



## AutomatikCentret TTH-6040-W Room Temperature Transmitter Instructions

[Home](#) » [AutomatikCentret](#) » AutomatikCentret TTH-6040-W Room Temperature Transmitter Instructions 



### TTH-6040-W Room Temperature Transmitter Instruction manual



TTH-6040-W is a Modbus-based temperature sensor for wall mounting supplied with a junction box for conversion from 4-core cable to modular Modbus cable. TTH-6040-W is used to measure room temperature for use by ventilation systems.

## Contents

- [1 PRODUCT PROGRAMME](#)
- [2 CONTENTS](#)
- [3 FUNCTION](#)
- [4 TECHNICAL DATA](#)
- [5 SERVICE AND MAINTENANCE](#)
- [6 Documents / Resources](#)
  - [6.1 References](#)
- [7 Related Posts](#)

## PRODUCT PROGRAMME

| Type       | Product                                          |
|------------|--------------------------------------------------|
| TTH-6040-W | Temperature sensor with Modbus for wall mounting |

## CONTENTS

The box contains the following:

- 1 x Temperature sensor for wall mounting
- 1 x Junction box with modular connector
- 3 m QuickPlug™ cable
- 2 x Screws
- 1 x Adhesive pad 50×50 mm

## FUNCTION

TTH-6040-W is a room temperature sensor with Modbus communication for use with an air handling unit equipped with an OJ Air2 Master (rotary selector in position 0). The sensor can also be used with other controllers that support the Modbus protocol.

TTH-6040-W measures room temperature and communicates the result via Modbus. The temperature sensor should be mounted on a flat surface at a representative measuring point. Do not mount the sensor in direct sunlight or where draughts occur. Connect the sensor to the junction box using a 4-core cable (not supplied); see Figure 6. Connect the junction box to the OJ Air2 Master using RJ12 cable. As long as the total cable length is less than 50 metres, no special demands are made on cable type or shielding. The cable should be connected to Modbus port A of the OJ Air2 Master.

## MODBUS

TTH-6040-W uses Modbus RTU, 38400 baud, 1 start bit, 8 data bits, 2 stop bits and no parity.

### Modbus addresses

See Table 1 on page 4.

## TECHNICAL DATA

|                                    |                                 |
|------------------------------------|---------------------------------|
| Supply voltage:                    | 17-28 VDC via bus and terminals |
| Power consumption: Temp. measuring | 0.24 W @ 24 VDC                 |
| Temp. measuring accuracy:          | ±0.3K @ 25°C                    |
| Ambient temperature:               | -10 / +40°C                     |
| Dimensions:                        | 86 x 86 x 25 mm                 |
| Enclosure rating:                  | IP 20                           |
| Weight:                            | 60 g                            |

## FIGURES

|         |                                |
|---------|--------------------------------|
| Fig. 1: | Opening the temperature sensor |
| Fig. 2: | Temperature sensor dimensions  |
| Fig. 3: | Opening the junction box       |
| Fig. 4: | Junction box dimensions        |
| Fig. 5: | Rotary selector                |
| Fig. 6: | Wiring diagram                 |

## SERVICE AND MAINTENANCE

TTH-6040-W contains no components which require service or maintenance. The ventilation holes in the temperature sensor must, however, be kept free of dust and dirt so as to allow free and unrestricted passage. Please contact your supplier if faults arise.

## DISPOSAL AND ENVIRONMENTAL PROTECTION

Help protect the environment by disposing of the packaging and redundant products in an environmentally responsible manner.

### Product disposal



Products marked with this symbol must not be disposed of together with household refuse but must be delivered to a waste collection centre in accordance with local regulations.

### Applied standards

EN 61000-6-2:2005 Electromagnetic compatibility (EMC)

EN 61000-6-3:2007

Electromagnetic compatibility (EMC)

### CE MARKING

OJ Electronics A/S hereby declares that the product is manufactured in accordance with Council Directive 04/31/EEC (and subsequent amendments) on electromagnetic compatibility.

### Applied standards

|                   |                                     |
|-------------------|-------------------------------------|
| EN 61000-6-2:2005 | Electromagnetic compatibility (EMC) |
| EN 61000-6-3:2007 | Electromagnetic compatibility (EMC) |

**OJ ELECTRONICS A/S**

Stenager 13B · DK-6400 Sønderborg

Tel. +45 73 12 13 14 · Fax +45 73 12 13 13

[oj@ojelectronics.com](mailto:oj@ojelectronics.com) · [www.ojelectronics.com](http://www.ojelectronics.com)

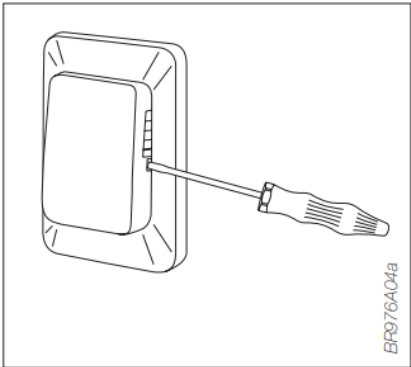


Fig. 1 - Disassemble temperature sensor

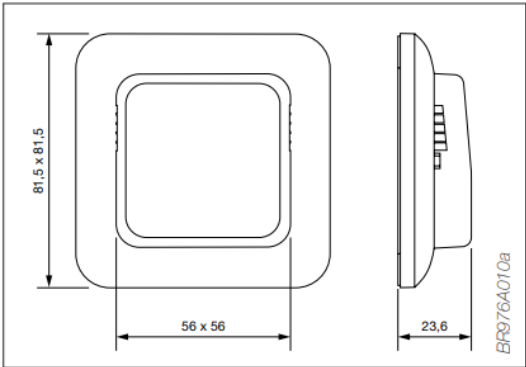


Fig. 2 - Dimensions temperature sensor

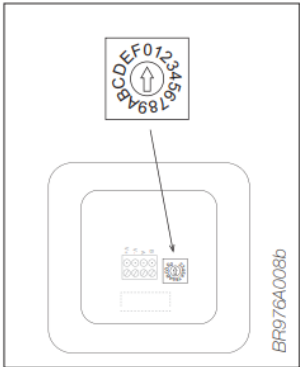


Fig. 5 - Rotary selector

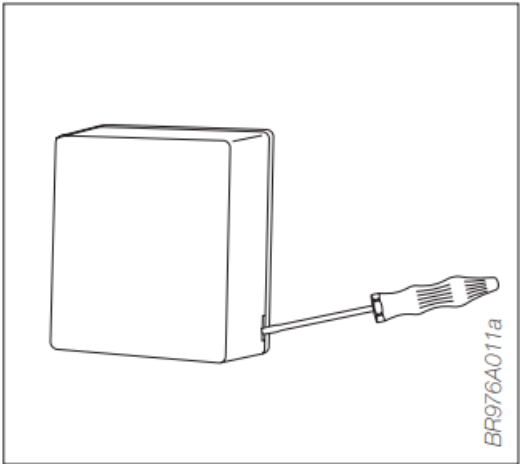


Fig. 3 - Disassembly connection box

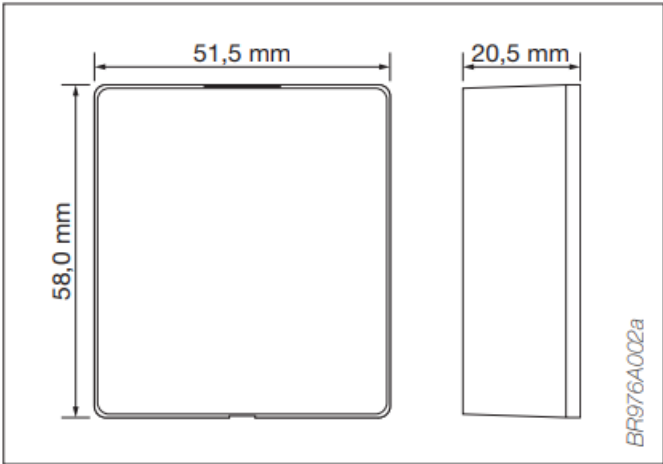


Fig. 4 - Dimensions connection box

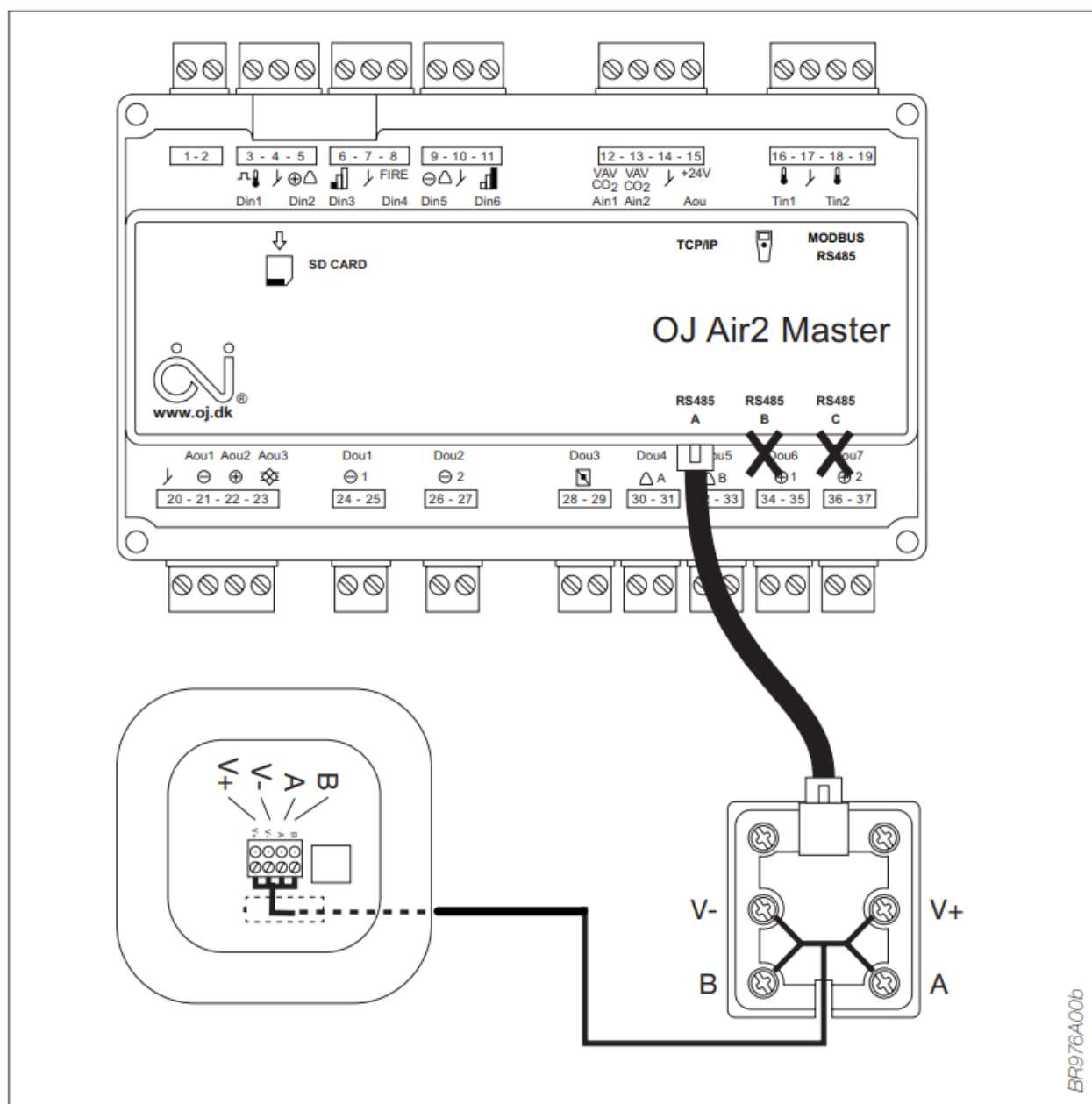


Fig. 6 - Connection diagram

| Position | Modbus adr.            |
|----------|------------------------|
| 0        | 0x10 (hex) / 16 (dec.) |
| 1        | 0x11 (hex) / 17 (dec.) |
| 2        | 0x12 (hex) / 18 (dec.) |
| 3        | 0x13 (hex) / 19 (dec.) |
| 4        | 0x14 (hex) / 20 (dec.) |
| 5        | 0x15 (hex) / 21 (dec.) |
| 6        | 0x16 (hex) / 22 (dec.) |
| 7        | 0x17 (hex) / 23 (dec.) |
| 8        | 0x18 (hex) / 24 (dec.) |
| 9        | 0x19 (hex) / 25 (dec.) |
| A        | 0x1A (hex) / 26 (dec.) |
| B        | 0x1B (hex) / 27 (dec.) |
| C        | 0x1C (hex) / 28 (dec.) |
| D        | 0x1D (hex) / 29 (dec.) |
| E        | 0x1E (hex) / 30 (dec.) |
| F        | 0x1F (hex) / 31 (dec.) |

Tabel 1. Modbus addresses



#### OJ ELECTRONICS A/S

Stenager 13B

DK-6400 Sønderborg

Tel. +45 7312 1314

Fax +45 7312 1313

[oj@ojelectronics.com](mailto:oj@ojelectronics.com)

[www.ojelectronics.com](http://www.ojelectronics.com)

#### Documents / Resources

|  |                                                                                                                                                                                                                                 |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|  | <p><a href="#">AutomatikCentret TTH-6040-W Room Temperature Transmitter</a> [pdf] Instructions<br/> TTH-6040-W Room Temperature Transmitter, TTH-6040-W, Room Temperature Transmitter, Temperature Transmitter, Transmitter</p> |
|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## References

- [!\[\]\(6841ca9b0e023296428e7c9e683b9367\_img.jpg\) OJ Electronics – Know-how Creates Strong Partnerships](#)
- [!\[\]\(e258e347e7683f87061f627f84598eb5\_img.jpg\) OJ Electronics – Know-how Creates Strong Partnerships](#)

Manuals+.