

PBA

Room operating unit

Room operating unit for individual room control in HVAC systems.

Used in conjunction with the PRONTO PRFA., PRONTO IRC PRU/A, PRFB., PRVU, SMART SMVU or INTEGRAL RS controllers.

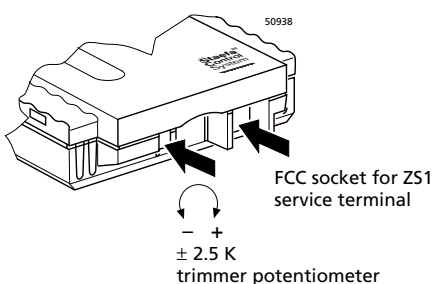
- T1 temperature sensor
- ± 3 K setpoint adjuster
- Socket for ZS1 service terminal (for PRONTO IRC only).



PBA

Technical data

Product data	
Operating range	0 ... 50 °C
Sensor element	T1 (PTC)
Trimmer range	± 2.5 K
Setpoint adjustment	± 3.0 K, stepless (rotary knob)
Connections	
Screw terminals	2.5 mm ²
Service socket	FCC 4/4 pin
Weight without unit base (including packaging)	0.09 kg
Dimensions (w x h x d)	80 x 135 x 37 mm
Colour	
Housing	NCS 0003-R20B
Operator elements	NCS 1005-R20B
Safety	
Product safety	EN 61010-1
– Contamination level	2 (normal, non-conductive contamination)
Electrical safety	SELV
General ambient conditions	
Usage	For indoor use
Operating temperature	0 ... 50 °C
Storage temperature	– 25 ... 70 °C
Ambient humidity	Max. 65 %rh annual mean, non-condensing
Conforms to	CE requirements



Principle of operation

The room temperature is measured with a built-in *T1 temperature sensor* (PTC silicon resistance element, see sheet 1713. If a sill-line sensor is used (such as the PFB-T1), the room temperature sensor must not be connected (see "Terminal layout", page 2).

The *stepless rotary knob* on the room operating unit allows the setpoint defined in the connected controller to be reset locally by ± 3 K.

The measured sensor signal can be recalibrated by ± 2.5 K by use of the *trimmer potentiometer* on the underside of the room operating unit

An *FCC telephone socket* is provided on the underside of the unit for connection of the ZS1 service terminal, used in conjunction with the PRONTO IRC controllers for parameter-setting and diagnostics.

Ordering information

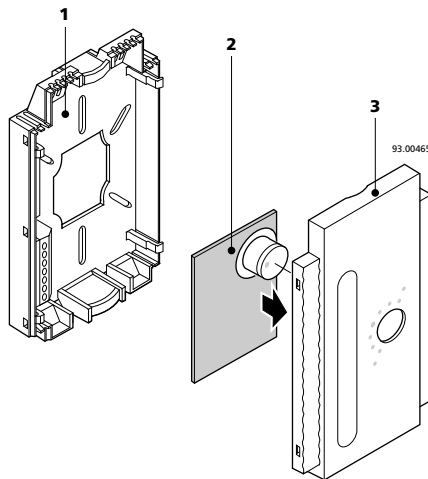
The base unit and electronic assembly are supplied separately and must be ordered as separate items:

- PBA Electronic assembly (without base unit)
- PB1 Base unit with transparent protective cover
- 22845 Service cable for ZS1 service terminal

Ordering example

- PBA** (Electronic assembly)
- PB1** (Base unit)
- 22845** (Service cable)

Construction



1 PB1 base unit with 7 connection terminals

Not shown: Temporary transparent cover (recyclable PET) to protect the base unit after mounting.

PBA assembly, comprising:

- 2 Printed circuit board with rotary knob for setpoint adjustment
- 3 Unit cover

Mounting

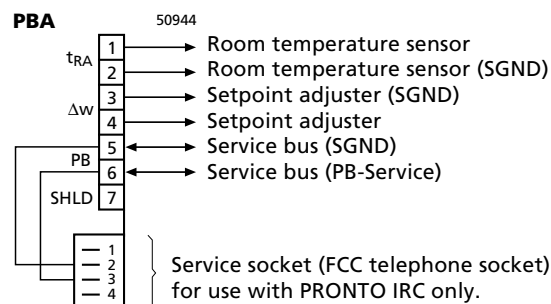
Mounting instructions (Ref. 35642) are enclosed with the operating unit. The room operating unit may be flush-mounted in a wall box or screwed directly onto a wall.

Note the following, when using the built-in temperature sensor:

- Mount in the occupied area, approximately 1.5 m above floor level and at least 0.5 m from any adjacent wall.
- Do not expose to direct sunlight.
- Do not mount on external walls, in recesses, behind curtains or in the vicinity of chimneys, doors and lamps.

See sheet 1659 for dimensions and further mounting instructions.

PBA terminal layout



Connection to the controller

Use twisted pair cable to connect the PBA room operating unit and the controller. Screening is not required.

See the relevant controller description for:

- Connection diagrams.
- Cable types and admissible lengths.

Commissioning / Service

To set the PRONTO IRC controller parameters and read controller data, the ZS1 service terminal may be connected to the FCC telephone socket on the room operating unit (see page 1). It is then possible to set the parameters of all controllers connected to the same trunk.

Initialisation is only possible with the ZS1 connected directly to the relevant controller.

If there is no requirement for communication with the controllers from the room operating unit, there is no need to wire the service bus (see "Terminal layout", page 2).

