

# Data sheet

## CHP ECO 240 EG



### Complete System

Fuel	Natural Gas/Biomethane and Pilot Oil
Pilot Oil	Fuel Oil EL according to DIN 51603-1, Rapeseed Oil Raffinate (DIN EN 51605) or Biodiesel (DIN EN 14214)
Operation Mode	Parallel network operation
Electrical Power	240 kW (kVA)
Thermal Power	240 kW
CHP Coefficient	1
Rated Thermal Input	571 kW
Fuel Consumption (Gas)	53.1 Nm <sup>3</sup> /h
Fuel Consumption (Pilot Oil)	< 5 l/h
Electrical Efficiency (measured)	42 %
Electrical Efficiency (acc. to DIN 3046-1)	43.5 %
Heating Supply Temperature	max 90 °C
Heating Return Temperature	max 70 °C

### Engine

Type	<b>MAN D2676 (Basic Engine)</b> 6 Cylinder In-Line Engine
Operation Process	4-Cycle Otto with Turbocharging
Displacement / Bore / Stroke	12.4 l / 126 mm / 166 mm
Rotation Speed	1500 1/min
Exhaust Gas Flow Rate	1300 kg/h
NO <sub>x</sub>	< 2500 mg/m <sup>3</sup> based on 5% O <sub>2</sub>
CO	< 650 mg/m <sup>3</sup> based on 5% O <sub>2</sub>
Formaldehyde	< 60 mg/m <sup>3</sup> based on 5% O <sub>2</sub>
Exhaust Gas Treatment	EGR and Oxidation Catalyst

### Synchronous Generator

Cooling System	<b>Leroy Somer LSA 47.2 M8</b> Air cooled
max. Power (Based on cos Phi 0.8)	550 kVA
Voltage / Frequency / cos Phi	400 V / 50 Hz / 1
Efficiency	96 %

### Dimensions, Weight and Connections

Length / Width / Height	3850mm / 1730mm / 2600mm
Weight with coolant	5060 kg
Heating Connection	DN50
Electrical Connection	3 x 400V 32A

The technical data are based on Fuel Oil EL according to DIN 51603-1 with a heat value of 10 kWh/Ltr, Rapeseed Oil according to DIN EN 51605 with a heat value of 10 kWh/kg or Biodiesel according to DIN EN 14214 with a heat value of 10 kWh/kg and natural gas with a heat value of 10.0 kWh/Nm<sup>3</sup> and a Methane number higher 80. The technical data are specified on standard terms and conditions according to DIN ISO 3046-1. All values are based on the system in norm operation. Standard terms and conditions: absolute air pressure 100 kPa; air temperature: 25 °C; relative air humidity: 30%. Power adaptation at ambient condition specified in DIN ISO 3046-1. At nominal power the tolerance for the specific fuel consumption is 5% and for the usable thermal power it is 7%. Reservation: We reserve the right to change the data and features without notice.