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Type  
AGS0820M

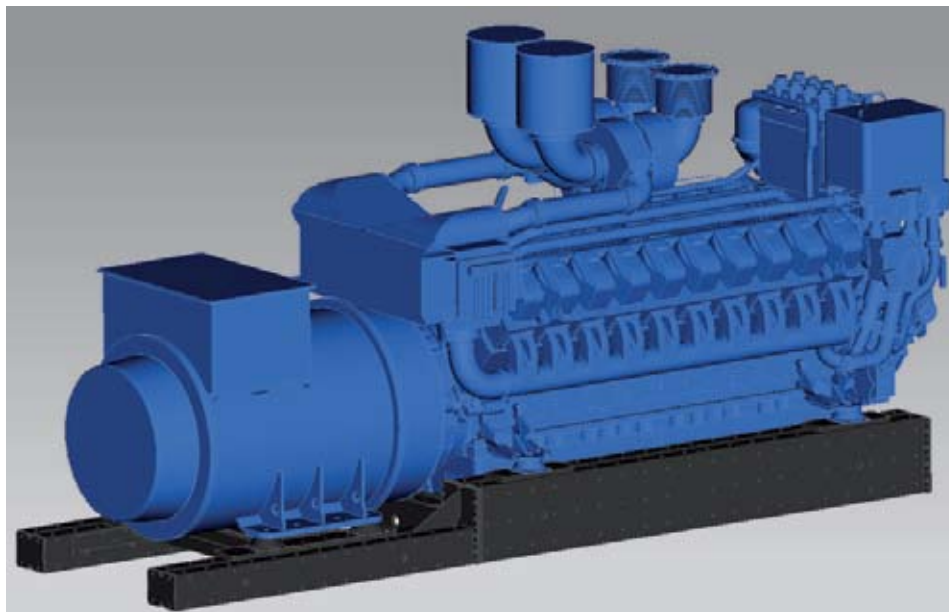
DIESEL GENERATOR SET  
Fuel Consumption Optimized  
775/850 kVA

Machine Set

# Diesel Generating Set

## Type AGS0820M

### 775/850 kVA



Torsion-free base frame made of laser-cut, welded tilted steel profiles; machine group is mounted on base frame with rubber feet which allow the machine group to vibrate; however, there is no transfer of vibration to frame; eyelets for crane hooks included in base frame; engine and alternator are connected with steel flange coupling;

#### Genset Data

Prime power (PRP)	775 kVA
Emergency power (EP)	850 kVA
Power factor (cos phi)	0.8
Nominal voltage	400 V / 230 V
Nominal current	1 119 A
Frequency	50 Hz
Speed	1 500 min
Load acceptance	approx. 40 %

#### Dimensions and Weights

Open Set	
Length	-
Width	-
Height	-
Weight	6 000 kg
Sound Proof	
Length	6 100 mm
Width	2 440 mm
Height	2 590 mm
Weight	10 000 kg

#### Fuel System<sup>4</sup>

Fuel consumption at		
100 % load		168.1 l/h
75 % load		126.7 l/h
50 % load		87.4 l/h
25 % load		47.9 l/h
Specific fuel consumption at		
100 % load		202 g/kWh
75 % load		203 g/kWh
50 % load		210 g/kWh
25 % load		230 g/kWh
Fuel tank capacity (Open Set)		-
Fuel tank capacity (Sound Proof)		-
Autonomy at full load (Open Set)		-
Autonomy at full load (Sound Proof)		-

#### Noise Emission<sup>5</sup>

Sound power <sub>WA</sub> (Container)	110 dB(A)
Sound pressure <sub>PA</sub> @ 7m (Container)	-

## Engine Data

Manufacturer	MTU
Type	12V 2000 G65
Configuration	4 cycle; V; 12 cylinder Diesel
Aspiration	turbo charged with charge air cooler
Displacement	23.88 l
Gross output - Prime power (PRP)	695.0 kW
Gross output - Emergency power (LTP)	765.0 kW
Compression ratio	16.0:1
Governor type	electronic
Oil capacity (sump)	67 l
Oil consumption	< 1.0 % of fuel consumption
Starting voltage	24 V
Exhaust emission standard	TA Luft 4000 (Edition 1986)

## Combustion Air

Combustion air volume	3 060 m <sup>3</sup> /h
Air cleaner type	dry; replaceable element with safety cartridge

## Exhaust System

Max. exhaust gas temperature	555 °C
Max. exhaust back pressure	85 mbar
Exhaust gas flow	8 280 m <sup>3</sup> /h

## Heat Rejection

Heat rejection to coolant	310.0 kW
Heat rejection to charge air cooler	135.0 kW
Heat rejection to engine radiation and convection	40.0 kW
Heat rejection to alternator radiation and convection	37.7 kW

### Legend:

<sup>1</sup>PRP (Prime Power) is available at a variable load for unlimited hours. Adjustable permanent output 100 %, no time restrictions. Prime Power is in accordance with ISO 8528. A 10 % overload capacity is available for limited time in accordance with ISO 3046, AS 2789, DIN 6271 and BS 5514.

<sup>2</sup>LTP (Limited Time Power) is applicable for supplying power to a constant electrical load for limited hours in the event of a main power network failure. No overload is permitted. LTP is in accordance with ISO 8528.

<sup>3</sup>max. additional output in kVA (PRP).

<sup>4</sup>Fuel consumption according to MTU datasheet.

<sup>5</sup>at 75 % load, according to EU directive 2000/14/EG

## Alternator Data

Manufacturer	Aggretech
Type	ACG0800-4-400
Mechanical protection (IP class)	IP 23
Insulation class	H
Excitation	brushless, self-exciting synchronous alternator
Voltage control	electronic, self-regulating +/- 1 %
Short circuit capability	3x nominal current
AC wavefactor total harmonic distortion	< 2 %
Radio interference	EN 55011 Class B, Group 1
Efficiency (cos phi 0,8 / 400V) at	
100 % load	94.4 %
75 % load	94.3 %
50 % load	93.4 %
Cooling air volume	6 360 m <sup>3</sup> /h

## Cooling System

Standard of cooling system	water cooled
Fan power consumption	38.0 kW
Cooling air flow	63 720 m <sup>3</sup> /h
Coolant temperature (at engine outlet in front of cooling equipment)	95 °C
Max. coolant temperature after engine (Alarm)	97 °C
Max. coolant temperature after engine (Shutdown)	102 °C
Coolant flow rate	40 m <sup>3</sup> /h
Operating pressure	2.2 bar
Max. pressure in cooling system	-
Max. pressure loss in external cooling system	0.7 bar

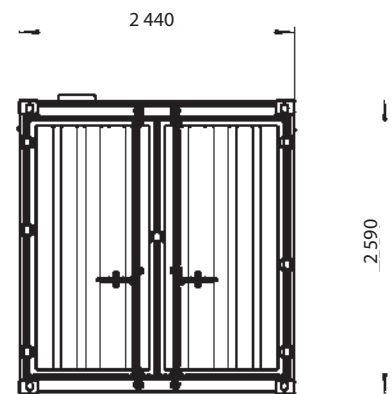
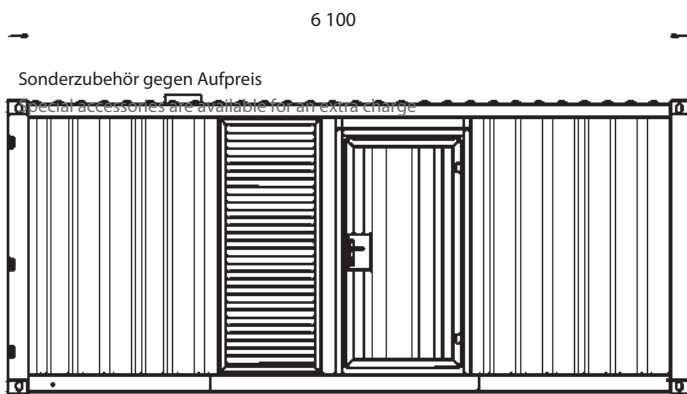
### Quality standards:

VDE 0530, DIN 6280, ISO 8528, IEC 34, BS 4999, BS 5000, BS 5514; We are certified specialist according to §19 I WHG.

All performance figures are to be understood for ambient conditions as follows: ambient temperature 25 °C, 100 m above sea level, rel. humidity 30 %.

We reserve the right to change specifications without notice.

# Diesel Generating Set Type AGS0820M 775/850 kVA



Your authorised dealer

Drawings are not true to scale.

Weights refer to the dry weights and represent a set with standard features. Accessories and loose parts are not accounted. Drawings are for illustrative purposes only and might include special accessories.

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