

## TSUP: Room-temperature transducer

For measuring the room temperature in occupied rooms; used in conjunction with pneumatic *centair* control systems. Conforms to the regulations on pressure equipment (97/23/EG Art. 3.3). Housing plinth of anthracite-grey (RAL 7016) light alloy; force-balance system with nozzle-ball. Bimetal measuring element. Cover of thermoplastic with pure-white (RAL 9010) front plate; compressed air supplied via push-on connector for soft plastic tubing of Ø 4 mm internal diameter. Measurement connection M4.

| Type  | Measuring range<br>°C | Output pressure<br>bar    | Weight<br>kg            |
|---|-----------------------|---------------------------|-------------------------|
| <b>TSUP 1 F001</b>  | 5...35                | 0.2...1.0                 | 0.17                    |
| Supply pressure <sup>1)</sup><br>via external restrictor Ø 0.2 mm | 1.3 ± 0.1 bar         | Permissible ambient temp. | 0...70 °C               |
| Air capacity, air consumption                                     | 33 l <sub>n</sub> /h  | Connection diagram        | <a href="#">A02781</a>  |
| Linearity   | < 2%                  | Dimension drawing         | <a href="#">M303048</a> |
| Time constant (0.2 m/s)   | 5 min                 | Fitting instructions      | MV 23153                |

### Accessories

- [0296218 000\\*](#) Buckle-proof adaptor for push-on fitting.
- [0296990 000\\*](#) Buckle-proof adaptor for screw-type fitting; see MV 7322.
- [0303124 000\\*](#) Recessed junction box.
- [0310315 000\\*](#) Surface junction box.

<sup>\*)</sup> Dimension drawing or wiring diagram are available under the same number

- <sup>1)</sup> In the RCP and RPP 20 controllers, the restrictors (Ø 0.2 mm) are fitted at inputs 3 and 4.  
See Section 60 on regulations concerning the quality of supply air, especially at low ambient temperatures.

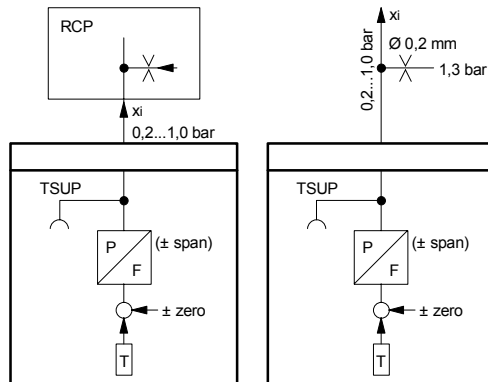
### Operation

As the temperature rises, the bimetal strip bends and exerts a corresponding force on the nozzle-ball system. This converts the force into a pressure change. The output pressure increases as the temperature rises.

### Technical information

Technical manual: *centair* system 304991 003

### Connection diagram



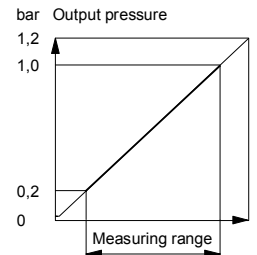
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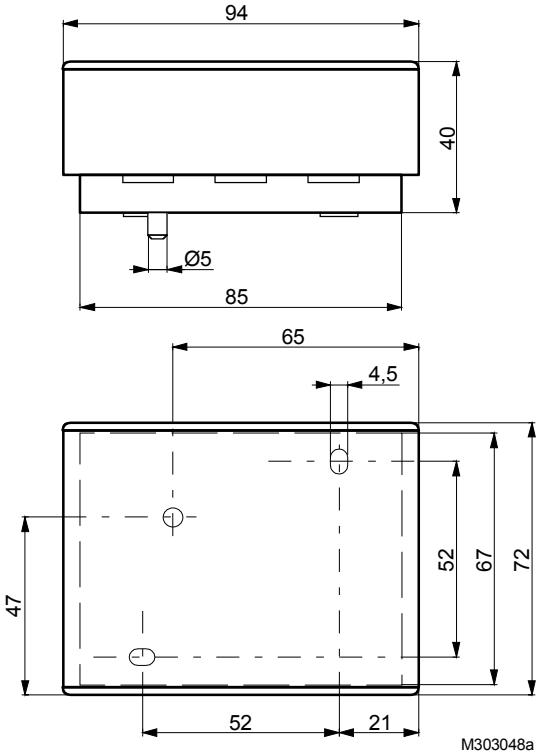


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Dimension drawing



Accessories

