

RATINGS 400 V - 50 Hz		
Standby	kVA	44
	kWe	35,20
Prime	kVA	40
	kWe	32

### GENERAL SPECIFICATIONS

Engine brand	BAUDOUIIN
Alternator commercial brand	KOHLER
Voltage (V)	400/230
Standard Control Panel	APM303
Consumption @ 100% load ESP (L/h)	10
Consumption @ 100% load PRP (L/h)	9
Emission level	Fuel consumption optimization
Type of Cooling	Radiator
Performance class	G2

### GENERATOR SETS RATINGS

				Standby Rating			Prime Rating	
	Voltage	PH	Hz	kWe	kVA	Amps	kWe	kVA
B44	415/240	3	50	35,20	44	61	32	40
	400/230	3	50	35,20	44	64	32	40
	380/220	3	50	35,20	44	67	32	40

### DIMENSIONS COMPACT VERSION

Length (mm)	1700
Width (mm)	896
Height (mm)	1130
Tank capacity (L)	100
Dry weight (kg)	596

### DIMENSIONS SOUNDPROOFED VERSION

Type soundproofing	M137-B
Length (mm)	2100
Width (mm)	938
Height (mm)	1267
Tank capacity (L)	100
Dry weight (kg)	845
Acoustic pressure level @1m in dB(A) 50Hz (75% PRP)	75
Acoustic pressure level @7m in dB(A) 50Hz (75% PRP)	65

Reference Conditions: 25°C Air Inlet Temperature, 40°C Fuel Inlet Temperature, 100 kPa Barometric Pressure; 10.7 g/kg of dry air Humidity. Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back pressure set to maximum allowable limit; Fuel density at 0.85 kg/L.

Data was taken from a single engine test according to the test methods, fuel specification and reference conditions stated above and is subjected to instrumentation and engine-to-engine variability. Test conducted with alternate test methods, instrumentation, fuel or reference conditions can yield different results. Data and specifications subject to change without notice.

### Engine

#### General

Engine brand	BAUDOUIN
Engine ref.	4M06G44_5 *
Air inlet system	Turbo
Fuel	Diesel Fuel/HVO
Emission level	Fuel consumption optimization
Cylinder configuration	L
Number of cylinders	4
Displacement (l)	2,29
Bore (mm) * Stroke (mm)	89 * 92
Compression ratio	17.5 : 1
Speed 50Hz (RPM)	1500
Maximum stand-by power at rated RPM (kW)	41
Frequency regulation, steady state (%)	+/- 0.5%
Injection Type	Direct
Governor type	Electronic
Air cleaner type, models	Dry

#### Fuel system

Maximum fuel pump flow (l/h)	40
Fuel Inlet Minimum recommended size (mm)	10
Fuel Outlet Minimum recommended size (mm)	10
Max head on fuel return line (m fuel)	5,90
Maximum allowed inlet fuel temperature (°C)	50

#### Consumption with cooling system

Fuel consumption @ ESP Max Power (l/h)	10,70
Fuel consumption @ PRP Max Power (l/h)	9,40
Fuel consumption @ 75% of PRP Power (l/h)	6,90
Fuel consumption @ 50% of PRP Power (l/h)	4,70

#### Lubrication System

Oil system capacity including filters (l)	11,50
Min. oil pressure (bar)	1
Max. oil pressure (bar)	6
Oil sump capacity (l)	7,10
Oil consumption 100% ESP 50Hz (l/h)	0,0430

#### Air Intake system

Max. intake restriction (mm H2O)	600
Combustion air flow (l/s)	37

#### Exhaust system

	PRP	ESP
Exhaust gas temperature (°C)	650	650
Exhaust gas flow (L/s)	121	132
Max. exhaust back pressure (mm H2O)	800	

#### Cooling system

Radiator & Engine capacity (l)	9,40
Fan power 50Hz (kW)	0,50
Fan air flow w/o restriction (m3/s)	1,41
Available restriction on air flow (mm H2O)	20
Type of coolant	Gencool
Radiated heat to ambient (kW)	5
Coolant capacity HT, engine only (l)	5
Max coolant temperature, Shutdown (°C)	105
Thermostat begin of opening HT (°C)	72
Thermostat end of opening HT (°C)	82

#### Cooling system and charge air cooler

Radiator & Engine capacity (l)	9,40
Fan power 50Hz (kW)	0,50
Fan air flow w/o restriction (m3/s)	1,41
Available restriction on air flow (mm H2O)	20
Type of coolant	Gencool
Radiated heat to ambient (kW)	5
Heat rejection to coolant HT (kW)	
Coolant capacity HT, engine only (l)	5
Outlet coolant temperature (°C)	
Max coolant temperature, Shutdown (°C)	105
Max. pressure at inlet of HT water pump (mbar)	
Thermostat begin of opening HT (°C)	72
Thermostat end of opening HT (°C)	82
CAC Heat Rejection (kW)	

#### Cooling system (HT/LT)

Radiator & Engine capacity (l)	9,40
Fan power 50Hz (kW)	0,50
Fan air flow w/o restriction (m3/s)	1,41
Available restriction on air flow (mm H2O)	20

Reference Conditions: 25°C Air Inlet Temperature, 40°C Fuel Inlet Temperature, 100 kPa Barometric Pressure; 10.7 g/kg of dry air Humidity. Intake Restriction set to maximum allowable limit for clean filter; Exhaust Back pressure set to maximum allowable limit; Fuel density at 0.85 kg/L.

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Type of coolant	Gencool
Radiated heat to ambient (kW)	5
Heat rejection to coolant HT (kW)	
Coolant capacity HT, engine only (l)	5
Outlet coolant temperature (°C)	
Max coolant temperature, Shutdown (°C)	105
Max. pressure at inlet of HT water pump (mbar)	
Thermostat begin of opening HT (°C)	72
Thermostat end of opening HT (°C)	82
Heat rejection to coolant LT (kW)	
LT circuit flow rate (l/min)	
Coolant capacity LT, engine only (l)	0

\* Engine reference may be partially modified depending on genset application, options selected by the customer and lead time required.

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### Alternator Specifications

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Alternator commercial brand	KOHLER
Kohler Alternator description	KH00602TO4N
Number of pole	4
Number of bearing	Single Bearing
Technology	Brushless
Indication of protection	IP23
Insulation class	H
Number of wires	06
AVR Regulation	Yes
Coupling	Direct

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### Application data

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Overspeed (rpm)	2250
Power factor (Cos Phi)	0,80
Voltage regulation at established rating (+/- %)	0,50
Wave form : NEMA=TIF	<50
Wave form : CEI=FHT	<2
Total Harmonic Distortion in no-load DHT (%)	<2
Total Harmonic Distortion, on linear load DHT (%)	<5
Recovery time (Delta U = 20% transient) (ms)	500

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### Performance datas

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Continuous Nominal Rating 40°C (kVA)	40
Unbalanced load acceptance ratio (%)	8
Peak motor starting (kVA) based on x% voltage dip power factor at 0.3	

### Alternator Standard Features

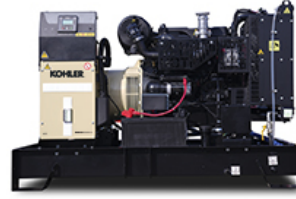
- All models are brushless, rotating-field alternators
- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting
- The AVR voltage regulator provides superior short circuit capability
- Self-ventilated and dip proof construction
- Superior voltage waveform

*Note: See Alternator Data Sheets for alternator application data and ratings, efficiency curves, voltage dip with motor starting curves, and short circuit decrement curves.*

**Dimensions compact version**

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Length (mm) * Width (mm) * Height (mm)	1700 * 896 * 1130
Dry weight (kg)	596
Tank capacity (L)	100

**M137-B - Dimensions soundproofed version**

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Length (mm) * Width (mm) * Height (mm)	2100 * 938 * 1267
Dry weight (kg)	845
Tank capacity (L)	100
Acoustic pressure level @1m in dB(A) 50Hz (75% PRP)	75
Sound power level guaranteed (Lwa) 50Hz (75% PRP)	92
Acoustic pressure level @7m in dB(A) 50Hz (75% PRP)	65



**APM303**

The APM303 is a versatile unit which can be operated in manual or automatic mode. It offers the following features:

- Measurements: phase-to-neutral and phase-to-phase voltages, fuel level (In option : active power currents, effective power, power factors, Kw/h energy meter, oil pressure and coolant temperature levels)
- Supervision: Modbus RTU communication on RS485
- Reports: (In option : 2 configurable reports)
- Safety features: Overspeed, oil pressure, coolant temperatures, minimum and maximum voltage, minimum and maximum frequency (Maximum active power  $P < 66\text{kVA}$ )
- Traceability: Stack of 12 stored events

For further information, please refer to the data sheet for the APM303

**STANDARD SCOPE OF SUPPLY**

All our gensets are fitted with:

- Industrial water cooled DIESEL engine
- Electric starter & charge alternator
- Standard air filter
- Schneider or ABB electric circuit breaker, adapted to the short-circuit current of the generating set
- Single bearing alternator IP 23 T° rise/ insulation to class H/H
- Welded steel base frame with 85% vibration attenuation mounts
- 4 lifting points on the chassis, lifting bar on the top included from 165 kVA ESP or optional
- highly durable QUALICOAT certified epoxy paint
- frame height optimized to allow it to be moved safely by forklift
- enclosure made of new high-quality European steel with enhanced corrosion resistance
- IP 64 locks, made from stainless materials
- enclosures and base frames tested and analyzed by the French Corrosion Institut
- 100% of tanks tested for permeability
- Personal protection ensured by protective grilles on hot and rotating parts
- Separate 9 dB(A) silencer
- Fuel tank welded inside the genset frame
- Retention bund included for gensets up to 110 kVA ESP
- Charged DC starting battery with electrolyte
- Emergency stop button on the outside
- Flexible fuel lines & lub oil drain cock
- Exhaust outlet with flexible and flanges
- User's manual (1 copy)
- Packing under plastic film
- Delivered with oil and antifreeze liquid

**CODES AND STANDARDS**

Engine-generators set is designed and manufactured in facilities certified to standards ISO9001:2015 & ISO14001:2015. The generator sets and its components are prototype-tested, factory built and production tested and are in compliance with the relevant standards:

- Machinery Directive 2006/42/EC of May 17th 2006
- EMC Directive 2014/30/UE
- Safety objectives set out in the Low Voltage Directive 2014/35/UE
- EN ISO 8528-13, EN 60034-1, EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 55011, EN 1679-1 et EN 60204-1

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**TERMS OF USE**

According to the standard, the nominal power assigned by the genset is given for 25°C Air Inlet Temperature, of a barometric pressure of 100 kPa (100 m A.S.L), and 30% relative humidity. For particular conditions in your installation, refer to the derating table.

**WARRANTY INFORMATIONS**

Standard Warranty Period:

- for Products in "back-up" service
  - o 30 months from the date the Product leaves the plant
  - o 24 months from the Product's commissioning date
  - o 1,000 running hours

The warranty expires when one of the above conditions is met.

- for Products in "prime" or "continuous" service (continuous supply of electricity, either in the absence of any normal electricity grid or to complement the grid),
  - o 18 months from the date the Product leaves the plant
  - o 12 months from the Product's commissioning date
  - o 2,500 running hours

The warranty expires when one of the above conditions is met.

For more details regarding conditions of application and scope of the warranty please refer to our General "terms & conditions of sales".