



Ratings Range

400/230 V - 50 Hz

| | | |
|---------|-----|------|
| Standby | kW | 1000 |
| | kVA | 1250 |
| Prime | kW | 909 |
| | kVA | 1136 |



Benefits and features

Rehiko premium quality

- Rehiko provides **one source responsibility** for the generating set and accessories
- The generator set, its components and a wide range of options have been **fully developed, prototype tested, factory built,** and production tested
- The generator sets are designed in accordance to ISO8528
- Approved for use with HVO (Hydrotreated Vegetable Oil) according to EN15940

Rehiko premium performances

Engines

- High reliability enhanced through a simple design for optimal functional performances
- High performances turbochargers providing high engine performances under all loads
- Easy operation and maintenance: accessories requiring daily maintenance are conveniently located on the same side of the engine

Alternator

- Oversized alternator for 50°C ambient temperature
- Provide industry leading motor starting capability
- Excitation system to permit sustained overcurrent > 300% In, during 10 sec
- Built with a class H insulation and IP23

Cooling

- A compact and complete solution using a mechanical driven fan radiator

Control panel

- The Rehiko wide controller range provides the reliability and performances you expect from your equipment. You can program, manage and diagnose it easily and in an efficient way

Rehiko worldwide support

- A standard two-year or 1000-hours limited warranty for standby applications.
- A standard one-year or 2500 hours limited warranty for prime power applications.
- A worldwide product support

Generator sets ratings

| | | Standby rating | | | Prime rating | |
|---------|----|----------------|------|------|--------------|------|
| | Hz | kWe | kVA | Amps | kWe | kVA |
| 400/230 | 50 | 1000 | 1250 | 1804 | 909 | 1136 |
| 380/220 | 50 | 1000 | 1250 | 1899 | 909 | 1136 |
| 415/240 | 50 | 1000 | 1250 | 1739 | 909 | 1136 |

General Specifications

| | |
|--|-------------------------------|
| Manufacturer | Rehiko |
| Engine ref. | 12M33G1250_V2_5 |
| Alternator choices | KH04830T |
| Performance class | G3 |
| Voltage (V) | 400/230 380/220 415/240 |
| Controllers | APM403 |
| Emission level | Fuel consumption optimization |
| Type of Cooling | Radiator 50°C |
| Factory installed enclosures | ISO20 |
| ** Volumetric Fuel consumption is up to 4% higher when using HVO than Diesel Fuel" | |

Engine Specifications

| | |
|--|------------------|
| Engine brand | BAUDOUIN |
| Engine ref. | 12M33G1250_V2_5* |
| Air inlet system | Turbo |
| Cylinder configuration | 12 - V |
| Displacement (l) | 39 |
| Bore (mm) x Stroke (mm) | 150 x 185 |
| Compression ratio | 15 : 1 |
| Speed 50Hz (RPM) | 1500 |
| Maximum stand-by power at rated RPM (kW) | 1108 |
| Governor type | Electronic |

Lubrication System

Oil Filter Quantity and type****

Charge Air coolant Air/Air

****Rehiko recommends the use of genuine oil and filters.

Fuel System

Maximum fuel pump flow (l/h) 1070

Max head on fuel return line (m fuel) 5,9

Fuel Filter Quantity and type

Fuel Diesel Fuel/HVO

Consumption with cooling system

| | |
|--|-------|
| Specific consumption @ ESP Max Power (g/kW.h) | 199,1 |
| Specific consumption @ PRP Max Power (g/kW.h) | 197 |
| Specific consumption @ 75% of PRP Power (g/kW.h) | 194,6 |
| Specific consumption @ 50% of PRP Power (g/kW.h) | 199,3 |

Cooling system

| | |
|--|---------|
| Radiator & Engine capacity (l) | 240 |
| Fan power 50Hz (kW) | 55 |
| Fan air flow w/o restriction (m3/s) | 27,5 |
| Available restriction on air flow (mm H2O) | 20 |
| Type of coolant | Gencool |
| Coolant capacity HT, engine only (l) | 240 |
| Max coolant temperature, Shutdown (°C) | 103 |
| Thermostat begin of opening HT (°C) | 77 |
| Thermostat end of opening HT (°C) | 87 |

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

Exhaust system

| | |
|------------------------------------|------|
| Heat rejection to exhaust (kW) | |
| Exhaust gas temperature @ ESP (°C) | 550 |
| Exhaust gas flow @ ESP (l/s) | 3533 |

Electrical system

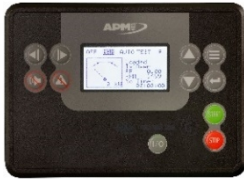
| | |
|---------------------|----|
| Battery voltage (V) | 24 |
|---------------------|----|

Air Intake system

| | |
|-------------------------------|------|
| Combustion air flow (l/s) | 1275 |
| Radiated heat to ambient (kW) | |

Alternator Specifications

| | |
|--|-----------|
| Number of pole | 4 |
| Technology | Brushless |
| AVR Regulation | Yes |
| Insulation class | H |
| Indication of protection | IP23 |
| Number of bearing | 1 |
| Number of wires | 12 |
| Coupling | Direct |
| Overspeed (rpm) | 2250 |
| Voltage regulation at established rating (+/- %) | 0,5 |
| Unbalanced load acceptance ratio (%) | 8 |



APM403 controller

The APM403 is a versatile control unit which allows operation in manual or automatic mode

- Measurements : voltage and current
- kW/kWh/kVA power meters
- Standard specifications: Voltmeter, Frequency meter.
- Optional : Battery ammeter.
- J1939 CAN ECU engine control
- Alarms and faults: Oil pressure, Coolant temperature, Overspeed, Start-up failure, alternator min/max, Emergency stop button.
- Engine parameters: Fuel level, hour counter, battery voltage.
- Optional (standard at 24V): Oil pressure, water temperature.
- Event log/ Management of the last 300 genset events.
- Mains and genset protection
- Clock management
- USB connections, USB Host and PC,
- Communications : RS485 INTERFACE
- ModBUS protocol /SNMP
- Optional : Ethernet, GPRS, remote control, 3G, 4G
- Websupervisor, SMS, E-mails

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

Power ratings definition according to ISO8528-1 (2018-02 edition) and ISO-3046-1

Emergency Standby Power (ESP): The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Average load factor per 24 hours of operation is <70%.

Prime Power (PRP): At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour within 12 hour of operation. Average load factor per 24 hours of operation is <70%.

Warranty informations

Standard warranty period:

- for Products in "back-up" service
 - 30 months from the date the Product leaves the plant
 - 24 months from the Product's commissioning date
 - 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),
 - 18 months from the date the Product leaves the plant
 - 12 months from the Product's commissioning date
 - 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".

Standard scope of supply

All our electrical generating sets (compact version) are equipped with:

- Water-cooled DIESEL engine
- Electronic control device and mechanical injection
- High filtration air filter
- Radiator without coolant
- Electric starter & 24 VDC charging alternator
- Single-bearing alternator, IP 23, H/H Class Insulation/Temp
- Welded steel base frame with vibration damping supports
- Flexible fuel lines and lubrication oil drainage pump
- Primary filter
- Exhaust outlet with hose and clamps
- Included in your preconfigured pack:
 - Starter batteries
 - Automatic start-up pack including a battery charger and a preheating kit
 - APM403 control/command (P or S) depending on configuration
 - 4-pole circuit breakers, manual or motorized depending on configuration
- User documentation (1 copy)
- Packaged in film

Excluded from the supply :

- For Baudouin XPRESS products, from 25 to 1500 kVA: oil and antifreeze liquid
- For Baudouin XPRESS products, from 25 to 165 kVA: batteries

Dimensions and Weights

Compact version

| | |
|-------------------------------------|--------------------|
| Overall Size, max., L x W x H, (mm) | 4765 x 2250 x 2465 |
| Dry weight (kg) | 9150 |
| Tank capacity (L) | 500 |



Container dimensions ISO20 soundproofed version

| | |
|---|--------------------|
| Overall Size, max., L x W x H, (mm) | 6060 x 2440 x 2896 |
| Tank capacity (L) | 500 |
| Dry weight (kg) | 14940 |
| Sound power level guaranteed (Lwa) 50Hz (75% PRP) | 113 |
| Acoustic pressure level @1m in dB(A) 50Hz (75% PRP) | 91 |
| Acoustic pressure level @7m in dB(A) 50Hz (75% PRP) | 82 |



* dimensions and weight without options

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.