



TTS MARTIN, s.r.o., 038 42 Příbovce 343, SLOVAKIA

tel. +421 43 42 94 466, fax +421 43 42 94 026

e-mail: tts@tts-martin.sk, http: www.tts-martin.sk

## 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 60 N - CU

61 kVA / 49 kW
<b>50 kW</b>
<b>148 kW</b>
46 kW
- kW
- kW
- kW
33 kW
<b>79 kW</b>
<b>33,8%</b>
53,4%
<b>87,2%</b>
88 A
100 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 0834 E 302

54 kW
naturally aspired
electronic
4R
108 mm
125 mm
4,6 dm <sup>3</sup>
13:1
1-3-4-2
18 °BTDC
1,0
-
40 °C
181 kg/h
192 kg/h
4 kPa
620 °C
12 kW
220 g/kWh
11 kg/h
9 kg/h
7 kg/h
9/12 l
0,02 kg/h
12 l
2 bar
137 l/min
80/88 °C
6 °C
-
-
-
-
24 V
4 kW
88 Ah



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## NATURAL GAS COGENERATING UNIT WITH SPARK IGNITION ENGINE

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### Cogenerating unit model

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

### Emissions

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

### 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 60 N - CU

<b>MARELLI</b>
<b>MJB 200 MB4</b>
72 kVA / 58 kW
66 kVA
SAE 2
electronic
1,5 %

### @ 5% O<sub>2</sub>

6500 mg/Nm <sup>3</sup>
6500 mg/Nm <sup>3</sup>

2600 mm
1200 mm
2000 mm

2600 mm
1200 mm
2350 mm

20'
6058 mm
2438 mm
2591 mm

Rp 3/4"
DN 100

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