Danfoss RTS2 Combined Radiation and Room Temperature Sensor Installation Guide

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Danger!
This device may only be installed by a qualified electrician in accordance with the circuit diagram in the operating instructions. The existing safety regulations must be observed.

Contents

Application

This sensor was specially developed to record the room and/or radiation temperature in residential, hotel and office rooms under normal ambient conditions.

Function

There are 4 NTC sensors in the sensor housing, two act as room temperature sensors, the other two are glued directly into the black hemisphere as radiation sensors. This combination allows, for example, when the room is not occupied, the reduced temperature or frost protection to be monitored by the room sensor, and when the room is occupied, the radiant heat can be recorded by the radiation sensor. In the case of combined heating systems, it is possible to regulate the "feel good temperature" which is determined from the room and radiation temperature using a suitable evaluation device

Technical specifications

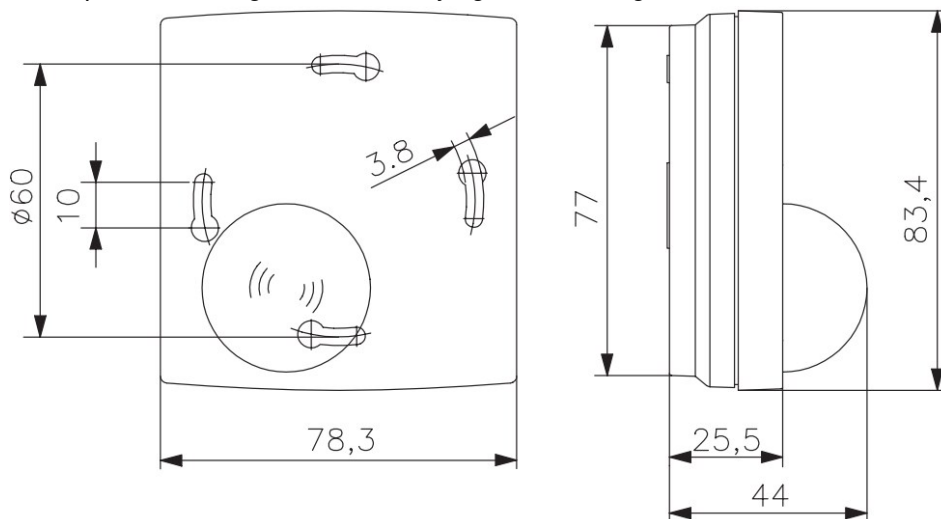**Degree of protection:** IP30
Ambient temperature: -20 … +70°C
Measurement current: < 1mA
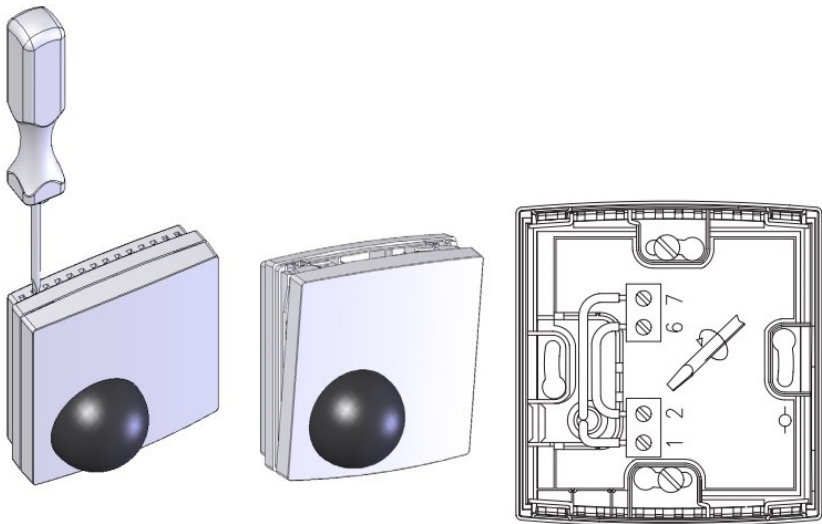**Ball pressure test** : 75°C
Pollution Degree: 2

Electrical connection: screw terminals (0.14 … 1.5 mm2), cable length max. 50 m, (only for use with safety extra low voltage, max. 30V~ / 42V4)

Avoid parallel routing with lines carrying mains voltage or use shielded lines.
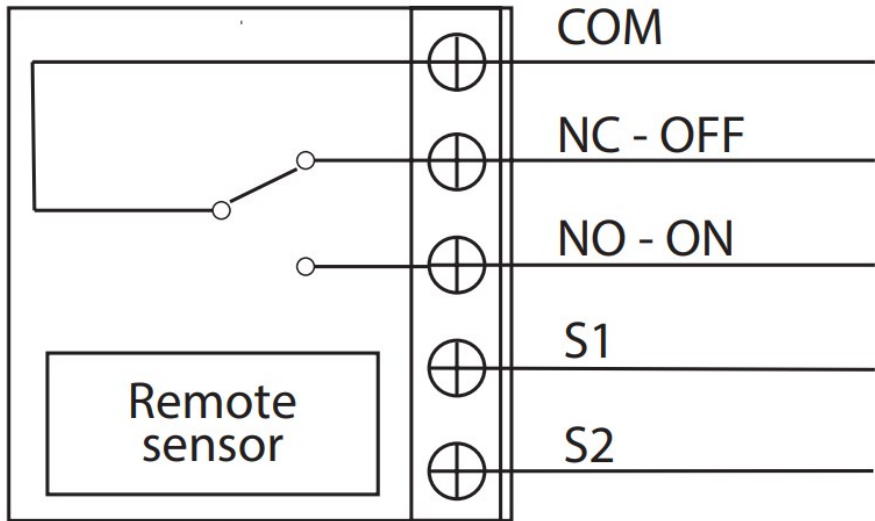

Mounting

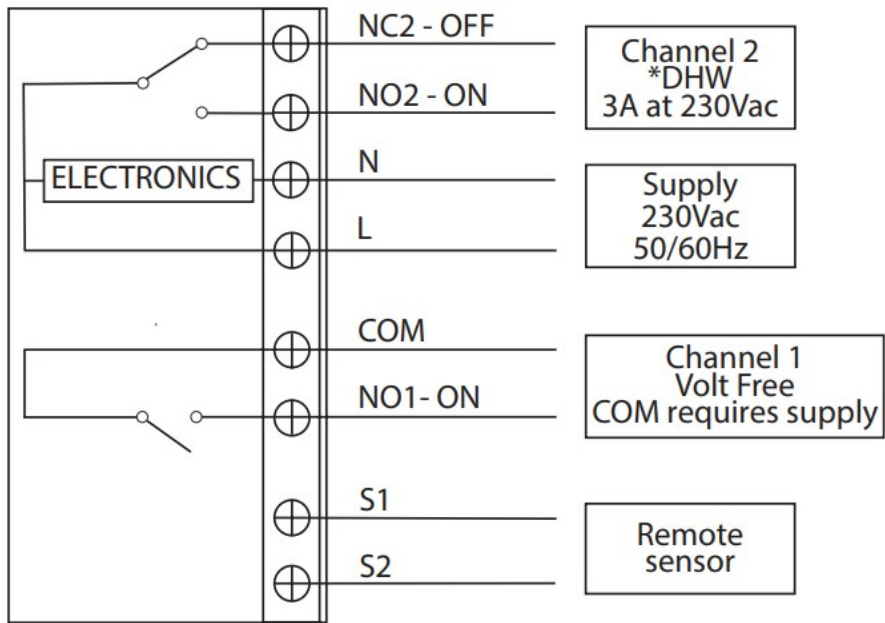**Wall mounting or installation on an UP box Colour:** pure white, similar to RAL 9010, hemisphere in black.

Wiring Diagram

TPOne B

COM	
NC - OFF	
NO - ON	
S1	
Remote sensor	S2

TPOne M

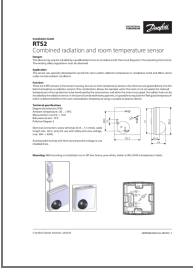|	
NC2 - OFF	Channel 2 *DHW 3A at 230Vac
NO2 - ON	
N	Supply 230Vac 50/60Hz
L	
COM	Channel 1 Volt Free COM requires supply
NO1- ON	
S1	Remote sensor
S2	

RTS2 needs to be connected on S1 and S2

Documents / Resources

Danfoss RTS2 Combined Radiation and Room Temperature Sensor [pdf] Installation Guide
RTS2 Combined Radiation and Room Temperature Sensor, RTS2, RTS2 Temperature Sensor, Combined Radiation and Room Temperature Sensor, Combined Radiation Sensor, Room Temperature Sensor, Temperature Sensor, Sensor

Manuals+,