BLADON MICRO TURBINE

MTG12

12kVA MULTIFUEL MICRO TURBINE POWER

OUTPUT RATINGS

	PRIME	STANDBY
230Vac 50/60Hz	**12kVA[1]**	**12kVA[2]**
@1.0 Power Factor	**12kW[1]**	**12kW[2]**

Mechanical Technical Data

Engine Make	**Bladon**
Engine Model	**MTG12**
Engine Speed (rpm)	**65,000 to 135,000**
Cooling System	**Air cooled**
Total Lubrication System Capacity (L)	**n/a (Air bearing technology)**
Combustion Air Flow @ 100% Load (kg/s)	**0.14**
Exhaust Gas Flow (kg/s)	**0.15**
Fuel Consumption @ 25% load (L/hr)[3]	**2.2**
Fuel Consumption @ 50% load (L/hr)[3]	**3.2**
Fuel Consumption @ 75% load (L/hr)[3]	**4.3**
Fuel Consumption @ 100% load (L/hr)[3]	**5.6**
Base Fuel Tank (L)	**1000/1500 (Optional equipment)**

Dimensions

Length (m)	**2.1**
Width (m)	**1.01**
Height (m)	**1.4**
Weight (kg)[4]	**920**

Electrical Technical Data

Alternator Manufacturer	**Bladon**
Output Voltage Range (V)	**230 1ph**
Output Frequency (Hz)	**50/60 end user configurable without affecting fuel consumption**
Earthing Configuration	**TN-S**
Performance Class (ISO 8528)	**G2**
Circuit Breaker	**3 pole MCB**
Internal Battery Voltage (V)	**48 (4 x 12)**
Internal Battery Capacity (Ah)	**65**
Automatic Transfer Switch - ATS	**Optional equipment**
Battery Charger	**Optional equipment**

Environmental Capability

Ambient Temperature (°C)[5]	**-10 to +45**
Humidity (%)	**0 to 100**
Altitude (m)[5]	**0 to 2000**
Maximum Windspeed (m/s)	**50**
Canopy Ingress Protection Rating	**IP24**

Other Characteristics

Emissions Class	**EU Stage V**
Sound Pressure @ 7m (dB L_{PA})[6]	**60**
Sound Pressure @ 7m with Super Quiet Pack (dB L_{PA})[6]	**55 (Optional equipment)**
Control Panel	**Deepsea DSE 7320**
Remote Monitoring	**Deepsea DSE 890 with 4G and RS485**
Base Frame	**Powder coat over zinc phosphate coated steel**
Enclosure	**Powder coat over zinc phosphate coated steel**
Access Doors	**Lockable**

Compatible Fuels

The Bladon Micro Turbine is capable of running on a multitude of fuels including variable ratio mixes. These fuels include Bio-diesel, Kerosene, Paraffin and Diesel. Please refer to your Bladon representative for a full list of the compatible fuels.

Maintenance & Servicing

Design life of 45,000 run hours[7]
Once a year servicing – regardless of run hours[8]

Warranty

24 month or 8760 hour, whichever comes earlier, parts & labour.
Optional extended warranty available by request.

References

1) P.R.P. Prime Power-Continuous power
The power that a generator can supply in continuous service at a variable load for an unlimited number of hours per year while respecting the maintenance intervals established in the environmental conditions stated by the manufacturer according to ISO8528-1. The average power supplied over time and any applicable overload must be less than the percentages stated by the manufacturer.

2) E.S.P Emergency Standby Power
Emergency standby power rating indicates the maximum power output available for a limited number of hours per year during an emergency or a failure of the primary power source. This rating provides the stated capacity for one hour in every 12 hours of operation, whilst respecting the maintenance intervals established in the environmental conditions stated by the manufacturer according to ISO8528-1. The total number of hours at this load must not exceed 200 run hours per year. Overload is not permitted.

3) Nominal fuel consumption using diesel at a density of 0.850kg/L.

4) Weight is provided including coolant and lubricants but without fuel.

5) The output power of the product will de-rate due to altitude or temperature greater than the standard conditions specified in ISO8528. Please refer to your Bladon representative for access to the de-rating table.

6) Sound pressure levels refer to free field conditions: Installation site may influence the values.

7) Subject to Bladon certified maintenance schedule

8) In environments subject to sand and dust storms additional filter maintenance may be required.