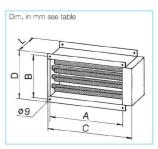
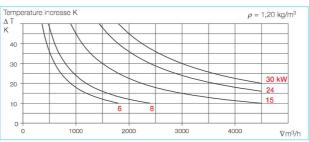
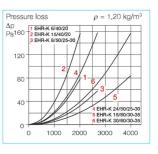
Helios









■ Electric heater battery EHR-K
Heating elements enclosed in a
galvanised casing with MEZ
flanges on both sides for in-duct
installation.

Heating elements with low surface temperature are individually wired to the outer terminal box and coils can be wired in several groups.

Equipped with a thermal switch which opens at 90 °C and resets itself after cooling down. The other thermal switch opens at 120 °C and must be reset manually.

Note

DIN VDE 0100-420 must be observed on site; a proper air flow monitoring and electrical interlocking shall be provided.

Installation

The heater must be installed downstream of the fan. If installing it before the fan, make sure that the air flow temperature at the fan does not exceed the fan's maximum temperature. A rectangular duct with a length of at least 1 metre must be installed between fan and heater. The heater should not be used below the minimum air flow volume of the heater battery. The electrical connection must be interlocked so that the heater cannot operate if the fan is not running. If the thermal switch releases, the heater battery must cut off automatically. The coils can be wired in groups so that the heat output can be reduced arbitrarily.

Selection and operation

The heater batteries generate an additional resistance that must be considered when designing the system.

The temperature increase depends on air flow volume and heat output (see diagrams above).

In order to prevent an unwanted thermal cut out, the air flow volume must be higher than the minimum figure shown in the chart.

Accessories

Electronic temperature control system

Type EHS see table below Controls the heat output of the heating element by monitoring difference between the supply air temperature and the required temperature.

Duct sensor (accessory for EHS)

Type TFK Ref. no. 5005
Temperature sensor for detecting the air temperature in ducting.

Room sensor (accessory for EHS)

Type TFR Ref. no. 5006
Temperature sensor with integrated "desired value encoder" for surface mounting. Can also be used as temperature sensor or as desired value encoder only.

Accessories	Page
Electronic temperature	
control system EHS	427

Type Ref. no.			Motor power	Switching groups no.	Current	Minimum air flow volume		Wiring diagram ¹⁾	Dimensions in mm A B C D L					Weight approx.	Suitable temperature control system	
		kW	x kW	Α	m³/h	nom. size cm	no.						kg	Туре	Ref. no.	
3~, 400																
EHR-K	6/40/20	8702	6	2 x 3	8.7	430	40/20	361.4	423	223	550	250	200	7.3	EHSD 16	5003
EHR-K	15/40/20	8703	15	5 x 3	21.7	430	40/20	366.4	423	223	550	250	320	13.3	EHSD 16	5003
EHR-K	8/50/25-30	8704	8	2 x 4	11.3	680	50/25-30	362.4	523	273/323	650	350	200	9.2	EHSD 16	5003
EHR-K 2	24/50/25-30	8705	24	6 x 4	33.9	680	50/25-30	364.4	523	273/323	650	350	250	17.2	EHSD 30	5004
EHR-K 1	15/60/30-35	8706	15	3 x 5	20.9	980	60/30-35	365.4	623	323/373	750	400	200	12.9	EHSD 16	5003
EHR-K 3	30/60/30-35	8707	30	6 x 5	41.7	980	60/30-35	363.4	623	323/373	750	400	200	19.3	EHSD 30	5004

1) Principal wiring for all types no. 476.2





■ Electric heater battery EHR-R
Heating elements with low surface temperature made of stainless high-grade steel and are
totally enclosed in a galvanised
casing with terminal box for
commercial in-duct installations.

Equipped with a thermal switch which opens at 50 °C and resets itself after cooling down. The other thermal switch opens at 120 °C and must be reset manually.

Installation

The heater must be installed downstream of the fan. If installing it before the fan, make sure that the air flow temperature at the fan does not exceed the fan's maximum temperature. A circular duct with a length of at least 1 metre must be installed between fan and heater. The heater should not be used below the minimum air flow volume of the heater battery. The electrical connection must be interlocked so that the heater cannot operate if the fan is not running. If the thermal switch releases, the heater battery must cut off automatically. The coils can be wired in groups

■ Selection and operation

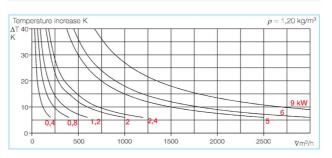
reduced arbitrarily.

The heater batteries generate an additional resistance that must be considered when designing the system.

so that the heat output can be

The temperature increase depends on air flow volume and heat output (see diagrams above). In order to prevent an unwanted thermal cut out, the air flow volume must be higher than the minimum figure shown in the chart.





Accessories

Electronic temperature control system

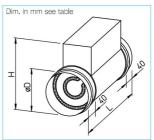
Type EHS see table below Controls the heat output of the heating element by monitoring difference between the supply air temperature and the required temperature.

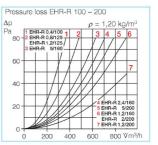
Duct sensor (accessory for EHS) Type TFK Ref. no. 5005

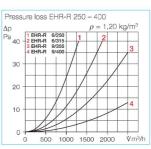
Temperature sensor for detecting the air temperature in ducting.

Room sensor (accessory for EHS)

Type TFR Ref. no. 5006
Temperature sensor with integrated "desired value encoder" for surface mounting. Can also be used as temperature sensor or as desired value encoder only.







	Type Ref. no.		Motor Switching groups no.		Current	Minimum air flow	Fits fan nominal	Wiring diagram ¹⁾	Dimensions			Weight approx.	Suitable temperature control		
			power	groupo no.		volume	size	diagram	ØD	Н	L	арргол.	system		
				kW	x kW	Α	m³/h	mm	No.	mm	mm	mm	kg	Туре	Ref. no.
1~, 230 V															
	EHR-R (0,4/100	8708	0.4	1 x 0.4	1.7	45	100	813	100	185	325	2.0	EHS	5002
	EHR-R (0,8/125	8709	0.8	1 x 0.8	3.5	70	125	813	125	225	325	2.3	EHS	5002
	EHR-R 1	1,2/125	9433	1.2	1 x 1.2	5.2	70	125	813	125	225	325	2.4	EHS	5002
	EHR-R 1	,2/160	9434	1.2	1 x 1.2	5.2	110	160	813	160	260	380	2.6	EHS	5002
	EHR-R 2	2,4/160	9435	2.4	1 x 2.4	10.4	110	160	814	160	260	380	3.0	EHS	5002
	EHR-R 1	,2/200	9436	1.2	1 x 1.2	5.2	180	200	813	200	300	380	2.8	EHS	5002
	EHR-R	2/200	9437	2.0	1 x 2.0	8.7	180	200	813	200	300	380	3.2	EHS	5002
2~, 400 V															
	EHR-R	5/160	8710	5.0	1 x 5.0 parallel	12,5	110	160	815	160	260	380	4.0	EHS	5002
	EHR-R	5/200	8711	5.0	1 x 5.0 parallel	12,5	180	200	815	200	300	380	4.6	EHS	5002
	EHR-R	6/250	8712	6.0	1 x 6.0 parallel	15,0	270	250	815	250	350	380	7.3	EHS	5002
	EHR-R	6/315	8713	6.0	1 x 6.0 parallel	15,0	420	315	815	315	415	380	9.2	EHS	5002
3~, 400 V															
	EHR-R	9/355	8656	9.0	1 x 9,0 im Δ	13,0	550	355	816	355	455	380	12.5	EHSD 16	5003
1	EHR-R	9/400	8657	9.0	$1 \times 9.0 \text{ im } \Delta$	13,0	680	400	816	400	500	380	13.1	EHSD 16	5003
1	Principal	wiring f	or all types	No. 476.2											

DIN VDE 0100-420 must be observed on site; a proper air flow monitoring and electrical interlocking shall be provided.

Accessories Page

Electronic temperature control system EHS 427