of the engine's ESP power rating. Typical operational hours of the engine is 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. No overload capability is allowed. The engine is not to be used for sustained utility paralleling applications.

Phone:

Email:

Website:



# **Engine specifications**

General information		Exhaust system	
Engine manufacturer	Baudouin	Max. exhaust back pressure	75 mBar
Engine model	8M21G660/5	Max. exhaust temp before turbocharger	720 °C
Engine speed	1500 rpm	Max. exhaust temp after turbocharger	600 °C
N° of Cylinders / Valves	8/32	Exhaust flow @ PRP	110,3 m³/min
Cylinders arrangement	V	Exhaust flow @ ESP	125,2 m³/min
Bore x Stroke	127 x 165 mm	Min. diameter of exhaust pipe	128 mm
Displacement	16,7 L		
Thermodynamic Cycle	Diesel 4 stroke	Cooling system	
Compression ratio	15:1	Max. ambient temp up to	55 °C
Injection System	Direct	Radiator type	Mechanical
Fuel System	Common rail	Fan type	Belt driven pusher
Aspiration	Turbocharged and	Coolant capacity of radiator and pipes	70 L
	aftercooled	Thermostat opening temp	83 °C
		Thermostat full open temp	91 °C
Noise		Coolant capacity of the engine	31 L
Diesel engine noise	113 dB(A)	Cooling fan airflow	800 m³/min
Lubrication system		Aftercooling system	
Oil capacity Low / High	37 / 44 L	Aftercooler system type	Air to air
Oil pressure under normal conditions	4 - 6 Bar	Max. intake temp @ 25°C ambient	55 °C
Max. oil temp	107 °C	Max. diff intake / ambient temp	30 °C
Oil fuel consumption ratio	≤ 0.2 %	Max. pressure drop aftercooler	120 mBar
Total system capacity including filters	45,0 L		
		Fuel system	
Electrical system		Governor	ECU
Electrical system voltage	24 V	Max. pressure at fuel inlet	0,4 Bar
Starter power	9 kW	Max. fuel inlet temp	50 °C
Dynamo charger current	70 A	Fuel supply flow	950 L/h
Air intake		Fuel consumption	
Air intake temperature rise	≤ 15 °C	Consumption at 100% ESP	140,7 L/h
Air intake restriction clean filter	≤ 35 mbar	Consumption at 100% PRP	124,2 L/h
Air intake restriction dirty filter	≤ 65 mbar	Consumption at 75% PRP	95,4 L/h
Recommended air flow PRP	32,6 m³/min	Consumption at 50% PRP	64,7 L/h
Recommended air flow ESP	36,2 m³/min	Consumption at 25% PRP	34,9 L/h
Min. diameter of intake pipe	140 mm	Fuel consumption tolerance	± 3%

<sup>\*</sup>All ratings are based on operating conditions under ISO 8528-1, ISO 3046, DIN6271 Performance tolerance of ±5%.

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## Alternator specifications

General information		Cooling
Alternator manufacturer	XINGNUO or eq.	Cooling air
Alternator model	XN5E or eq.	Temp rise cont. H
Voltage	400 V	
Frequency	50 Hz	Protection and distortion
Rated power factor	0,8	Insulation system
Technology	Brushless, AVR	Protection
Voltage measurement	3-phase	Telephone interference
Efficiency	94,9%	Wafevorm distortion without load

#### Internal assembly

Maximum overspeed	2250 Rev/Min	Alternator highlights
Stator winding	Double layer lap	Low telephone interfe
Winding pitch	2/3	High efficiency and m
Winding leads	12	Rigid assembly, effect
Bearing amount	1	All rotors are dynamic
Stator wdg. Resistance per phase at 22°C	0.0043 Ohms	Non-maintenance sea
Rotor wdg. Resistance at 22°C	1.96 Ohms	Suitable for environm

Wavevorm distortion with a linear load

ference (THF) as defined by IEC 60034-1 notor startup capability ctively reduces the vibration during running ically balanced to conform with BS6861 ealed-for-life ball bearing Suitable for environment with 95% relative humidity

1.035 m<sup>3</sup>/sec 125/40 °C

Н IP23 THF < 2% < 1.5%

< 5.0%

# ComAp InteliLite AMF 25



#### The following features are included in the used model:

- Standby and Prime power applications
- Flexible event based history with up to 350 events
- 3 Phase generator current measurement
- Generator and Mains phase voltage measurement
- Active/reactive power measurement
- Active and reactive energy counter
- Battery charging alternator circuit connection
- Comprehensive gen-set protections
- CAN and USB on board
- Internet access using Ethernet, GPRS or 4G module
- Support for Modbus and SNMP protocols
- Cloud-based monitoring and control via WebSupervisor
- Active SMS or e-mails (module required)
- Geofencing and tracking via WebSupervisor
- 2x 10 A binary outputs for cranking and fuel solenoid
- Option for up to 16 additional binary inputs/outputs
- Operating temperature -20 + 70°C
- IP65 operator interface protection

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<sup>\*</sup>Used alternator meets the requirements of BS5000, VDE0530, UTE5100, NEMA MGt-22, CEMA, IEC34-1, CSAC22.2-100 and AS1359