



**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 1000 M - CU

950 kVA / 760 kW
776 kW
1832 kW
105/191 m ³ /h
401 kW
included in engine cooling
included in engine cooling
47 kW
422 kW
869 kW
42,4%
47,7%
90,1%
1392 A
1600 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

8V 4000 L33

800 kW
turbocharged with intercooler
electronic
8V
170 mm
210 mm
38,1 dm ³
12,8:1
1-5-7-2-6-3-4-8
fixed
lean burn
25 °C
20/30 °C
3981 kg/h
4116 kg/h
6 kPa
453 °C
55 kW
176 g/kWh
144 kg/h
112 kg/h
79 kg/h
160 l
0,18 l/h
150 l (engine only)
6 bar
37,9 m ³ /h
78/89 °C
78/102 °C
70/90 °C
45,5 m ³ /h
40/42 °C
24,1 m ³ /h
24 V
9 kW
4 x 170 Ah



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Generator manufacturer
Generator model
Nominal power
F class power
Protection
Voltage regulation
Voltage precision

STAMFORD
PI 734C
1550 kVA
1445 kVA
IP 23
electronic
1,5 %

Emissions ⁴⁾
NO _x
CO
HCHO

@ 5% O ₂
500 mg/Nm ³
300 mg/Nm ³ (with OxiCat)
60 mg/Nm ³

Open genset
Length
Width
Height
Weight

4200 mm
2000 mm
2400 mm
9500 kg

Open CHP version
Length
Width
Height
Weight

5700 mm
2000 mm
2400 mm
10750 kg

Canopied CHP version
Length
Width
Height
Weight

12000 mm
3100 mm
3100 mm

Container CHP version
Length
Width
Height
Weight

40'
12192 mm
3100 mm
3100 mm

Installation - connections
Gas inlet
Heating HT circuit
Heating LT circuit (optional)
Exhaust (pipe up to 6 m)

DN 65 / PN 16
DN 100 / PN 16
DN 50 / PN 16
DN 300 / 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