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NATURAL GAS COGENERATING UNIT WITH SPARK IGNITION ENGINE

MARTIN POWER MTU

Cogenerating unit model

Electric power @ cos phi 0.8
Electric power @ cos phi 1.0
Energy input in fuel ³⁾
Gas consumption (min/max) @ 9,6 kWh/m ³
Thermal power from engine cooling
HT-stage intercooler thermal power
Lube oil cooling thermal power
LT-stage intercooler thermal power ¹⁾
Thermal power from exhaust
Thermal power on the output ²⁾
Electric power efficiency
Thermal power efficiency
Total efficiency
Current
Control panel current
Speed

MP 550 M - CU

514 kVA / 411 kW
420 kW
1064 kW
60/111 m ³ /h
247 kW
included in engine cooling
included in engine cooling
31 kW
257 kW
535 kW
39,5%
50,3%
89,8%
758 A
1000 A
1500 min ⁻¹

Engine model

Nominal power
Intake
Speed governor
Cylinders
Bore
Stroke
Displacement
Compression ratio
Ignition sequence
Ignition timing
Lambda
Intake air temperature
Combustion air temperature (min/max)
Air mass flow
Exhaust gas flow
Max. back pressure at exhaust
Max. exhaust temperature (@ rated power)
Radiated heat
Specific gas consumption
Gas consumption (CH ₄) @ 100% load
Gas consumption (CH ₄) @ 75% load
Gas consumption (CH ₄) @ 50% load
Engine oil volume
Engine oil consumption
Coolant volume (CHP)
Coolant pressure (max)
Minimal coolant flow through engine
Coolant temperature - engine (in/out)
Coolant temperature - CHP (in/out)
Heating water temperature (in/out)
Heating water flow rate
LT stage intercooler temperature (in/out)
LT stage intercooler coolant flow
Battery voltage
Starter
Battery

E3042 Z6

437 kW
turbocharged with intercooler
electronic
12V
130 mm
142 mm
22,6 dm ³
12:1
1-12-2-11-3-10-6-7-5-8-4-9
fixed
lean burn
25 °C
5/45 °C
2161 kg/h
2241 kg/h
5 kPa
494 °C
35 kW
189 g/kWh
79 kg/h
61 kg/h
43 kg/h
34 l
0,103 l/h
245 l
2,5 bar
37,2 m ³ /h
82/88 °C
82/94 °C
70/90 °C
22,3 m ³ /h
40/42,5 °C
10,8 m ³ /h
24 V
7 kW
143 Ah

NATURAL GAS COGENERATING UNIT WITH SPARK IGNITION ENGINE

MARTIN POWER MTU

Cogenerating unit model

Generator manufacturer

Generator model

Nominal power

F class power

Protection

Voltage regulation

Voltage precision

Emissions ⁴⁾

NO_x

CO

HCHO

Open genset

Length

Width

Height

Weight

Open CHP version

Length

Width

Height

Weight

Canopied CHP version

Length

Width

Height

Weight

Container CHP version

Length

Width

Height

Weight

Installation - connections

Gas inlet

Heating HT circuit

Heating LT circuit (optional)

Exhaust (pipe up to 6 m)

MP 550 M - CU

LEROY SOMER

LSA 47.2 M7

500 kVA

465 kVA

IP 23

electronic

1,5 %

@ 5% O₂

500 mg/Nm³

300 mg/Nm³ (with OxiCat)

60 mg/Nm³

3900 mm

1670 mm

2060 mm

3300 kg

3900 mm

1900 mm

2300 mm

5800 kg

6000 mm

2400 mm

2600 mm

20'

6058 mm

2438 mm

2591 mm

DN 50 / PN 16

Rp 2,5"

Rp 2,5"

DN 250 / PN 6

1) The thermal power is available if the cooling water temperature input is below 35°C

2) Theoretical usable thermal power; tolerance +/- 8 %

3) According to ISO 3046 (+ 5 % tolerance), using reference fuel used at 400 V, p.f. 1.0, 50 Hz

4) Emission values during grid parallel operation