# Electric heating element for round ducts EHR-R TR with integrated temperature control



# Dimensions EHR-R TR







Electric heating element EHR-R TR with integrated temperature control. The convenient and easy to install solution for wherever there is a need for constant supply air or room temperature. Electric heating elements EHR-R TR have integrated temperature control and they can be installed in any position in the duct system.

Installation is very easy and space-saving.

# Heating element

Closed tubular heating elementmade of stainless steel with low surface temperature. Duct casing with terminal box made of galvanised steel sheet and integrated temperature control for installation in commercial pipe systems.

Equipped with an automatically resetting temperature limiter (activation temperature 50 °C) and a manually resettable temperature limiter (activation temperature 120 °C).

# Temperature control

Constant supply air temperature control by connecting a duct sensor (TFK, Accessories). Setpoint setting (0 – 30 °C) via potentiometer on outside of unit. Room air temperature control by connecting a room sensor (TFR, Accessories); optional setpoint setting via room sensor TFR or potentiometer. Automatic detection of supply voltage 230 V or 400 V.

Load capacity	16 A
Protection category	IP20

The controllers are continuously variable through time-proportional pulse width control. The ratio between activation time and deactivation time is adjusted to the existing power requirement. The max. switching cycles per time unit stipulated by the electricity suppliers are thus maintained even for high switching capacities.



# Application

EHR-R TR are suitable for constant supply air control and constant room control. In case of rapid temperature changes in the supply air, a Pl control behaviour is achieved; in case of slow changes in room air, the control behaviour corresponds to a P-controller.

An air flow monitoring system is also stipulated for safety reasons.

# Flow monitor

- electronic **SWE** Ref. no. 00065 - mechanical, from NW 315 **SWT** Ref. no. 00080 see product page.

#### Installation instructions

See description EHR-R, page 486.

# Selection and operation

Heating elements create additional pressure loss which must be taken into account for overall system dimensioning. An air flow temperature increase depends on the volume flow and heat output (see diagrams on the right).

In order to prevent unwanted temperature monitor deactivation, the minimum air flow rate (see table) must be maintained.

#### Accessories

### Duct sensor

**TFK** Ref. no. 05005 Temperature sensor for detecting the air temperature in air ducts.

#### Room sensor

**TFR** Ref. no. 05006 Temperature sensor with integrated setpoint adjuster for surface mounting. Also suitable simply as a temperature sensor or simply as a setpoint adjuster.

Туре	Ref. no.	Power	Switch. groups	Curr. con-	Minimum volume flow	Compat. with	Wiring diagram	Dimensions					Weight approx.
			no.	sump.		fan		ØD	Н	L	A	В	
		kW	x kW	А	m³/h	NS mm	No.	mm	mm	mm	mm	mm	kg
1~, 230 V													
EHR-R 0.8/125 TR	05293	0.8	1 x 0.8	3.5	70	125	799.1	125	225	325	125	145	2.6
EHR-R 2.4/160 TR	05294	2.4	2 x 1.2	10.4	110	160	799.1	160	260	380	150	170	3.4
2~, 400 V													
EHR-R 5/200 TR	05295	5.0	2 x 2.5	12.5	180	200	800.1	200	300	380	150	170	4.4
EHR-R 6/250 TR	05296	6.0	2 x 3.0	15	270	250	800.1	250	350	380	150	170	4.8
EHR-R 6/315 TR	05301	6.0	2 x 3.0	15	420	315	800.1	315	415	380	150	170	6.4
3~, 400 V													
EHR-R 9/355 TR	05297	9.0	3 x 3.0	13	550	355	801.1	355	455	380	150	182	8.5
EHR-R 9/400 TR	05299	9.0	3 x 3.0	13	680	400	801.1	400	500	380	150	182	8.9