

Ladies and Gentlemen,

Starting from the season of 2008/2009, ESPAR offers heaters of Airtronic family, equipped with a new control unit.

We also took this rearrangement as an opportunity to revise the versions of these heaters and their installation kits. In this circular we introduce the improvements by the rearrangement of the control units as well as the heater versions and its installation kits to you.

New generation of control units for heaters Airtronic/Airtronic M/Airtronic L:

All versions of the Airtronic/Airtronic M heaters have been equipped with new control unit variants and software data sets.

This results in the following innovations:

► **Least heating power level is 900 watt !**

The least power level for the operation have been reduced to 900 watts at Airtronic D4 heaters.

Effect: - **low operating noise**
- **low current consumption**

Note: the least power level of the Airtronic D2 is 850 watt. Those of the Airtronic B4, 1300 watt

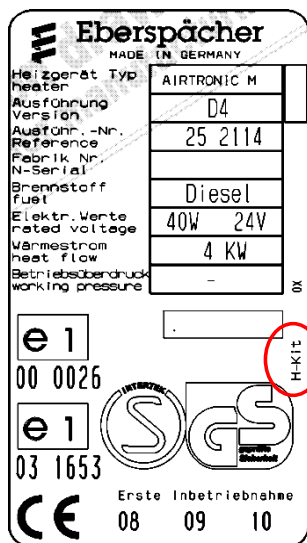
► **Automatic adjustment to the altitude with an optional height kit.**

All heaters with the new control unit are prepared for operation in higher regions > 1400 metres (4600'). With the optional height kit an operation of the heater in regions up from 1400m (4600') until 3000m (9850') are possible. After starting the heater the height sensor which is enclosed with the kit measures the atmospheric pressure and communicate it to the control unit. The control unit adjusts then the frequency of the metering pump. Because of this the heating power in height operation will be reduced by approx. 9% per 1000 m (3280'). In regions below 1400m (4600') the heater works in normal operation with the full heating power.

Example: at the Airtronic D4 (4000 watt max. heating power) the heating power will be reduced by 360 watt per 1000 metres above 1400 meters.

Order data height kit: 22 1000 33 22 00 The height kit should be considered for every Airtronic heater frequently used at elevations above 1400 meters (4600') for extended period of time.

Compatibility:



If you intend an upgrade of an existing heater installation with the height kit, please check at first if the control unit of the heater is prepared for an height operation. There are 3 possibilities to do that:

1. At the right side of the type plate of the heater you will find the information **H-Kit**. If this information is placed, the heater is prepared for the automatic adjustment to the altitude.

This would only be for sure if the heater had its original ECU / Control Unit in it. Also, this does not apply to the Heater Models that come with TriPacs. Model Numbers 25 2440 05 and 25 2441 05 must be checked via the below method by looking at the ECU / Control Unit itself.

2. On the package of the heater (box) is a label on which the order no. of the heater is placed. The last two digits of this number (e.g. 0N) informs about the status (revision) of the heater. In the table of the next page you will find the information up from which heater status a compatibility with the height kit is given.

Pict.: Label on heater ECU – Information about the heater status



Table: Compatibility of heater versions with the height kit up from status:

Type:	Heater no:	up from status:
D2 12V	25.2069.05.0000	.0P
D2 24V	25.2070.05.0000	.0O
B4 12V	20.1812.05.0000	.0D
D4 12V	25.2113.05.0000	.0P
D4 24V	25.2114.05.0000	.0O
B5 12V	20.1859.05.0000	.0F
D5 12V	25.2361.05.0000	.0G
D5 24V	25.2362.05.0000	.0G

3. If ECU on a heater was replaced after repair or upgrade and on some OEM (i.e. TriPac heaters) it may be necessary to check compatibility of the currently installed ECU.

Please use the ID method below to guarantee that the ECU is compatible with the new High Altitude Sensor (the height kit) with Espar Part Number 22 1000 33 2200. Please Refer to white label on the Control Unit after Removing the Heater Cover.



If the bottom white Label on the ECU has the “0C”, “0D” or a later status (revision) code at the end of the 14 digit number it is the new style ECU and is compatible with the sensor. This method of ID will work for all Airtronic Heaters with TriPac or in the aftermarket under model numbers D2 Airtronic 25 2069 05 and D4 Airtronic 25 2113 05. This will guarantee it is compatible.



High Altitude options for Airtronic heaters of previous generations

1. Airtronic D2, D4 and D5 heaters of the current and previous generations may be equipped with the high altitude kit part # 20 2900 70 00 07, which includes High Altitude Compensator module. This module automatically adjusts fuel quantity providing by existing pump for altitudes of up to 3000 meters (9840’).
2. As an alternative Airtronic D2 and D4 heaters of any generation may be equipped with the high altitude pump kit p/n 24 0222 00 00 00. This kit contains extra pump used on high altitudes, manual switch and necessary wiring/piping parts. Can be used on altitudes of up to 3000 meters (9840’).
3. Heater can be upgraded to High Altitude version by replacing ECU with the current version accordingly to heater’s model. Current versions of ECUs are fully backward compatible. Then the height kit **22 1000 33 22 00** can be used.