

ecopower Combined Heat Power Unit

technical specifications

electric power*	~ 1.3 - 4.7 kW
thermal power (flow T_{\max} 75°C)	~ 4.0 - 12.5 kW
total operating ratio	> 90% - 92% ~ 25% electrical + 65% - 68% thermal
one-cylinder gas engine (4-stroke)	272 cm ³
fuel	town gas, LPG (Propane)
variable speed control	1,200 - 3,600 rpm
λ -1 engine management 3-way catalytic converter	low - NO _x
noise level	< 56dB(A) (distance 2m)
dimensions	L 1370 x W 740 x H 1080 mm
weight	395 kg

CE-certification (PIN 0063AU3290), EMV and VDE approval

special permanent-magnet generator

exhaust gas heat exchanger/exhaust silencer T 60°C - < 90°C

separate water circuits for engine and heater

heat and noise insulating housing with integrated switch board section

* depending on atmospheric density and gas quality

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Operation

simple and operator-friendly setting, two modi of operation

1. priority thermal energy requirements (on grid applications, mainly)
2. priority electric power requirements (mainly OFF grid applications)

optional remote monitoring

digital display easy to operate including diagnostics

modulating thermal energy

monitoring heat circuits, flow and return temperatures

monitoring outside and room temperatures

strategic store and buffer management

hot water management

monitoring electric grid (ENS, feed)

modulating electric energy

mains (grid) parallel operation, 1-or 3 phase, 3 x 400V 50Hz cos ϕ 1

mains inverter, power filter

Voltage and frequency monitoring

monitoring exhaust gas

heating and hot water temperature managment

exhausts specification

exhaust back pressure sensor installed

exhaust temperature < 90° C

exhaust flow per hour 22-23 Nm³

N0x < 70 mg/Nm³ at 5% O₂

CO < 300 mg/Nm³

exhaust pressure max 2,0 mbar