

## Technical Data

### BA.A-M712

570KW / 712KVA  
520KW / 650KVA

### Diesel Generating Set

Standby Power (50Hz)  
Prime Power (50Hz)

#### General Features:

- Engine (MTU/12V2000G23)
- Radiator 50C max, fans are driven belt, with safety guard
- 24V charge alternator
- Alternator: single bearing alternator IP23, Insulation class H/H
- Absorber
- Dry type air filter, double fuel filter, oil filter  
Coolant filter
- Main line circuit breaker
- Permanent Magnet Generator (PMG)
- Standard control panel
- Two 12V batteries, rack and cable
- Ripple flex exhaust pipe, exhaust siphon, flange, muffler
- User manual



Generator Ratings						
Prime Ratings (KW/KVA)	Standby Ratings (KW/KVA)	Standby Amps	P.F (COS $\phi$ )	Phase	HZ	Voltage
520/650	570/712	935	0.8	3	50	440/254
520/650	570/712	991	0.8	3	50	415/240
520/650	570/712	1028	0.8	3	50	400/230
520/650	570/712	1083	0.8	3	50	380/220

**Prime Power (PRP):** Prime power is available for an unlimited number of annual hours in variable load application, in accordance with GB/T2820-97 (eqv ISO8528) ; A 10% overload capability is available for a period of 1 hour within a 12-hour period of operation.

**Standby Power Rating (ESP):** The standby power rating is applicable for supplying emergency power for the duration of a utility power interruption. No overload, utility parallel or negotiated outage operation capability is available at this rating.

#### Sales Promises

Bargh afshan alborz provides a full line of brand new and high quality products. Each and every unit is strictly factory tested.

Warranty is according to our standard conditions: a, 15 months, counted on the day Bargh afshan alborz sold to the first buyer; b, One year after installation; c, 1000 running hours (accumulated); subject to the earlier one. Service and parts are available from Bargh afshan alborz or distributors in your location.

## Technical Data

BA.A-M712 Diesel Generating Set	
<b>ENGINE DATA</b>	
Manufacturer / Model:	MTU/12V2000G23, 4-cycle
Air Intake System:	Turbo, Air/Air DC
Fuel System:	Electronic Fuel Injection System
Cylinder Arrangement:	12 in "V"
Displacement:	23.88L
Bore and Stroke:	130*150 (mm)
Compression Ratio:	16.0:
Rated RPM:	1500rpm
Max. Standby Power at Rated RPM:	625KW/886HP
Governor Type:	MDEC
<b>Exhaust System</b>	
Exhaust Gas Flow:	132.6m <sup>3</sup> /min
Exhaust Temperature:	550°C
Max Back Pressure:	5 kPa
<b>Air Intake System</b>	
Max Intake Restriction:	3 kPa
Consumption:	47.4 m <sup>3</sup> /min
Air Flow:	726 m <sup>3</sup> /min
<b>Fuel System</b>	
100%( Prime Power) Load:	136.5 L/h
75%(Prime Power) Load:	124.5 L/h
50%(Prime Power) Load:::	92.4 L/h
<b>Oil System</b>	
Total Oil Capacity:	82 L
Oil Consumption:	0.5% fuel consumption
Engine Oil Tank Capacity:	67 L
Oil Pressure at Rated RPM:	620-720kPa
<b>Cooling System</b>	
Total Coolant Capacity:	174 L
Thermostat:	82-95°C
Max Water Temperature:	102°C

## Technical Data

### BA.A-M712 Diesel Generating Set

#### ALTERNATOR SPECIFICATION

##### GENERAL DATA

Compliance with GB755, BS5000, VDE0530, NEMAMG1-22, IED34-1, CSA22.2 and AS1359 standards.

##### Alternator Data

Number of Phase:	3
Connecting Type:	3 Phase and 4 Wires, "Y" type connecting
Number of Bearing:	1
Power Factor:	0.8
Protection Grade:	IP23
Altitude:	≤1000m
Exciter Type:	Brushless, self-exciting
Insulation Class, Temperature Rise:	H/H
Telephone Influence Factor (TIF):	<50
THF:	<2%
Voltage Regulation, Steady State:	±1%
Alternator Capacity:	670KVA
Alternator Efficiencies:	94.9%
Air Cooling Flow:	1.035 m <sup>3</sup> /s

##### GENERATING SET DATA

Voltage Regulation:	±5%
Voltage Regulation, Stead State:	±1%
Sudden Voltage Warp (100% Sudden Reduce):	+20%
Sudden Voltage Warp (Sudden Increase):	-15%
Voltage Stable Time (100% Sudden Reduce):	≤4S
Voltage Stable Time (Sudden Increase)	≤4S
Frequency Regulation, Stead State:	0-5% adjustable
Frequency Waving:	≤0.5%
Sudden Frequency Warp (100% Sudden Reduce):	+10%
Sudden Frequency Warp (Sudden Increase):	-7%
Frequency Recovery Time (100% Sudden Reduce):	≤3S
Frequency Recovery Time (Sudden Increase):	≤3S

## Technical Data

BA.A-M712 Diesel Generating Set		
Options		
Engine	Fuel System	Control System
Heater 2KW & 4KW Battery Charger 3.5A & 7A	Daily Fuel Tank Base Fuel Tank Water Separator Fuel Level Sensor	Auto Control Panel Remote Control Panel Auto Transfer Switch (ATS) Paralleling System
Anti-Condensation Heater Drop CT (For Paralleling)	Rainproof Type Soundproof Type Container Type	Engine Parts Drawing List Spare Parts
Dimension & Weight		
Standard Configuration (Open Type)	With Base Fuel Tank	Soundproof Type
Overall Size: 4000 (mm) *1580 (mm) *2110 (mm) Weight: 5300kg	Overall Size: 4000 (mm) *1580 (mm) *2030 (mm) Weight: 5350kg	Overall Size: 20'ft container Weight: 6950kg

## Technical Data

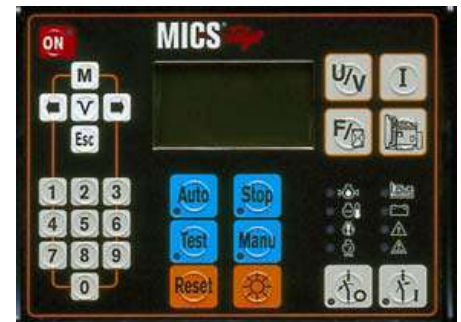
**BA.A-M712 Diesel Generating Set**

Standard Control Panel

Auto Module Control Panel

**Auto Module Control Panel** is the configuration for nobody on duty controlling generators. This kind of panel adopts auto module control system, with large LCD display to show the menu.

TELYS Microprocessor control panel Type S2500



Features: **S2500**-can receive remote output signal from ATS and realize auto start and stop of generators.

**S5000**-Auto Mains Failure controller, can realize all functions of S2500, furthermore can detect ATS and control directly.

### Auto Parallel Control Panel

**Automatic Parallel Control Panel** This new automatic parallel system adopts intelligent modules, inserted and folded installed, no need the peripheral relay and logic circuit.

TELYS Microprocessor control panel Type S7000



The main switch adopts electronic breaker or frame breaker, combined together with the generator, which is very reliable. One generator, one panel. The panel can be used both for singly and parallel. It is only need to parallel generator with such panel when the capability needs to be enlarged in the future.