

Heating Unit Electrical Connection

Selected radiator types bearing the ⚡ symbol can be operated as independent electric heaters, electric clothes dryers or heating units for combined connection.

Electric radiators

Electric heating units designed for interior heating. Our electric radiators come with an installed heating rod and a temperature regulator. Each unit is filled with an antifreeze fluid (down to -5 °C), tested and sealed. Once properly installed and connected to the power supply, the purchased radiator is ready for immediate operation. Electrical heating units with a finish in RAL 9016 colour include a white regulator. Units in all other colour variations come with a chrome regulator. The heating units are fitted with an electric cartridge heater and a Whistle or Stone regulator located in the right-side flow pipe. The Stone regulator can also be installed in the left-side flow pipe of the heating unit if requested. However, a left-side installation requirement must be noted in the order. Electric radiators with a heating film facilitate heating with no fluid in the radiator. The heating film ensures that the entire surface of the radiator is uniformly heated. Temperature control is via a black or white digital thermostat based on customer requirements. All heating units are operated in accordance with Directive 2009/125/EC of the European Parliament and of the Council and Commission Regulation (EU) 2015/1188 with regard to the ecodesign requirements for local space heaters.

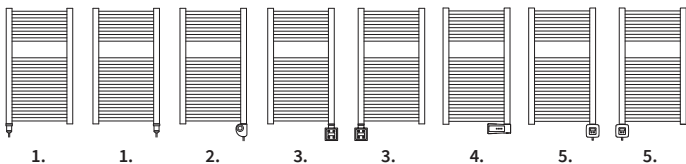
Heating units for combined heating

The heating units come in basic design as for integration into the central heating system. They are neither filled with an antifreeze fluid nor equipped with electric heating elements. The Whistle (or Stone) regulator and a T-piece can be supplied as part of a separate order. The thermostatic valve is installed opposite the regulator. During electric operation, the thermostatic valve must be closed to prevent heated water from flowing into the heating system. As a rule, all heating units are configured for heating rod installation in the right-side lower flow pipe. The Stone regulator can be installed in either of the two flow pipes.

Electric dryers

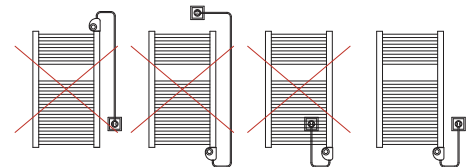
Electric heating units designed for clothes drying. Our electric dryers come with an installed heating rod and a regulator. Each unit is filled with an antifreeze fluid (down to -5 °C), tested and sealed. Once properly installed and connected to the power supply, the purchased dryer is ready for immediate operation. Electric dryers with a finish in RAL 9016 colour include a white regulator. Units in all other colour variations come with a chrome regulator. The drying units are fitted with an electric cartridge heater (a basic Z heating rod) and a Mini PW or KTX 3 regulator located in the right-side flow pipe. The basic Z heating rod and KTX 3 regulator can also be installed in the left-side flow pipe of the heating unit if requested. However, a left-side installation requirement must be noted in the order. Dryer operation is in full compliance with EN 60335-2-43.

Correct heating rod and electric regulator installation



1. Z heating rod - both right-side and left-side installation is possible*
2. Mini PW regulator heating rod - right-side installation
3. KTX 3 regulator heating rod - right-side or left-side installation of the regulator*
4. Whistle regulator heating rod - right-side installation
5. Stone regulator heating rod - right-side or left-side installation of the regulator*

*Left-side installation requirement must be noted in the order.

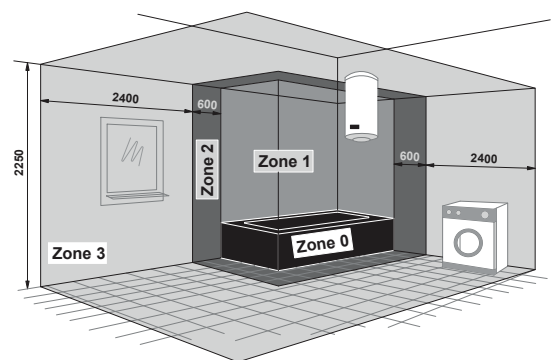


Applies to all listed regulators and rods.

Electric radiator placement in the bathroom

Electric bathroom radiators, dryers and combined heating units can be installed in zones 2 and 3 (in accordance with ČSN 33 200-7-701). Electric units must be connected to a 230 V/50 Hz power supply using a corresponding socket in line with ČSN 35 4515.

Protection rating and placement of electric units in protection zones		
Z heating rod	protection IP44	zone 2 a 3
Mini PW	protection IPX4	zone 2 a 3
KTX 3	protection IPX5	zone 2 a 3
Whistle	protection IPX4	zone 2 a 3
Stone	protection IPX4	zone 2 a 3



Regulator Overview

WHISTLE



An electronic LCD regulator with four control buttons, one of which switches the regulator on/off or puts it in standby mode.

The next two buttons allow for manual control of functions such as Chrono, Comfort, Night Mode, Freeze-Prevention, Quick Heat-Up, LCD Lock and open window detection. The last two buttons are used for changing parameter values (e.g. temperature).

The regulator controls room temperature using a microprocessor which regulates temperature without being affected by external conditions or temperature of the radiator. Lower right-side flow pipe installation only.



Technical Data	
Working voltage	230 V/50 HZ
Protection category	I
Degree of protection	IPX4
Working temperature	0–50 °C
Working humidity	0–85 % (without condensation)
Temperature range of room	7 °C, 15–30 °C
Open window detection	yes
Temperature control	weekly program
Installation	on the right side
Connection thread	G1/2" outer (on the heating rod)
Dimensions	72 × 140 × 60 mm
Connection	straight electric cable 120 cm ended by plug
Colour of regulator	white/chrome
Colour of cable	white/grey
Protection zone	2 and 3
Available heating rods	200 W–1 400 W

STONE



Designed for electric radiators, this digital temperature regulator with an OLED display employs a smartphone and tablet application with a Bluetooth interface. It has two control buttons, one of which switches the regulator on/off, while the other selects between operation modes. These include Quick Heat-Up, Comfort, Eco, and Freeze-Prevention. The regulator controls room temperature using the highly accurate electronic PID controller. It is normally installed in the right-side lower flow pipe. Left-side installation requirement must be specified in the order.



The application designed for Android and iOS systems allows for individual control of separate heating units in the house and heating programme planning, thus contributing to further energy cost savings. Its simple interface makes it easy to display energy consumption statistics, etc. For the application to function properly, it requires an Android 4.3 device and min. 4.0 Bluetooth version.



Technical Data	
Working voltage	230 V/50 HZ
Protection category	I
Degree of protection	IPX4
Working temperature	0–50 °C
Working humidity	0–85 % (without condensation)
Open window detection	yes
Temperature control	weekly program (via App)
Installation	on the right side (on the left - must be stated in the order)
Connection thread	G1/2" outer (on the heating rod)
Dimensions	63 × 63 × 56 mm
Connection	straight electric cable 120 cm ended by plug
Colour of regulator	white/chrome
Colour of cable	white/grey
Protection zone	2 and 3
Available heating rods	200 W–1 400 W

Basic installation and operation guidelines for electric radiators and heaters

- The regulator must always be installed in a vertical position with water supplied from the bottom.
- The heating rod power input is selected based on recommendations for individual heating units. Using a heating rod with a higher power input won't increase the heat output, on the contrary, it will decrease its service life. Do not loosen the heating unit blind plugs.
- Heaters likely to be placed in bathrooms must be installed in a way that prevents users from touching the switch or other control components while in a bath or shower.
- Improper installation may result in damage to the unit, electric shock or burn injuries. Never place the heater directly below a wall socket. Have the suitability of your sockets tested by a licensed electrician (ČSN 35 4515). The radiator must be installed no less than 25 cm (or 60 cm in the case of dryers) above floor level.
- When installing the unit outside of the Czech Republic, care should be taken to comply with relevant national regulations.
- The regulators connect to a 230 V/50 Hz power supply via a flexible cord terminated with a male plug designed for standard wall plugs installed in accordance with ČSN standards. The equipment must be protected by a residual current device with 30 mA release current.
- Electric shock protection must be provided in accordance with ČSN 33 2000-4-41.
- In the event of a fixed connection of the appliance to the power supply, the regulator lead must be fitted with a master switch (cut-out), which is readily accessible and disconnects both poles of the power supply.
- Connection to the power supply and verification of installation suitability can only be performed by a licensed electrician.

Z heating rod

Z heating rod without a regulator. Standard right lower flow pipe installation. Left-side installation requirement must be specified in the order.



Technical Data	
Working voltage	230 V/50 Hz
Protection category	I
Degree of protection	IP44
Installation	on the right side (on the left - must be stated in the order)
Connection thread	G 1/2" outer
Connection	coiled electric cable 120 cm ended by plug (in the stretched state - max. 280 cm)
Colour of cable	white
Protection zone	2 and 3
Available heating rods	200 W-1 350 W

Mini PW

A basic regulator with a dial for controlling the dryer output at a scale of 20 to 100% of the rated output. In the min. position the regulator is OFF, while in the max. position it remains constantly ON. Installation in the lower right-side flow pipe only (left-side installation available only for Koro, Koro Extra and Koro Plus models).



Technical Data	
Working voltage	230 V/50 Hz
Protection category	I
Degree of protection	IPX4
Working temperature	0-50 °C
Working humidity	0-85 % (without condensation)
Power range	20-100 % of the nominal output of towel dryer
Installation	on the right side (on the left for models Koro, Koro Extra, Koro Plus)
Connection thread	G 1/2" outer (on the heating rod)
Connection	straight electric cable 120 cm ended by plug
Colour of regulator	white/chrome
Colour of cable	white/grey
Protection zone	2 and 3
Available heating rods	200 W-1 200 W

KTX 3

An LCD regulator with four buttons, one of which switches the regulator on/off, the next two buttons are used to adjust various parameters (e.g. temperature) and the last one allows for manual setting of time functions - clock, dryer or timer. The electric heating element heats up the radiator while regulating its temperature. It is normally installed in the right-side lower flow pipe. Left-side installation requirement must be specified in the order.

Standard design



Technical Data	
Working voltage	230 V/50 Hz
Protection category	I
Degree of protection	IPX5
Temperature range of towel dryer	30-60 °C, in step 1 °C
Installation	on the right side (on the left - must be stated in the order)
Connection thread	G 1/2" outer (on the heating rod)
Connection	straight electric cable 150 cm ended by plug
Colour of regulator	white/chrome
Colour of cable	white/grey
Protection zone	2 and 3
Available heating rods	120 W-1 000 W

Models with a cover and straight cord without a male plug



Electric Drying and Heating Sets

Bathroom ladder heaters are suitable for heating water systems with forced circulation and can be integrated with electric clothes drying or electric heating sets.

Electric clothes drying sets constitute electric dryers. Units with a built-in electric drying set can be operated independently of the central heating system.

The set includes a heating rod with a recommended output based on the type of ladder and regulator used (KTX 3, Mini PW). If you are contemplating clothes drying using the heating rod alone, consideration should also be given to installing a timer switch. When using the set, due care must be taken in choosing the location of the unit in the bathroom, taking into account the position of the wall socket, the length of the supply cable and the required IP rating of the regulator.

When using the set for heating purposes, the units can be hooked up to the central heating system or be used for electric heating, especially in the interim period between heating seasons (spring/autumn). The set includes a heating rod with a recommended output based on the type of radiator and temperature regulator used (Whistle, Stone). The set can be supplied with a T-piece for connecting the heating rod to the ladder. If using the set for electric heating, due care must be taken in choosing the location of the unit in the bathroom, taking into account the position of the wall socket, the length of the supply cable and the required IP rating of the regulator.

Z heating rod (without regulator)	
Power input [W] Length [mm]	Order code
200 / 380	O14-1S020Z00-01_EN
300 / 380	O14-1S030Z00-01_EN
400 / 435	O14-1S040Z00-01_EN
500 / 435	O14-1S050Z00-01_EN
600 / 550	O14-1S060Z00-01_EN
700 / 550	O14-1S070Z00-01_EN
800 / 720	O14-1S080Z00-01_EN
900 / 720	O14-1S090Z00-01_EN
1000 / 720	O14-1S100Z00-01_EN
1200 / 875	O14-1S120Z00-01_EN

MINI PW regulator heating rod		
Power input [W] Length [mm]	WHITE	CHROME
	Order code	Order code
200 / 320	O14-1S020M01-01_EN	O14-1S020M80-01_EN
300 / 400	O14-1S030M01-01_EN	O14-1S030M80-01_EN
400 / 480	O14-1S040M01-01_EN	O14-1S040M80-01_EN
500 / 560	O14-1S050M01-01_EN	O14-1S050M80-01_EN
600 / 680	O14-1S060M01-01_EN	O14-1S060M80-01_EN
700 / 730	O14-1S070M01-01_EN	O14-1S070M80-01_EN
800 / 820	O14-1S080M01-01_EN	O14-1S080M80-01_EN
900 / 910	O14-1S090M01-01_EN	O14-1S090M80-01_EN
1000 / 980	O14-1S100M01-01_EN	O14-1S100M80-01_EN
1200 / 1150	O14-1S120M01-01_EN	O14-1S120M80-01_EN

KTX 3 regulator heating rod		
Power input [W] Length [mm]	WHITE	CHROME
	Order code	Order code
120 / 325	O14-1S012K01-01_EN	O14-1S012K80-01_EN
200 / 285	O14-1S020K01-01_EN	O14-1S020K80-01_EN
300 / 310	O14-1S030K01-01_EN	O14-1S030K80-01_EN
400 / 345	O14-1S040K01-01_EN	O14-1S040K80-01_EN
600 / 375	O14-1S060K01-01_EN	O14-1S060K80-01_EN
800 / 485	O14-1S080K01-01_EN	O14-1S080K80-01_EN
1000 / 575	O14-1S100K01-01_EN	O14-1S100K80-01_EN

KTX 3 regulator heating rod, with cover, without male plug		
Power input [W] Length [mm]	WHITE	CHROME
	Order code	Order code
120 / 325	O14-1-012J01-01_EN	O14-1-012J80-01_EN
200 / 285	O14-1-020J01-01_EN	O14-1-020J80-01_EN
300 / 310	O14-1-030J01-01_EN	O14-1-030J80-01_EN
400 / 345	O14-1-040J01-01_EN	O14-1-040J80-01_EN
600 / 375	O14-1-060J01-01_EN	O14-1-060J80-01_EN
800 / 485	O14-1-080J01-01_EN	O14-1-080J80-01_EN
1000 / 575	O14-1-100J01-01_EN	O14-1-100J80-01_EN

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WHISTLE regulator heating rod		
Power input [W] Length [mm]	WHITE	CHROME
	Order code	Order code
200 / 320	O14-1S020V01-01_EN	O14-1S020V80-01_EN
300 / 400	O14-1S030V01-01_EN	O14-1S030V80-01_EN
400 / 480	O14-1S040V01-01_EN	O14-1S040V80-01_EN
500 / 560	O14-1S050V01-01_EN	O14-1S050V80-01_EN
600 / 680	O14-1S060V01-01_EN	O14-1S060V80-01_EN
700 / 730	O14-1S070V01-01_EN	O14-1S070V80-01_EN
800 / 820	O14-1S080V01-01_EN	O14-1S080V80-01_EN
900 / 910	O14-1S090V01-01_EN	O14-1S090V80-01_EN
1000 / 980	O14-1S100V01-01_EN	O14-1S100V80-01_EN
1200 / 1150	O14-1S120V01-01_EN	O14-1S120V80-01_EN

STONE regulator heating rod		
Power input [W] Length [mm]	WHITE	CHROME
	Order code	Order code
200 / 320	O14-1S020U01-01_EN	O14-1S020U80-01_EN
300 / 400	O14-1S030U01-01_EN	O14-1S030U80-01_EN
400 / 480	O14-1S040U01-01_EN	O14-1S040U80-01_EN
500 / 560	O14-1S050U01-01_EN	O14-1S050U80-01_EN
600 / 680	O14-1S060U01-01_EN	O14-1S060U80-01_EN
700 / 730	O14-1S070U01-01_EN	O14-1S070U80-01_EN
800 / 820	O14-1S080U01-01_EN	O14-1S080U80-01_EN
900 / 910	O14-1S090U01-01_EN	O14-1S090U80-01_EN
1000 / 980	O14-1S100U01-01_EN	O14-1S100U80-01_EN
1200 / 1150	O14-1S120U01-01_EN	O14-1S120U80-01_EN

T-piece	Order code
G 1/2	484000250

T-piece	Order code
G 1/2 (KTX3)	344001537

Note: White regulator - automatically supplied with only RAL 9016 and color units; all other color and finish versions come automatically with a chrome regulator. Any other requirements must be noted in the order.