

KRT-1B Room control unit

Application

For use in conjunction with THERMO RH500 heating controllers and controllers in the INTEGRAL range, for measurement and adjustment of the room temperature.

Incorporates:

- programme extension switch to extend the heating time.
- manual switch to change the operating mode.



KRT-1B

Technical Data

Setpoint adjustment range	± 4 K (in increments of 1 K)	
Sensor measuring range (T1)	-50 ... 150 °C	
Sensor correction range (T1)	± 2.5 K (trimming potentiometer)	
Programme extension switch	1, 2 or 4 hr extension time	
Mode selector switch	☉ Auto ✨ Day ☾ Night	
Connection:		
T1 sensor	2 wire, interchangeable	
Operating mode switch	3 wire	
Max. cable length	170 m	1.5 mm ² Cu
	110 m	1.0 mm ² Cu
	(max 2 Ω per conductor)	
Protection class	III ⚡	
Protection standard	IP30 to IEC529, DIN 40050	
Ambient temperature:		
Operation	0 ... 50 °C	
Storage	-30 ... 70 °C	

Principle of operation

Using the setpoint adjuster the setpoint programmed into the controller may be adjusted by ± 4 K.

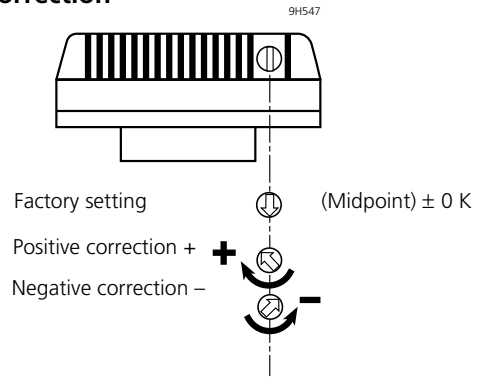
Using the programme extension switch (marked "party" on the unit), the comfort temperature can be extended by either 1, 2 or 4 hours. The extension time selected is indicated by an LED. If an extension time is selected during Day mode, this is memorised and the change-over to *Night* mode will be delayed by time selected. If an extension time is selected during *Night* mode, the controller will immediately switch to *Day* mode. When the extension time has elapsed, the normal programme will be resumed.

The operating mode selector switch may be used to select constant day or night mode irrespective of the controller programme. Switching to *Night* mode results in control at the setback temperature.

The temperature sensor is fitted with a silicon element with a positive temperature coefficient, i.e. one whose resistance increases as the temperature rises.

The temperature sensor (T1) may also be corrected by ±2.5 K with the trimming potentiometer, which is built into the base of the device and can be adjusted through an aperture in the housing.

T1 sensor correction



Construction

The unit is supplied in a standard multi-part plastic housing. (For description and dimensions see 1718)

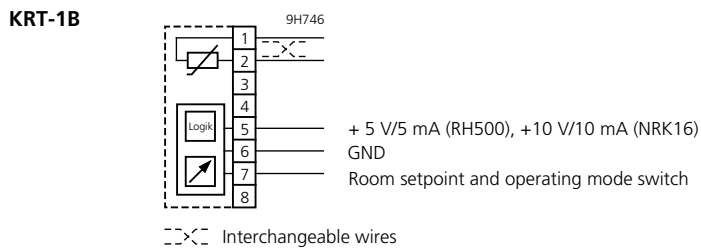
Mounting instructions

The room control unit should be mounted approximately 1.5 m above floor level. If the temperature sensor is used, locations where it will be exposed to undue influences from heat, draughts and moisture (e.g. next to doors, windows and fireplaces) should be avoided; locations with poor air circulation (e.g. corners, niches) should also be avoided.

A frame is supplied as an accessory for surface mounting.

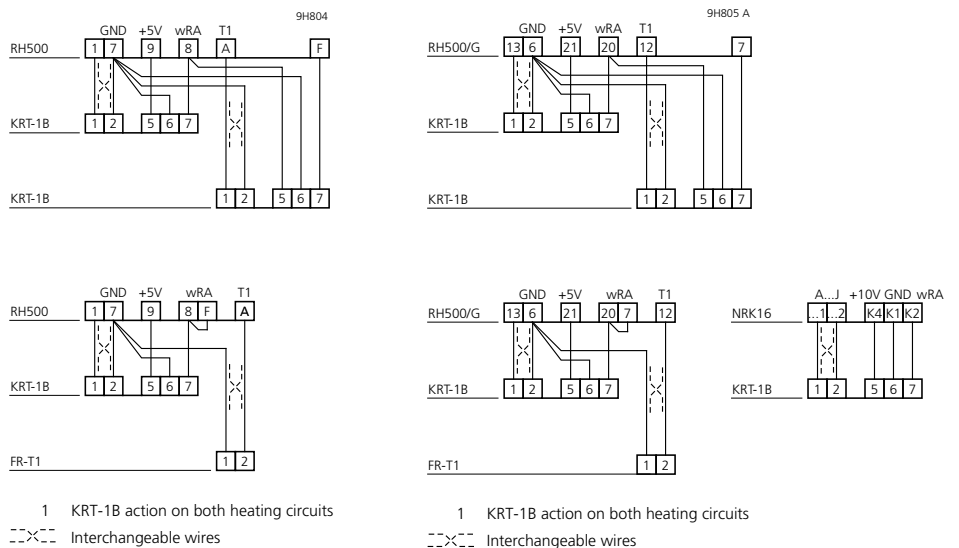
Terminal layout

(max. 2 KRT-1B per controller)



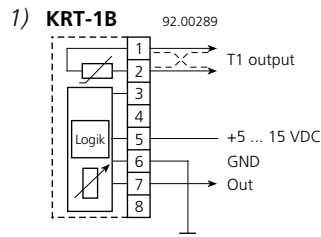
Connection diagram

(max. 2 KRT-1B per controller)

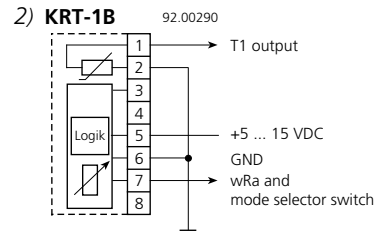


Connection diagrams - staefa integral RS

Terminal layout

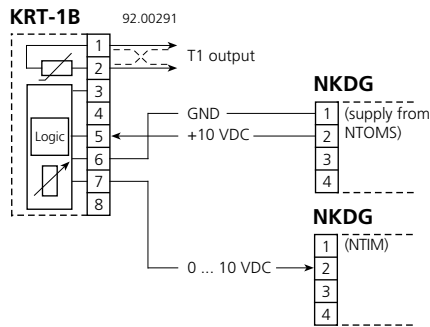


1) Standard, 5-wire

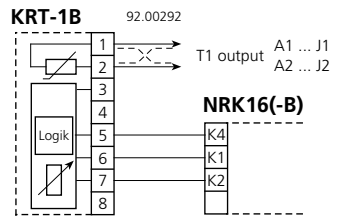


2) Alternative, 4-wire

INTEGRAL RSM (see Note 1)



INTEGRAL RSA (see Note 2)



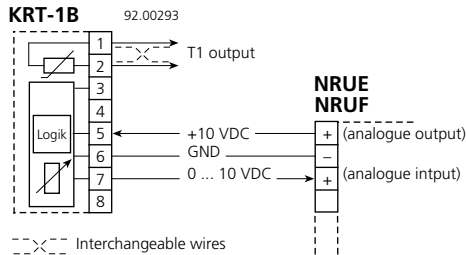
Note

1) Only one KRT-1B or 1 KRT-1L may be fitted per NTOM(S) output module carrier i.e. max. 1 KRT-1B for NRUA, NRUB max. 2 KRT-1B for NRUC, NRUD

2) Only one KRT-1B or KRT-1L may be fitted per RSA or RSC module

For KRT-1L specification, see catalogue sheet 1613.

INTEGRAL RSC (see Note 2)



A separate order is required for the SAPIM macro used to process the switch functions.

---x--- Interchangeable wires

