

INSTALLATION INSTRUCTION

HE 500x300-5.1-1

HE 500x300-9.0-3

HE 600x350-5.1-1

HE 600x350-9.0-3

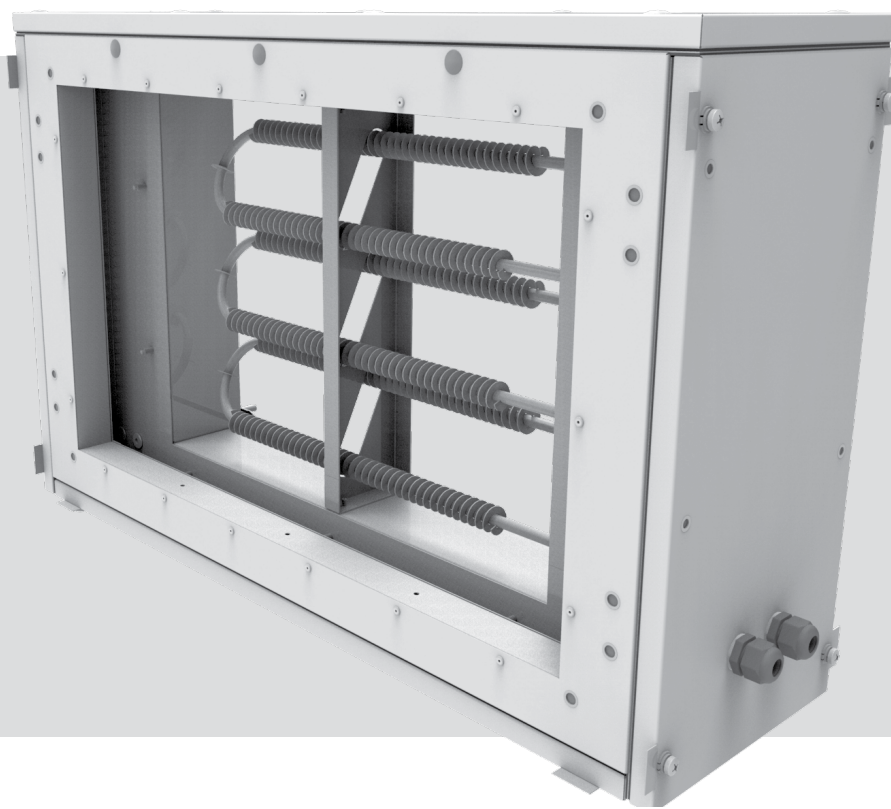
HE 600x350-12.0-3

HE 700x400-12.0-3

HE 800x500-24.0-3

HE 1000x500-24.0-3

HE 1200x600-24.0-3



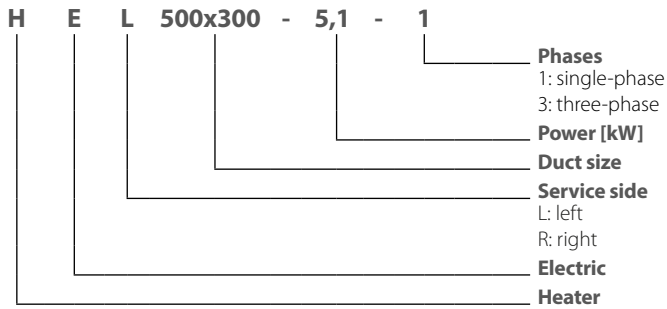
Electric heater

Designation key.....	3
Technical data.....	3
Heater installation.....	4
Electrical connections.....	6
Technical maintenance.....	8
Storage and transportation regulations.....	9
Manufacturer's warranty.....	10
Certificate of acceptance.....	11
Seller information.....	11
Installation certificate.....	11
Warranty card.....	11

The unit is a component part and is not designed for independent operation.

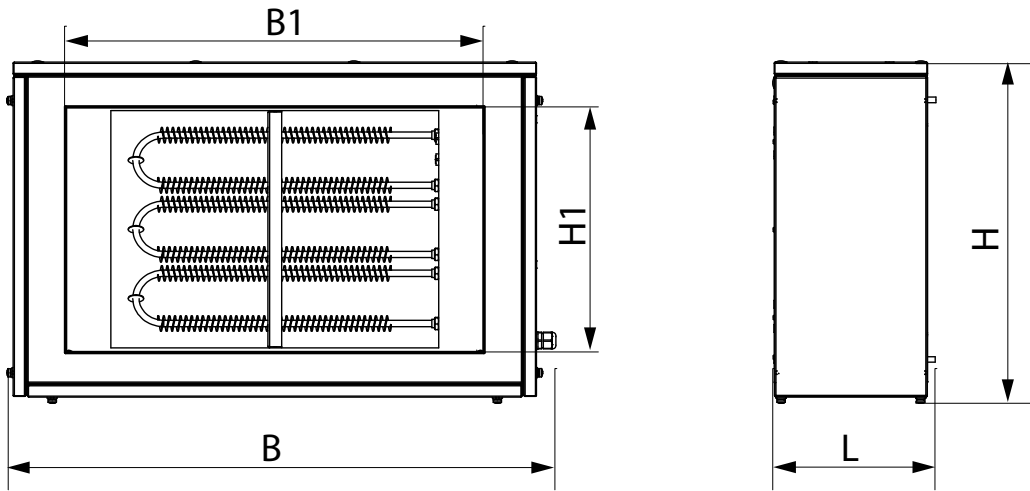
The unit design is constantly being improved, thus some models may be slightly different from those described in this manual.

DESIGNATION KEY



TECHNICAL DATA

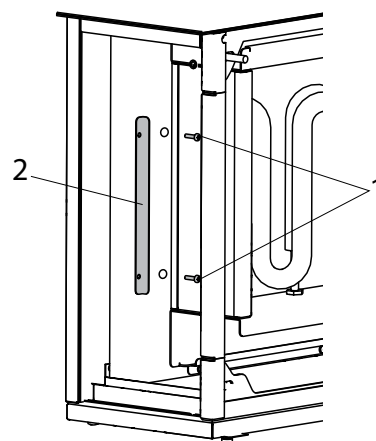
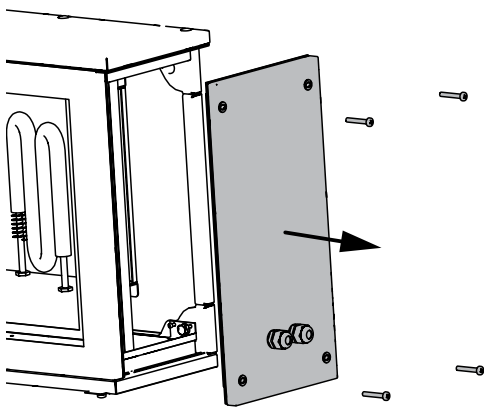
	Unit type	Number of electric heating elements [pcs.]	Total power [kW]	TRIAC controller	Power	Total current [A]
HE 500x300-5.1-1	AV02 RP 1500	3	5.10	RNS -5,1	1/230	22.2
HE 500x300-9.0-3	AV02 RP 2500		9.0	RNS-12,0	3/400	13.0
HE 600x350-5.1-1	AV02 RH 1500	3	5.10	RNS -5,1	1/230	22.2
	AV02 CFP 1500					
	AV02 CFH 1500					
HE 600x350-9.0-3	AV02 RH 2500	3	9.0	RNS-12,0	3/400	13.0
	AV02 CFP 2500					
	AV02 CFH 2500					
HE 600x350-12.0-3	AV03 CFP 3500	3	12.0	RNS-12,0	3/400	17.3
HE 700x400-12.0-3	AV03 RH 3500	3	12.0	RNS-12,0	3/400	17.3
	AV03 CFH 3500					
HE 800x500-24.0-3	AV07 CFP 5000	6	24	RNS-24,0	3/400	34.6
	AV07 CFP 6000					
HE 1000x500-24.0-3	AV07 RH 5000	6	24	RNS-24,0	3/400	34.6
	AV07 RH 6000					
	AV07 CFH 5000					
	AV07 CFH 6000					
HE 1200x600-24.0-3	AV12 RH 9000	6	24	RNS-24,0	3/400	34.6
	AV12 CFH 9000					



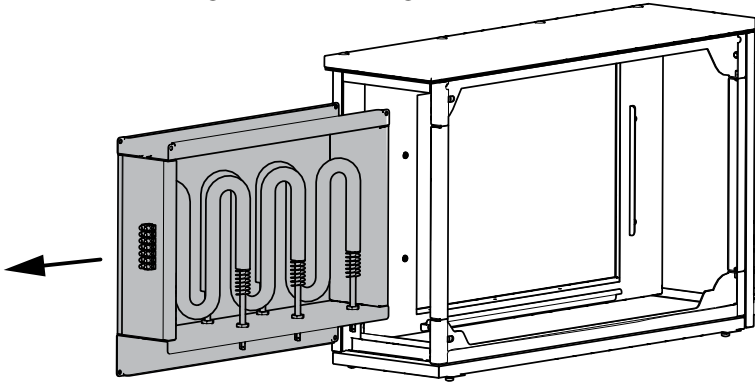
Unit standard size	Electric heater	B	H	L	B1	H1	Weight [kg]
		mm					
AV02	HE 500x300-5.1-1	645	630	380	500	300	11
	HE 500x300-9.0-3						12
	HE 600x350-5.1-1	750	480	220	600	350	25
	HE 600x350-9.0-3						25
	HE 600x350-12.0-3						26
AV03	HE 600x350-12.0-3						27
AV03	HE 700x400-12.0-3	890	645	220	700	400	27
AV07	HE 800x500-24.0-3	1000	970	360	800	500	30
AV07	HE 1000x500-24.0-3	1280	710	360	1000	500	45
AV12	HE 1200x600-24.0-3	1410	907	505	1200	600	53

HEATER INSTALLATION

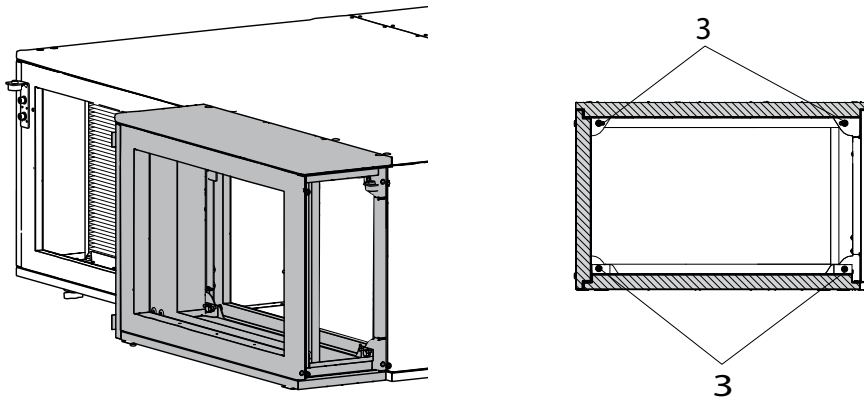
Unscrew the screws and remove the side panel from the heater. Unscrew the screws (1) and remove the angle (2).



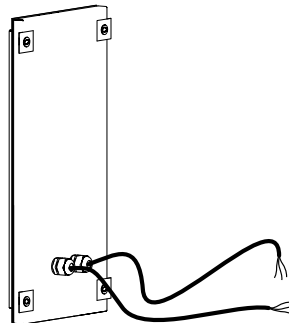
Remove the cartridge with the heating elements from the heater casing.



Fasten the heater casing to the unit with the screws (3).



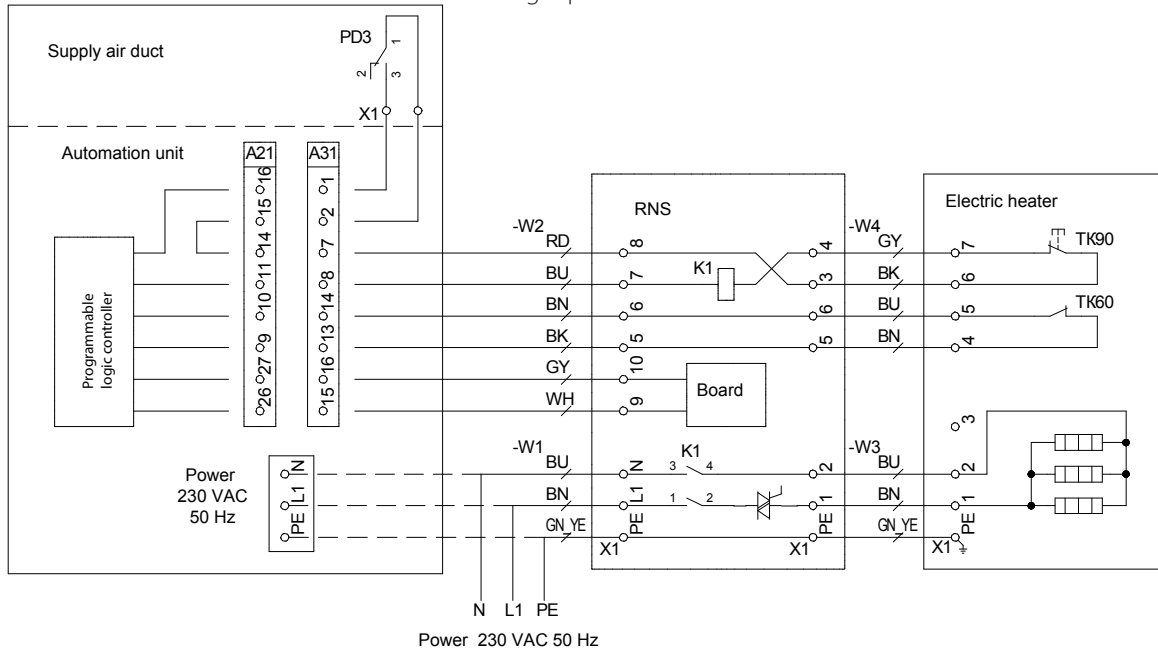
Install the cartridge with heating elements into the casing. Fix the angle (2).
Insert the wires into the cable glands and connect them to the terminal block in accordance with the wiring diagram.



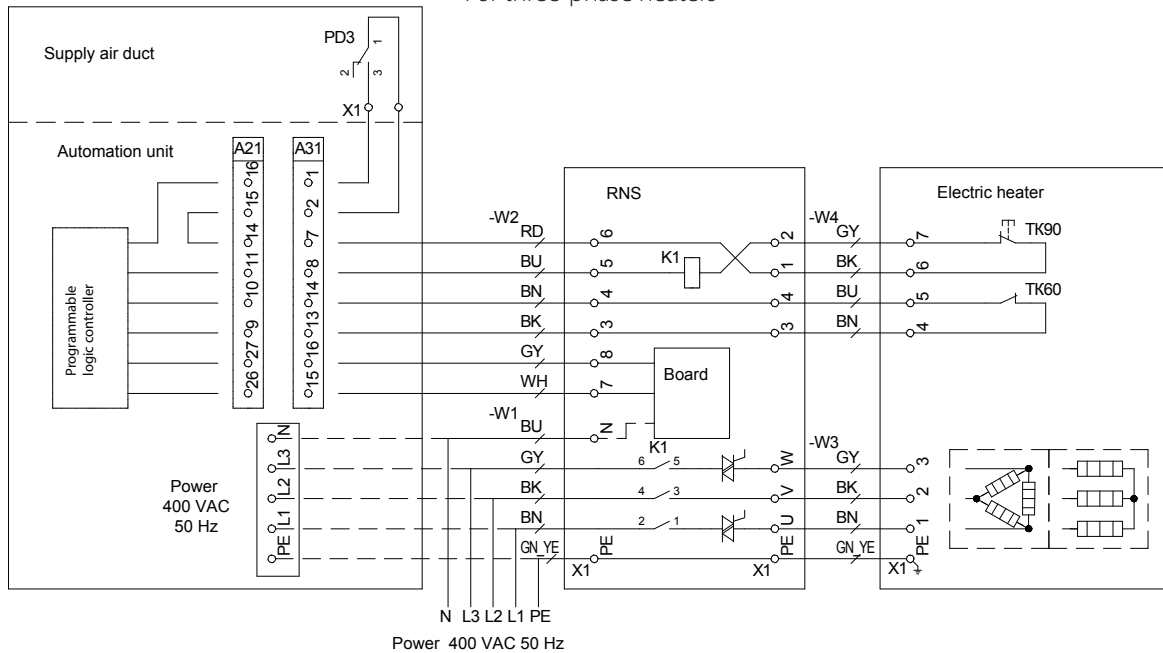
Install the side panel.

ELECTRICAL CONNECTIONS

For single-phase heaters



For three-phase heaters

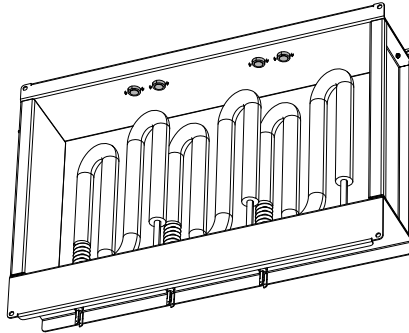


BK – black
 BN – brown
 BU – blue
 RD – red
 WH – white
 GY – grey
 GN_YE – yellow-green

Heater connection cables are included in the delivery set. Designed for connection of thermal contacts 4x0.5 mm², power supply 3x4 mm² (for single-phase heaters) and 4x4 mm² (for three-phase heaters). The pressure switch is connected with a 2x0.5 mm² cable. Before connecting the pressure switch, it is necessary to remove the jumper from the X1 terminal block in the unit (in the supply fan section).

The electric heater has two built-in thermal contacts for overheating protection: TK60 with an actuation temperature of +60 °C with automatic restart and TK90 with an actuation temperature of +90 °C with a manual restart.

To restart the TK 90 thermal contact, remove the cartridge with heating elements from the heater casing and press the restart button on the thermal contact.



To control the fan operation, the delivery set includes a differential pressure switch. The relay is installed in the supply duct of the unit or in the air duct. The pressure switch must be set so as to exclude the possibility of false activation of the electric heater section.

Warning! The air flow speed must be at least 1.5 m/s.

TECHNICAL MAINTENANCE

During the operation of the air handling unit, when the heater does not work, dust may settle on the heating elements.

When the heater is turned on, heavy contamination can cause the smell of burning dust or even cause a fire.

Regularly (annually) and before the heating season, check the condition of electrical connections, heating elements and their contamination level.

Any contamination should be removed with a vacuum cleaner with a soft suction nozzle or with compressed air.

Check the functionality of the thermal contacts and the pressure switch regularly.

STORAGE AND TRANSPORTATION REGULATIONS

- Store the unit in the manufacturer's original packaging box in a dry closed ventilated premise with temperature range +5...+40 °C and relative humidity up to 70 %.
- Storage environment must not contain aggressive vapors and chemical mixtures provoking corrosion, insulation, and sealing deformation.
- Use suitable hoist machinery for handling and storage operations to prevent possible damage to the unit.
- Follow the handling requirements applicable for the particular type of cargo.
- The unit can be carried in the original packaging by any mode of transport provided proper protection against precipitation and mechanical damage. The unit must be transported only in the working position.
- Avoid sharp blows, scratches, or rough handling during loading and unloading.
- Prior to the initial power-up after transportation at low temperatures, allow the unit to warm up at operating temperature for at least 3-4 hours.

MANUFACTURER'S WARRANTY

The product is in compliance with EU norms and standards on low voltage guidelines and electromagnetic compatibility. We hereby declare that the product complies with the provisions of Electromagnetic Compatibility (EMC) Directive 2014/30/EU of the European Parliament and of the Council, Low Voltage Directive (LVD) 2014/35/EU of the European Parliament and of the Council and CE-marking Council Directive 93/68/EEC. This certificate is issued following test carried out on samples of the product referred to above.

The manufacturer hereby warrants normal operation of the unit for 24 months after the retail sale date provided the user's observance of the transportation, storage, installation, and operation regulations. Should any malfunctions occur in the course of the unit operation through the Manufacturer's fault during the guaranteed period of operation, the user is entitled to get all the faults eliminated by the manufacturer by means of warranty repair at the factory free of charge. The warranty repair includes work specific to elimination of faults in the unit operation to ensure its intended use by the user within the guaranteed period of operation. The faults are eliminated by means of replacement or repair of the unit components or a specific part of such unit component.

The warranty repair does not include:

- routine technical maintenance
- unit installation/dismantling
- unit setup

To benefit from warranty repair, the user must provide the unit, the user's manual with the purchase date stamp, and the payment paperwork certifying the purchase. The unit model must comply with the one stated in the user's manual. Contact the Seller for warranty service.

The manufacturer's warranty does not apply to the following cases:

- User's failure to submit the unit with the entire delivery package as stated in the user's manual including submission with missing component parts previously dismantled by the user.
- Mismatch of the unit model and the brand name with the information stated on the unit packaging and in the user's manual.
- User's failure to ensure timely technical maintenance of the unit.
- External damage to the unit casing (excluding external modifications as required for installation) and internal components caused by the user.
- Redesign or engineering changes to the unit.
- Replacement and use of any assemblies, parts and components not approved by the manufacturer.
- Unit misuse.
- Violation of the unit installation regulations by the user.
- Violation of the unit control regulations by the user.
- Unit connection to power mains with a voltage different from the one stated in the user's manual.
- Unit breakdown due to voltage surges in power mains.
- Discretionary repair of the unit by the user.
- Unit repair by any persons without the manufacturer's authorization.
- Expiration of the unit warranty period.
- Violation of the unit transportation regulations by the user.
- Violation of the unit storage regulations by the user.
- Wrongful actions against the unit committed by third parties.
- Unit breakdown due to circumstances of insuperable force (fire, flood, earthquake, war, hostilities of any kind, blockades).
- Missing seals if provided by the user's manual.
- Failure to submit the user's manual with the unit purchase date stamp.
- Missing payment paperwork certifying the unit purchase.



FOLLOWING THE REGULATIONS STIPULATED HEREIN WILL ENSURE A LONG AND TROUBLE-FREE OPERATION OF THE UNIT



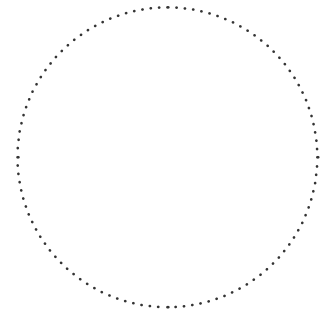
USER'S WARRANTY CLAIMS SHALL BE SUBJECT TO REVIEW ONLY UPON PRESENTATION OF THE UNIT, THE PAYMENT DOCUMENT AND THE USER'S MANUAL WITH THE PURCHASE DATE STAMP

CERTIFICATE OF ACCEPTANCE

Unit Type	Electric heater
Model	HE ___x___-___A__
Serial Number	
Manufacture Date	
Quality Inspector's Stamp	

SELLER INFORMATION

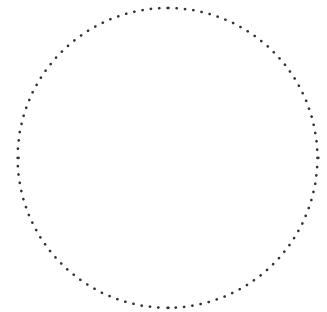
Seller	
Address	
Phone Number	
E-mail	
Purchase Date	
This is to certify acceptance of the complete unit delivery with the user's manual. The warranty terms are acknowledged and accepted.	
Customer's Signature	



Seller's Stamp

INSTALLATION CERTIFICATE

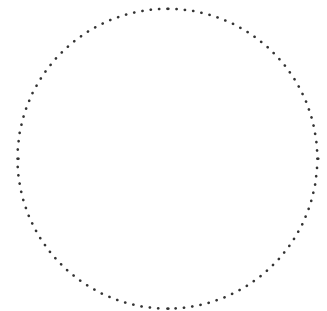
The HE ___x___-___A__ unit is installed pursuant to the requirements stated in the present user's manual.	
Company name	
Address	
Phone Number	
Installation Technician's Full Name	
Installation Date:	Signature:
The unit has been installed in accordance with the provisions of all the applicable local and national construction, electrical and technical codes and standards. The unit operates normally as intended by the manufacturer.	
Signature:	



Installation Stamp

WARRANTY CARD

Unit Type	Electric heater
Model	HE ___x___-___A__
Serial Number	
Manufacture Date	
Purchase Date	
Warranty Period	
Seller	



Seller's Stamp



VENTS