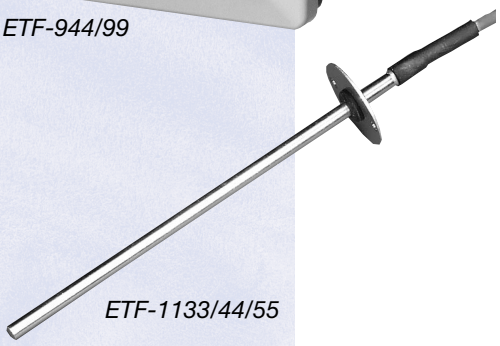
Temperature controller EFRP-91

- 24V proportional regulator
- DC output 0-10V or 10-0V
- Temperature range 0/+40°C
- Adjustable P-band
- Setback of temperature by external timer
- Wall mounting

EFRP-91

ETF-944/99



ETF-1133/44/55

Application

EFRP is used as an external regulator for power controllers EFR and EFM (see catalogue 6) for a modulating regulation of room temperature in air duct systems with electrical heating surfaces.

In systems with water-based heating/cooling surfaces EFRP is used for regulating a desired room temperature via the valve actuator. EFRP can also be used in combination with step controller ETT-6 for regulating modulated controlled electrical heating surfaces, air condensers, compressors or gas boilers.

Product programme

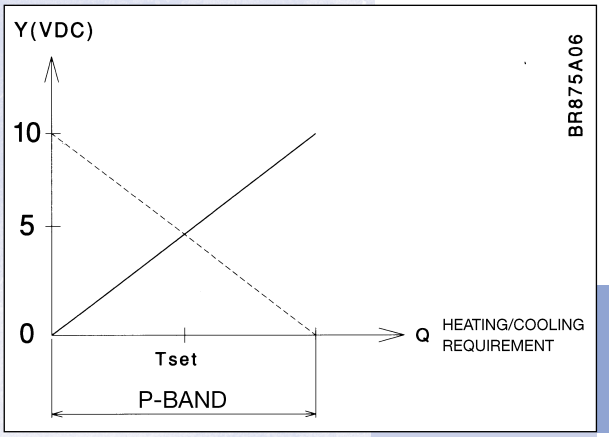
Type	Product	EAN-No.
EFRP-91	Regulator for wall mounting with built-in sensor	5703502540856
Accessories for EFRP-91*		
ETF-144/99	Universal sensor for floor and ceiling etc.	5703866101069
ETF-944/99-H	Room sensor for wall mounting	5703502500379
ETF-1144/99	Duct sensor with adjustable flange	5703866100406
ETNK	Coverbox for wall mounting	5413656100911

**) Remove the jumper from its recepticle for connection of remote sensor.*

Function

EFRP has a temperature range of 0/+40°C. It submits a 0-10V DC control signal in proportion with the temperature deviation. The proportional band is adjustable. The control signal is 10V when the sensor indicates a temperature which corresponds to the preset temperature –0.5 × P-band. When the sensor temperature corresponds to the preset temperature +0.5 × P-band, the control signal is 0V.

The control signal can be changed to 10-0V.



Technical data

Supply voltage	14-24V DC or 24V AC ±10%
Power consumption	max. 30 mA
Temperature range	0/+40°C
DC-output	max. 2 mA, 0-10V DC
Regulation mode	proportional
P-band	adjustable 1-6°C
Setback temperature	adjustable 3-10°C
Ambient temperature	–10/+50°C
Dimensions	L/84 × W/84 × D/27 mm
Housing	IP 30

Setting
Proportional band
Temperature setback
Room temperature
0-10V, 10-0V

Proportional band: Setting is made on the potentiometer behind the front panel.

Temperature setback: Setting is made on the potentiometer behind the front panel. Activation of setback temperature must be done via potential free contact in remote contact timer.

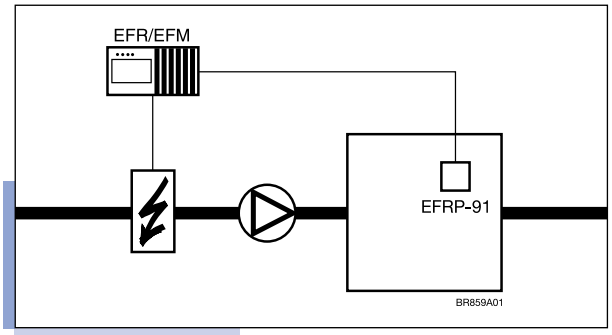
Mounting
EFRP-91 is with built-in sensor and is mounted on the wall in the room, where the temperature should be controlled. By removing the factory-mounted jumper the remote sensor can be connected.

Supply
The EFRP is supplied with voltage from output controller type EFR or EFM, or from separate 24V AC supply.

Control signal
The control signal is connected to the 0-10V DC terminals on the power controller type EFR or EFM or damper/valve motor.

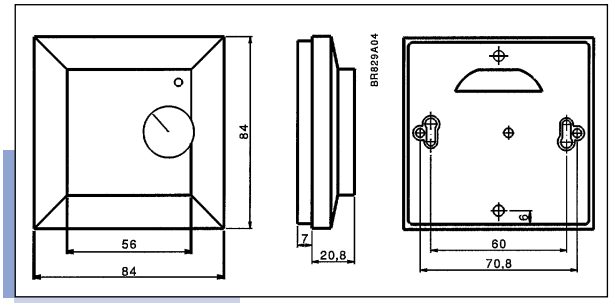
If a 10-0V control signal to damper/valve motor is desired, the jumpers SW1, SW2 are set as shown in. *See connection/electrical diagram.*

Application examples



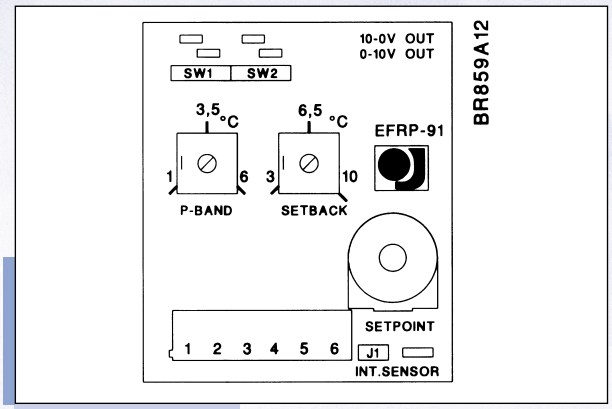
Constant room temperature (P control)

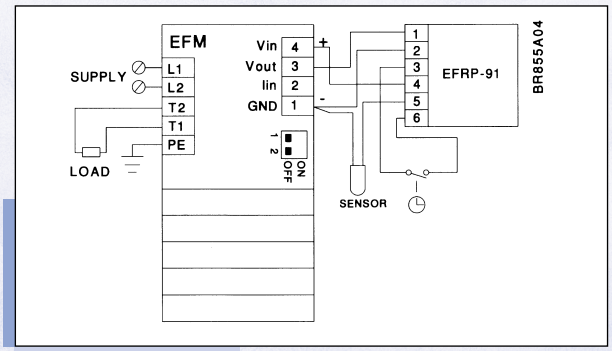
Dimensions



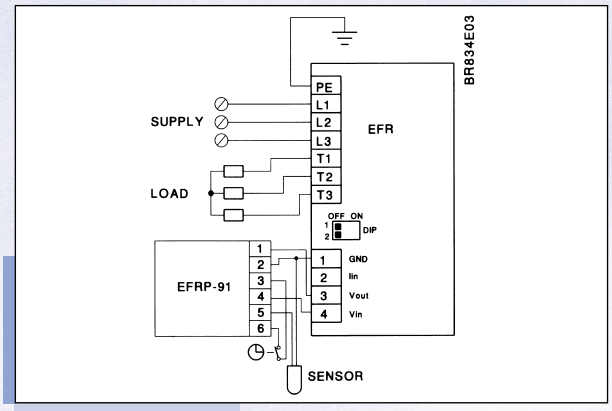
EFRP-91

Connection diagrams

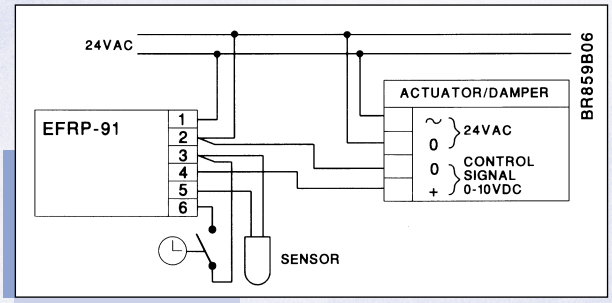




The regulator EFRP-91 is supplied from EFM



The regulator EFRP-91 is supplied from output controller EFR



The regulator EFRP-91 is connected to actuator (external voltage supply)