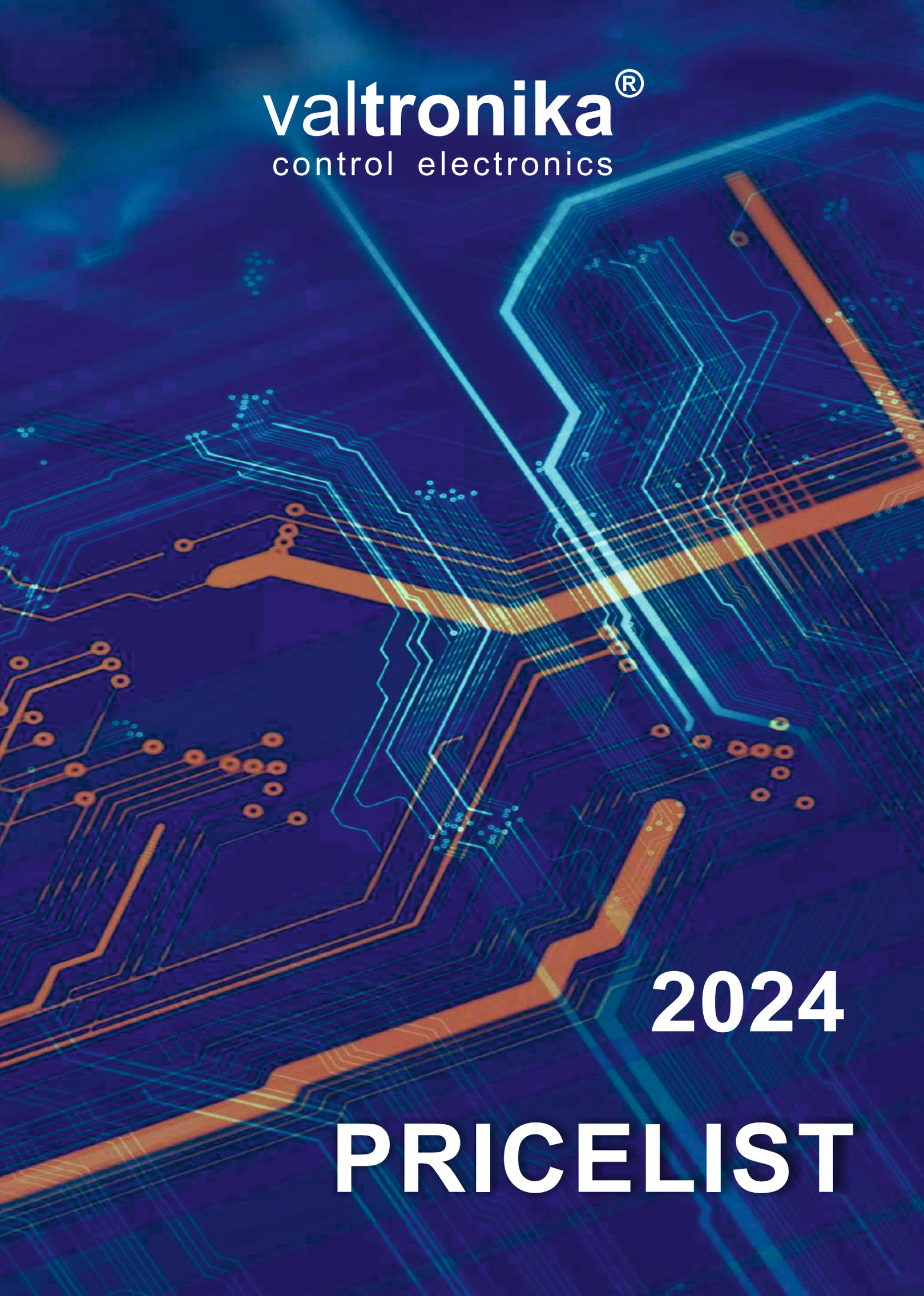
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Contents

Control system for AHU with EC motors, plate or rotary heat exchanger, electric or water heater

DESCRIPTION

The control system is intended to be used for the control of AHU with plate heat exchangers, supply and extract fans with EC motors, supply air electric heater, outside air damper, and plate heat exchanger "Bypass" damper.

For the parameter settings measured data monitoring, a remote control with a touch screen is connected to the control board. The remote control with the control board is connected using the 4-wire cable and data transmitted RS485 MODBUS mode.

For economical and accurate AHU control 4 or 5 (depending on AHU type) temperature sensors are connected to the control board. Temperature sensors help quickly reach the user's defined settings.

For the fan motors control, PCB has 0-10VDC control outputs. PCB has an input for fan motors TACHO or NC feedback signal connection. With TACHO or NC system gets the fan fault signals. The electric heater is controlled by the PID algorithm and this allows to obtain good temperature control accuracy.

The control system has a heat exchanger frost protection function. If the exhaust air temperature drops below the set limit (factory default 1-10) and the freezing risk of the heat exchanger then first according to default settings pre-heaters turn on, then if the exhaust temperature does not rise „Bypass" damper opens. If the exhaust temperature still does not rise above the set limit supply and exhaust fan speeds are altered to raise exhaust air temperature (supply air fan speed is gradually reduced to 30%, then exhaust air fan speed is increased gradually up to 100%).

The system controls the heat exchanger and free-cooling modes.

The control system also can check the status of external signals such as filter pollution from the pressure switch, and fire alarm for the fire alarm system.

TECHNICAL DATA:

- Power supply: 230 VAC, 50 Hz.
- Remote control connection: RS485 MODBUS.
- Temperature setpoint range: 5..30°C.
- Fans rotation speed setpoint range: 20..100 %.
- Air damper actuator control: 230 VAC.
- Electric heater and preheater control: total power 230VAC up to 3,6kW (16A) or 0-10VDC output for heater.
- Fans control signals: 0-10 VDC.
- Fans motors failure signal: pulse.
- Temperature sensors quantity and type: 5 pcs., NTC10K.
- Filter pollution alarm digital input: voltage free, NO.
- Fire alarm digital input: voltage free, NO.
- Dimensions of electrical plate: 90x160 mm.
- Dimensions of remote controller: 86x92x19 mm.

Type	Input voltage [V]	Current[A]	Weight [kg]	Price Eur
RPA-EC-230-3-M6-PE1-8, VT1-15-3.5/P/M6x4NTC	230	16,0	0,6	**351,90**

(Prices without VAT).

Water leakage detection relay LDW

DESCRIPTION

The water leakage detection relay LDW is used to prevent water flooding in the room if there is water leakage in the plumbing system. The water leakage is detected on the floor with a water sensor.

TECHNICAL DATA:

- Power supply: 12 VDC/1,5 A.
- Motorized valve output: max 12 VDC/1,0 A.
- Protection class: IP44.
- Max. ambient temperature: 40°C.
- Dimensions: 80x80x27 mm.

Type	Price Eur
LDW	135,45

(Prices without VAT).

Water leakage detection systems LDRF with radio frequency

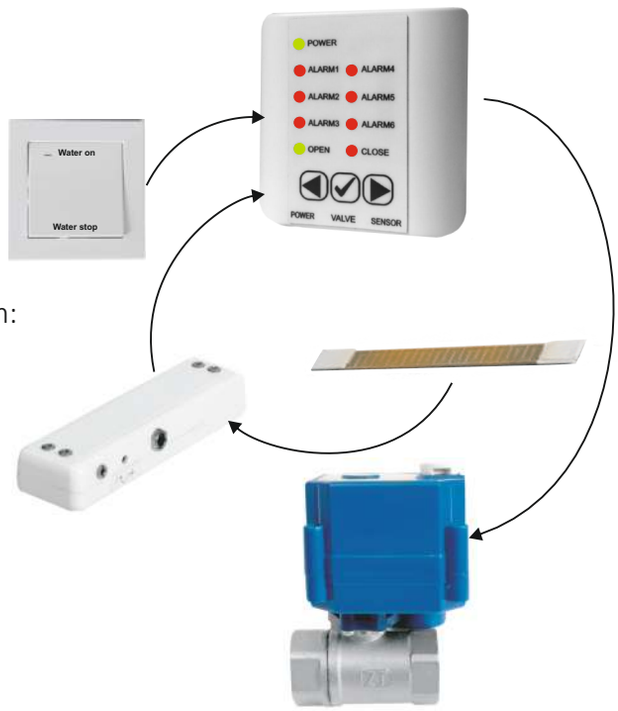
DESCRIPTION

The water leakage detection system with radio frequency LDRF is used to prevent water flooding in the rooms if there is water leakage in the plumbing system. The water leakage is detected on the floor with a humidity sensor.

TECHNICAL DATA:

LDCRF – controller of the water leakage detection system:

- Power supply: 12 VDC/1,5 A.
- Motorized valve output: max 12 VDC/1,0 A.
- Protection class: IP44.
- Max. ambient temperature: 40°C.
- Dimensions: 80x80x27 mm.



LDSRF – remote switch of the water leakage detection system:

- Power supply: 3, CR 2032.
- Protection class: IP44.
- Max. ambient temperature: 40°C.
- Dimensions: 82x82x11 mm.

LDTRF – transmitter of the water leakage detection system:

- Power supply: 5 VDC plugin adapter or 2xAAA 1,5 VDC.
- Protection class: IP44.
- Max. ambient temperature: 40°C.
- Dimensions: 129x40x25,5 mm.

LDHS – humidity sensor of the water leakage detection:

- Connector: 2,5 mm plug.
- Cable: 1,5 m.
- Dimensions: 150x19x0,8 mm.

Type	Price Eur
LDRF	252,00

(Prices without VAT).

Electronic speed controllers ERV..B (230V)

DESCRIPTION

Electronic speed controllers ERV..B are used to change rotation speed by changing the supply voltage of the motor without overheating the external connection. The controller has a minimum speed setpoint inside. The hard start time setpoint inside of the controller. The start from the maximum rotating speed with the time delay to set one with a potentiometer. If the setpoint is 0, the controller will start in the soft mode – minimum to maximum. Controllers ERV..B have an overheat protection function.

TECHNICAL DATA:

- Frequency (Hz):50/60.
- Protection class IP20.
- Protection class IP44 if installed in the flush box.
- Overheat protection: 65°C.
- Max. ambient temperature: 30°C.
- Storage temperature: -35..+ 50°C.

Type	Input voltage [V]	Current [A]	Fuse 5x20mm [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
ERV 0.5B	230	0,5	0,63	80x80x65x60	0,14	**33,70**
ERV 1.5B	230	1,5	2,0	80x80x65x60	0,16	**36,80**
ERV 3.0B	230	3,0	4,0	80x80x65x60	0,18	**39,60**
ERV 4.0B	230	4,0	5,0	80x80x65x60	0,23	**59,95**

(Prices without VAT).

Electronic speed controllers ERV ..T (230V)

DESCRIPTION

Triac speed controllers ERV ..T are designed to change motor rotation speed by changing voltage. Controllers have a triac thermal protection function. The regulation of motor rotating speed is stepless from the set minimum inside of the controller up to full supply voltage on the controller's output. The rotation setpoint can be done with a knob on the cover of the controller. The controllers also have an ON/OFF switch with a green power supply indication. A fuse is installed in the controllers for safety work.

TECHNICAL DATA:

- The regulation of motor rotation speed is stepless from the set minimum inside of the controller up to full supply voltage on the controller's output.
- Minimum output voltage set point range: 60..150 VAC.
- Power supply: 230 VAC.
- Frequency: 50/60[Hz].
- Protection class: IP54.
- Max. ambient temperature 35°C.
- Max. controller temperature 70°C is limited with thermal protection.

Type	Input voltage [V]	Current [A]	Fuse [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
ERV 5.0T	230	0,1-5,0	6,0	125x175x90x75	0,5	**85,70**
ERV 10.0T	230	0,2-10,0	12,5	125x175x90x75	0,6	**98,80**

(Prices without VAT).

Electronic speed controllers ERV ..TMB (230V)

DESCRIPTION

Triac speed controllers ERV ..TMB are designed to change the motor rotation speed by changing the output voltage. Controllers have a function of triac thermo protection. The regulation of the motor rotation speed is stepless from the set minimum inside of the controller up to the full supply voltage on the controller's output. The rotation speed setpoint can be done with a knob which is located on the cover of the controller or with the external control signal 0-10VDC, by the interface RS485 MODBUS. The work mode change of the controller mode can be changed with the external relay contacts. The controllers also have an ON/OFF switch with a green power supply indication. The fuse is installed in the controller for safety work.

TECHNICAL DATA:

- The regulation of motor rotating speed is stepless from the set minimum inside of the controller up to full supply voltage on the controller's output.
- Minimum output voltage set point range: 50..150 VAC ±5%.
- Power supply: 230 VAC ±5%.
- Frequency: 50/60[Hz].
- Protection class: IP54.
- Max. ambient temperature 35°C+5%.
- Max. controller temperature 70°C+5% is limited with thermo protection.

Type	Input voltage [V]	Current [A]	Fuse [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
ERV 5.0TMB	230±5%	0,1-5,0	6,3	125x175x90x75	0,5	**112,53**
ERV 10.0TMB	230±5%	0,2-10,0	12,5	125x175x90x75	0,6	**142,60**

(Prices without VAT).

Potentiometer EC-10

DESCRIPTION

The controller EC-10 is designed for direct control or nominal value present of EC fans with potentiometer input or any application where a DC control signal is required. For the manual control of speed and airflow of electrical fans with 0-10V output. Additionally equipped with an enabling push switch. The jet-proof IP54 enclosure is achieved with the included surface mounting case. Flush-mounting a splash-proof IP44 enclosure is also suitable for highly demanding environments such as bathrooms etc.

TECHNICAL DATA:

- Protection class: IP44/54 .
- Max. ambient temperature 0 to 40°C.
- Weight: 120 gr.
- Control range: 0...20 Kohm.
- Output voltage: 0...10 VDC.
- Switch rating: 3A/250 VAC, 10A/12 VDC.

Type	Switch rating [A/VAC]	Supply voltage [VDC]	Output voltage [VDC]	Ambient temperature [°C]	Dimensions [mm]	Price Eur
EC-10	3/250	10	0...10	0+45	80x80x65x60	**20,90**

(Prices without VAT).

Setpoint potentiometer with relay output ECS10

DESCRIPTION

Setpoint potentiometer with relay output ECS10 is designed to change EC (electronically commutated) motor rotating speed by changing control signal 0..10 VDC. The ECS10 can be also used to change control input DC signals for frequency inverters or other devices that can be controlled by input DC signals. The ECS10 has an enclosure for the surface installation. For the output signal regulation, the voltage 3..15 VDC must be supplied to the ECS10. For enabling the controlled device the ECS10 has relay output. The minimum and maximum levels of the potentiometer output signal can be adjusted with inside-installed trimmers.

TECHNICAL DATA:

- The supply voltage: 3..15 VDC.
- The adjustable output signal is limited with minimum and maximum.
- The relay output is voltage-free for enabling a controlled device.
- The minimum setpoint range: 10..70% of the supply voltage.
- The maximum setpoint range: is 30..100% of the supply voltage.
- The protection class:
  IP44 (ECS10, IP44),
  IP54 (ECS10, IP54).
- The max. ambient temperature: 40°C.
- The max. ambient humidity 90% without the condensation.

ECS10, IP44

ECS10, IP54

Type	Input voltage [VDC]	Dimensions [mm]	Weight [kg]	Price Eur
ECS10, IP44	3..15	80x80x26x32	0,07	**29,80**
ECS10, IP54	3..15	80x80x65x60	0,12	**27,60**

(Prices without VAT).

Controller ECS10-PWM

DESCRIPTION

The controller ECS10-PWM is designed to change EC (electronically commutated) motor rotating speed or to control other devices by changing control signals 0..10 VDC, 2..20 mA or PWM 10..100 %. The selection of signal type can be done with the switch inside the controller. The ECS10-PWM has an enclosure for the surface installation. The power supply 230 VAC must be supplied to the controller ECS10-PWM. For enabling the controlled device the ECS10-PWM has the relay output. The minimum and maximum levels of the potentiometer output signal can be adjusted with inside-installed trimmers.

TECHNICAL DATA:

- The supply voltage: 230 VAC.
- The adjustable output signal is limited with minimum and maximum.
- The relay output is voltage-free for enabling a controlled device.
- The minimum setpoint range: 1..7 VDC, 2..10 mA , PWM 1..70 %.
- The maximum setpoint range: 3..10 VDC, 6..20 mA, PWM 30..100 %.
- The protection class: IP44.
- The max. ambient temperature: 40°C.
- The max. ambient humidity 90% without the condensation.

Type	Input voltage [VDC]	Dimensions [mm]	Weight [kg]	Price Eur
ECS10-PWM	230	80x80x26x32	0,08	**94,39**

(Prices without VAT).

Transformer fan speed controllers RV..B (1x230V)

DESCRIPTION

Transformer controllers RV ..B are designed to change motor rotation speed by changing voltage. Controllers have transformers overheating protection function. The steps have fixed voltages and are switchable with a rotary switch. With a single-speed, the controller can control multiple motors, if the total of all motor's power consumption does not exceed the maximum controller current.

TECHNICAL DATA:

- 5 steps the motor rotation speed controller.
- Power supply: 230 VAC.
- Frequency (Hz):50/60.
- Protection class IP54.
- Max. ambient temperature: 40°C.
- Max. controller temperature 70°C is limited with thermo protection.

Type	Input voltage [V]	Current [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
RV 0.6B	230	0,6	100x120x85x70	1,0	**60,86**
RV 1.2B	230	1,2	100x120x85x70	1,4	**80,50**
RV 1.5B	230	1,5	100x120x85x70	1,6	**82,33**
RV 2.2B	230	2,2	125x175x75x90	2,2	**90,79**
RV 3.0B	230	3,0	125x175x75x90	3,0	**107,43**
RV 4.0B	230	4,0	125x175x115x100	3,2	**119,95**
RV 5.0B	230	5,0	125x175x115x100	3,6	**139,27**
RV 7.0B	230	7,0	240x190x140x125	6,5	**190,32**
RV 11.0B	230	11,0	240x190x140x125	7,6	**215,77**
RV 14.0B	230	14,0	240x190x140x125	11,2	**248,01**

(Prices without VAT). (Without motor thermo protection connection).

Transformer fan speed controllers RV..(1x230V)

DESCRIPTION

Transformer controllers RV .. are designed to change motor rotation speed by changing voltage. Controllers have transformers overheating protection function. The steps have fixed voltages and are switchable with a rotary switch. With a single-speed, the controller can control multiple motors, if the total of all motor's power consumption does not exceed the maximum controller current.

TECHNICAL DATA:

- 5 steps the motor rotation speed controller.
- Power supply: 230 VAC.
- Frequency (Hz):50/60.
- Protection class IP54.
- Max. ambient temperature: 40°C.
- Max. controller temperature 70°C is limited with thermo protection.

Type	Input voltage [V]	Current [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
RV 1.2	230	1,2	125x175x90x75	1,6	**89,44**
RV 1.5	230	1,5	125x175x90x75	1,8	**91,89**
RV 2.2	230	2,2	125x175x90x75	2,2	**102,54**
RV 3.0	230	3,0	125x175x90x75	3,0	**114,74**
RV 4.0	230	4,0	125x175x120x100	3,7	**123,52**
RV 5.0	230	5,0	125x175x120x100	4,1	**160,97**
RV 7.0	230	7,0	240x190x145x125	7,0	**204,16**
RV 11.0	230	11,0	240x190x145x125	8,1	**227,35**
RV 14.0	230	14,0	240x190x145x125	11,2	**264,70**

(Prices without VAT). (With motor thermo protection connection).

Transformer fan speed controllers RT..(3x400V)

DESCRIPTION

Transformer controllers RT .. are designed to change motor rotation speed by changing voltage. All controllers have an overheating protection function. The steps have fixed voltages and are switchable with a rotary switch. With a single-speed, the controller can control multiple motors, if the total of all motor's power consumption does not exceed the maximum controller current.

TECHNICAL DATA:

- 5 steps motor rotation speed controller.
- Power supply: 400 VAC.
- Frequency (Hz):50/60.
- Protection class:
  IP54 (RT 1.0...RT 5.0) – plastic boxes,
  IP44 (RT 7.0...RT 14.0) – metal boxes.
- Max. ambient temperature: 40°C.
- Max. controller temperature 70°C is limited with thermo protection.

Type	Input voltage [V]	Current [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
RT 1.0	400	1,0	240x190x110x90	5,7	**168,93**
RT 2.0	400	2,0	240x190x110x90	8,3	**199,41**
RT 3.0	400	3,0	300x220x140x120	10,3	**224,31**
RT 4.0	400	4,0	300x220x140x120	14,4	**262,26**
RT 5.0	400	5,0	300x220x140x120	16,3	**297,79**
RT 7.0	400	7,0	360x300x165x145	23,3	**381,21**
RT 11.0	400	11,0	380x340x220x200	36,7	**442,43**
RT 14.0	400	14,0	380x340x220x200	38,1	**623,94**

(Prices without VAT).

Transformer fan speed controllers RT..EX (3x400V)

DESCRIPTION

Transformer controllers RT ..EX are designed to change motor rotation speed by changing voltage. All controllers have an overheating protection function. The steps have fixed voltages and are switchable with a rotary switch. With a single speed, the controller can control multiple motors, if the total of all motor's power consumption does not exceed the maximum controller current.

TECHNICAL DATA:

- 5 steps motor rotation speed controller.
- Power supply: 400 VAC.
- Frequency (Hz):50/60.
- Protection class:
  IP54 (RT 1.0EX...RT 5.0EX – plastic boxes),
  IP44 (RT 7.0EX...RT 14.0EX – metal boxes).
- Max. ambient temperature: 40°C.
- Max. controller temperature 70°C is limited with thermo protection.
- Motor thermal protection – PTC.

Type	Input voltage [V]	Current [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
RT 1.0EX	400	1,0	240x190x110x90	5,9	**311,87**
RT 2.0EX	400	2,0	300x220x140x120	8,5	**342,19**
RT 3.0EX	400	3,0	300x220x140x120	10,5	**355,75**
RT 4.0EX	400	4,0	300x220x140x120	14,6	**398,83**
RT 5.0EX	400	5,0	300x220x140x120	16,5	**418,20**
RT 7.0EX	400	7,0	360x300x165x145	23,5	**506,50**
RT 11.0EX	400	11,0	380x340x220x200	36,9	**576,24**
RT 14.0EX	400	14,0	380x340x220x200	38,3	**614,13**

(Prices without VAT). (For explosion-proof fans).

Transformer fan speed controllers RV..B-2 (1x230V)

DESCRIPTION

Transformer controllers RV ..-2B are designed to change motor rotation speed by changing voltage. All controllers have an overheating protection function. The steps have fixed voltages and are switchable with a rotary switch. Controllers are equipped with 2 rotary switches. Rotary switch selection can be made with an external signal. In this case, can be selected one of the set speeds.

TECHNICAL DATA:

- 5 steps the motor rotation speed controller.
- Power supply: 230 VAC.
- Frequency (Hz):50/60.
- Protection class IP54.
- Max. ambient temperature: 40°C.
- Max. controller temperature 70°C.

Type	Input voltage [V]	Current [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
RV 1.2B-2	230	1,2	125x175x90x75	1,6	**113,40**
RV 1.5B-2	230	1,5	125x175x90x75	1,8	**113,87**
RV 2.2B-2	230	2,2	125x175x90x75	2,2	**123,77**
RV 3.0B-2	230	3,0	125x175x115x100	3,0	**148,53**
RV 4.0B-2	230	4,0	125x175x115x100	3,7	**155,96**
RV 5.0B-2	230	5,0	125x175x120x100	4,1	**203,00**
RV 7.0B-2	230	7,0	240x190x145x125	7,1	**220,94**
RV 11.0B-2	230	11,0	240x190x145x125	8,2	**242,60**

(Prices without VAT). (Without motor thermo protection connection).

Transformer fan speed controllers RV..-2 (1x230V)

DESCRIPTION

Transformer controllers RV ..-2 are designed to change motor rotation speed by changing voltage. Controllers are with transformers and motor overheating protection functions. The steps have fixed voltages and are switchable with a rotary switch. Controllers are equipped with 2 rotary switches. Rotary switch selection can be made with an external signal. In this case, can be selected one of the set speeds. With a single-speed, the controller can control multiple motors, if the total of all motor's power consumption does not exceed the maximum controller current.

TECHNICAL DATA:

- 5 steps the motor rotation speed controller.
- Power supply: 230 VAC.
- Frequency (Hz):50/60.
- Protection class IP54.
- Max. ambient temperature: 40°C.
- Max. controller temperature 70°C is limited with thermo protection.

Type	Input voltage [V]	Current [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
RV 1.2-2	230	1,2	125x175x90x75	1,7	**134,67**
RV 1.5-2	230	1,5	125x175x90x75	1,9	**138,63**
RV 2.2-2	230	2,2	125x175x90x75	2,3	**154,48**
RV 3.0-2	230	3,0	125x175x115x100	3,1	**160,91**
RV 4.0-2	230	4,0	240x190x145x125	3,8	**183,19**
RV 5.0-2	230	5,0	240x190x145x125	4,2	**227,76**
RV 7.0-2	230	7,0	240x190x145x125	7,1	**245,55**
RV 11.0-2	230	11,0	240x190x145x125	8,2	**255,60**

(Prices without VAT). (With motor thermo protection connection).

Transformer fan speed controllers R T ..-2 (3x400V)

DESCRIPTION

Transformer controllers RT ..-2 are designed to change motor rotation speed by changing voltage. Controllers are with transformers and motor thermal protection functions. The steps have fixed voltages and are switchable with a rotary switch. Controllers are equipped with 2 rotary switches. Rotary switch selection can be made with an external signal. In this case, can be selected one of the set speeds.

TECHNICAL DATA:

- 5 steps motor rotation speed controller.
- Power supply: 400 VAC.
- Frequency (Hz):50/60.
- Protection class:
  IP54 (RT 1.0-2..RT 5.0-2) – plastic boxes,
  IP44 (RT 7.0-2..RT 14.0-2) – metal boxes.
- Max. ambient temperature: 40°C.
- Max. controller temperature 70°C is limited with thermo protection.

Type	Input voltage [V]	Current [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
RT 1.0-2	400	1,0	240x190x105x90	7,0	**241,36**
RT 2.0-2	400	2,0	300x220x135x120	9,0	**268,13**
RT 3.0-2	400	3,0	300x220x135x120	11,0	**305,09**
RT 4.0-2	400	4,0	300x220x135x120	15,1	**320,19**
RT 5.0-2	400	5,0	300x220x135x120	17,0	**381,19**
RT 7.0-2	400	7,0	380x300x185x170	24,0	**447,74**
RT 11.0-2	400	11,0	380x300x185x170	37,4	**520,66**
RT 14.0-2	400	14,0	380x300x185x170	38,8	**572,71**

(Prices without VAT).

Transformer fan speed controllers RV ..YS (1x230V) with external relay input (door switch)

DESCRIPTION

Transformer controllers RV ..YS are designed to change motor rotation speed by changing voltage. Controllers are with transformers and motor overheating functions. The steps have fixed voltages and are switchable with a rotary switch. Controllers have external relay signal input S-S for switching ON/OFF controllers. With a single-speed, the controller can control multiple motors, if the total of all motor's power consumption does not exceed the maximum controller current.

TECHNICAL DATA:

- 5 steps the motor rotation speed controller.
- Power supply: 230 VAC.
- Frequency (Hz):50/60.
- Protection class IP54.
- Max. ambient temperature: 40°C.
- Max. controller temperature 70°C is limited with thermo protection.

Type	Input voltage [V]	Current [A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
RV 1.2YS	230	1,2	125x175x90x75	1,6	**106,88**
RV 1.5YS	230	1,5	125x175x90x75	1,8	**110,45**
RV 2.2YS	230	2,2	125x175x90x75	2,2	**122,91**
RV 3.0YS	230	3,0	125x175x90x75	3,0	**138,05**
RV 4.0 YS	230	4,0	125x175x120x100	3,7	**140,72**
RV 5.0 YS	230	5,0	125x175x120x100	4,1	**202,72**
RV 7.0 YS	230	7,0	240x190x145x125	7,0	**224,45**
RV 11.0YS	230	11,0	240x190x145x125	8,1	**247,10**
RV 14.0YS	230	14,0	240x190x145x125	11,2	**284,96**

(Prices without VAT). (With motor thermo protection connection).

Transformer speed controllers RT ..YS (3x400V) with external relay input (door switch)

DESCRIPTION

Transformer controllers RT ..YS are designed to change motor rotation speed by changing voltage. Controllers are with transformers and motor thermal protection functions. The steps have fixed voltages and are switchable with a rotary switch. Controllers have external relay signal input S-S for switching ON/OFF controllers. With a single-speed, the controller can control multiple motors, if the total of all motor's power consumption does not exceed the maximum controller current.

TECHNICAL DATA:

- 5 steps motor rotation speed controller.
- Power supply: 400 VAC.
- Frequency (Hz):50/60.
- Protection class:
  IP54 (RT 1.0YS...RT 5.0YS) – plastic boxes,
  IP44 (RT 7.0YS...RT 14.0YS) – metal boxes.
- Max. ambient temperature: 40°C.
- Max. controller temperature 70°C is limited with thermo protection.

Type	Input voltage [V]	Current[A]	Dimensions AxBxCxD [mm]	Weight [kg]	Price Eur
RT 1.0YS	400	1,0	240x190x105x90	5,9	**207,67**
RT 2.0YS	400	2,0	300x220x135x120	8,5	**236,97**
RT 3.0YS	400	3,0	300x220x135x120	10,5	**249,90**
RT 4.0YS	400	4,0	300x220x135x120	14,6	**301,59**
RT 5.0YS	400	5,0	300x220x135x120	16,5	**342,44**
RT 7.0YS	400	7,0	380x300x185x170	23,5	**426,96**
RT 11.0YS	400	11,0	380x300x185x170	37,0	**508,79**
RT 14.0YS	400	14,0	380x300x185x170	38,3	**569,27**

(Prices without VAT).

Controllers for two speeds fan motor RD 4.0

DESCRIPTION

Controllers are used for two-speed fan motor control with a star/delta electrical connection. Controllers have a motor overheating protection function. If the motor overheats protection gives a signal that the motor winding temperature is too high the controller cuts off the power supply to the motor.

TECHNICAL DATA:

- Power supply: 400 VAC.
- Frequency: 50/60 Hz.
- Motor power and current: max 4,0 kW, 9,0 A.
- Protection class: IP54.
- Max. ambient temperature: 40°C.

Type	Input voltage [V]	Current[A]	Dimensions AxBxCxD [mm]	Weight[kg]	Price Eur
RD 4.0	400	9,0	175x125x146x101	1,1	**90,33**

(Prices without VAT).

Controllers for two speeds fan motor RD 4.0EX

DESCRIPTION

Controllers are used for two-speed fan motor control with a star/delta electrical connection. Controllers have a motor overheating protection function. If the motor overheats protection gives a signal that the motor winding temperature is too high the controller cuts off the power supply to the motor.

TECHNICAL DATA:

- Power supply: 400 VAC.
- Frequency: 50/60 Hz.
- Motor power and current: max 4,0 kW, 9,0 A.
- Protection class: IP54.
- Max. ambient temperature: 40°C.
- Motor thermal protection – PTC.

Type	Input voltage [V]	Current[A]	Dimensions AxBxCxD [mm]	Weight[kg]	Price Eur
RD 4.0EX	400	9,0	175x125x146x101	1,2	**154,15**

(Prices without VAT). For explosion-proof fans.

3 and 4 positions switches PJ-3, PJ-4

DESCRIPTION

Operational speed step switches can adjust manually the speed of electrical motors/fans. Several motors can be connected to a one-step switch if the total of all motor power consumption does not exceed the maximum switch current.

TECHNICAL DATA:

- Switch: ON/OFF.
- Control signal: step switch.
- Protection class: IP44/54.
- Max. ambient temperature up to 40°C.

PJ-3

PJ-4

Type	Steps	Supply voltage [V]	Switch rating [A/VAC]	Dimensions [mm]	Price Eur
PJ-3	2	230	3/230	80x80x65x60	**18,60**
PJ-4	3	230	3/230	80x80x65x60	**18,90**

(Prices without VAT).

Pressure switches SR ..

DESCRIPTION

SR .. pressure switches are capable of sensing tiny pressure changes. Pressure switches can control the flue of the aerator, the operation of the fan, and filter contamination in a ventilation system. Pressure switches are also suitable for overheat protection in industrial cooling systems. The setpoint is adjusted to be visible due to pressure switch's outstanding design.

TECHNICAL DATA:

- Medium: air, non-combustible and non-aggressive gases.
- Max. operating pressure: 10kPa.
- Degree of protection: IP54 (with cover), IP00 (without cover).
- Contact arrangement: SPDT.
- Electric rating resistance: initial <50miliohms.
- Terminal: 6.3mm x 0.8 blade or screw terminal.
- Operating temperature -40°C...+85°C.

Type	Differential [Pa]	Pressure range [Pa]	Current/voltage [A/V]	Price Eur
SR 200	10	20-200	1,5A(0,4)/250V	**22,83**
SR 500	20	50-500	1,5A(0,4)/250V	**23,00**
SR 1000	100	200-1000	1,5A(0,4)/250V	**26,18**
SR 2500	250	500-2500	1,5A(0,4)/250V	**28,67**
SR 200K	10	20-200	1,5A(0,4)/250V	**25,50**
SR 500K	20	50-500	1,5A(0,4)/250V	**25,67**
SR 1000K	100	200-1000	1,5A(0,4)/250V	**28,85**
SR 2500K	250	500-2500	1,5A(0,4)/250V	**31,34**

(Prices without VAT).

NOTE: SR..-pressure switch. SR..K-pressure switch with accessories.

SR..

SR..K

ACCESSORIES SR..K:

Plastic tube – 1,5 m.
Connectors – 2 pcs.
Screw for connectors – 4 pcs.

Frequency inverters VT1000..

TECHNICAL DATA:

- Selectable V/F, sensorless vector control.
- Motor parameter auto-tuning (turning).
- 150% torque at 0.5Hz.
- 0.1 ~ 400Hz frequency output.
- 1 ~ 15kHz carrier frequency.
- 0 ~ 10 VDC analog input.
- IP20 enclosure.
- Selectable manual/automatic torque boost.
- Built-in potentiometer.
- Selectable PNP/NPN input signal.
- Fault history: last 5 faults.
- Enhanced process PID control.
- MODBUS RTU communication.

Input: 1x230V 50/60Hz, output: 3x230V 50/60 Hz	Price Eur
Frequency inverter VT1000 0,4kW/230V/IP20	204,79
Frequency inverter VT1000 0,75kW/230V/IP20	227,16
Frequency inverter VT1000 1,5kW/230V/IP20	250,26
Frequency inverter VT1000 2,2kW/230V/IP20	288,77

(Prices without VAT).

Input: 3x400V 50/60Hz, output: 3x400V 50/60 Hz	Price Eur
Frequency inverter VT1000 0,4kW/400V/IP20	264,32
Frequency inverter VT1000 0,75kW/400V/IP20	277,22
Frequency inverter VT1000 1,5kW/400V/IP20	292,62
Frequency inverter VT1000 2,2kW/400V/IP20	327,27
Frequency inverter VT1000 3,7kW/400V/IP20	396,46
Frequency inverter VT1000 5,5kW/400V/IP20	429,48
Frequency inverter VT1000 7,5kW/400V/IP20	608,87
Frequency inverter VT1000 11,0kW/400V/IP20	737,08
Frequency inverter VT1000 15,0kW/400V/IP20	1038,32
Frequency inverter VT1000 18,5kW/400V/IP20	1192,14
Frequency inverter VT1000 22,0kW/400V/IP20	1281,84
Frequency inverter VT1000 30,0kW/400V/IP20	2038,72
Frequency inverter VT1000 37,0kW/400V/IP20	2301,77
Frequency inverter VT1000 45,0kW/400V/IP20	3146,77

(Prices without VAT).

Frequency inverters VT5000..

TECHNICAL DATA:

- Selectable V/F, sensorless vector control.
- Motor parameter auto-tuning (turning).
- 150% torque at 0.5Hz.
- 0.1 ~ 400Hz frequency output.
- 1 ~ 15kHz carrier frequency.
- 0 ~ 10 VDC analog input.
- IP65 enclosure.
- Selectable manual/automatic torque boost.
- Built-in potentiometer.
- Selectable PNP/NPN input signal.
- Fault history: last 5 faults.
- Enhanced process PID control.
- MODBUS RTU communication.

Input: 1x230V 50/60Hz, output: 3x230V 50/60 Hz	Price Eur
Frequency inverter VT5000 0,75kW/230V/IP65	389,25
Frequency inverter VT5000 1,5kW/230V/IP65	422,02
Frequency inverter VT5000 2,2kW/230V/IP65	474,61

(Prices without VAT).

Input: 3x400V 50/60Hz, output: 3x400V 50/60 Hz	Price Eur
Frequency inverter VT5000 0,75kW/400V/IP65	395,73
Frequency inverter VT5000 1,5kW/400V/IP65	429,03
Frequency inverter VT5000 2,2kW/400V/IP65	474,61
Frequency inverter VT5000 3,7kW/400V/IP65	692,89
Frequency inverter VT5000 5,5kW/400V/IP65	758,79
Frequency inverter VT5000 7,5kW/400V/IP65	824,78
Frequency inverter VT5000 11,0kW/400V/IP65	890,74
Frequency inverter VT5000 15,0kW/400V/IP65	1395,32

(Prices without VAT).

Setpoint for frequency inverter RES 001/10kom/ON/OFF

DESCRIPTION

RES 001/10kom/ON/OFF is intended to be used for external speed setpoint when it is connected to a frequency inverter.

TECHNICAL DATA:

- Protection class: Ip30.
- Nominal value: 10 kΩ.
- Speed range: 0..100%.

Type	Price Eur
RES 001/10kom/ON/OFF	39,39

(Prices without VAT).

Electronic controllers for electrical heating REC16, REC16MB

DESCRIPTION

The controller's REC.. are intended to be used for electrical heating control by the PID algorithm. Operating is managed by set and measured temperatures. If the measured temperature is lower than set one, controllers gradually change the pulse and pause time of the heater's power supply voltage to get the precise value of the set temperature. The controllers can work with an internal or external temperature sensor or with both at one time when heating control is carried out with temperature limitation of the supply air and the room temperature control according to the set temperature. The controlled phase current is switched at zero angle to avoid radio interference. The controllers can be used for single-phase or two-phase power supply, it is not suitable for a three-phase power supply. Controllers REC16MB are intended to be connected to the building management system (BMS) via RS485 mode by MODBUS protocol.

TECHNICAL DATA:

- Power supply: 1 phase 230VAC or 2 phase 400VAC, 190..410 VAC.
- Controlled load: up to 16A, 1~ 230VAC/max. 3kW or 2~ 400VAC/max. 6kW.
- Frequency: 50/60[Hz].
- Protection class: IP20.
- Max. ambient temperature: 30°C.
- Storage temperature: -35+50°C.
- Temperature setpoint: 0..+30°C or 0..+60°C (can be set in the programming menu).

- Working mode:
  with one sensor (supply air temperature control),
  IP44 (RT 7.0...RT 14.0) – metal boxes.
  with two sensors (the regulation of extract/room air temperature according to setpoint, supply air temperature limiting),
  with external control signal 0-10VDC.

Type	Input voltage [V]	Current[A]	Dimensions AxBxC [mm]	Weight [kg]	Price Eur
REC16	1~230 or 2~400	16,0	140x110x37	0,4	**104,90**
REC16MB	1~230 or 2~400	16,0	140x110x37	0,4	**115,90**

(Prices without VAT). **NOTE: duct temperature sensor TSD/NTC10/2m. must be ordered separately.**

Electronic controllers for electric heating REC25, REC25B, REC50, REC50B

DESCRIPTION

The controller's REC.. are intended to be used for electric heating control by PID algorithm. Operation is managed by set and measured temperatures. If the measured temperature is lower than set one, controllers gradually change the pulse and pause time of the heater's power supply voltage to get the precise value of the set temperature. The controllers can work with one temperature sensor for controlling supply air temperature or with 2 sensors when heating control is carried out with temperature limitation of the supply air and with the room temperature control according to the set temperature. The controlled phase current is switched at zero angle to avoid radio interference. The controllers can be used for only a three-phase power supply. The controllers can be used for building a management system (BMS) via RS485 mode by MODBUS protocol when the control panel is disconnected from the control PCB and RS485 is connected instead. Controllers are designed only for electric heater control. REC25 and REC50 have 4 relay outputs for extra load control if the heater has more than 1 step. REC25B and REC50B have 1 relay output.

TECHNICAL DATA:

- Power supply: 3 phases 400VAC, 350..425 VAC.
- Controlled load with triacs: up to 25A, 3~ 400VAC/max.16.44 kW or up to 50A, 3~ 400VAC/max.32.89 kW.
- Frequency: 50/60[Hz].
- Working mode:
  with one sensor (supply air temperature control),
  with two sensors (the regulation of extract/room air temperature according to setpoint, supply air temperature limiting),
  with external control signal 0-10VDC.

Type	Input voltage [V]	Current[A]	Dimensions AxBxC [mm]	Weight [kg]	Price Eur
REC25 4XDO	3~400	25,0	240x168x130	2,48	**264,18**
REC25B 1XDO	3~400	25,0	240x168x130	2,48	**241,46**
REC50 4XDO	3~400	50,0	240x168x140	2,60	**383,46**
REC50B 1XDO	3~400	50,0	240x168x140	2,60	**342,96**

(Prices without VAT). **NOTE: duct temperature sensor TSD/NTC10/2m. must be ordered separately.**

Electric circular duct heaters/preheaters for ventilation systems EHC..

DESCRIPTION

The electric circular duct heaters/preheaters are intended to be used for heating clean air in the ventilation systems. Also, heaters/preheaters can be used for heating or preheating functions with air-handling units. The heaters/preheaters can be supplied with or without the installed electronic controller, with a pressure and/or flow monitoring system, with a contactor, or produced according to the client's requirements. It is possible to connect to the BMS system via the RS485 MODBUS. The heater/preheater cases are produced from aluzinc-coated metal sheets, sealing rubber for a tight connection with the ventilation duct system. The stainless steel tubes of heating elements are used in the heaters/preheaters. All heaters/preheaters are equipped with 2 overheat thermostats.

Heaters/preheaters with diameters under 250 mm have an automatic reset thermostat of 60°C that controls output air temperature, manual reset thermostat of 100°C is for cut-off function in case of overheating. Heaters/preheaters with a diameter of 250 mm have an automatic reset thermostat of 70°C that controls output air temperature, manual reset thermostat of 100°C is for cut-off function in case of overheating. The thermostat push button is installed on the heater cover to reset manual reset. Thermostats for 1 phase are connected in series with the heating element and no extra relay is needed. For 2 and 3 phase heaters, the external relay is needed for overheating functions. Except in that case, when the mounted relay is inside of the heaters/preheaters.

Preheaters are additionally insulated.

Minimum airspeed for heaters/preheaters must be not less than 1,5 m/s.

Flow monitor makes it possible to monitor airflow in ducts and prevent them from operating and overheating if there is no airflow. In this case, no extra interlocking with fans or air handling units is needed.

Heaters/preheaters with the installed electronic controller can be supplied in 6 types:

- An internal setpoint with one duct temperature sensor (model SI), duct sensor must be installed in the output air duct. Setpoint knob is installed on the heater case.
- An external setpoint with one duct temperature sensor (model SE), duct sensor must be installed in the output air duct.
- A setpoint device installed on the wall is used (potentiometer resistance – 10K). External control signal 0-10 VDC (model CE). An external control signal from other controllers must be supplied.
- FC - flow and pressure control.
- F- flow control.
- MB - MODBUS. Temperature setpoint and other settings can be adjusted using the RS485 serial interface and MODBUS protocol. MODBUS master can be a BMS (building management system) module, local server or computer.

If the heater/preheater is supplied without an installed electronic controller, an external controller should be used.

HEATER'S MODEL NAME DESCRIPTION

Example: EHC 250/3.0/2/SI/FC/MB/K (0...+30)
EHC – electric circular heater,
250 – diameter of duct in mm,
3.0 – output power kW,
2 – phase,
SI – electronic controller type,
FC – flow and pressure control,
MB – MODBUS,
K – contactor,
(0...+30) – setpoint range.

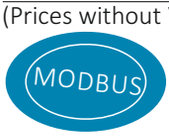
PREHEATER'S MODEL NAME DESCRIPTION

Example: EHC 250/3.0/2/SI/FC/MB/K (-10...+20)
EHC – electric circular preheater,
250 – diameter of duct in mm,
3.0 – output power kW,
2 – phase,
SI – electronic controller type,
FC – flow and pressure control,
MB – MODBUS,
K – contactor,
(-10...+20) – setpoint range.

Type	Price Eur EHC	Price Eur EHC	Price Eur EHC..CE	Price Eur EHC..CE	Price Eur EHC..SE	Price Eur EHC..SE	Price Eur EHC..SI	Price Eur EHC..SI	Price Eur EHC..FC	Price Eur EHC..FC
	Heater without integrated control	Preheater without integrated control	Heater with integrated control (0-10)V	Preheater with integrated control (0-10)V	Heater with integrated control (external setpoint) (0...+30)	Preheater with integrated control (external setpoint) (-10...+20)	Heater with integrated control (internal setpoint) (0...+30)	Preheater with integrated control (internal setpoint) (-10...+20)	Heater Plug & play (with flow and pressure control) (0...+30)	Preheater Plug & play (with flow and pressure control) (-10...+20)
EHC 100/0.5/1	68,59	72,02	117,03	122,88	136,20	143,01	139,44	145,71	176,79	183,86
EHC 125/0.5/1	70,75	74,29	119,19	125,15	138,36	145,28	141,60	147,97	178,95	186,11
EHC 125/1.0/1	71,99	75,59	120,43	126,45	139,60	146,58	142,84	149,27	180,19	187,40
EHC 160/0.5/1	73,52	77,20	121,97	128,07	141,14	148,20	144,39	150,89	181,73	189,00
EHC 160/1.0/1	74,45	78,17	122,90	129,05	142,07	149,17	145,31	151,85	182,66	189,97
EHC 160/1.5/1	83,41	87,58	131,86	138,45	151,03	158,58	154,27	161,21	191,61	199,27
EHC 160/2.0/1	86,50	90,83	134,95	141,70	154,12	161,83	157,36	164,44	194,70	202,49

Type	Price Eur EHC	Price Eur EHC	Price Eur EHC..CE	Price Eur EHC..CE	Price Eur EHC..SE	Price Eur EHC..SE	Price Eur EHC..SI	Price Eur EHC..SI	Price Eur EHC..FC	Price Eur EHC..FC
	Heater without integrated control	Preheater without integrated control	Heater with integrated control (0-10)V	Preheater with integrated control (0-10)V	Heater with integrated control (external setpoint) (0...+30)	Preheater with integrated control (external setpoint) (-10...+20)	Heater with integrated control (internal setpoint) (0...+30)	Preheater with integrated control (internal setpoint) (-10...+20)	Heater Plug & play (with flow and pressure control) (0...+30)	Preheater Plug & play (with flow and pressure control) (-10...+20)
EHC 160/3.0/1	98,24	103,15	146,68	154,01	165,86	174,15	169,11	176,72	206,44	214,70
EHC 160/3.0/2	100,15	105,16	148,11	155,52	167,47	175,84	170,75	178,43	208,88	217,24
EHC 160/4.5/2	108,75	114,19	157,58	165,46	176,72	185,56	179,96	188,06	217,37	226,06
EHC 200/1.0/1	76,61	80,44	125,06	131,31	144,23	151,44	147,48	154,12	184,81	192,20
EHC 200/1.5/1	86,81	91,15	135,26	142,02	154,43	162,15	157,67	164,77	195,01	202,81
EHC 200/2.0/1	89,90	94,40	138,35	145,27	157,52	165,40	160,76	167,99	198,10	206,02
EHC 200/3.0/1	99,17	104,13	147,61	154,99	166,79	175,13	170,03	177,68	207,37	215,66
EHC 200/3.0/2	101,09	106,14	149,44	156,91	168,76	177,20	172,04	179,78	209,82	218,21
EHC 200/4.5/2	111,84	117,43	160,67	168,70	179,81	188,80	183,05	191,29	220,46	229,28
EHC 200/6.0/2	125,42	131,69	174,27	182,98	193,40	203,07	196,65	205,50	234,06	243,42
EHC 200/6.0/3	127,86	134,25	177,98	186,88	196,25	206,06	199,49	208,47	238,46	248,00
EHC 200/9.0/3	153,85	161,54	211,35	221,92	229,61	241,09	232,85	243,33	271,82	282,69
EHC 250/1.0/1	80,32	84,34	128,77	135,21	147,94	155,34	151,18	157,98	188,52	196,06
EHC 250/1.5/1	88,04	92,44	136,50	143,33	155,66	163,44	158,91	166,06	196,25	204,10
EHC 250/2.0/1	91,13	95,69	139,59	146,57	158,75	166,69	162,00	169,29	199,34	207,31
EHC 250/3.0/1	105,66	110,94	154,10	161,81	173,28	181,94	176,51	184,45	213,86	222,41
EHC 250/3.0/2	107,71	113,10	156,00	163,80	175,31	184,08	178,59	186,63	216,36	225,01
EHC 250/4.5/2	113,69	119,37	162,52	170,65	181,66	190,74	184,91	193,23	222,32	231,21
EHC 250/6.0/2	127,28	133,64	176,12	184,93	195,26	205,02	198,50	207,43	235,91	245,35
EHC 250/6.0/3	128,44	134,86	182,31	191,43	200,57	210,60	203,82	212,99	242,78	252,49
EHC 250/9.0/3	159,10	167,06	216,60	227,43	234,86	246,60	238,11	248,82	277,07	288,15
EHC 315/2.0/1	98,86	103,80	147,30	154,67	166,48	174,80	169,72	177,36	207,06	215,34
EHC 315/3.0/1	112,76	118,40	161,21	169,27	180,37	189,39	183,62	191,88	220,97	229,81
EHC 315/3.0/2	114,95	120,70	163,17	171,33	182,49	191,61	185,77	194,13	223,54	232,48
EHC 315/4.5/2	124,19	130,40	173,03	181,68	192,17	201,78	195,41	204,20	232,82	242,13
EHC 315/6.0/2	138,71	145,65	187,54	196,92	206,68	217,01	209,92	219,37	247,34	257,23
EHC 315/6.0/3	141,40	148,47	190,64	200,17	208,90	219,35	212,15	221,70	251,12	261,16
EHC 315/9.0/3	167,14	175,50	224,63	235,86	242,89	255,03	246,14	257,22	285,10	296,50
EHC 315/12.0/3	205,44	215,71	262,94	276,09	281,20	295,26	284,44	297,24	323,41	336,35
EHC 400/3.0/1	126,66	132,99	175,11	183,87	194,28	203,99	197,52	206,41	234,86	244,25
EHC 400/3.0/2	131,29	137,85	180,14	189,15	199,27	209,23	202,52	211,63	239,93	249,53
EHC 400/4.5/2	143,65	150,83	192,49	202,11	211,62	222,20	214,87	224,54	252,29	262,38
EHC 400/6.0/2	156,01	163,81	204,85	215,09	223,98	235,18	227,23	237,46	264,64	275,23
EHC 400/6.0/3	158,83	166,77	208,09	218,49	226,53	237,86	229,80	240,14	269,16	279,93
EHC 400/9.0/3	185,05	194,30	242,54	254,67	260,81	273,85	264,05	275,93	303,03	315,15
EHC 400/12.0/3	221,81	232,90	279,32	293,29	297,58	312,46	300,82	314,36	339,79	353,38
EHC 400/15.0/3	257,96	270,86	319,28	335,24	337,13	353,99	340,36	355,68	380,02	395,22

(Prices without VAT). **NOTE: external temperature setpoint must be ordered separately for EHC..SE, EHC..SE/FC modifications.**



Type	Price Eur EHC..SE/MB	Price Eur EHC..SE/MB	Price Eur EHC..SI/MB	Price Eur EHC..SI/MB	Price Eur EHC..SE/FC/MB EHC..SI/FC/MB	Price Eur EHC..SE/FC/MB EHC..SI/FC/MB
	Heater with integrated control (external setpoint) with MODBUS (0...+30)	Preheater with integrated control (external setpoint) with MODBUS (-10...+20)	Heater with integrated control (internal setpoint) with MODBUS (0...+30)	Preheater with integrated control (internal setpoint) with MODBUS (-10...+20)	Heater plug & play (with flow and pressure control) with MODBUS (0...+30)	Preheater plug & play (with flow and pressure control) with MODBUS (-10...+20)
EHC 100/0.5/1	154,74	160,93	157,98	164,30	195,32	202,16
EHC 125/0.5/1	156,90	163,18	160,14	166,55	197,48	204,39
EHC 125/1.0/1	158,14	164,47	161,38	167,84	198,72	205,68
EHC 160/0.5/1	159,68	166,07	162,93	169,45	200,26	207,27

Type	Price Eur EHC..SE/MB	Price Eur EHC..SE/MB	Price Eur EHC..SI/MB	Price Eur EHC..SI/MB	Price Eur EHC..SE/FC/MB EHC..SI/FC/MB	Price Eur EHC..SE/FC/MB EHC..SI/FC/MB
	Heater with integrated control (external setpoint) with MODBUS (0...+30)	Preheater with integrated control (external setpoint) with MODBUS (-10...+20)	Heater with integrated control (internal setpoint) with MODBUS (0...+30)	Preheater with integrated control (internal setpoint) with MODBUS (-10...+20)	Heater plug & play (with flow and pressure control) with MODBUS (0...+30)	Preheater plug & play (with flow and pressure control) with MODBUS (-10...+20)
EHC 160/1.0/1	160,61	167,03	163,85	170,40	201,19	208,23
EHC 160/1.5/1	169,57	176,35	172,81	179,72	210,15	217,51
EHC 160/2.0/1	172,66	179,57	175,89	182,93	213,24	220,70
EHC 160/3.0/1	184,39	191,77	187,64	195,15	224,98	232,85
EHC 160/3.0/2	184,75	192,14	188,00	195,52	225,41	233,30
EHC 160/4.5/2	195,26	203,07	198,50	206,44	235,91	244,17
EHC 200/1.0/1	162,77	169,28	166,02	172,66	203,35	210,47
EHC 200/1.5/1	172,97	179,89	176,20	183,25	213,55	221,02
EHC 200/2.0/1	176,05	183,09	179,29	186,46	216,64	224,22
EHC 200/3.0/1	185,32	192,73	188,56	196,10	225,91	233,82
EHC 200/3.0/2	185,68	193,11	188,92	196,48	226,33	234,25
EHC 200/4.5/2	198,35	206,28	201,59	209,65	239,00	247,37
EHC 200/6.0/2	211,93	220,41	215,18	223,79	252,60	261,44
EHC 200/6.0/3	227,14	236,23	230,38	239,60	269,36	278,79
EHC 200/9.0/3	260,50	270,92	263,74	274,29	302,72	313,32
EHC 250/1.0/1	166,48	173,14	169,72	176,51	207,06	214,31
EHC 250/1.5/1	174,19	181,16	177,44	184,54	214,79	222,31
EHC 250/2.0/1	177,28	184,37	180,53	187,75	217,88	225,51
EHC 250/3.0/1	191,81	199,48	195,05	202,85	232,40	240,53
EHC 250/3.0/2	192,17	199,86	195,41	203,23	232,82	240,97
EHC 250/4.5/2	200,20	208,21	203,45	211,59	240,86	249,29
EHC 250/6.0/2	213,79	222,34	217,03	225,71	254,45	263,36
EHC 250/6.0/3	231,46	240,72	234,71	244,10	273,67	283,25
EHC 250/9.0/3	265,75	276,38	269,00	279,76	307,97	318,75
EHC 315/2.0/1	185,01	192,41	188,25	195,78	225,60	233,50
EHC 315/3.0/1	198,91	206,87	202,16	210,25	239,50	247,88
EHC 315/3.0/2	199,27	207,24	202,52	210,62	239,93	248,33
EHC 315/4.5/2	210,70	219,13	213,94	222,50	251,36	260,16
EHC 315/6.0/2	252,22	262,31	228,46	237,60	265,87	275,18
EHC 315/6.0/3	239,80	249,39	243,05	252,77	282,01	291,88
EHC 315/9.0/3	273,78	284,73	277,03	288,11	316,00	327,06
EHC 315/12.0/3	312,09	324,57	315,33	327,94	354,31	366,71
EHC 400/3.0/1	212,82	221,33	216,06	224,70	253,40	262,27
EHC 400/3.0/2	217,80	226,51	221,05	229,89	258,47	267,52
EHC 400/4.5/2	230,16	239,37	233,41	242,75	270,82	280,30
EHC 400/6.0/2	242,52	252,22	245,77	255,60	283,18	293,09
EHC 400/6.0/3	255,24	265,45	258,49	268,83	297,46	307,87
EHC 400/9.0/3	291,71	303,38	294,95	306,75	333,92	345,61
EHC 400/12.0/3	328,47	341,61	331,71	344,98	370,68	383,65
EHC 400/15.0/3	368,02	382,74	371,26	386,11	410,91	425,29

(Prices without VAT).**NOTE: external temperature setpoint must be ordered separately for EHC..SE/MB, EHC..SE/FC/MB modifications.**

Electric circular duct heaters/preheaters with PTC heating elements for ventilation systems EHC PTC..

DESCRIPTION

The electric circular duct heaters/preheaters with PTC heating elements are intended to be used for heating clean air in the ventilation systems. Also, heaters/preheaters can be used for heating or preheating functions with air-handling units. The heaters/preheaters can be supplied with or without the installed electronic controller, with

pressure and/or flow monitoring system, with a contactor, or produced according to the client's requirements. It is possible to connect to the BMS system via the RS485 MODBUS. The heater/preheater cases are produced from aluzinc-coated metal sheets, sealing rubber for a tight connection with the ventilation duct system.

All heaters/preheaters are equipped with 2 overheat thermostats. The automatic reset thermostat of 60°C is for controlling output air temperature, manual reset thermostat of 100°C is for cutoff function in case of overheating. The thermostat push button is installed on the heater cover to reset manual reset. Thermostats for 1 phase are connected in series with the heating element and no extra relay is needed.

Flow monitor makes it possible to monitor airflow in ducts and prevents them from operating and overheating if there is no airflow. In this case, no extra interlocking with fans or air handling units is needed.

Preheaters are additionally insulated.

Heaters/preheaters with the installed electronic controller can be supplied in 6 types:

- An internal setpoint with one duct temperature sensor (model SI), duct sensor must be installed in the output air duct. Setpoint knob is installed on the heater case.
- An external setpoint with one duct temperature sensor (model SE), duct sensor must be installed in the output air duct.
- A setpoint device installed on the wall is used (potentiometer resistance – 10K). External control signal 0-10 VDC (model CE). An external control signal from other controllers must be supplied.
- FC - flow and pressure control.
- F - flow control.
- MB - MODBUS. Temperature setpoint and other settings can be adjusted using the RS485 serial interface and MODBUS protocol. MODBUS master can be a BMS (building management system) module, local server or computer.

If heaters/preheaters are supplied without an electronic controller, an external controller should be used.

Benefits:

- Self-regulating and safe PTC heating element.
- Small heater/preheater size.
- Low-pressure drop.

HEATER'S MODEL NAME DESCRIPTION

Example: EHC PTC 200/2.0/1/SI/FC/MB/K (0...+30)
EHC – electric circular heater,
PTC – heating element,
200 – diameter of duct in mm,
2.0 – output power kW,
1 – phase,
SI – electronic controller type,
FC – flow and pressure control,
MB – MODBUS,
K – contactor,
(0...+30) – setpoint range.

PREHEATER'S MODEL NAME DESCRIPTION

Example: EHC PTC 200/2.0/1/SI/FC/K (-10..+20)
EHC – electric circular preheater,
PTC – heating element,
200 – diameter of duct in mm,
2.0 – output power kW,
1 – phase,
SI – electronic controller type,
FC – flow and pressure control,
MB – MODBUS,
K – contactor,
(-10..+20) – setpoint range.

Type	Price Eur EHC PTC	Price Eur EHC PTC	Price Eur EHC PTC.. CE	Price Eur EHC PTC.. CE	Price Eur EHC PTC.. SE	Price Eur EHC PTC.. SE	Price Eur EHC PTC.. SI	Price Eur EHC PTC.. SI	Price Eur EHC PTC.. FC	Price Eur EHC PTC.. FC
	Heater without integrated control	Preheater without integrated control	Heater with integrated control (0-10)V	Preheater with integrated control (0-10)V	Heater with integrated control (external setpoint) (0...+30)	Preheater with integrated control (external setpoint) (-10...+20)	Heater with integrated control (internal setpoint) (0...+30)	Preheater with integrated control (internal setpoint) (-10...+20)	Heater Plug & play (with flow and pressure control) (0...+30)	Preheater Plug & play (with flow and pressure control) (-10...+20)
EHC PTC 125/0.5/1	132,78	136,89	179,81	185,40	211,68	216,43	214,48	221,06	249,99	256,99

Type	Price Eur EHC PTC	Price Eur EHC PTC	Price Eur EHC PTC.. CE	Price Eur EHC PTC.. CE	Price Eur EHC PTC.. SE	Price Eur EHC PTC.. SE	Price Eur EHC PTC.. SI	Price Eur EHC PTC.. SI	Price Eur EHC PTC.. FC	Price Eur EHC PTC.. FC
	Heater without integrated control	Preheater without integrated control	Heater with integrated control (0-10)V	Preheater with integrated control (0-10)V	Heater with integrated control (external setpoint) (0...+30)	Preheater with integrated control (external setpoint) (-10...+20)	Heater with integrated control (internal setpoint) (0...+30)	Preheater with integrated control (internal setpoint) (-10...+20)	Heater Plug & play (with flow and pressure control) (0...+30)	Preheater Plug & play (with flow and pressure control) (-10...+20)
EHC PTC 160/1.0/1	167,89	173,01	204,43	211,01	231,51	237,75	235,91	243,35	269,65	277,34
EHC PTC 200/2.0/1	192,15	198,24	232,52	239,82	273,55	279,63	277,74	286,85	309,95	318,59

(Prices without VAT).

NOTE: external temperature setpoint must be ordered separately for EHC PTC..SE, EHC PTC..SE/FC modifications.

MODBUS

Type	Price Eur EHC PTC..SE/MB	Price Eur EHC PTC..SE/MB	Price Eur EHC PTC..SI/MB	Price Eur EHC PTC..SI/MB	Price Eur EHR..SE/FC/MB EHR..SI/FC/MB	Price Eur EHR..SE/FC/MB EHR..SI/FC/MB
	Heater with integrated control (external setpoint) with MODBUS (0...+30)	Preheater with integrated control (external setpoint) with MODBUS (-10...+20)	Heater with integrated control (internal setpoint) with MODBUS (0...+30)	Preheater with integrated control (internal setpoint) with MODBUS (-10...+20)	Heater plug & play (with flow and pressure control) with MODBUS (0...+30)	Preheater plug & play (with flow and pressure control) with MODBUS (-10...+20)
EHC PTC 125/0.5/1	232,48	249,78	239,15	246,72	265,99	273,90
EHC PTC 160/1.0/1	255,29	263,50	265,91	273,35	288,20	296,89
EHC PTC 200/2.0/1	289,48	298,66	297,74	206,85	332,33	344,21

(Prices without VAT).

NOTE: external temperature setpoint must be ordered separately for EHC PTC..SE/MB, EHC PTC..SE/FC/MB modifications.

Electric circular duct heaters/preheaters for ventilation systems short version EHC TR..

NEW

DESCRIPTION

The electric circular duct heaters/preheaters are intended to be used for heating clean air in the ventilation systems. Also, heaters/preheaters can be used for heating or preheating functions with air-handling units. The heaters/preheaters can be supplied with or without the installed electronic controller, with a pressure and/or flow monitoring system, with a contactor, or produced according to the client's requirements. It is possible to connect to the BMS system via the RS485 MODBUS. The heater/preheater cases are produced from aluzinc-coated metal sheets, sealing rubber for a tight connection with the ventilation duct system. The stainless steel tubes of heating elements are used in the heaters/preheaters. All heaters/preheaters are equipped with 2 overheat thermostats. Heaters/preheaters with diameters under 250 mm have an automatic reset thermostat of 60°C that controls output air temperature, manual reset thermostat of 100°C is for cut-off function in case of overheating. The thermostat push button is installed on the heater cover to reset manual reset. Thermostats for 1 phase are connected in series with the heating element and no extra relay is needed. For 2 and 3 phase heaters, the external relay is needed for overheating functions. Except in that case, when the mounted relay is inside of the heaters/preheaters.

Preheaters are additionally insulated.

Minimum airspeed for heaters/preheaters must be not less than 1,5 m/s.

Flow monitor makes it possible to monitor airflow in ducts and prevent them from operating and overheating if there is no airflow. In this case, no extra interlocking with fans or air handling units is needed.

Heaters/preheaters with the installed electronic controller can be supplied in 6 types:

- An internal setpoint with one duct temperature sensor (model SI), duct sensor must be installed in the output air duct. Setpoint knob is installed on the heater case.
- An external setpoint with one duct temperature sensor (model SE), duct sensor must be installed in the output air duct.

- A setpoint device installed on the wall is used (potentiometer resistance – 10K). External control signal 0-10 VDC (model CE). An external control signal from other controllers must be supplied.
- FC - flow and pressure control.
- F- flow control.
- MB - MODBUS. Temperature setpoint and other settings can be adjusted using the RS485 serial interface and MODBUS protocol. MODBUS master can be a BMS (building management system) module, local server or computer.

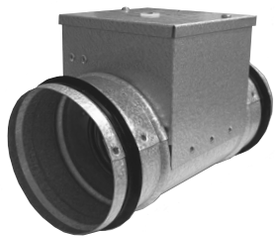
If the heater/preheater is supplied without an installed electronic controller, an external controller should be used.

Benefit:

- Short heater's/preheater's case.

HEATER'S MODEL NAME DESCRIPTION

Example: EHC TR 125/1.0/1/SI/FC/MB/K (0...+30)
EHC – electric circular heater,
TR – short version,
125 – diameter of duct in mm,
1.0 – output power kW,
1 – phase,
SI – electronic controller type,
FC – flow and pressure control,
MB – MODBUS,
K – contactor,
(0...+30) – setpoint range.



PREHEATER'S MODEL NAME DESCRIPTION

Example: EHC TR 125/1.0/1/SI/FC/MB/K (-10..+20)
EHC – electric circular preheater,
TR – short version,
125 – diameter of duct in mm,
1.0 – output power kW,
1 – phase,
SI – electronic controller type,
FC – flow and pressure control,
MB – MODBUS,
K – contactor,
(-10..+20) – setpoint range.

Type	Price Eur EHC TR	Price Eur EHC TR	Price Eur EHC TR.. CE	Price Eur EHC TR.. CE	Price Eur EHC TR.. SE	Price Eur EHC TR.. SE	Price Eur EHC TR.. SI	Price Eur EHC TR.. SI	Price Eur EHC TR.. FC	Price Eur EHC TR.. FC
	Heater without integrated control	Preheater without integrated control	Heater with integrated control (0-10)V	Preheater with integrated control (0-10)V	Heater with integrated control (external setpoint) (0...+30)	Preheater with integrated control (external setpoint) (-10...+20)	Heater with integrated control (internal setpoint) (0...+30)	Preheater with integrated control (internal setpoint) (-10...+20)	Heater Plug & play (with flow and pressure control) (0...+30)	Preheater Plug & play (with flow and pressure control) (-10...+20)
EHC TR 125/0.5/1	69,65	73,13	118,09	123,99	137,26	144,12	140,50	146,82	177,85	184,07
EHC TR 125/1.0/1	70,89	74,43	119,33	125,30	138,50	145,43	141,74	148,12	179,09	185,36
EHC TR 160/0.5/1	72,42	76,04	120,77	126,81	140,04	147,04	143,19	149,63	180,43	186,75
EHC TR 160/1.0/1	73,15	76,81	121,70	127,79	140,87	147,91	144,01	150,49	181,36	187,71
EHC TR 160/1.5/1	82,11	86,22	130,56	137,09	149,83	157,32	153,07	159,96	190,31	196,97
EHC TR 160/2.0/1	85,30	89,57	133,65	140,33	152,82	160,46	156,16	163,19	193,40	200,17
EHC TR 160/3.0/1	97,04	101,89	145,38	152,65	164,56	172,79	167,81	175,36	205,14	212,32
EHC TR 200/1.0/1	75,31	79,08	123,86	130,05	143,03	150,18	146,18	152,76	183,51	189,93
EHC TR 200/1.5/1	85,51	89,79	133,96	140,66	153,13	160,79	156,37	163,41	193,71	200,49
EHC TR 200/2.0/1	88,60	93,03	137,05	143,90	156,22	164,03	159,46	166,64	196,81	203,70
EHC TR 200/3.0/1	97,97	102,87	146,31	153,63	165,49	173,76	168,83	176,43	206,07	213,28

(Prices without VAT).

NOTE: heater's/preheater's length 270 mm.

NOTE: external temperature setpoint must be ordered separately for EHC TR..SE, EHC TR..SE/FC modifications.

MODBUS

Type	Price Eur EHC TR..SE/MB	Price Eur EHC TR..SE/MB	Price Eur EHC TR..SI/MB	Price Eur EHC TR..SI/MB	Price Eur EHC TR..FC/MB	Price Eur EHC TR..FC/MB
	Heater with integrated control (external setpoint) with MODBUS (0...+30)	Preheater with integrated control (external setpoint) with MODBUS (-10...+20)	Heater with integrated control (internal setpoint) with MODBUS (0...+30)	Preheater with integrated control (internal setpoint) with MODBUS (-10...+20)	Heater plug & play (with flow and pressure control) with MODBUS (0...+30)	Preheater plug & play (with flow and pressure control) with MODBUS (-10...+20)
EHC TR 125/0.5/1	155,90	162,14	159,14	165,51	196,48	203,36
EHC TR 125/1.0/1	157,14	163,43	160,38	166,80	197,72	204,64
EHC TR 160/0.5/1	158,68	165,03	161,93	168,41	199,26	206,23
EHC TR 160/1.0/1	159,61	165,99	162,85	169,36	200,19	207,20
EHC TR 160/1.5/1	168,57	175,31	171,81	178,68	209,15	216,47
EHC TR 160/2.0/1	171,66	178,53	174,89	181,89	212,24	219,67
EHC TR 160/3.0/1	183,39	190,73	186,64	194,11	223,98	231,82
EHC TR 200/1.0/1	161,77	168,24	165,02	171,62	202,35	209,43
EHC TR 200/1.5/1	171,97	178,85	175,20	182,21	212,55	219,99
EHC TR 200/2.0/1	175,05	182,05	178,29	185,42	215,64	223,19
EHC TR 200/3.0/1	184,32	191,69	187,56	195,06	224,91	232,78

(Prices without VAT).

NOTE: heater's/preheater's length 270 mm.

NOTE: external temperature setpoint must be ordered separately for EHC..SE/MB, EHC..SE/FC/MB modifications.

ACCESSORIES

Type
External controller REC16, 1~230 VAC or 2~400 VAC, 16A
External controller REC16MB, 1~230 VAC or 2~400 VAC, 16A
External controller REC25B, 3~400 VAC/max. 16,44 kW, 25A
External controller REC25, 3~400 VAC/max. 16,44 kW, 25A
External controller REC50B, 3~400 VAC/max. 32,89 kW, 50A
External controller REC50, 3~400 VAC/max. 32,89 kW, 50A
Duct temperature sensor TSD/NTC10K/2m
External temperature setpoint RES 001
External temperature setpoint with room sensor RES 002/NTC

External temperature setpoint RES 001

External temperature setpoint with room sensor RES 002/NTC

Duct temperature sensor TSD/NTC10K/2m.

NOTE: to specify a temperature scale (-10...+20), (-30...0) or (0...+30) in order.

NOTE: the heater's standard temperature scale is (0...+30). The Preheater's standard temperature scale is (-10...+20) and (-30..0). The other temperature scales are possible according to a client's requirements.

NOTE: heaters/preheaters with an integrated control system: EHC..SE, EHC..SE/FC, EHC..SE/F, EHC..SE/MB, EHC..SE/FC/MB, EHC..SE/F/MB, EHC PTC..SE, EHC PTC..SE/FC, EHC PTC..SE/F, EHC PTC..SE/FC/MB, EHC PTC..SE/F/MB, EHC TR/SE, EHC TR/SE/FC, EHC TR/SE/F, EHC TR/SE/MB, EHC TR/SE/FC/MB, EHC TR/SE/F/MB, EHC..SE/K, EHC..SE/FC/K, EHC..SE/F/K, EHC..SE/MB/K, EHC..SE/FC/MB/K, EHC..SE/F/MB/K, EHC PTC..SE/K, EHC PTC..SE/FC/K, EHC PTC..SE/F/K, EHC PTC..SE/FC/MB/K, EHC PTC..SE/F/MB/K, EHC TR/SE/K, EHC TR/SE/FC/K, EHC TR/SE/F/K, EHC TR/SE/MB/K, EHC TR/SE/FC/MB/K, EHC TR/SE/F/MB/K, EHC..SI, EHC..SI/FC, EHC..SI/F, EHC..SI/MB, EHC..SI/FC/MB, EHC..SI/F/MB, EHC PTC..SI, EHC PTC..SI/FC, EHC PTC..SI/F, EHC PTC..SI/FC/MB, EHC PTC..SI/F/MB, EHC TR/SI, EHC TR/SI/FC, EHC TR/SI/F, EHC TR/SI/MB, EHC TR/SI/FC/MB, EHC TR/SI/F/MB, EHC..SI/K, EHC..SI/FC/K, EHC..SI/F/K, EHC..SI/MB/K, EHC..SI/FC/MB/K, EHC..SI/F/MB/K, EHC PTC..SI/K, EHC PTC..SI/FC/K, EHC PTC..SI/F/K, EHC PTC..SI/FC/MB/K, EHC PTC..SI/F/MB/K, EHC TR/SI/K, EHC TR/SI/FC/K, EHC TR/SI/F/K, EHC TR/SI/MB/K, EHC TR/SI/FC/MB/K, EHC TR/SI/F/MB/K – duct temperature sensor L-2.0 m included.

NOTE: external temperature setpoint RES 001 and external temperature setpoint with room sensor RES 002/NTC are needed for: EHC..SE, EHC..SE/FC, EHC..SE/F, EHC..SE/MB, EHC..SE/FC/MB, EHC..SE/F/MB, EHC PTC..SE, EHC PTC SE/FC, EHC PTC SE/F, EHC TR/SE, EHC TR/SE/FC, EHC TR/SE/F, EHC TR/SE/MB, EHC TR/SE/FC/MB, EHC TR/SE/F/MB, EHC..SE/K, EHC..SE/FC/K, EHC..SE/F/K, EHC..SE/MB/K, EHC..SE/FC/MB/K, EHC..SE/F/MB/K, EHC PTC..SE/K, EHC PTC SE/FC/K, EHC PTC SE/F/K, EHC TR/SE/K, EHC TR/SE/FC/K, EHC TR/SE/F/K, EHC TR/SE/MB/K, EHC TR/SE/FC/MB/K, TR/SE/F/MB/K modifications.

Electric rectangular duct heaters/preheaters for ventilation systems EHR..

DESCRIPTION

The electric rectangular duct heaters/preheaters are intended to be used for heating clean air in the ventilation systems. Also, heaters/preheaters can be used for heating or preheating functions with air-handling units. The heaters/preheaters can be supplied with or without the installed electronic controller, with a pressure and/or flow monitoring system, with a contactor, or produced according to the client's requirements. It is possible to connect to the BMS system via the RS485 MODBUS. The heater/preheater cases are produced from aluzinc coated metal sheet. The stainless steel heating elements are used in the heaters/preheaters.

All heaters/preheaters are equipped with 2 overheat thermostats. The automatic reset thermostat at 70°C is for controlling output air temperature, manual reset thermostat at 100°C is for cut-off function in case of overheating. The thermostat push button is installed on the heater/preheater cover to reset the manual reset. Thermostats for 1 phase are connected in series with the heating element and no extra relay is needed. For 2 and 3 phase heaters, the external relay is needed for overheating functions. Except in that case, when the mounted relay is inside of the heaters/preheaters.

Preheaters are additionally insulated.

Minimum airspeed for heaters/preheaters must be not less than 1,5 m/s.

Flow monitor makes it possible to monitor airflow in ducts and prevent from operating and overheating if there is no airflow. In this case, no extra interlocking with fans or air handling units is needed.

Heaters/preheaters with the installed electronic controller can be supplied in 6 types:

- An internal setpoint with one duct temperature sensor (model SI), duct sensor must be installed in the output air duct. Setpoint knob is installed on the heater case.
- An external setpoint with one duct temperature sensor (model SE), duct sensor must be installed in the output air duct. Setpoint device installed on the wall is used (potentiometer resistance – 10K).
- An external control signal 0-10 VDC (model CE). An external control signal from another controller must be supplied.
- FC- flow and pressure control.
- F- flow control.
- MB - MODBUS. Temperature setpoint and other settings can be adjusted using the RS485 serial interface and MODBUS protocol. MODBUS master can be a BMS (building management system) module, local server or computer.

If the heater is supplied without an installed electronic controller, an external controller should be used.

HEATER'S MODEL NAME DESCRIPTION

Example: EHR 400x200x200/6.0/3/SI/FC/MB/K (0..+30)
EHR – electric rectangular heater,
400x200x200 – dimensions of duct in mm,
6.0 – output power kW,
3 – phase,
SI – electronic controller type,
FC – flow and pressure control,
MB – MODBUS,
K – contactor,
(0...+30) – setpoint range.

PREHEATER'S MODEL NAME DESCRIPTION

Example: EHR 400x200x200/6.0/3/SI/FC/MB/K (-10...+20)
EHR – electric rectangular preheater,
400x200x200 – dimensions of duct in mm,
6.0 – output power kW,
3 – phase,
SI – electronic controller type,
FC – flow and pressure control,
MB – MODBUS,
K – contactor,
(-10...+20) setpoint range.

Type	Price Eur EHR	Price Eur EHR	Price Eur EHR..CE	Price Eur EHR..CE	Price Eur EHR..SE	Price Eur EHR..SE	Price Eur EHR..SI	Price Eur EHR..SI	Price Eur EHR..FC	Price Eur EHR..FC
	Heater without integrated control	Preheater without integrated control	Heater with integrated control (0-10)V	Preheater with integrated control (0-10)V	Heater with integrated control (external setpoint) (0...+30)	Preheater with integrated control (external setpoint) (-10...+20)	Heater with integrated control (internal setpoint) (0...+30)	Preheater with integrated control (internal setpoint) (-10...+20)	Heater Plug & play (with flow and pressure control) (0...+30)	Preheater Plug & play (with flow and pressure control) (-10...+20)
EHR 400x200/1.0/1	165,28	171,89	220,88	229,72	233,24	242,34	236,33	245,55	261,05	269,66
EHR 400x200/2.0/1	171,45	178,31	227,06	236,14	239,42	248,76	242,51	251,97	267,22	276,04
EHR 400x200/3.0/1	189,99	197,59	245,60	255,42	257,96	268,02	261,05	271,23	285,76	295,19
EHR 400x200/3.0/3	193,08	200,80	248,69	258,64	261,05	271,23	264,14	274,44	288,85	298,38
EHR 400x200/6.0/3	200,13	208,14	253,92	264,08	266,27	276,65	269,36	279,87	290,65	300,24
EHR 400x200/9.0/3	231,70	240,97	291,02	302,66	303,99	315,85	300,94	351,13	327,47	371,33
EHR 400x200/12.0/3	274,95	285,95	352,50	366,60	359,91	373,95	365,46	379,71	392,00	404,94
EHR 400x200/15.0/3	324,38	337,36	402,85	418,96	415,20	431,39	418,29	434,60	441,78	456,36
EHR 500x250/3.0/1	194,63	202,42	248,42	258,36	260,78	270,95	263,87	274,16	281,13	290,41
EHR 500x250/3.0/3	199,26	207,23	253,05	263,17	265,41	275,76	268,49	278,96	285,76	295,19
EHR 500x250/6.0/3	210,33	218,74	264,11	274,67	276,46	287,24	279,55	290,45	300,84	310,77
EHR 500x250/9.0/3	241,83	251,50	298,06	309,98	310,42	322,53	313,51	325,74	335,03	346,09
EHR 500x250/12.0/3	288,95	300,51	362,31	376,80	374,67	389,28	377,76	392,49	401,01	414,24
EHR 500x250/15.0/3	329,79	342,98	408,26	424,59	420,61	437,01	423,70	440,22	447,46	462,23
EHR 500x250/18.0/3	383,82	399,17	458,73	477,08	471,09	489,46	474,18	492,67	497,58	514,00
EHR 500x250/21.0/3	417,06	433,74	491,98	511,66	504,34	524,01	507,42	527,21	530,83	548,35
EHR 500x250/24.0/3	461,73	480,20	541,75	563,42	554,11	575,72	557,19	578,92	581,11	600,29
EHR 500x250/27.0/3	497,05	516,93	577,06	600,14	589,42	612,41	592,51	615,62	616,41	636,75
EHR 500x250/30.0/3	580,18	603,39	660,19	686,60	672,55	698,78	675,64	701,99	699,56	722,65
EHR 500x250/33.0/3	596,25	620,10	700,97	729,01	713,33	741,15	716,42	744,36	742,81	767,32
EHR 500x250/36.0/3	641,04	666,68	747,63	777,54	761,21	790,90	763,07	792,83	789,64	815,70
EHR 500x300/3.0/1	194,43	209,49	248,42	258,36	260,78	276,15	263,87	282,47	281,13	300,74
EHR 500x300/6.0/3	210,33	218,74	264,11	274,67	276,46	287,24	279,55	290,45	300,84	310,77
EHR 500x300/9.0/3	241,83	251,50	298,06	309,98	310,42	322,53	313,51	325,74	335,04	346,10
EHR 500x300/12.0/3	288,95	300,51	362,31	376,80	374,67	389,28	377,76	392,49	401,01	414,24
EHR 500x300/15.0/3	329,79	342,98	408,26	424,59	420,61	437,01	423,70	440,22	447,46	462,23
EHR 500x300/18.0/3	383,82	399,17	458,73	477,08	471,09	489,46	474,18	492,67	497,58	514,00
EHR 500x300/21.0/3	417,06	433,74	491,98	511,66	504,34	524,01	507,42	527,21	530,83	548,35
EHR 500x300/24.0/3	461,73	480,20	541,75	563,42	554,11	575,72	557,19	578,92	581,11	600,29
EHR 500x300/27.0/3	497,05	516,93	577,06	600,14	589,42	612,41	592,51	615,62	616,41	636,75
EHR 500x300/30.0/3	580,18	603,39	660,19	686,60	672,55	698,78	675,64	701,99	699,56	722,65
EHR 500x300/33.0/3	595,63	619,46	700,35	728,36	712,71	740,51	715,80	743,72	742,19	766,68
EHR 500x300/36.0/3	644,13	669,90	750,71	780,74	764,30	794,11	766,16	796,04	792,73	818,89
EHR 600x300/3.0/3	203,90	212,06	257,69	268,00	270,35	280,89	273,13	283,78	290,40	299,98

Type	Price Eur EHR	Price Eur EHR	Price Eur EHR..CE	Price Eur EHR..CE	Price Eur EHR..SE	Price Eur EHR..SE	Price Eur EHR..SI	Price Eur EHR..SI	Price Eur EHR..FC	Price Eur EHR..FC
	Heater without integrated control	Preheater without integrated control	Heater with integrated control (0-10)V	Preheater with integrated control (0-10)V	Heater with integrated control (external setpoint) (0...+30)	Preheater with integrated control (external setpoint) (-10...+20)	Heater with integrated control (internal setpoint) (0...+30)	Preheater with integrated control (internal setpoint) (-10...+20)	Heater Plug & play (with flow and pressure control) (0...+30)	Preheater Plug & play (with flow and pressure control) (-10...+20)
EHR 600x300/6.0/3	210,71	219,14	262,92	273,44	274,92	285,64	277,92	288,76	298,59	308,44
EHR 600x300/9.0/3	268,83	279,58	325,06	338,06	337,42	350,58	340,51	353,79	362,03	373,98
EHR 600x300/12.0/3	306,06	318,30	379,43	394,61	391,79	407,07	394,88	410,28	418,13	431,93
EHR 600x300/15.0/3	345,24	359,05	423,70	440,65	436,06	453,07	439,15	456,28	462,90	478,18
EHR 600x300/18.0/3	399,79	415,78	474,71	493,70	487,07	506,07	490,16	509,28	513,56	530,51
EHR 600x300/21.0/3	432,51	449,81	507,42	527,72	519,78	540,05	522,87	543,26	546,27	564,30
EHR 600x300/24.0/3	477,18	496,27	557,19	579,48	569,55	591,76	572,64	594,97	596,56	616,25
EHR 600x300/27.0/3	512,49	532,99	592,51	616,21	604,86	628,45	607,95	631,66	631,86	652,71
EHR 600x300/30.0/3	597,64	621,55	677,65	704,76	690,01	716,92	693,10	720,13	717,00	740,66
EHR 600x300/33.0/3	620,87	645,70	725,69	754,72	738,05	766,83	741,14	770,04	767,52	792,85
EHR 600x300/36.0/3	654,94	681,14	761,52	791,98	775,12	805,35	776,97	807,27	803,53	830,05
EHR 600x300/39.0/3	710,55	738,97	817,13	849,82	830,73	863,13	832,58	865,05	859,14	887,49
EHR 600x300/42.0/3	753,80	783,95	863,16	897,69	875,83	909,99	878,92	913,20	905,79	935,68
EHR 600x300/45.0/3	821,77	854,64	928,35	965,48	941,94	978,68	943,79	980,60	970,36	1002,38
EHR 600x300/48.0/3	889,73	925,32	999,09	1039,05	1011,76	1051,22	1014,85	1054,43	1041,72	1076,10
EHR 600x300/54.0/3	960,78	999,21	1092,08	1135,76	1105,67	1148,79	1107,53	1150,72	1136,56	1174,07
EHR 600x350/6.0/3	230,15	239,36	285,76	297,19	299,36	311,04	302,45	314,25	324,04	334,73
EHR 600x350/9.0/3	265,13	296,54	321,35	355,00	333,71	367,50	336,80	381,11	358,34	401,16
EHR 600x350/12.0/3	312,24	324,73	385,61	401,03	397,97	413,49	401,06	416,70	424,31	438,31
EHR 600x350/15.0/3	351,42	365,48	429,88	447,08	442,24	459,49	445,33	462,70	469,08	484,56
EHR 600x350/18.0/3	405,97	422,21	480,89	500,13	493,25	512,49	496,34	515,70	519,74	536,89
EHR 600x350/21.0/3	438,69	456,24	513,60	534,14	525,96	546,47	529,05	549,68	552,45	570,68
EHR 600x350/24.0/3	483,36	502,69	563,37	585,90	575,73	598,18	578,82	601,39	602,74	622,63
EHR 600x350/27.0/3	518,67	539,42	598,69	622,64	611,04	634,87	614,13	638,08	638,04	659,10
EHR 600x350/30.0/3	601,81	625,88	681,82	709,09	694,18	721,25	697,27	724,46	721,18	744,98
EHR 600x350/33.0/3	630,23	655,44	734,96	764,36	747,32	776,47	750,40	779,67	776,79	802,42
EHR 600x350/36.0/3	661,12	687,56	767,70	798,41	781,30	811,77	783,15	813,69	809,71	836,43
EHR 600x350/39.0/3	722,91	751,83	829,49	862,67	843,09	875,97	844,93	877,88	871,50	900,26
EHR 600x350/42.0/3	769,25	800,02	878,61	913,75	891,28	926,04	894,36	929,24	921,24	951,64
EHR 600x350/45.0/3	846,48	880,34	953,06	991,18	966,66	1004,36	968,51	1006,28	995,07	1027,91
EHR 600x350/48.0/3	895,90	931,74	1005,27	1045,48	1017,94	1057,64	1021,03	1060,85	1047,90	1082,48
EHR 600x350/54.0/3	966,96	1005,64	1098,26	1142,19	1111,85	1155,21	1113,71	1157,14	1142,74	1180,45
EHR 700x400/9.0/3	302,20	314,29	358,43	372,77	370,78	385,24	373,87	388,45	395,41	408,46
EHR 700x400/12.0/3	349,31	363,28	422,68	439,59	435,04	452,01	438,13	455,22	461,38	476,61
EHR 700x400/15.0/3	388,49	404,03	466,95	485,63	479,31	498,00	482,40	501,21	506,16	522,86
EHR 700x400/18.0/3	443,04	460,76	517,96	538,68	530,32	551,00	533,41	554,21	556,81	575,18
EHR 700x400/21.0/3	475,76	494,79	550,68	572,71	563,03	584,99	566,12	588,20	589,52	608,97
EHR 700x400/24.0/3	520,43	541,25	600,45	624,47	612,80	636,70	615,89	639,91	639,81	660,92
EHR 700x400/27.0/3	555,74	577,97	635,76	661,19	648,12	673,40	651,21	676,61	675,11	697,39
EHR 700x400/30.0/3	638,88	664,44	717,34	746,03	731,25	759,77	734,34	762,98	758,24	783,26
EHR 700x400/33.0/3	645,68	671,51	750,40	780,42	762,76	792,51	765,85	795,72	792,23	818,37
EHR 700x400/36.0/3	670,39	697,21	776,97	808,05	790,57	821,40	792,42	823,32	818,98	846,01
EHR 700x400/39.0/3	732,18	761,47	838,76	872,31	852,35	885,59	854,20	887,51	880,77	909,84
EHR 700x400/42.0/3	781,61	812,87	890,97	926,61	903,63	938,87	906,72	942,08	933,60	964,41
EHR 700x400/45.0/3	855,74	889,97	962,33	1000,82	975,93	1013,99	977,78	1015,91	1004,34	1037,48
EHR 700x400/48.0/3	905,17	941,38	1014,54	1055,12	1027,21	1067,27	1030,30	1070,48	1057,17	1092,06
EHR 700x400/54.0/3	976,23	1015,28	1107,53	1151,83	1121,12	1164,84	1122,98	1166,78	1152,01	1190,03
EHR 700x400/57.0/3	997,85	1037,76	1129,16	1174,33	1142,74	1187,31	1144,60	1189,24	1173,64	1212,37
EHR 700x400/60.0/3	1047,28	1089,17	1178,59	1225,73	1192,17	1238,66	1194,03	1240,60	1223,07	1263,43
EHR 700x400/66.0/3	1115,25	1159,86	1246,55	1296,41	1260,14	1309,29	1262,00	1311,22	1291,03	1333,63
EHR 800x500/12.0/3	367,01	381,69	440,39	458,01	452,75	470,41	455,84	473,62	479,08	494,89
EHR 800x500/15.0/3	392,10	407,78	472,11	490,99	482,93	501,76	486,02	504,97	509,77	526,59
EHR 800x500/18.0/3	446,13	463,98	521,05	541,89	533,41	554,21	536,50	557,42	559,90	578,38
EHR 800x500/21.0/3	478,85	498,00	553,77	575,92	566,12	588,20	569,21	591,41	592,61	612,17

Type	Price Eur EHR	Price Eur EHR	Price Eur EHR..CE	Price Eur EHR..CE	Price Eur EHR..SE	Price Eur EHR..SE	Price Eur EHR..SI	Price Eur EHR..SI	Price Eur EHR..FC	Price Eur EHR..FC
	Heater without integrated control	Preheater without integrated control	Heater with integrated control (0-10)V	Preheater with integrated control (0-10)V	Heater with integrated control (external setpoint) (0...+30)	Preheater with integrated control (external setpoint) (-10...+20)	Heater with integrated control (internal setpoint) (0...+30)	Preheater with integrated control (internal setpoint) (-10...+20)	Heater Plug & play (with flow and pressure control) (0...+30)	Preheater Plug & play (with flow and pressure control) (-10...+20)
EHR 800x500/24.0/3	523,52	544,46	603,53	627,67	615,89	639,91	618,98	643,12	642,90	664,12
EHR 800x500/27.0/3	558,83	581,18	638,85	664,40	651,21	676,61	654,29	679,81	678,20	700,58
EHR 800x500/30.0/3	641,97	667,65	721,98	750,86	734,34	762,98	737,43	766,19	761,33	786,45
EHR 800x500/33.0/3	658,03	684,35	762,76	793,27	775,12	805,35	778,21	808,56	804,59	831,14
EHR 800x500/36.0/3	682,75	710,06	789,33	820,90	802,92	834,23	804,77	836,16	831,34	858,77
EHR 800x500/39.0/3	744,54	774,32	851,11	885,15	864,71	898,43	866,56	900,36	893,12	922,59
EHR 800x500/42.0/3	797,05	828,93	906,41	942,67	919,08	954,92	922,17	958,13	949,04	980,36
EHR 800x500/45.0/3	868,10	902,82	974,69	1013,68	988,29	1026,83	990,13	1028,75	1016,70	1050,25
EHR 800x500/48.0/3	911,35	947,80	1020,72	1061,55	1033,39	1073,69	1036,48	1076,90	1063,35	1098,44
EHR 800x500/54.0/3	988,59	1028,13	1119,89	1164,69	1133,48	1177,69	1135,33	1179,61	1164,37	1202,79
EHR 800x500/57.0/3	1010,21	1050,62	1141,51	1187,17	1155,10	1200,15	1156,96	1202,08	1185,99	1225,13
EHR 800x500/60.0/3	1059,64	1102,03	1190,94	1238,58	1204,53	1251,51	1206,39	1253,44	1235,42	1276,19
EHR 800x500/66.0/3	1127,61	1172,71	1258,91	1309,27	1272,50	1322,13	1274,36	1324,06	1303,39	1346,40
EHR 1000x500/15.0/3	423,52	440,46	501,99	522,07	514,34	534,40	517,43	537,61	541,93	559,81
EHR 1000x500/18.0/3	477,55	496,65	552,47	574,57	564,82	586,85	567,91	590,06	591,31	610,82
EHR 1000x500/21.0/3	510,26	530,67	585,18	608,59	597,54	620,84	600,63	624,05	624,04	644,63
EHR 1000x500/24.0/3	554,94	577,14	634,95	660,35	647,31	672,56	650,40	675,77	674,31	696,56
EHR 1000x500/27.0/3	590,25	613,86	670,26	697,07	682,62	709,24	685,71	712,45	709,62	733,04
EHR 1000x500/30.0/3	673,38	700,32	753,39	783,53	765,75	795,61	768,84	798,82	792,76	818,92
EHR 1000x500/33.0/3	667,30	717,50	772,03	802,91	784,39	814,98	787,48	818,19	813,85	840,71
EHR 1000x500/36.0/3	701,28	750,13	807,86	840,17	821,46	853,50	823,31	855,42	849,87	877,92
EHR 1000x500/39.0/3	756,89	787,17	863,47	898,01	877,07	911,28	878,92	913,20	905,48	935,36
EHR 1000x500/42.0/3	809,41	841,79	918,77	955,52	931,44	967,77	934,53	970,98	961,40	993,13
EHR 1000x500/45.0/3	886,64	922,11	993,22	1032,95	1006,82	1046,09	1008,67	1048,01	1035,24	1069,40
EHR 1000x500/48.0/3	932,98	970,30	1042,34	1084,03	1055,01	1096,16	1058,10	1099,37	1084,98	1120,78
EHR 1000x500/54.0/3	1000,94	1040,98	1132,25	1177,54	1145,83	1190,52	1147,69	1192,45	1176,73	1215,56
EHR 1000x500/57.0/3	1025,66	1066,69	1156,96	1203,24	1170,55	1216,20	1172,41	1218,13	1201,44	1241,09
EHR 1000x500/60.0/3	1068,91	1111,67	1200,21	1248,22	1213,80	1261,14	1215,66	1263,07	1244,69	1285,76
EHR 1000x500/66.0/3	1139,96	1185,56	1271,27	1322,12	1284,85	1334,96	1286,71	1336,89	1315,75	1359,17
EHR 1000x500/75.0/3	1226,47	1275,53	1376,30	1431,35	1389,89	1444,10	1393,29	1447,63	1424,34	1471,34
EHR 1000x500/84.0/3	1557,03	1619,31	1706,86	1775,13	1720,45	1787,55	1723,64	1790,86	1754,90	1812,81

(Prices without VAT). **NOTE: external temperature setpoint must be ordered separately for EHR..SE, EHR..SE/FC modifications.**

MODBUS

Type	Price Eur EHR..SE/MB	Price Eur EHR..SE/MB	Price Eur EHR..SI/MB	Price Eur EHR..SI/MB	Price Eur EHR..SE/FC/MB EHR..SI/FC/MB	Price Eur EHR..SE/FC/MB EHR..SI/FC/MB
	Heater with integrated control (external setpoint) with MODBUS (0...+30)	Preheater with integrated control (external setpoint) with MODBUS (-10...+20)	Heater with integrated control (internal setpoint) with MODBUS (0...+30)	Preheater with integrated control (internal setpoint) with MODBUS (-10...+20)	Heater plug & play (with flow and pressure control) with MODBUS (0...+30)	Preheater plug & play (with flow and pressure control) with MODBUS (-10...+20)
EHR 400x200/1.0/1	251,78	261,85	254,87	264,94	279,58	289,37
EHR 400x200/2.0/1	257,96	268,28	261,05	271,36	285,76	295,76
EHR 400x200/3.0/1	276,49	287,55	279,58	290,62	304,30	314,95
EHR 400x200/3.0/3	291,94	303,62	295,03	306,68	319,74	330,93
EHR 400x200/6.0/3	297,17	309,06	300,26	312,12	321,55	332,80
EHR 400x200/9.0/3	334,88	348,28	331,82	344,93	358,37	370,91
EHR 400x200/12.0/3	390,80	406,43	396,37	412,03	401,62	415,68
EHR 400x200/15.0/3	446,10	463,94	449,19	466,93	472,67	489,21
EHR 500x250/3.0/1	279,31	290,48	282,40	293,55	299,67	310,16
EHR 500x250/3.0/3	296,30	308,15	299,39	311,22	316,65	327,73

MODBUS

Type	Price Eur EHR..SE/MB	Price Eur EHR..SE/MB	Price Eur EHR..SI/MB	Price Eur EHR..SI/MB	Price Eur EHR..SE/FC/MB EHR..SI/FC/MB	Price Eur EHR..SE/FC/MB EHR..SI/FC/MB
	Heater with integrated control (external setpoint) with MODBUS (0...+30)	Preheater with integrated control (external setpoint) with MODBUS (-10...+20)	Heater with integrated control (internal setpoint) with MODBUS (0...+30)	Preheater with integrated control (internal setpoint) with MODBUS (-10...+20)	Heater plug & play (with flow and pressure control) with MODBUS (0...+30)	Preheater plug & play (with flow and pressure control) with MODBUS (-10...+20)
EHR 500x250/6.0/3	307,36	319,65	310,45	322,71	331,73	343,34
EHR 500x250/9.0/3	341,31	354,96	344,40	358,00	365,93	378,74
EHR 500x250/12.0/3	405,57	421,79	408,66	424,80	431,91	447,03
EHR 500x250/15.0/3	451,51	469,57	454,60	472,56	478,35	495,09
EHR 500x250/18.0/3	501,99	522,07	505,08	525,03	528,48	546,98
EHR 500x250/21.0/3	535,23	556,64	538,32	559,58	561,72	581,38
EHR 500x250/24.0/3	585,00	608,40	588,09	611,32	612,00	633,42
EHR 500x250/27.0/3	620,31	645,12	623,40	648,02	647,31	669,97
EHR 500x250/30.0/3	703,44	731,58	706,53	734,44	730,45	756,02
EHR 500x250/33.0/3	744,23	774,00	474,32	493,06	773,70	800,78
EHR 500x250/36.0/3	792,11	823,79	793,97	825,33	820,53	849,25
EHR 500x300/3.0/1	279,31	290,48	282,40	293,55	299,67	310,16
EHR 500x300/6.0/3	307,36	319,65	310,45	322,71	331,73	343,34
EHR 500x300/9.0/3	341,31	354,96	344,40	358,00	365,93	378,74
EHR 500x300/12.0/3	405,57	421,79	408,66	424,80	431,91	447,03
EHR 500x300/15.0/3	451,51	469,57	454,60	472,56	478,35	495,09
EHR 500x300/18.0/3	501,99	522,07	505,08	525,03	528,48	546,98
EHR 500x300/21.0/3	535,23	556,64	538,32	559,58	561,72	581,38
EHR 500x300/24.0/3	585,00	608,40	588,09	611,32	612,00	633,42
EHR 500x300/27.0/3	620,31	645,12	623,40	648,02	647,31	669,97
EHR 500x300/30.0/3	703,44	731,58	706,53	734,44	730,45	756,02
EHR 500x300/33.0/3	743,61	773,35	746,70	776,19	773,08	800,14
EHR 500x300/36.0/3	795,20	827,01	797,04	828,52	823,62	852,45
EHR 600x300/3.0/3	300,94	312,98	304,02	316,03	321,29	332,54
EHR 600x300/6.0/3	314,06	326,62	317,15	329,68	338,44	350,29
EHR 600x300/9.0/3	368,31	383,04	371,40	386,07	392,94	406,69
EHR 600x300/12.0/3	422,68	439,59	425,77	442,59	449,02	464,74
EHR 600x300/15.0/3	466,95	485,63	470,04	488,61	493,80	511,08
EHR 600x300/18.0/3	517,96	538,68	521,05	541,63	544,45	563,51
EHR 600x300/21.0/3	550,68	572,71	553,77	575,64	577,17	597,37
EHR 600x300/24.0/3	600,45	624,47	603,53	627,37	627,45	649,41
EHR 600x300/27.0/3	635,76	661,19	638,85	664,08	662,75	685,95
EHR 600x300/30.0/3	720,90	749,74	723,99	752,59	744,81	770,88
EHR 600x300/33.0/3	768,94	799,70	772,03	802,53	798,40	826,34
EHR 600x300/36.0/3	806,01	838,25	807,86	839,77	834,43	863,64
EHR 600x300/39.0/3	861,62	896,08	863,47	897,58	890,04	921,19
EHR 600x300/42.0/3	906,72	942,99	909,81	945,75	936,69	969,47
EHR 600x300/45.0/3	972,84	1011,75	974,69	1013,19	1001,25	1036,29
EHR 600x300/48.0/3	1042,65	1084,36	1045,74	1087,05	1072,62	1110,16
EHR 600x300/54.0/3	1136,56	1182,02	1138,42	1183,39	1167,46	1208,32
EHR 600x350/6.0/3	330,25	343,46	333,34	346,51	354,94	367,36
EHR 600x350/9.0/3	364,60	379,18	367,69	382,21	389,23	402,85
EHR 600x350/12.0/3	428,86	446,01	431,95	449,01	455,20	471,13
EHR 600x350/15.0/3	473,13	492,06	476,22	495,03	499,98	517,48
EHR 600x350/18.0/3	524,14	545,11	527,23	548,06	550,63	569,90
EHR 600x350/21.0/3	556,85	579,12	559,94	582,06	583,34	603,76
EHR 600x350/24.0/3	606,62	630,88	609,71	633,79	633,62	655,80
EHR 600x350/27.0/3	641,94	667,62	645,03	670,51	668,93	692,34
EHR 600x350/30.0/3	725,07	754,07	728,16	756,92	752,06	778,38
EHR 600x350/33.0/3	778,21	809,34	781,30	812,16	807,68	835,95

Type	Price Eur EHR..SE/MB	Price Eur EHR..SE/MB	Price Eur EHR..SI/MB	Price Eur EHR..SI/MB	Price Eur EHR..SE/FC/MB EHR..SI/FC/MB	Price Eur EHR..SE/FC/MB EHR..SI/FC/MB
	Heater with integrated control (external setpoint) with MODBUS (0...+30)	Preheater with integrated control (external setpoint) with MODBUS (-10...+20)	Heater with integrated control (internal setpoint) with MODBUS (0...+30)	Preheater with integrated control (internal setpoint) with MODBUS (-10...+20)	Heater plug & play (with flow and pressure control) with MODBUS (0...+30)	Preheater plug & play (with flow and pressure control) with MODBUS (-10...+20)
EHR 600x350/36.0/3	812,19	844,68	814,04	846,19	840,61	870,03
EHR 600x350/39.0/3	873,98	908,94	875,83	910,43	902,39	933,97
EHR 600x350/42.0/3	922,17	959,06	925,26	961,81	952,13	985,45
EHR 600x350/45.0/3	997,54	1037,44	999,40	1038,88	1025,97	1061,88
EHR 600x350/48.0/3	1048,83	1090,78	1051,92	1093,47	1078,80	1116,56
EHR 600x350/54.0/3	1142,74	1188,45	1144,60	1189,81	1173,64	1214,72
EHR 700x400/9.0/3	401,68	417,75	404,77	420,76	426,30	441,22
EHR 700x400/12.0/3	465,93	484,57	469,02	487,55	492,27	509,50
EHR 700x400/15.0/3	510,20	530,61	513,29	533,56	537,05	555,85
EHR 700x400/18.0/3	561,21	583,66	564,29	586,58	587,70	608,27
EHR 700x400/21.0/3	593,93	617,69	597,02	620,60	620,42	642,13
EHR 700x400/24.0/3	643,70	669,45	646,79	672,34	670,70	694,17
EHR 700x400/27.0/3	679,01	706,17	682,10	709,04	706,00	730,71
EHR 700x400/30.0/3	762,14	792,63	765,23	795,46	789,15	816,77
EHR 700x400/33.0/3	793,66	825,41	796,74	828,21	823,13	851,94
EHR 700x400/36.0/3	821,46	854,32	823,31	855,83	849,87	879,62
EHR 700x400/39.0/3	883,25	918,58	885,10	920,06	911,66	943,57
EHR 700x400/42.0/3	934,53	971,91	937,62	974,66	964,49	998,25
EHR 700x400/45.0/3	1006,81	1047,08	1008,67	1048,51	1035,24	1071,47
EHR 700x400/48.0/3	1058,10	1100,42	1061,19	1103,11	1088,06	1126,14
EHR 700x400/54.0/3	1152,01	1198,09	1153,87	1199,45	1182,90	1224,30
EHR 700x400/57.0/3	1173,64	1220,59	1175,50	1221,93	1204,53	1246,69
EHR 700x400/60.0/3	1223,07	1271,99	1224,93	1273,31	1217,44	1260,05
EHR 700x400/66.0/3	1253,43	1303,57	1255,23	1304,81	1321,93	1368,20
EHR 800x500/12.0/3	483,64	502,99	486,73	505,96	509,97	527,82
EHR 800x500/15.0/3	513,82	534,37	516,91	537,33	540,67	559,59
EHR 800x500/18.0/3	564,30	586,87	567,39	589,80	590,79	611,47
EHR 800x500/21.0/3	597,02	620,90	600,11	623,81	523,51	541,83
EHR 800x500/24.0/3	646,79	672,66	649,88	675,55	673,79	697,37
EHR 800x500/27.0/3	682,10	709,38	685,19	712,26	709,09	733,91
EHR 800x500/30.0/3	765,23	795,84	768,32	798,67	792,24	819,97
EHR 800x500/33.0/3	806,01	838,25	809,10	841,06	835,48	864,72
EHR 800x500/36.0/3	833,82	867,17	835,67	868,68	862,23	892,41
EHR 800x500/39.0/3	895,60	931,42	897,45	932,90	924,02	956,36
EHR 800x500/42.0/3	949,97	987,97	953,06	990,71	979,94	1014,24
EHR 800x500/45.0/3	1019,18	1059,95	1021,03	1061,36	1047,59	1084,26
EHR 800x500/48.0/3	1064,29	1106,86	1067,37	1109,53	1094,24	1132,54
EHR 800x500/54.0/3	1164,37	1210,94	1166,23	1212,30	1195,26	1237,09
EHR 800x500/57.0/3	1186,00	1233,44	1187,85	1234,77	1216,89	1259,48
EHR 800x500/60.0/3	1235,42	1284,84	1237,28	1286,15	1266,32	1310,64
EHR 800x500/66.0/3	1303,39	1355,53	1305,25	1356,81	133,28	137,94
EHR 1000x500/15.0/3	545,24	567,05	548,33	569,99	572,08	592,10
EHR 1000x500/18.0/3	595,72	619,55	598,81	622,46	622,21	643,99
EHR 1000x500/21.0/3	628,43	653,57	631,52	656,47	654,93	677,85
EHR 1000x500/24.0/3	678,20	705,33	681,29	708,20	705,20	729,88
EHR 1000x500/27.0/3	713,51	742,05	716,60	744,91	740,52	766,44
EHR 1000x500/30.0/3	796,64	828,51	799,73	831,32	823,65	852,48
EHR 1000x500/33.0/3	815,28	847,89	818,37	850,70	844,74	874,31
EHR 1000x500/36.0/3	852,35	886,44	854,20	887,94	880,77	911,60
EHR 1000x500/39.0/3	907,96	944,28	909,81	945,75	936,38	969,15
EHR 1000x500/42.0/3	962,33	1000,82	965,42	1003,55	992,29	1027,02
EHR 1000x500/45.0/3	1037,72	1079,23	1039,56	1080,62	1066,13	1103,44
EHR 1000x500/48.0/3	1085,91	1129,35	1088,99	1132,01	1115,87	1154,93

Type	Price Eur EHR..SE/MB	Price Eur EHR..SE/MB	Price Eur EHR..SI/MB	Price Eur EHR..SI/MB	Price Eur EHR..SE/FC/MB EHR..SI/FC/MB	Price Eur EHR..SE/FC/MB EHR..SI/FC/MB
	Heater with integrated control (external setpoint) with MODBUS (0...+30)	Preheater with integrated control (external setpoint) with MODBUS (-10...+20)	Heater with integrated control (internal setpoint) with MODBUS (0...+30)	Preheater with integrated control (internal setpoint) with MODBUS (-10...+20)	Heater plug & play (with flow and pressure control) with MODBUS (0...+30)	Preheater plug & play (with flow and pressure control) with MODBUS (-10...+20)
EHR 1000x500/54.0/3	1176,73	1223,80	1178,59	1225,14	1207,62	1249,89
EHR 1000x500/57.0/3	1201,44	1249,50	1203,30	1250,83	1232,33	1275,46
EHR 1000x500/60.0/3	1244,69	1294,48	1246,55	1295,79	1275,59	1320,24
EHR 1000x500/66.0/3	1315,75	1368,38	1317,61	1369,66	1346,64	1393,77
EHR 1000x500/75.0/3	1420,79	1477,62	1424,18	1480,44	1455,24	1506,17
EHR 1000x500/84.0/3	1751,35	1821,40	1754,75	1824,06	1785,79	1848,29

(Prices without VAT).

NOTE: external temperature setpoint must be ordered separately for EHR..SE/MB, EHR..SE/FC/MB modifications.

ACCESSORIES

Type
External controller REC16, 1~230 VAC or 2~400 VAC, 16A
External controller REC16MB, 1~230 VAC or 2~400 VAC, 16A
External controller REC25B, 3~400 VAC/max. 16,44 kW, 25A
External controller REC25, 3~400 VAC/max. 16,44 kW, 25A
External controller REC50B, 3~400 VAC/max. 32,89 kW, 50A
External controller REC50, 3~400 VAC/max. 32,89 kW, 50A
Duct temperature sensor TSD/NTC10K/2m
External temperature setpoint RES 001
External temperature setpoint with room sensor RES 002/NTC

External temperature setpoint RES 001

External temperature setpoint with room sensor RES 002/NTC

Duct temperature sensor TSD/NTC10K/2m.

NOTE: to specify a temperature scale (-10...+20), (-30...0) or (0...+30) in order.

NOTE: the heater's standard temperature scale is (0...+30). The Preheater's standard temperature scale is (-10...+20) and (-30...0). The other temperature scales are possible according to a client's requirements.

NOTE: heaters/preheaters with an integrated control system: EHR..SE, EHR..SE/FC, EHR..SE/F, EHR..SE/MB, EHR..SE/FC/MB, EHR..SE/F/MB, EHR..SE/K, EHR..SE/FC/K, EHR..SE/F/K, EHR..SE/MB/K, EHR..SE/FC/MB/K, EHR..SE/F/MB/K, EHR..SI, EHR..SI/FC, EHR..SI/F, EHR..SI/MB, EHR..SI/FC/MB, EHR..SI/F/MB, EHR..SI/K, EHR..SI/FC/K, EHR..SI/F/K, EHR..SI/MB/K, EHR..SI/FC/MB/K, EHR..SI/F/MB/K – duct temperature sensor L-2.0 m included.

NOTE: external temperature setpoint RES 001 and external temperature setpoint with room sensor RES 002/NTC are needed for: EHR..SE, EHR..SE/FC, EHR..SE/F, EHR..SE/MB, EHR..SE/FC/MB, EHR..SE/F/MB, EHR..SE/K, EHR..SE/FC/K, EHR..SE/F/K, EHR..SE/MB/K, EHR.SE/FC/MB/K, EHR..SE/F/MB/K modifications.

DUCT TEMPERATURE SENSOR TSD/NTC10K

DESCRIPTION

The duct temperature sensor with an NTC element is designed for measuring air temperature in ventilation ducts. Insertion length is not adjustable.

TECHNICAL DATA:

- Insertion length: 100 mm.
- Cable length: 2.0 m., 15 m., or 25 m.
- Protection class: IP54.
- Sensor element thermistor: NTC10K B25/85 (K)3977.
- Temperature range: -40...+60°C.

Type	Price Eur
TSD/NTC10K/2m	24,50
TSD/NTC10K/15m	28,60
TSD/NTC10K/25m	32,80

(Prices without VAT).

DUCT TEMPERATURE SENSOR TSD/PT1000/2m

DESCRIPTION

The duct temperature sensor with a PT1000 element is designed for measuring air temperature in ventilation ducts. The sensor has an adjustable length. The length of the connecting cable is 2 m.

TECHNICAL DATA:

- Insertion length: 100 mm.
- Cable length: 2.0 m.
- Protection class: IP54.
- Sensor element thermistor: PT1000(1kΩ/0°C).
- Temperature range: -30...+60°C.

Type	Price Eur
TSD/PT1000/2m	32,90

(Prices without VAT).

SURFACE TEMPERATURE SENSOR TSS/NTC10K/2m

DESCRIPTION

The surface temperature sensor with an NTC element is designed for measuring temperature on closed pipe systems. Insertion length is not adjustable. The length of the connecting cable is 2 m.

TECHNICAL DATA:

- Insertion length: 30 mm.
- Insertion diameter: 4 mm.
- Cable length: 2.0 m.2x0,14² mm.
- Protection class: IP54.
- Sensor element thermistor: NTC10K B25/85 (K)3977.
- Temperature range: -40...+85°C.

Type	Price Eur
TSS/NTC10K/2m	31,90

(Prices without VAT).

SURFACE TEMPERATURE SENSOR TSS/PT1000/2m

DESCRIPTION

The surface temperature sensor with PT1000 element is designed for measuring temperature on closed pipe systems. Insertion length is not adjustable. The length of the connecting cable is 2 m.

TECHNICAL DATA:

- Insertion length: 30 mm.
- Insertion diameter: 4 mm.
- Cable length: 2.0 m.2x0,14² mm.
- Protection class: IP54.
- Sensor element thermistor: PT1000.
- Temperature range: -40...+85°C.

Type	Price Eur
TSS/PT1000/2m	34,90

(Prices without VAT).

ROOM TEMPERATURE SENSOR TSR/NTC10

NEW

DESCRIPTION

The sensor with NTC-element is designed for measuring air temperature in rooms.

TECHNICAL DATA:

- Protection class: IP54.
- Sensor element thermistor: NTC10K B25/85 (K)3977.
- Temperature range: -40...+60°C.
- Dimensions: X-71 mm, Y-71 mm, Z-27 mm.

Type	Price Eur
TSR/NTC10	39,90

(Prices without VAT).

ROOM TEMPERATURE SENSOR TSR/PT1000

NEW

DESCRIPTION

The sensor with PT1000 element is designed for measuring air temperature in rooms.

TECHNICAL DATA:

- Protection class: IP20.
- Sensor element thermistor: PT1000.
- Temperature range: 0...+60°C.
- Dimensions: X-71 mm, Y-71 mm, Z-27 mm.

Type	Price Eur
TSR/PT1000	47,90

(Prices without VAT).

EXTERNAL TEMPERATURE SETPOINT RES 001

DESCRIPTION

The RES 001 is intended to be used for external temperature setpoint when it is connected to the electric heater's controller REH.. installed in heaters EHC.. or EHR.. .

TECHNICAL DATA:

- Protection class: IP30.
- Nominal value 10 kΩ.
- Temperature range: 0...+30°C.
- Dimensions: X-71 mm, Y-71 mm, Z-24 mm.

Type	Price Eur
RES 001	48,90

(Prices without VAT). **NOTE: the other temperature range is possible according to a client's requirements.**

EXTERNAL TEMPERATURE SETPOINT WITH ROOM SENSOR RES 002/NTC

DESCRIPTION

The RES 002/NTC is intended to be used for external temperature setpoint when it is connected to the electric heater's controller REH .. installed in heaters EHC .. or EHR .. . Sensor with NTC element is for measuring air temperature in the room.

TECHNICAL DATA:

- Protection class: IP30.
- Nominal value 10 kΩ.
- Temperature range: 0...+30°C.
- Sensor element thermistor: NTC10K B25/85 (K)3977.
- Dimensions: X-71 mm, Y-71 mm, Z-24 mm.

Type	Price Eur
RES 002/NTC	58,90

(Prices without VAT). **NOTE: the other temperature range is possible according to a client's requirements.**

Heating elements

DESCRIPTION

Tubular heating elements are used in ventilation systems. The possibility to modify the shape of the heating elements is suitable for many applications.

Type	Price Eur
Heating element 6,4mm 500W 230V „U“ L-370mm +/-10	12,52
Heating element 6,4mm 1000W 230V „U“ L-680mm +/-10	18,58
Heating element 6,4mm 1500W 230V „U“ L-990mm +/-15	23,49

(Prices without VAT).

NOTE: heating elements are with double flange and 6,3 tags.

PTC heating elements

NEW

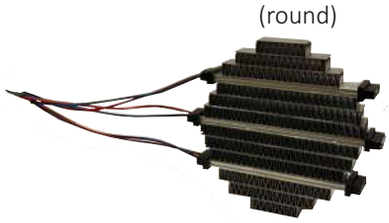
DESCRIPTION

The PTC heating elements are intended to be used for heating clean air in the ventilation systems. Also, can be used for heating or preheating functions in air-handling units.

TECHNICAL DATA:

- Voltage: 1~230V, 50Hz.
- The power: 500W/1000W/2000W-round types, 800W/2000W-rectangular types.
- Diameter: according to element.
- Lowest air temperature: -30°C.

PTC heating element (round)



PTC heating element (rectangular)

Type	Price Eur
PTC heating element 500W, d-125 mm, gap-4,5 mm, wires-150 mm (round)	60,90
PTC heating element 1000W, d-160 mm, gap-4,5 mm, wires-150 mm (round)	75,80
PTC heating element 2000W, d-200 mm, gap-4,5 mm, wires-150 mm (round)	159,00
PTC heating element 800W, 66x234x20 mm, gap-4,5 mm, wires-150 mm (rectangular)	67,70
PTC heating element 2000W, 127x362x20 mm, gap-4,5 mm, wires-150 mm (rectangular)	162,00

(Prices without VAT).

NOTE: the sizes and capacities are possible according to a client's requirements.

Air damper actuators without spring return

DESCRIPTION

The actuators contain the right products to suit different torques, in all the usual damper sizes. Quality and highly-developed technology are of course a part of the package. Whether for 24, 120 or 240 VAC/DC, the optimized design of the actuators guarantees at least 6000 cycles for springs and motors. Less mechanical components mean that the integrated BLDC technology (brushless direct current) reduces wear.

Type	315-024-04/8E	227C-024-05	227S-024-05	227S-230-05	227-024-10	227-230-10	227C-024-10	227-024-15
Torque motor	4 Nm	5 Nm	5 Nm	5 Nm	10 Nm	10 Nm	10 Nm	15 Nm
3 point control			·	·	·	·		·
On / Off			·	·	·	·		·
Power supply 24 VAC	·	·	·		·		·	·
Power supply 230 VAC				·		·		
Control (0) 2...10 VDC	·	·					·	
With spring return								
Price Eur	**170,02**	**187,02**	**142,38**	**142,38**	**170,02**	**175,33**	**245,47**	**179,57**

(Prices without VAT).

Type	227-230-15	227C-024-15	363-230-20	363-230-20-S2	363-024-20	363-024-20-S2	363C-024-20
Torque motor	15 Nm	15 Nm	20 Nm	20 Nm	20 Nm	20 Nm	20 Nm
3 point control	·		·	·	·	·	
On / Off	·		·	·	·	·	
Power supply 24 VAC		·			·	·	·
Power supply 230 VAC	·		·	·			
Control (0) 2...10 VDC		·					·
With spring return							
Price Eur	**185,96**	**268,82**	**197,65**	**248,64**	**194,44**	**242,26**	**277,35**

(Prices without VAT).

Air damper actuators with spring return

DESCRIPTION

The actuators contain the right products to suit different torques, in all the usual damper sizes. Quality and highly-developed technology are of course a part of the package. Whether for 24, 120 or 240 VAC/DC, the optimized design of the actuators guarantees at least 6000 cycles for springs and motors. Less mechanical components mean that the integrated BLDC technology (brushless direct current) reduces wear.

Type	341-230D-0	341-024D-0	341-230-05	341-230-05-S	341-024-05-S	341-024-05	341C-024-05	361-230-10	361-230-10-S2	361-024-10
Torque motor	3 Nm	3 Nm	5 Nm	5 Nm	5 Nm	5 Nm	5 Nm	10 Nm	10 Nm	10 Nm
3 point control										
On / Off	·	·	·	·	·	·		·	·	·
Power supply 24 VAC		·			·	·	·			·
Power supply 230 VAC	·		·	·				·	·	
Control (0) 2...10 VDC							·			
With spring return	·	·	·	·	·	·	·	·	·	·
Price Eur	**194,44**	**180,64**	**239,09**	**270,96**	**253,95**	**219,97**	**297,53**	**326,23**	**370,84**	**274,14**

(Prices without VAT).

Type	361C-024-10	361-024-10-S2	361-230-20	361-230-20-S2	361-024-20	361-024-20-S2	361C-024-20
Torque motor	10 Nm	10 Nm	20 Nm	20 Nm	20 Nm	20 Nm	20 Nm
3 point control							
On / Off		·	·	·	·	·	
Power supply 24 VAC	·	·			·	·	·
Power supply 230 VAC			·	·			
Control (0) 2...10 VDC	·						·
With spring return	·	·	·	·	·	·	·
Price Eur	**329,41**	**311,33**	**388,92**	**425,04**	**337,89**	**374,05**	**391,25**

(Prices without VAT).

Room thermostats TEM 16, TMM6

DESCRIPTION

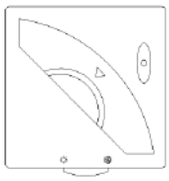
Electromechanical thermostats are intended to be used for control of heating, cooling, and air conditioning systems. Thermostats can control fans, coolers, heaters or other types of equipment according to temperature setpoint.

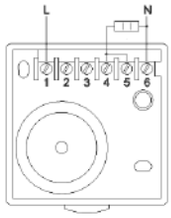
TECHNICAL DATA:

- Temperature setpoint: +10...+30 °C.
- Measurement accuracy: ±1°C.
- Power supply: 230V.
- Frequency: 50/60 Hz.
- Protection class: IP20.
- Dimensions: 80x80x44 mm.

Type	Supply voltage [VAC]	Temperature setpoint [°C]	Control load	Max. ambient temperature [°C]	Price Eur
TEM 16	230	+10...+30	16(2.5) A, 230V	50	**34,90**

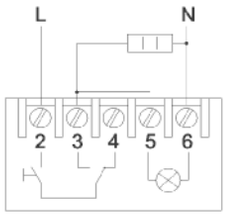
(Prices without VAT).





Type	Supply voltage [VAC]	Temperature setpoint [°C]	Control load	Max. ambient temperature [°C]	Price Eur
TMM6	230	+10...+30	6(2) A, 230V	50	**32,90**

(Prices without VAT).



Electromechanical room thermostat for fan coil TMM6-3V

DESCRIPTION

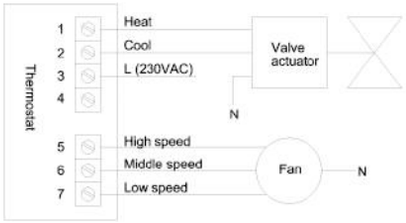
Electromechanical thermostats are intended to be used for control of heating, cooling, and air conditioning systems. Thermostats can control heating, cooling valve actuators and 3-speed fans according to temperature set point.

TECHNICAL DATA:

- Temperature setpoint: +10...+30 °C.
- Measurement accuracy: ±1°C.
- Power supply: 230V.
- Frequency: 50/60 Hz.
- Protection class: Ip20.
- Dimensions: 128x85x39 mm.

Type	Supply voltage [VAC]	Temperature setpoint [°C]	Control load	Max. ambient temperature [°C]	Price Eur
TMM6-3V	230	+10...+30	6(4) A, 230V	50	**37,90**

(Prices without VAT).



TEM 16TD touch screen weekly heating thermostat

DESCRIPTION

This new design thermostat satisfies all market requirements. It has a large LCD display, easy operation, and complete functions. It can control the motorized ball valve, motorized valve, thermal valve, solenoid valve, heater, electric heating, and carbon crystal. It is used for floor heating. Flush mounting.

TECHNICAL DATA:

- Power supply: AC200~240V, 50/60.
- Load current: (3) 16A electric heating.
- Accuracy: ±0.5°C.
- Limit temperature range: 5+99°C.
- Consumption: <0.3W.
- Temperature sensor: NTC.
- Size: 86x86x17 mm.

Type	Supply voltage [VAC]	Temperature setpoint [°C]	Control load	Max. ambient temperature [°C]	Price Eur
TEM 16TD	230	+5...+60	3 A, 240V	50	**92,90**

(Prices without VAT).

TEM 3TD series touch screen thermostat with the possibility to connect to BMS system

DESCRIPTION

TEM 3TD series of touchscreen thermostats is designed for fan coil units or central windpipe systems. Air conditioning helps to adjust the indoor temperature by comparing the room temperature with the set temperature. Surface mounting.

TECHNICAL DATA:

- Power supply: AC100~240V, 50/60.
- Rated current: 3A.
- Ambient: 0-50°C.
- Size: 130x90x27 mm.
- Installation: surface-mounting.
- Sensor: NTC.
- Accuracy: ±0.5°C.
- Protection class: IP30.
- Storage temperature: 10°C~60°C.
- With RS485.

Type	Supply voltage [VAC]	Temperature setpoint [°C]	Control load	Max. ambient temperature [°C]	Price Eur
TEM 3TD	230	+5...+35	3 A, 240V	50	**82,90**

(Prices without VAT).

Frost protection thermostat FT 6.0

DESCRIPTION

Frost protection thermostat is developed to protect ventilation components (water heaters) from freezing under cold weather and insufficient heating. Frost protection thermostat works under pressure of steam, reacts fast and has maximum sensitivity.

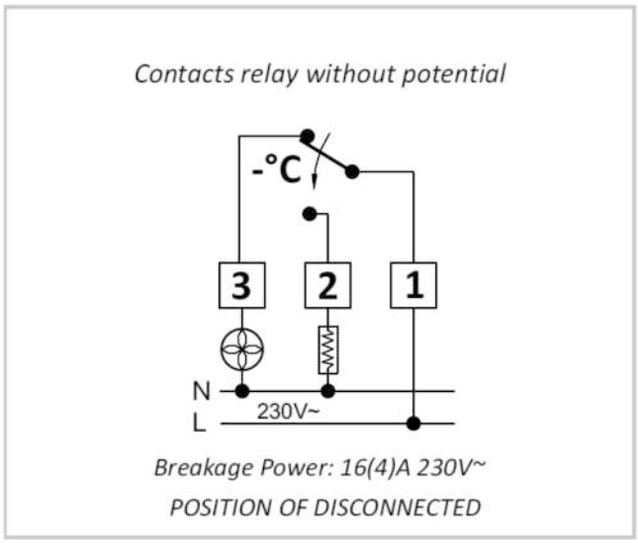
TECHNICAL DATA:

- Regulation scale: -15°C to +15°C.
- Differential: 2°C fix.
- Capillary reaction length 300..600 mm (depending on capillary length).
- Maximum temperature for the body: 55°C.
- Minimum capillary bending radius: 5 mm.
- Connections fast-on: 6,3 x 0,8 DIN or screw.
- Capillary tinned cooper: 1.8 m./4 m./6 m.
- Switched contacts: 16(4)A 250 V~.
- Approvals: EN-60730-1.
- Mounting accessories 4 sets.
- With RS485.

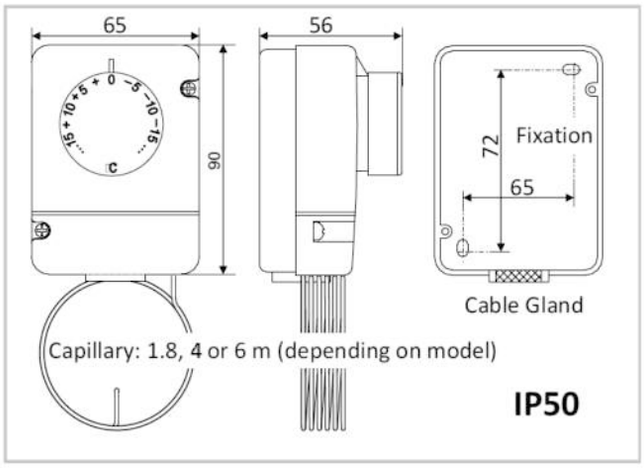
Type	Work range [°C]	Reset type	Max. ambient temperature [°C]	Mounting type	Price Eur
FT 6.0	-15....+15	manual	55	Capillary	65,76

(Prices without VAT).

ELECTRICAL CONNECTION



DIMENSIONS



Capillary and surface thermostats

Type	Work range	Reset type	Max. Ambient temperature [°C]	Mounting type	Price Eur
TY 95/AC, 70°C	70°C calibrated	automatic	150	Capillary	**15,66**
TY 95/S, 100°C	100°C calibrated	manual	150	Capillary	**23,04**
TY 95/H, 100°C	100°C calibrated	manual	150	Capillary	**23,04**
T-24-60°C bimetallic	60°C calibrated	automatic	100	Surface	**5,22**
T-24-70°C bimetallic	70°C calibrated	automatic	100	Surface	**5,22**
T-24R-100°C	100°C calibrated	manual	150	Surface	**6,30**

(Prices without VAT).

TECHNICAL DATA- TY95/AC, 70°C TA:

- Max. ambient temperature T150.
- Rated current and voltage 16(3)A/250V NC - 0,5A/250V NO.
- Minimal current 200 mA.

TECHNICAL DATA- TY95/S, 100°C:

- Max. ambient temperature T150.
- Rated current and voltage 16(3)A/250V NC - 0,5A/250V NO.
- Minimal current 200 mA.

TECHNICAL DATA- TY95/H, 100°C:

- Max. ambient temperature T150.
- Rated current and voltage 16(3)A/250V NC - 0,5A/250V NO.
- Minimal current 200 mA.
- With reset cap.

TECHNICAL DATA- T-24-60°C, T24-70°C:

- The number of automatic cycles, at rated current 10 A and power coeff. 0,95, not less than 100000.

TECHNICAL DATA- T-24R-100°:

- The number of automatic cycles, at rated current 10 A and power coefficient 0,95, not less than –100000.
- Rated current power coeff. 0,95, not more 16A.Minimal current 200mA.

AUTOTRANSFORMERS

Description	Code	I in [A]	Weight [kg]	Safety class	Price Eur
Autotransformer 5 outputs, 115V..230V (1,2A..3A), 80V..230V (4A..11A), 50/60Hz	124960	1,2	1,1	IP00	**33,23**
	124959	1,5	1,3	IP00	**36,29**
	124964	2,2	1,9	IP00	**45,16**
	124957	3,0	2,5	IP00	**58,98**
	124218	4,0	3,0	IP00	**71,77**
	124185	5,0	3,4	IP00	**76,85**
	124187	7,0	5,5	IP00	**119,99**
	124223	11,0	7,4	IP00	**141,04**

Description	Code	I in [A]	Weight [kg]	Safety class	Price Eur
Autotransformer 5 outputs, 130V..400V, 50/60Hz	124206	1,0	2,2	IP00	**53,23**
	124183	2,0	2,8	IP00	**76,49**
	124162	3,0	4,0	IP00	**87,49**
	124175	4,0	6,3	IP00	**125,44**
	124161	5,0	7,3	IP00	**137,68**
	124174	7,0	9,1	IP00	**184,48**
	124200	11,0	14,3	IP00	**247,81**
	124184	14,0	15,6	IP00	**261,26**

(Prices without VAT).

TRANSFORMERS

Description	Code	Primary (V)	Secondary (V)	Power (VA)	Price Eur
230v//18v 30VA encapsulated with tabs	124936	230	1x18	18,0	**30,23**
230v//18v 15VA/24v 15VA, 30VA encapsul. with tabs	124937	230	1x18//1x18	30,0	**31,96**
230v//18v 25VA/24v 25VA, encapsulated with tabs	124935	230	1x18//1x24	50,0	**39,05**

(Prices without VAT).

PCB TRANSFORMERS

Description	Code	Primary [V]	Secondary [V]	Power [VA]	Price Eur
Transformer 1x12V/6,0W	124915	230	1x12	6,0	**9,84**
Transformer 1x12V/20W	124924	230	1x12	20,0	**17,64**

(Prices without VAT).

NOTE: possible to supply various versions according to client's requirements.

Note

valtronika®
control electronics

2024

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