FAQ: MODBUS 40

(EN) **Modbus 40**

General

This document should be used as a "tips and tricks" for Modbus 40

- Verify that MODBUS 40 is activated in the heat pump/control units menu, either 5.2 or 5.2.4.

- Verify that the latest software is installed in the heat pump/control unit. Current software can be found in menu 3.1 and the last page, "display version".

- Verify that there is no communication alarm present in the heat pump/control unit. Verify that the Modbus40 have been identified in menu 3.1. The version of the Modbus40 should be 7 or higher.

- Verify that the LOG.SET is correctly created. If not created, then confirm that the maximum time-out is set at 2100ms and the delay between polls is set at 1000ms. These are the settings for manual reading of parameters; parameters that are set through the LOG.SET have maximum 500ms time-out.

- Verify that A & B between AA9-X2 on Modbus 40 and Modbus Master are correctly connected:
A = +, B = -, GND=ground
Also test to replace the cables to verify the function of the cable.

- Modbus40 has fixed settings that cannot be changed according to the picture below.

- Modbus40 has a preset address 1 (0x01) which means that nothing else can be connected in the Modbus Master on address 1, this will cause problems in the communication. With version 10 or higher, an address can be selected depending on the firmware in the heatpump/indoor unit. See table below.

- Reading must be made in "holding register" and the register number must be written in full i.e. 40004 and not 4, 04 004 (0x9C44 written in hexadecimal). From version 10 in Modbus 40, 003 can be used which is the same as 40004.

- Modbus40 uses commando type "Write Multiple registers". "Write Single registers" does not work in the Modbus40

- If you cannot find the list of registers in the Modbus Manager then verify that the version is at least 1.0.8 and the database is at least 4446.

- If the DUC uses PLC standard, the parameter needs to be added with one. Instead of 40004 you will use 40005.

Method	RTU RS-485
Speed	9600 baud
Word length	8 bits
Parity	None
Stop bits	1
Address	0x01 (version 7 or lower)
Address is changeable with Modbus40 version 10 or higher, demands firmware version 4150R7 for F1345 and version 5539 for other heatpumps/indoor untis.	

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