Product data sheet 21.165

TSHK 670...672: Fan-coil room-temperature controller, heating/cooling sequence

How energy efficiency is improved

Enables controlling of HVAC components according to needs.

Features

- Room temperature can be set as the setpoint using the printed temperature scale
- · Gradual transition from heating to cooling through sequence characteristic
- · Variants with master switch plus slide switch for the fan
- · Suitable for wall mounting or fitting on recessed junction boxes
- · Electronics unit and switching relay
- · Setpoint adjuster with mechanical min. and max. limitation of the setting range
- · Quasi-continuous temperature control
- · Two-point pulsed activation
- · Individual unitary temperature control in residential and business rooms for activating e.g. electric heating systems, thermal actuators, or fans or cooling units in air-conditioning systems.

Technical data

recillical data		
Power supply		
	Power supply	230 V~, approx. ±10%, 5060 Hz
Parameters		
	Setting range	530 °C
	Proportional band	2 × 3 K
	Sequence dead zone	2 K ±0,7
	Hysteresis ¹⁾	Approx. ±0.10.5 K
	Shortest switching interval	Approx. 19 min (E = 0.5)
	Time constant in still air	20 min
	Dead time in still air	2 min
	Time constant in moving air (0.2 m/s	s) 15 min
	Dead time in moving air (0.2 m/s)	1 min
Ambient conditions		
7 tillbiolit ochationo	Admissible ambient temperature	055 °C
Outputs		
	Load	10(4) A, 230 V~
	Fan load	6(3) A, 230 V~
Function		
	Operating mode	Heating/cooling sequence; 4-pipe
Construction		
Construction	Weight	0.18 kg
	Housing	Pure white (RAL 9010)
	Housing material	Fire-retardant thermoplastic (fire classification UL94 HB)
	Baseplate	Black thermoplastic with NTC senso
	Cable inlet	At rear
	Screw terminals	For wires of up to 2.5 mm ²
Standards and directives		
	Type of protection	IP 30 (EN 60529)
	Protection class	II (IEC 60730)
	Energy class	I = 1 %
	- 3,	acc. EU 811/2013, 2010/30/EU, 2009/125/EG

The device is pulsed electronically. When the temperature increases, the control factor is reduced to 0 on the "Heating" output and increased to E = 1 on the "Cooling" output. A small temperature variation of ±0.1...0.5 K occurs as a result of pulsing, depending on the time constant of the room



TSHK67*F001







Product data sheet 21.165

Overview of types

Number of switches

TSHK670F001 0 TSHK672F001

	TSHK670	TSHK672
Mains switch ON/OFF	_	•
Fan speeds	_	人人人
Indicators	_	1 LED

Accessories

Type Description

0362239001 Pure white intermediate cover plate, suitable for various recessed junction boxes

Description of operation

The room temperature is measured by an internal NTC temperature sensor and compared with the setpoint applied. Depending on the temperature deviation, an electrical switching relay is activated. When the setpoint is reached, the switch moves to the middle position "Off".

The operating points of the controller are determined by the setpoint, the dead zone and the proportional band.

Intended use

This product is only suitable for the purpose intended by the manufacturer, as described in the "Description of operation" section.

All related product regulations must also be adhered to. Changing or converting the product is not admissible.

Engineering and fitting notes

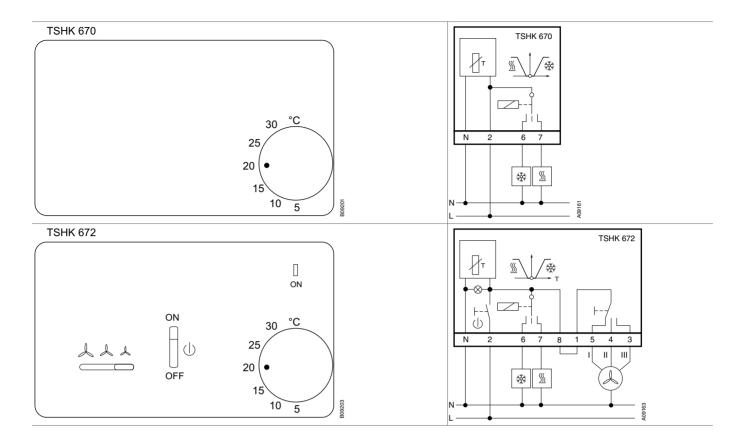
Fitting position: Horizontally on the wall. Avoid draughts and solar radiation. Fitting height approx. 1.5 m. The mechanical limitation of the setpoint adjuster enables individual corrections but prevents energy wastage through extreme settings.

Disposal

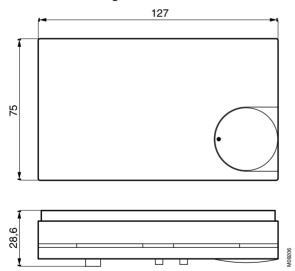
When disposing of the product, observe the currently applicable local laws.

More information on materials can be found in the Declaration on materials and the environment for this product.

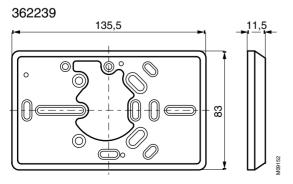
21.165 Product data sheet



Dimension drawing



Accessories



Fr. Sauter AG Im Surinam 55 CH-4016 Basel Tel. +41 61 - 695 55 55 www.sauter-controls.com