

4 Troubleshooting

Wherever no limit values are specified, the technical data in the table refer to the standard heater tolerances of $\pm 10\%$ at an ambient temperature of $+20\text{ °C}$ and at rated voltage under standard conditions.

Electrical components:

The control unit, drive motor for heating air and combustion air fan as well as the glow plug are designed for 12 Volt or 24 Volt.

The temperature sensor and flame monitor (only petrol heater) are not designed for specific voltages.

The fuel specified by the vehicle manufacturer should be used.

Fuel for Air Top 2000 STC D (diesel):

We know of no negative influences to additives.

If fuel is extracted from the vehicle's tank, follow the additive instructions issued by the vehicle manufacturer.

If you change to low-temperature fuel, the heater must be operated for approx. 15 minutes so that the fuel system is filled with the new fuel.

The Air Top 2000 STC D heater is also licensed for use with PME (biodiesel), which complies with ASTM D6751 and DIN EN 14214.

PME not approved for marine application.

4.1 General technical data

| Heater | Operation | Air Top 2000 STC B | Air Top 2000 STC D |
|---|---------------|---|---|
| Type approval | EMC Heater | E1 R10- 04 1085 E1 R122- 00 0216 | |
| Design | | Air heater with evaporator burner | |
| Heat flow | Control range | 1.0 - 2.0 kW | 0.9 - 2.0 kW |
| Fuel | | Gasoline | Diesel #1 Diesel #2 Arctic PME Kerosene |
| Fuel consumption | Control range | 0.1 - 0.2 kg/h (0.14 - 0.27 l/h) | 0.1 - 0.21 kg/h (0.12 - 0.24 l/h) |
| Rated voltage | | 12 Volt | 12 / 24 Volt |
| Operating voltage range | | 10.5 - 16 Volt | 10.5 - 16 / 20.5 - 31 Volt |
| Rated power consumption | Control range | 14-29 W | |
| Permissible ambient temperature: Heater: - Operation - Storage Fuel pump: - Operation - Storage | | -40 to + 40 °C -40 to + 85 °C -40 to + 20 °C (petrol), -40 to + 30 °C (diesel), -40 to + 85 °C | |
| Permissible combustion air intake temperature | | -40 to + 20 °C | |
| Adjustment range for interior temperature | Control range | +5 to + 35 °C | |
| Volumetric heating air flow rate at motor speed | at 0.5 mbar | max. 93 m ³ /h at 4750 U/min | |
| CO ₂ in exhaust gas (permitted function range) | 1 kW 2 kW | 5.0 - 8.0 % 9.0 - 12.5 % | 5.0 ... 8.0 % 9.0 ... 12.5 % |
| Heater dimensions | | Length 311 ± 2 mm - Width 120 ± 1 mm - Height 121 ± 1 mm | |
| Weight | | 2.6 kg | |

Fig. 401 Technical Data Air Top 2000 STC