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## NATURAL GAS COGENERATING UNIT WITH SPARK IGNITION ENGINE

## MARTIN POWER MAN

### Cogenerating unit model

Electric power @ cos phi 0.8
<b>Electric power @ cos phi 1.0</b>
<b>Power from fuel</b>
Thermal power from engine cooling
HT-stage intercooler thermal power
LT-stage intercooler thermal power <sup>1)</sup>
Thermal power from suction air cooling
Thermal power from exhaust <sup>2)</sup>
<b>Thermal power on the output</b>
<b>Electric power efficiency</b>
Thermal power efficiency
<b>Total efficiency</b>
Current
Control panel current
Speed

### MP 650 N - CU

656 kVA / 525 kW
<b>530 kW</b>
<b>1342 kW</b>
252 kW
74 kW
31 kW
105 kW
304 kW
<b>661 kW</b>
<b>39,5%</b>
49,3%
<b>88,8%</b>
947 A
1000 A
1500 min <sup>-1</sup>

### Engine model

Nominal power
Intake
Speed governor
Cylinders
Bore
Stroke
Displacement
Compression ratio
Ignition sequence
Ignition timing
Lambda
Max. mixture temperature
Max. intake temperature
Air mass flow
Exhaust gas flow
Max. back pressure at exhaust
Max. exhaust temperature (@ rated power)
Radiated heat (engine)
Specific gas consumption
Gas consumption @ 100% load
Gas consumption @ 75% load
Gas consumption @ 50% load
Engine oil volume (min/max)
Engine oil consumption
Coolant volume (engine only)
Coolant pressure (max)
Minimal coolant flow through engine
Coolant temperature (@ engine outlet) (min/max)
Max. temperature difference over engine
HT stage intercooler inlet temperature (max)
HT stage intercooler coolant flow (min)
LT stage intercooler inlet temperature (max)
LT stage intercooler coolant flow (min)
Battery voltage
Starter
Battery

### E 3262 LE 202

550 kW
turbocharged with intercooler
electronic
12V
132 mm
157 mm
25,8 dm <sup>3</sup>
12:1
1-12-2-11-3-10-6-7-5-8-4-9
20 °BTDC
1,68
50 °C
40 °C
2775 kg/h
2872 kg/h
4 kPa
458 °C
56 kW
183 g/kWh
97 kg/h
74 kg/h
52 kg/h
??/102 l
0,175 kg/h
3 bar
780 l/min
80/88 °C
6 °C
82 °C
311 l/min
42 °C
119 l/min
24 V
7 kW
170 Ah



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**NATURAL GAS COGENERATING UNIT WITH SPARK IGNITION ENGINE** **MARTIN POWER MAN**

**Cogenerating unit model**

<b>Generator manufacturer</b>
<b>Generator model</b>
Nominal power
F class power
Engine - generator connection
Voltage regulation
Voltage precision

<b>Emissions</b>
NO <sub>x</sub>
CO
NMHC
Formaldehyd

<b>Open CHP version</b>
Length
Width
Height
Weight

<b>Canopied CHP version</b>
Length
Width
Height
Weight

<b>Container CHP version</b>
Length
Width
Height
Weight

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

**MP 650 N - CU**

<b>MARELLI</b>
<b>MJB 355 MB4</b>
800 kVA / 640 kW
730 kVA
SAE 1
electronic
1,5 %

@ 5% O <sub>2</sub>
500 mg/Nm <sup>3</sup>
650 mg/Nm <sup>3</sup>
50 mg/Nm <sup>3</sup>
60 mg/Nm <sup>3</sup>



30'
9125 mm
2438 mm
2591 mm

DN 250

- 1) The thermal power is available if the cooling water temperature input is below 35°C
- 2) Theoretical usable thermal power only