



**Combined Heat & Power  
Solutions**



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# Technical specification of CHP unit

**KE-MNG 260 eco**



	400V/50Hz	Natural gas	
Electrical power	kW	260	
Thermal power	kW	371	
Energy input	kW	685,7	
Fuel consumption	m <sup>3</sup> /h	72,6	
Electrical efficiency	%	37,9	
Thermal efficiency with LT	%	-	
Thermal efficiency without LT	%	54,1	
Overall efficiency without LT	%	92,0	

**Engine: MAN Type: E3262 E302**

No. of cylinders	-	12V	Voltage/Frequency	V/Hz	400/50
Rated speed	min <sup>-1</sup>	1500	Cos φ	-	0,8 - 1,0
Bore/stroke/swept vol.	mm / mm / dm <sup>3</sup>	132/157/25,8	General efficiency	%	95,7
Compression ratio	-	12:1	Max. ambient temperature	°C	40
Engine power max.	kW	275			
Lambda air/fule	-	1,00			
Lube oil consumption	kg/h	0,11			
Lube oil filling quantity	dm <sup>3</sup>	90			

**Generator: LSA Type: 46.3. L11**

					Performance parameters supplied by CHP unit
<b>Rating data</b>					
Load	%	100	75	50	99
ISO engine power	kW	275	206	137	272
Electrical power	kW	263	197	131	260
Coolant heat	kW	231	197	169	229
Exhaust heat (120 °C)	kW	143	105	71	141
Exhaust heat (90 °C)	kW	-	-	-	-
Intercooler heat HT	kW	-	-	-	-
Intercooler heat LT	kW	-	-	-	-
Total heat power	kW	374	302	240	371
Radiation heat max.	kW	14	10	8	14
Energy input 1)	kW	693	541	402	686
Fuel consumption	m <sup>3</sup> /h	73,4	57,3	42,6	72,6
Combustion air	kg/h	849	663	492	840
Exhaust gas mass flow	kg/h	903	705	524	893
Exhaust gas temperature	°C	570	545	510	-
Electrical efficiency 1)	%	38,0	36,4	32,6	37,9
Thermal efficiency	%	54,0	55,8	59,7	54,1
<b>Overall efficiency</b>	<b>%</b>	<b>92,0</b>	<b>92,2</b>	<b>92,3</b>	<b>92,0</b>

1) According to ISO 3046.

**Fuel: Natural gas**

Min. methan no.	-	80
Calorific value	MJ/Nm <sup>3</sup>	34
Gas pressure in the inlet pipe	kPa	3÷5
Max. gas temperature	°C	30

## **Secondary circuit**

Heat power	kW	371
Temperature gradient	°C / °C	90/70
Cooling medium volume flow	m <sup>3</sup> /h	16,4
Pressure loss of PHE	bar	0,1
Heat transfer medium	-	Treated water
Max. operating pressure	bar	6

## **Ventilation air**

Fan air volume flow 1)	m <sup>3</sup> /h	6175
Max. allowable pressure loss of air duct 2)	Pa	90
Max. inlet air temperature	°C	35

1) At temperature 35 °C, pressure 101,3 kPa

2) Air ducts between CHP unit and air inlet/air outlet.

## **Exhaust gas system**

Exhaust gas mass flow, wet	kg/h	893
Exhaust gas temperature after EGHE	°C	120
Max. allowable pressure loss 1)	mbar	6
Silencer flanges	-	DN 200, PN 10

1) Exhaust gas pipe between CHP unit and outlet (without silencer).

## **Emissions**

CO	mg/Nm <sup>3</sup>	<150
NO <sub>x</sub>	mg/Nm <sup>3</sup>	<125 alternatively 80

Correlation 5% O<sub>2</sub>

## **Noise level**

Without Canopy 1)	dB(A)	107
With Canopy 1)	dB(A)	74
Container 2)	dB(A)	70
Exhaust line at 1 meter distance from silencer 3)	dB(A)	80
Input/Output ventilation 1)	dB(A)	80/80

1) Sound pressure level measured at 1 m distance from the CHP unit.

2) Sound pressure level measured at 1 m distance from the container.

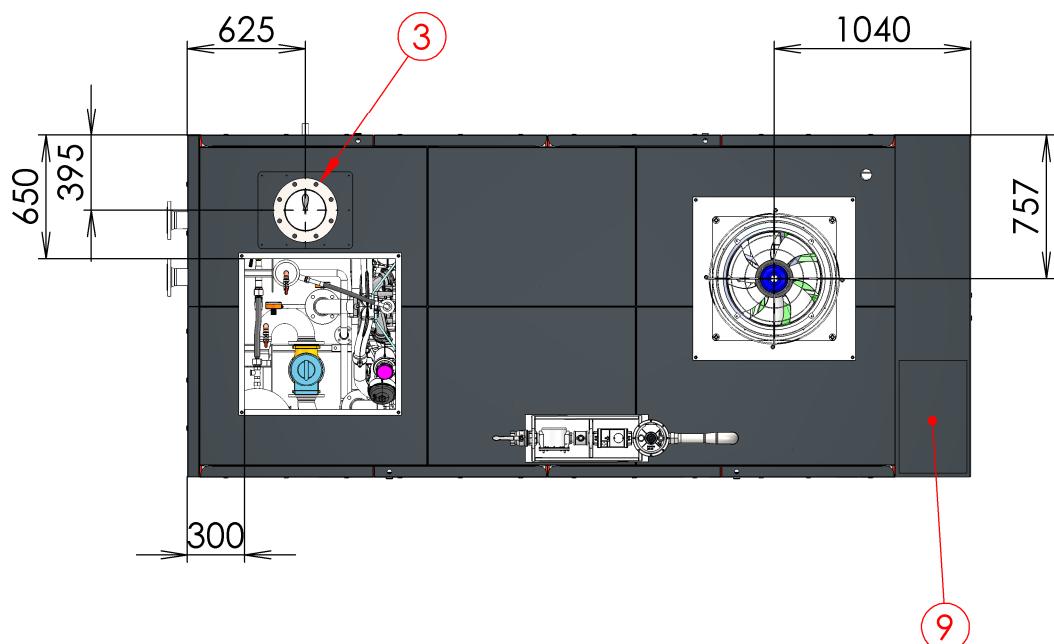
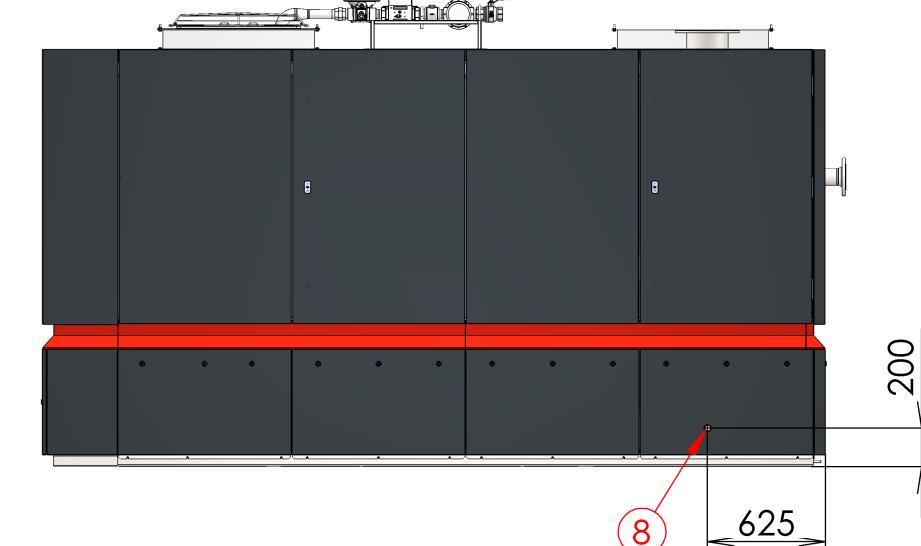
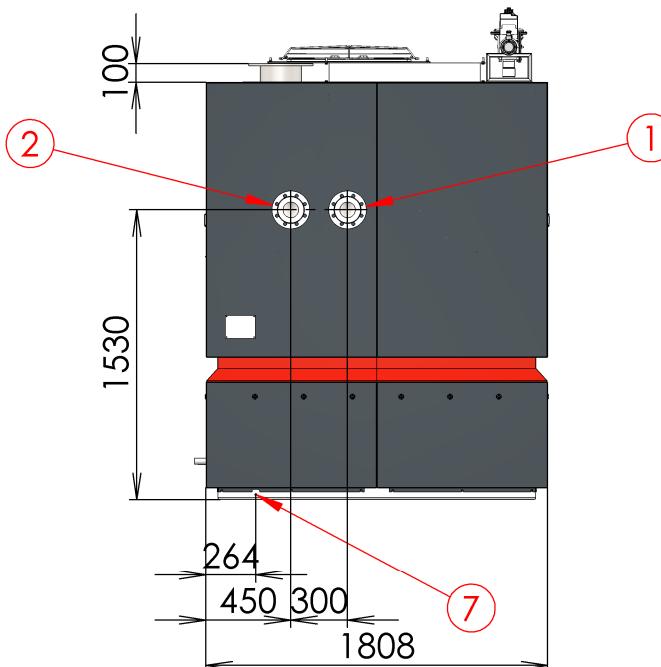
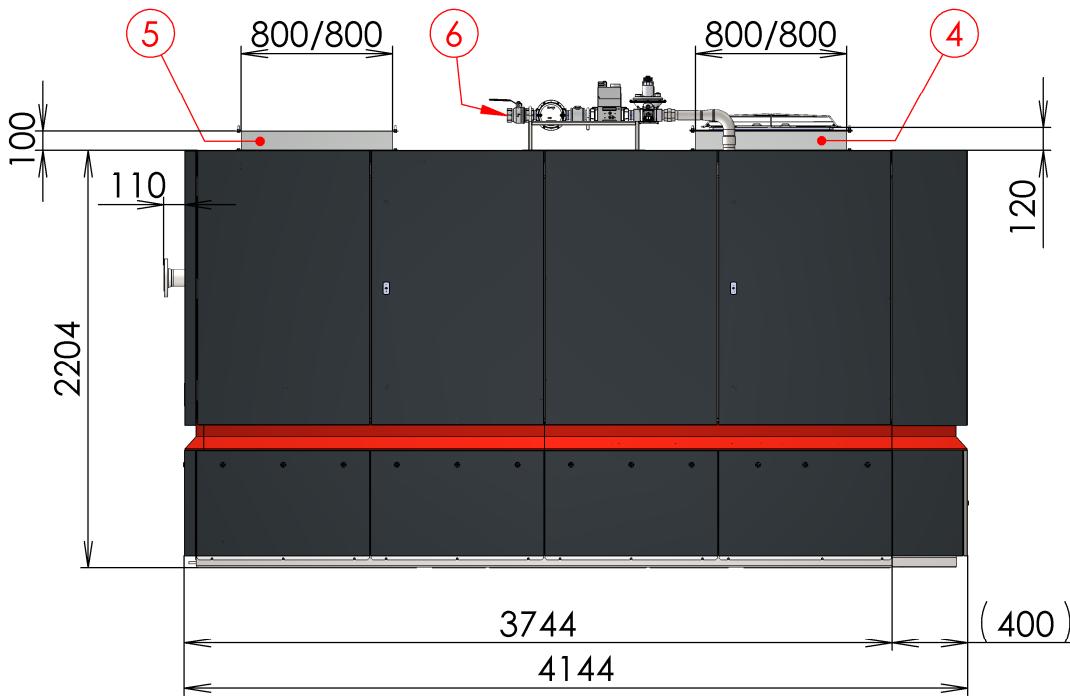
3) Depending on the requirement, noise can be reduced by additional optimization of the standard silencer.

## **Standard conditions, tolerance, weight**

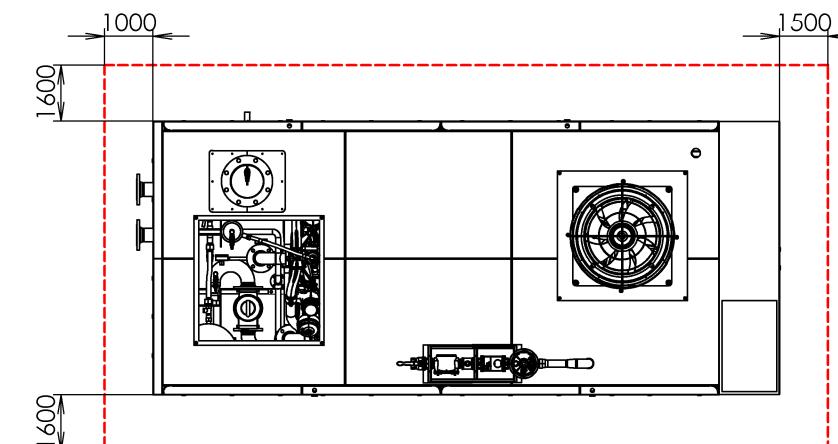
Atmospheric pressure	kPa	100
Air temperature	°C	25
Relative air humidity	%	30
Tolerance for the electrical output	%	±3
Tolerance for the usable heat	%	±7
Tolerance for the specific fuel consumption	%	±5
Dimensions L / W / H	mm	4200/1800/2200
Dry weight	kg	6300

Detailed technical specifications of components on demand.

Change of technical parameters and printing errors reserved.



OBSLUŽNÝ PROSTOR  
OPERATING AREA



1. Sekundární okruh - výstup DN80 PN16 / Secondary Circuit - outlet DN80 PN16
2. Sekundární okruh - vstup DN80 PN16 / Secondary Circuit - inlet DN80 PN16
3. Spalinové potrubí DN200 PN10 / Exhaust Piping - outlet DN200 PN10
4. Vzduchotechnické potrubí - sání 800/800 / Ventilation Piping - inlet 800/800
5. Vzduchotechnické potrubí - výfuk 800/800 / Ventilation Piping - outlet 800/800
6. Přívod plynu - vnitřní závit Rp 6/4" / Gas Train - Rp 6/4"
7. Uzemnění / Ground
8. Odvod kondenzátu R 1" / Condensate Drain R 1"
9. Vyvedení elektrického výkonu / Electric Power Output

Výrobce si vyhrazuje právo na změny v tomto dokumentu. / The producer reserves the right to make changes in this document.

NADŘAŽENÝ VÝKRES/PARENT DRW.	PROMÍTÁNÍ/PROJECTION	TOLEROVÁNÍ/TOLERATION	POVRCHOVÁ ÚPRAVA/SURFACE FINISH	HMOTNOST/MASS [kg]
POZICE/ NR. ITEM	ODJEHLENO/DEBURRING	PŘESNOST/ACCURACY ISO 2768 mK	MĚŘÍTKO/SCALE	6300
RADA/CHP TYPE	KRESLIL/DESIGNED BY:	DATUM/DATE:	REVIZE/REVISION:	Číslo/Nr.#
KE-MNG 260 eco	PETR ŠEBESTA	29.08.2018	15.04.2019	3
NÁZEV PROJEKTU/PROJECT NAME	SCHVÁLIL/APPROVED BY:			
AN260E-A	NÁZEV DOKUMENTU/DRAWING TITLE:			
<b>GEN TEC</b>	ROZMĚROVÝ VÝKRES DIMENSIONAL DRAWING			
MATERIÁL/MATERIAL:				
POLOTOVAR/STOCK PART:	Č. VÝKRESU/DRAWING NUMBER:			
	AN260E-A-01			
	A3			

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