

INSTALLATION GUIDE — WALL-MOUNTED CONVECTORS

1. UNIT DESCRIPTION

A wall-mounted heating unit. Models NUF1, NUF2, NMF1, NWF1, NWF2, NPF1, and NPF2 use the natural convection heating principle, models NKF1 and NKF2 are equipped with a fan for forced convection. Since the heater uses physical laws of thermodynamics it represents one of the most efficient methods of interior heating.

Benefits of heating convectors:

- › High output
- › Silent operation or low noise for units with fan
- › Lightweight compared to heating units with similar output which use radiation principle
- › Low hot water consumption
- › Short response time
- › Design
- › Minimum requirements for operation and maintenance
- › A great advantage of these convectors is the small required installation space. This is beneficial particularly in a situation where the heating units are used in interior renovation and replacement of old heaters with new ones and in situations where sufficient heating output is required.

3. TECHNICAL PARAMETERS

- › Use: Convectors without fan are designed for dry and wet environment, and convectors with a fan are designed for dry environment only.
- › Maximum operating pressure: 1 MPa.
- › Maximum operating temperature: 110 °C.
- › Operating medium: Water. It is not allowed to use a medium other than water. Water may not be mixed with other substances, such as antifreeze fluids!
- › Environment: interiors with temperatures ranging between +5 °C and +40 °C.

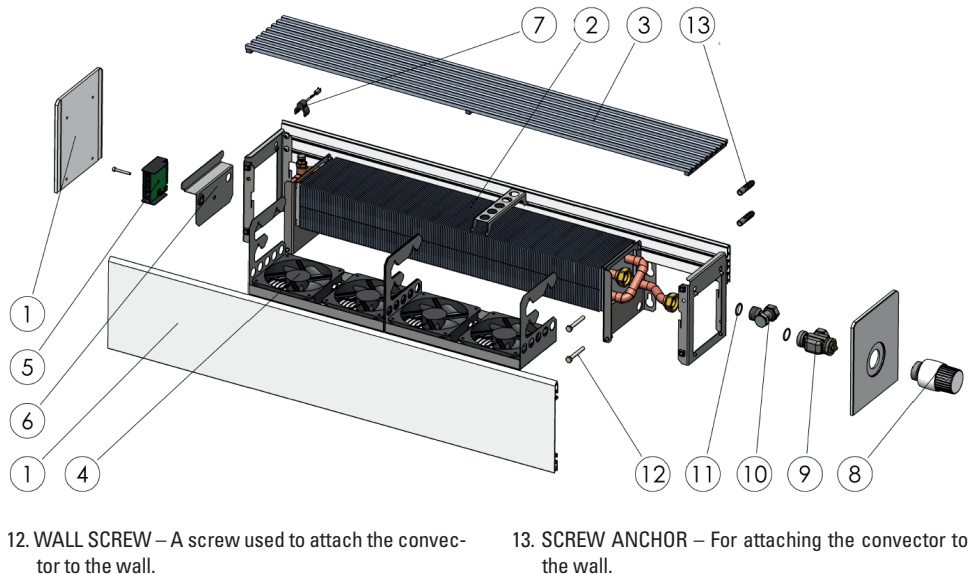
1. CONVECTOR BODY – Aluminum convector frame painted with color shade according to the catalog.
2. HEAT EXCHANGER – Copper pipes with pressed-on aluminum fins through which the heating water flows. The heat exchanger design differs according to the convector model.
3. COVERING GRILLE – Grille used to cover the convector outlet; with color shade according to the catalog.
4. AXIAL FAN (models with a fan) – Set of fan modules for forced convection of the heated air. The number differs according to the length of the convector.
5. EB CONTROL UNIT (models with a fan) – Fan motor control unit.
6. EB CONTROL UNIT BRACKET (models with a fan) – Used for fitting the control unit on the convector casing.
7. TEMPERATURE SENSOR (models with a fan) – Used for sensing temperature for the EB control unit.
8. THERMOSTATIC HEAD – Used for temperature control and operation of the axial valve.
9. AXIAL THERMOSTATIC VALVE – A valve used for incoming heating water flow control.
10. CONTROL SCREW FITTING – A valve which controls/adjusts the heating water flow.
11. GASKET RING – A gasket in the connection between the valve and the heat exchanger.

2. CONTENTS OF THE BOX

Contents of the box	NKF1	NKF2	NUF1	NUF2	NMF1	NWF1	NWF2	NPF1	NPF2
Convector									
Grille	1	1	1	1	1	1	1	1	1
Convector body	1	1	1	1	1	1	1	1	1
Heat exchanger	1	1	1	1	1	1	1	1	1
Grille reinforcement	1	1	1	1	1	1	1	1	1
Cable grommet	1	1	-	-	-	-	-	-	-
Fan – assembly of modules	2-4	2-4	-	-	-	-	-	-	-
EB control unit	1	1	-	-	-	-	-	-	-
Accessories									
Axial radiator valve	1	1	1	1	1	1	1	1	1
Thermostatic head	1	1	1	1	1	1	1	1	1
Control Screw fitting	1	1	1	1	1	1	1	1	1

Each position in the table corresponds to Figure No. 1.

FIG. 1. COMPONENTS AND DESCRIPTION OF THE CONVECTOR PARTS



12. WALL SCREW – A screw used to attach the convector to the wall.

13. SCREW ANCHOR – For attaching the convector to the wall.

4. DESIGN DETAILS, CONNECTION DIMENSIONS, PLACEMENT

L = Standard CONVECTOR LENGTH: 900, 1000, 1250, 1500, 1750, 2000 mm

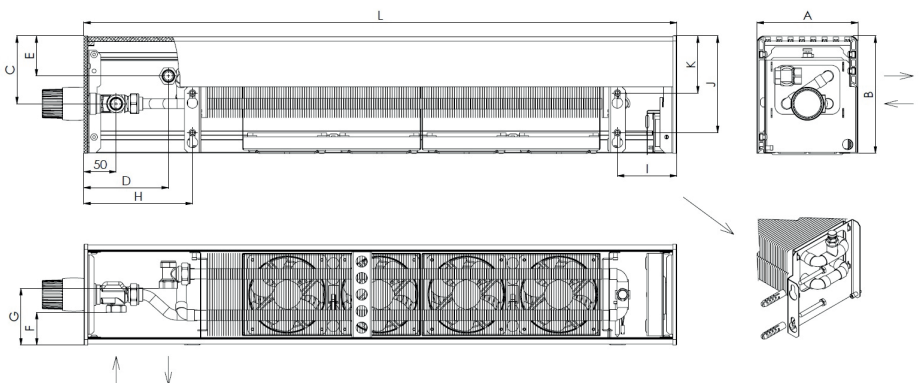


FIG. 2. Rear view

	A	B	C	D	E	F	G	H	I	J	K
NKF1	150	178	100	130	60	50	85	165	90	145	85
NKF2	150	348	265	130	200	50	85	165	90	315	90
NUF1	115	178	105	130	145	30	60	165	40	145	85
NUF2	115	348	275	130	315	30	60	165	40	190	90
NPF1	150	178	130	50	90	50	85	120	40	145	85
NPF2	150	348	195	50	320	50	85	115	50	315	90
NWF1	220	178	130	50	70	85	155	85	50	145	85
NWF2	220	348	300	50	240	85	155	85	50	190	90
NMF1	195	178	110	85	140	75	140	120	45	145	85

TABLE 1: applies to all lengths L 900, 1000, 1250, 1500, 1750, 2000 mm

5. INSTALLATION

Decide whether the convector will act as the main source of heat, or an additional heating element or, if applicable, as a thermal barrier.

As the main source of heat in your apartment or room, the convector should sufficiently cover the entire thermal loss of the room. Therefore, always choose a heating unit with a capacity that is higher than the thermal loss of your apartment, room, or other areas.

All wall-mounted convectors with a fan are designed for dry environment. A dry environment is an environment where the average annual relative humidity does not exceed 75%. A wet environment is an environment where such average annual value is equal to or greater than 75% or where the convector is exposed to direct contact with water. In terms of convector selection, a dry environment is in general any environment where no precipitation of vapor occurs in the convector unit.

Wall-mounted convectors made by MINIB are intended for installation on the wall below window frames or sills. Make sure to follow the principle that the distance from the floor should never be less than 110 mm (Figure 3). Never cover the upper grille of the convector – this would result in flow reduction and a considerable decrease in the convector output.

Use the supplied attachment elements to attach the wall-mounted convector to the wall.

5.1 Installation process

- According to the dimensions in table 1 and on Fig. 2:
 - Measure the holes for attachment of the convector to the wall, drill the holes, insert the screw anchors, mark, drill the opening for power supply cable (models with a fan).
 - Measure, drill the holes and install the heating water supply pipe.
 - Install the valves on the heating unit according to section 6. Adhere to the dimensions for the particular model.

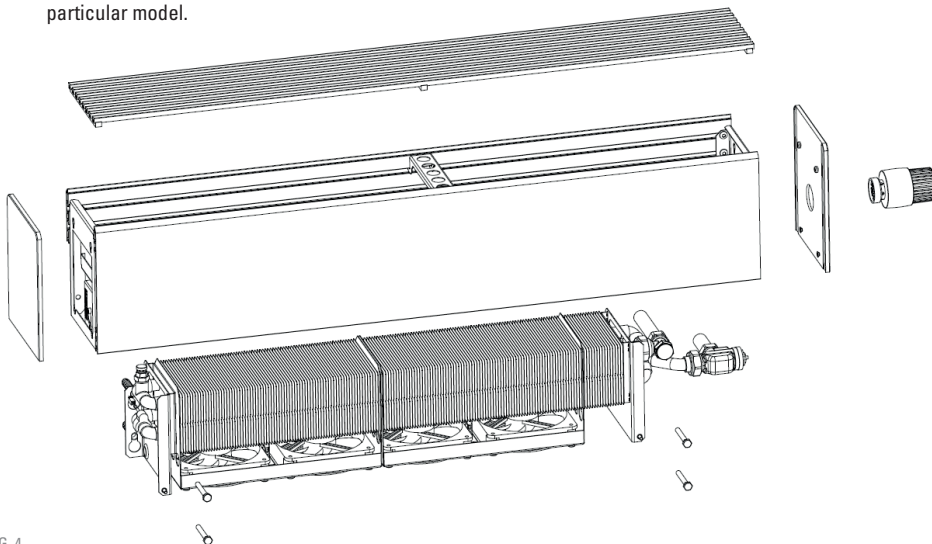


FIG. 4

- Remove the cover grille from the convector, remove the casing of convector from the heat exchanger.
- Insert the wall screws in the anchors, place the heat exchanger on them, slightly tighten.
- Connect the valves with the heat exchanger (pictured in detail on Fig. 5).
- Place the convector casing on the supporting member, install the thermostatic head on the axial valve.
- For models with a fan connect the power line to the EB control unit (pictured in detail on Fig. 6).
- If necessary, the side walls of the casing can be removed. Loosen (do not remove) the top screws (1) on Fig. 4 and remove the side wall in the direction of the arrow (2). Use reverse procedure to place back the side wall.
- Firmly tighten the wall screws. Install the cover grille.
- Check and, if necessary, adjust the vertical axle alignment of the unit with the wall using the adjusting screws which are located in the lower part of the casing.
- Vent (bleed) the convector according to section 7.

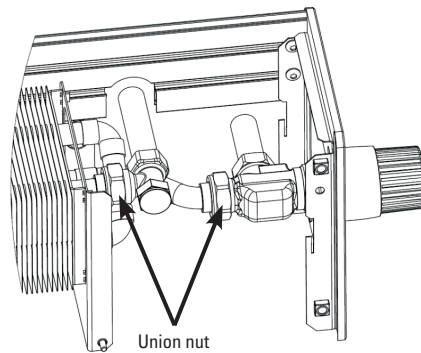


FIG. 5: Close-up view of the connection between the valves and the heat exchanger (the heat exchanger design differs according to the model)

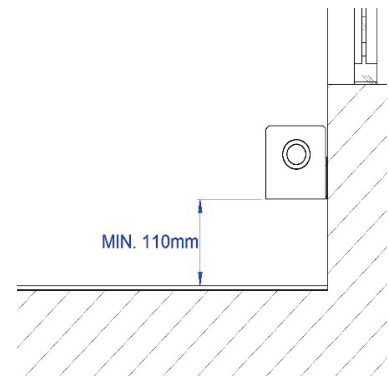


FIG. 3: Recommended placement of the wall-mounted convector.

6. CONNECTION OF THE FITTINGS

An axial thermostatic valve is connected to the water inlet of the heat exchanger. Control screw fitting is to be installed on the outlet line. Insert O-rings between the axial thermostatic valve / control screw fitting and the heat exchanger. Use gaskets for all the other connections.

7. VENTING THE UNIT

Vent (bleed) the unit using the air vent valve during the first use if necessary. The air vent valve is located on the heat exchanger pipe.

For additional options see the catalog or visit: www.minib.com.

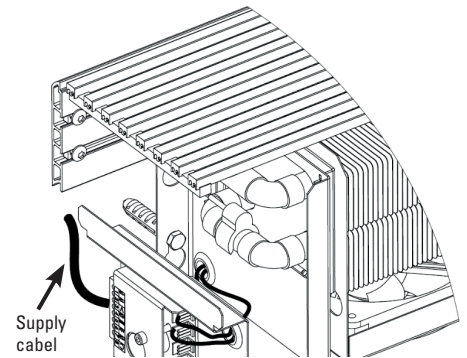


FIG. 6: Close-up view of the power line connection to the EB control unit (models with a fan)

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