



Ratings Range

400/230 V - 50 Hz

Standby	kW	1120
	kVA	1400
Prime	kW	1018
	kVA	1273



Benefits and features

Rehko premium quality

- Rehko 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

Rehko 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

- 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
- High temperature and altitude product capacity available

Control panel

- The Rehko 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

Rehko 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

	Hz	Standby rating			Prime rating	
		kWe	kVA	Amps	kWe	kVA
400/230	50	1120	1400	2021	1018	1273
380/220	50	1120	1400	2127	1018	1273
415/240	50	1120	1400	1948	1018	1273
415/240	50	1120	1400	1948	1018	1273
400/230	50	1120	1400	2021	1018	1273
380/220	50	1120	1400	2127	1018	1273

General Specifications

Manufacturer	Rehko
Engine ref.	12M33G1400_V2_5
Alternator choices	KH04830T KH05520T
Performance class	G3
Controllers	APM403
Consumption @ 100% load ESP (L/h)*	289
Consumption @ 100% load PRP (L/h)*	259
Emission level	Fuel consumption optimization
Type of Cooling	Radiator
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.	12M33G1400_V2_5*
Air inlet system	Turbo
Cylinder configuration	12 - V
Displacement (l)	39,23
Bore (mm) x Stroke (mm)	150 x 185
Compression ratio	15 : 1
Speed 50Hz (RPM)	1500
Maximum stand-by power at rated RPM (kW)	1210
Governor type	Electronic

Lubrication System

Oil Filter Quantity and type****

Charge Air coolant Air/Air

****Rehko 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	Diesel Fuel/HVO

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

Consumption with cooling system

Specific consumption @ ESP Max Power (g/kW.h)	200,5
Specific consumption @ PRP Max Power (g/kW.h)	197,5
Specific consumption @ 75% of PRP Power (g/kW.h)	194,2
Specific consumption @ 50% of PRP Power (g/kW.h)	197,3

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

Exhaust system

Exhaust gas temperature @ ESP (°C) 550

Exhaust gas flow @ ESP (l/s) 3950

Electrical system

Battery voltage (V) 24

Air Intake system

Combustion air flow (l/s) 1392

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

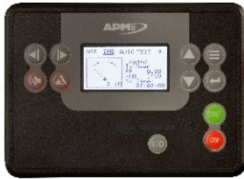
Voltage regulation at established rating (+/- %) 0,5

Unbalanced load acceptance ratio (%) 8

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
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds
- 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.



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

Warranty informations

Standard warranty period:

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

Dimensions and Weights

Compact version – Radiator

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 – Radiator

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.