

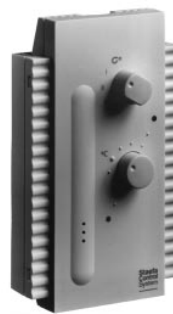
PBAS

Room operating unit for fan-coil systems

Room operating unit for individual room control in HVAC systems.

Used in conjunction with the PRONTO PRFA.. and PRONTO IRC PRU/A and PRFB.. controllers

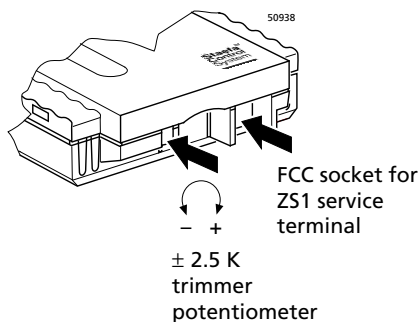
- T1 temperature sensor
- ± 3 K setpoint adjuster
- Fan speed switch
- Socket for ZS1 service terminal (with PRONTO IRC only)



PBAS

Technical data

Product data	
Operating range	0 ... 50 °C
Sensor element	T1 (PTC)
Trimmer range	± 2.5 K
Setpoint adjustment range	± 3.0 K, stepless (rotary knob)
Rotary switch, volt free	Fan speeds 0 – I – II – III
– Contact rating	Max. AC 250 V Max. 6 A resistive Max. 2 A inductive
– Voltage against earth	Max. 250 V
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)
– Overvoltage category	II with transient overvoltages of up to 2500 V
Electrical safety	SELV-E (PELV to IEC 364-4-41)
General ambient conditions	
Usage	For indoor use
Operating temperature	0 ... 50 °C
Storage temperature	– 25 ... 70 °C
Ambient humidity	10 ... 90 % rh, non-condensing
Conforms to	CE requirements



Ordering information

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

- PBAS Electronic assembly (without base unit)
- PB3 Base unit with transparent protective cover (delivered in packs of 10 units)
- 22845 Service cable for ZS1 service terminal

Ordering example

- PBAS** (Electronic assembly)
- PB3** (Base unit)
- 22845** (Service cable)

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).

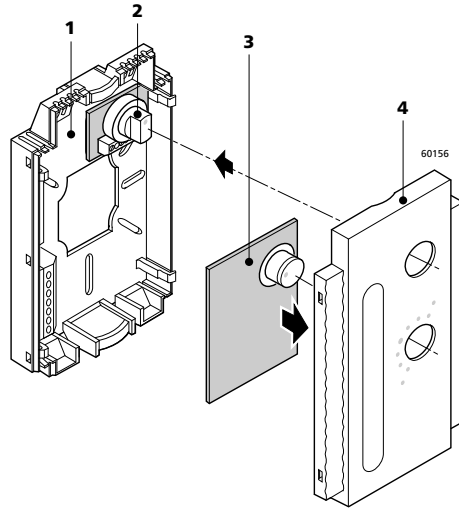
The *stepless rotary knob* on the room operating unit allows the setpoint defined in the controller to be reset by ± 3 K.

The 4-position *rotary switch* is provided for control of the fan.

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

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

Construction



PB3 base unit comprising:

- 1 Base unit with 7 connection terminals
 - 2 Switch assembly with 4 connection terminals for fan control.
- The above is designed to snap into position.

Not shown: Temporary transparent cover (recyclable PET) to protect the base unit and the connection terminals during the construction phase.

PBAS electronic assembly, comprising

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

Mounting

Mounting instructions (Ref. 35642) are enclosed with the operating unit.

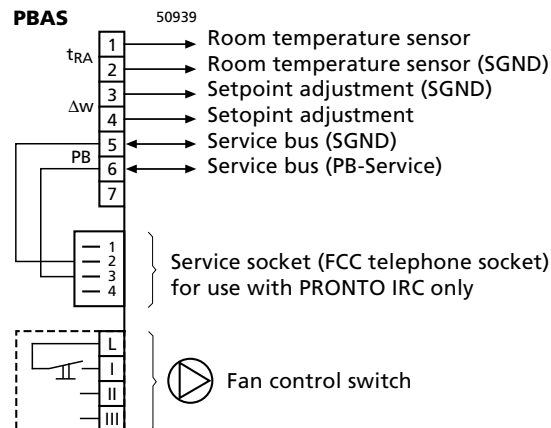
The room operating unit may be flush-mounted in a wall box or screwed directly onto a wall.

When using the built-in temperature sensor, the following must be noted:

- 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.

PBAS terminal layout



Connection to the controller

Use twisted pair cable to connect the PBAS 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).

