Air Heaters

Technical Data

Air Top Evo 40

Air Top Evo 40 B (Petrol)
Air Top Evo 40 D (Diesel)

4 Technical Data

Except where limit values are specified, the technical data listed in the table refer to the usual heater tolerances of ±10% at an ambient temperature of +20 °C and at the rated voltage and in rated conditions.

Electrical components:
The control unit, timer*, glow plug and control element are designed for 12 V or 24 V.
The drive unit, fuel pump, exhaust temperature sensor and external room temperature sensor are independent of voltage.

* not for ADR

Fuel for Air Top Evo 40 B / Air Top Evo 55 B (petrol):
The fuel specified by the manufacturer in accordance with DIN EN 228 must be used.

Fuel for Air Top Evo 40 D / Air Top Evo 55 D (diesel/PME):
The diesel fuel specified by the manufacturer in accordance with DIN EN 590 must be used.
We know of no negative influences due 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 Evo 40 D / Air Top Evo 55 D unit is also approved for operation with PME (bio-diesel) which complies with the standard DIN EN 14214.

About table (Fig. 401): Values in brackets apply to the increased heating capacity which is activated for a limited time during each start-up.

Heater	Operation	Air Top Evo 40B	Air Top Evo 55B	Air Top Evo 40 D	Air Top Evo 55 D
Type test permit		EMC: E1 03 5529 (Air Top Evo 40 / Air Top Evo 55) Heater: E1 00 0385 (Air Top Evo 40) Heater: E1 00 0386 (Air Top Evo 55)			
Model		Air heater with evaporation burner			
Heat output	Control range	1.7 to 3.5 (4.0) kW	1.7 to 5.0 (5.5) kW	1.5 to 3.5 (4.0) kW	1.5 to 5.0 (5.5) kW
Fuel		Petrol DIN EN 228		Diesel/Bio-Diesel DIN EN 590 DIN EN 14214	
Fuel consumption	Control range	0.18 to 0.38 (0.43) kg/h 0.25 to 0.51 (0.58) kg/h	0.18 to 0.54 (0.59) kg/h 0.25 to 0.73 (0.80) kg/h	0.15 to 0.36 (0.41) kg/h 0.18 to 0.43 (0.49) kg/h	0.15 to 0.51 (0.56) kg/h 0.18 to 0.61 (0.67) kg/h
Rated voltage		12 V		12/24 V	
Operating voltage range		10.5 to 16 V		10.5 to 16 V/20.5 to 31 V	
Rated power consumption	Control range	15 to 40 (55) W	15 to 95 (130) W	15 to 40 (55) W	15 to 95 (130) W
Permissible ambient temperature: Heater – Operation – Storage		–40 °C to +40 °C –40 °C to +85 °C			
Fuel pump – Operation – Storage		–40 °C to +20 °C (petrol), +30 °C (diesel) –40 °C to +85 °C			
Rotary selector – Operation – Storage		–40 °C to +75 °C –40 °C to +85 °C			
Permissible combustion air intake temperature		–40 °C to +20 °C			
Adjustment range for room temperature	Control range	+5 °C to +35 °C			
Volume flow rate of hot air	against 0.5 mbar	max. 132 (140) m^3/h	max. 200 (220) m^3/h	max. 132 (140) m^3/h	max. 200 (220) m^3/h
Heater dimensions		Length: 423 ± 2 mm Width: 148 ± 1 mm Height: 162 ± 1 mm			
Heater weight		5.9 kg			

Fig. 401 Technical data Air Top Evo 40 / Air Top Evo 55

Setpoint values:

		12 V	**24 V**
Glow plug	At 25 °C Test current: < 5 mA	No marking 0.190 - 0.250 ohms	Green marking 0.740 - 0.940 ohms
Drive unit	Outside	< 6 ohms	
Blow-out temperature sensor	at 25 °C	2,195 ohms	
External temperature sensor	at 25 °C	10,000 ohms	
Exhaust temperature sensor		2,160 ohms	
Undervoltage switch-off (triggering time > 20 s)		≤ 10,5 V	≤ 20.5 V
Overvoltage switch-off (triggering time > 6 s)		≥ 16 V	≥ 31 V

Fig. 402 Setpoint values for resistance values of components