



Fuel: H2



ComAp Control



Made in Germany



INDUSTRIAL GAS GENERATOR

VOLTAIR 290H



Operated
by
H2

ISO 9001-certified manufacturer in Germany
The generators comply with the CE marking in accordance with
the new EU Machinery Regulation (EU) 2023/1230.

VOLTAIR 290H

Rated Power

PRP Operation: kW(e) 232 kVA 290

GENERAL

Manufacturer:	AEnergy GmbH
Engine:	Hyundai
Engine Type:	11l
Alternator:	Linz/Sincro
Performance Class:	G2
Voltage:	400/230 V
Total Oil capacity (L):	44l
Total Coolant capacity (L):	53l
Canopy Color:	RAL9001
Overall Dimensions	
L x W x H (mm):	TBD
Net weight (kg):	TBD

ALTERNATOR DATA

Operation with H2:

Rated Power 50 Hz (PRP):	290 kVA
Poles:	4
Technology:	Bürstenlos
AVR Controller:	AVR
AVR Sensing:	einphasig
Voltage regulation:	+/- 1%
Insulation class:	H
Max Overspeed (rpm):	2250
Number Bearings:	1
Number of Leads Stator:	12
Winding Pitch:	2/3
R.F.I. Suppression	Standard EN55011

Generator Standard Features

- Compliance with EN60034-1, ISO8528-3, EN55011
- Excellent voltage waveform

ELECTRICAL SYSTEM

Battery voltage (V):	24
Starter (kW):	6
Alternator (A):	45

ENGINE DATA

Engine Brand:	Hyundai
Engine Type:	11l
Aspiration:	TCAC
Number of Cylinder:	6 - L
Displacement (cm³):	11,051
Bore x stroke (mm):	123 x 155
Compression ratio:	10.1 : 1
Engine Speed 50 Hz (rpm):	1500
Power PRP (kWm) LPG:	269
Power PRP (kWm) NG:	269
Controls:	ECU (Electronic Control Unit)
Engine certificate:	EPA

EXHAUST SYSTEM

Thermal power (kW):	237
Temperature (°C):	424
Volume (m³/min):	23,15

FUEL SYSTEM

Inlet Gas Pressure (mBar):	35 - 300
Fuel Type:	+95% Hydrogen (H2)
Connection size:	TBD
Fuel Consumption at 100% PRP load (m³/h):	TBD

ELECTRICAL CONNECTIONS (ON REQUEST)

TN-S System

electrical connections:	1x CEE 125A 400V 5-pole
	1x CEE 63A 400V 5-pole
	1x CEE 32A 400V 5-pole
	1x CEE 16A 400V 5-pole

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GENERATOR CONTROLLER

Single GenSet controller for stand-by and prime power applications

Controller Brand: ComAp
Model: IntelliLite 4 AMF 25

GenSet Controller Standard Features

- 3 applications in 1 hardware: AMF (Stand-by) – default, MRS (Prime-power), Engine
- Measurements: voltage, current
- Power measuring devices: kW / kWh / kVA
- Standard equipment: Voltmeter, Frequency meter
- Display: voltage, current, frequency, speed, battery voltage, operating hours
- Support of Modbus RTU/TCP, SNMP v1/v2c/v3, J1939 protocols
- 1 slot for extension plug-in module (more binary I/Os, 4G & GPS, Ethernet, RS232 & RS485)
- Multi ECU with support for two control units
- CAN module extensions
- Alternative configurations for GenSet with variable voltage and frequency
- Remote control and monitoring
- Built-in PLC logic and PLC editor
- High-level security features

DEFINITION OF NOMINAL POWER

Prime Power Operation (PRP): see p. 3
Designed for prime power operation

NORMS & STANDARDS

Manufactured according to current standards

WARRANTY INFORMATION

For PRP power generators (uninterruptible power supply without or in addition to the electricity grid):

- 20 months from commissioning
- 24 months from delivery
- 2,000 operating hours

The warranty expires when one of these three points is reached.
For more information on conditions of validity and scope of warranty,
please consult our Terms & Conditions.

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BENEFITS & FEATURES

- Prototype-tested and production-tested
- Years of German technical experience
- Optimized noise levels
- Stable performance
- Low space requirement
- Best power uptime
- Easy connection of the generator
- Robust base frame and high-quality housing
- Robust design, optimized for transport
- Protection of equipment and people

Engine:

- Premium-engines, from a competent partner (Hyundai)
- Quiet operation
- Low CO₂ emissions
- Low noise (appr. 70 dB)

Alternator:

- Providing industry-leading engine starting capability
- Made in Germany with components from EU/Korea
- Equipped with Class H

Prime Power Rating:

Suitable for power supply in place of utility power or for providing guaranteed emergency power. The Prime Power Rating applies to variable loads with a limited number of annual operating hours. The average output power must not exceed 75% of the Prime Power Rating. The total operating time at 100% of the prime power rating must not exceed 500 hours per year. An overload of 110% is permitted for a duration of one hour within a 12-hour period, provided that the total duration at 110% load does not exceed 25 hours per year. The maximum annual operating time is 2,500 hours.

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POSSIBLE SCOPE OF DELIVERY

- Water-cooled Gas industrial engine
- Electric starter and charging generator
- Standard air filter
- Circuit breaker, adapted to the short-circuit current of the generator
- Single-bearing generator, protection class IP 23, temperature rise/insulation up to class H/H
- Steel frame with powder coating
- Optimized chassis height for safe handling with a forklift
- Housing made of electro-galvanized steel or steel with aluminum-zinc alloy in EU quality
- IP64 locks, made of stainless material
- Optimized against corrosion
- Improved sound insulation
- Personal protection through protective grilles on hot and rotating parts
- Warning and error messages: Oil pressure, water temperature, overspeed, start error, min./max. generator, emergency stop button.
- Engine parameters: hour meter, battery voltage.
- History/management of the last 300 generator events
- Generator and grid protection devices
- Connections: USB, USB host, and PC
- Communication: RS485
- ModBUS/SNMP protocol
- Charged DC starter battery with electrolyte
- External emergency stop switch
- Oil drain pump
- Exhaust outlet with pipes and flanges
- Operating instructions (1 copy)
- Supplied with oil and antifreeze

All technical data are subject to change.

Picture may differ from the original.
Technical change or errors are excepted.
This data sheet refers to a standard version.
Due to special equipment, deviating values may occur.