

Datasheet CHP OEKO 380 G

Engine Data:	E 2842 LE 322
Manufacturer:	MAN Nutzfahrzeuge
Nominal rotation speed:	1500 rpm
Standard performance (according ISO):	420 kW
Air ratio:	Lambda 1,6
Type of construction:	V engine
Number of cylinders:	12
Bore:	128 mm
Stroke:	142 mm
Cylinder capacity:	21,93 l
Rotational direction:	left
Compression ratio:	12
Mean effect. pressure:	15,32 bar
Consumption of lubricant:	0.13 kg/h
Filling capacity of engine oil:	90 l
Inlet low pressure max:	15 mbar
Exhaust back pressure max:	40 mbar
Temperature of the cooling water min/ max:	80/88 °C
Exhaust gas temperature:	440 °C
Mixture temperature:	50°C
Heat of the cooling water:	291 kW
Heat of the exhaust gas:	222 kW
Radiant heat:	34 kW
Electrical performance:	375 kW
Thermal performance:	513 kW
Energy input:	955 kW
CHP coefficient:	0,73
Efficiency mechanical:	40,20%
Efficiency thermal:	49,10%
Combustion air:	2050 kg/h
Exhaust gas mass flow, moist:	2126 kg/h
Nox emission value:	<500 mg/ Nm ³
CO emission value:	<1000 mg/Nm ³
HCHO emission value:	<60 mg/ Nm ³
Sounds on the surface of the engine:	105,6 dB(A)
Sounds near the exhaust outlet:	129,7 dB(A)
Sounds with sound-pfoof covering:	56 dB(A) distance 1 m
<i>Technical Data:</i>	<i>given by MAN</i>

Technical data of the generator:

Model:	LSA 47.2 M 8
Manufacturer:	Leroy Somer
Performance:	550 kVA
Voltage:	400 V
Frequency:	50 Hz
Heating class:	H
Ambient temperature:	40 °C
Protection category:	IP 23
Altitude of site:	1000 m a.s.l
Design:	B35
Efficiency:	with cos-phi 1 = 96,3 %
Consumption of cooling air:	3960 m ³ /h

Control Unit:

Mains voltage:	3x400/231 V
Frequency:	50 Hz
Control voltage:	24 V
Voltage/ ignition/ starter:	24 V
Dimensions of the control cabinet:	1600x 2000x 400 mm (Length, Height, Width)

Exhaust heat exchangers:

Layout:	2 units of pipe bundle heat exchangers
Material:	W.1.4301
Dimensions:	2000x 220 mm
Weight:	392 kg

Sound-absorbing covering:

Length:	4000 mm
Width:	1600 mm
Height:	2100 mm
Design:	panel construction (thickness of the sound proofing: 80mm)

Dimensions of the CHP unit:

CHP unit:	3800x 1400x 2000 mm
Weight:	4200 kg

Connections:

Natural gas:	flange DN 80
Heating water:	flange DN 80
Exhaust gas:	flange DN 150