

New control unit for water heaters Hydronic

Starting from the season of 2008/2009, ESPAR offers heaters of Hydronic 4/5 family, equipped with a new control unit. The control units now have new part numbers. The spare parts list will be updated also.

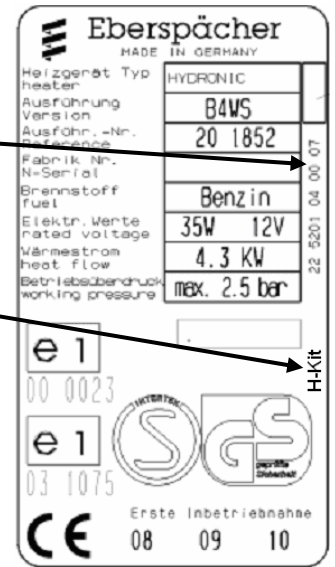
A: Identification of heaters with new control unit:

Below are some possibilities to find out whether a Hydronic - heater is equipped with a new control unit:

1. At the right side of the type plate of the heater the **number of the control unit** is placed (e.g. 22 5201 04 00 07). Is that number equal to the order no. of the control unit in the table at the next page (column: **Order-No. control unit**) the heater is equipped with a new control unit.

Note: to make the identification easier, up from end of October 2008 the type plates of heaters with a new control unit will have the note "H-Kit" at the right side of the plate.

2. On the package of the heater there is a label with the drawing number on it. The last two digits of this number (e.g. **0F**) defines the status (revision) of the heater. In the table of the backside you can look up from which heater-status the new control units are integrated.



Pic.: Label at heater package – drawing no. with status

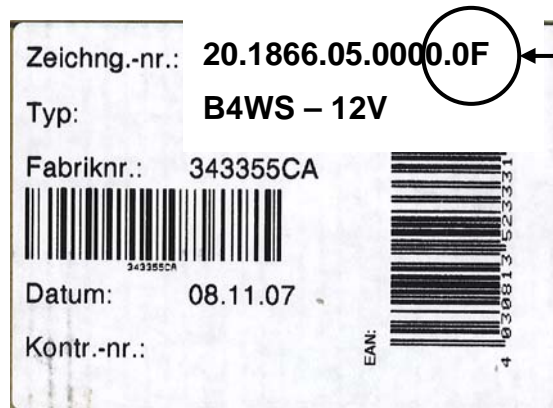


Table: new control units with current heater-status:

Heater type	Part Number	up from revision:	Order no. control unit
Hydronic B5 S - 12V	20 1819 05 00 00	.0G	22 5201 04 00 01
Hydronic D5 S - 12V	25 2217 05 00 00	.0E	22 5201 04 00 11
Hydronic B4 SC - 12V	20 1824 05 00 00	.0G	22 5201 04 00 07
Hydronic D4 SC - 12V	25 2257 05 00 00	.0E	22 5201 04 00 06
Hydronic B5 SC - 12V	20 1820 05 00 00	.0F	22 5201 04 00 01
Hydronic D5 SC - 12V	25 2219 05 00 00	.0E	22 5201 04 00 11

B: The update of the control unit software essentially causes the following innovation:

Automatic adjustment to the altitude with optional height kit:

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

Example: at the Hydronic D5WSC (5000 watt max. heating power) the heating power will be reduced by 450 watt per 1000 metres.

High Altitude sensor:

Part number

22 1000 33 22 00

Note in case of spare parts: it is possible to use previous control units with heaters that have been delivered with a new control unit (if you still have some stock of it). However, you should inform your customer then that the “old” control units do not have “automatic adjustment to the altitude” function.

High Altitude options for Hydronic 4/5 heaters of previous generations and for 24 Volt models

1. Hydronic 4 and 5 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. 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.