Construction readiness

for CTC heat pump indoor unit

RegulusHBOX K

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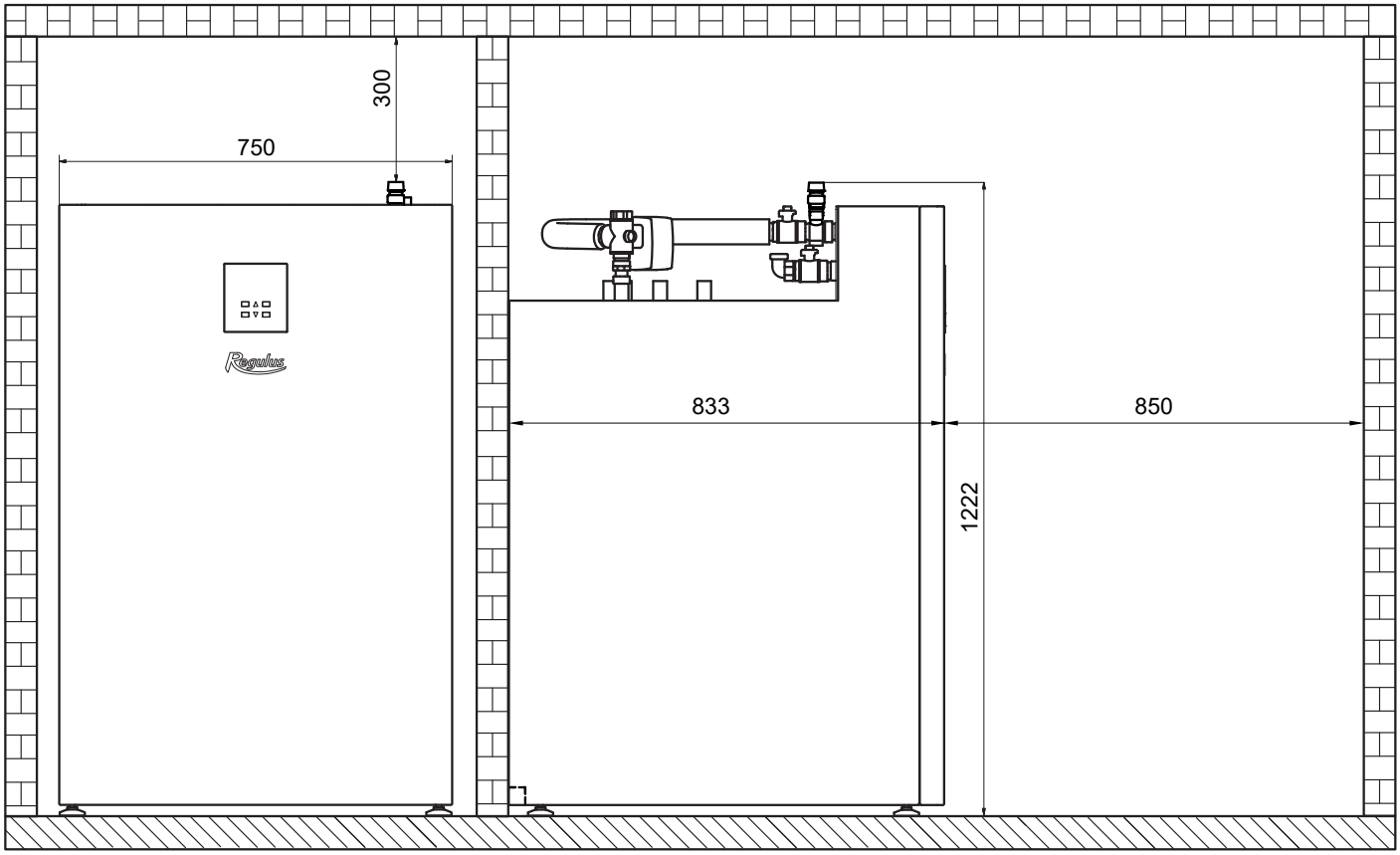
Installation Site Requirements

- RegulusHBOX K shall be installed indoor only.
- Ensure that no water can enter RegulusHBOX K at the installation site.
- Do not install the device in areas with a bath or shower in zones 0, 1 and 2.
- Do not install RegulusHBOX K at places with a risk of freezing.
- Do not install the device near aggressive, explosive or flammable gases, objects or substances.
- Observe the minimum required clearances from the constructions according to the picture.

Installation of RegulusHBOX K unit

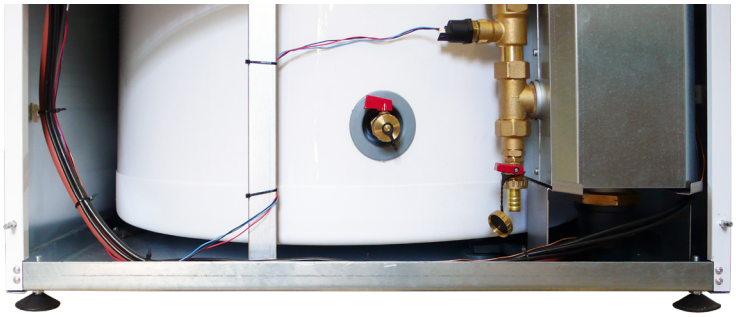


Installation

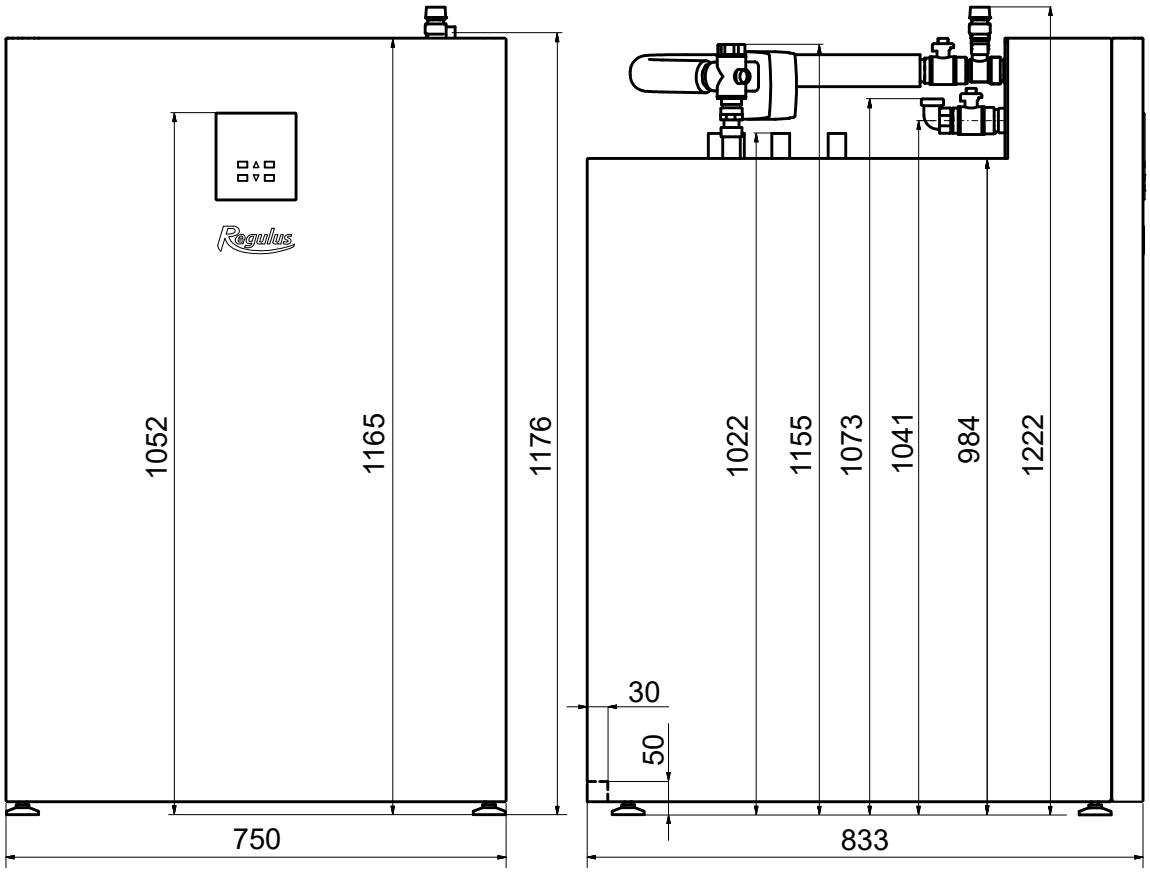
Transport RegulusHBOX K to the installation site in a vertical position. **It is not permitted to transport RegulusHBOX K in a horizontal position.**

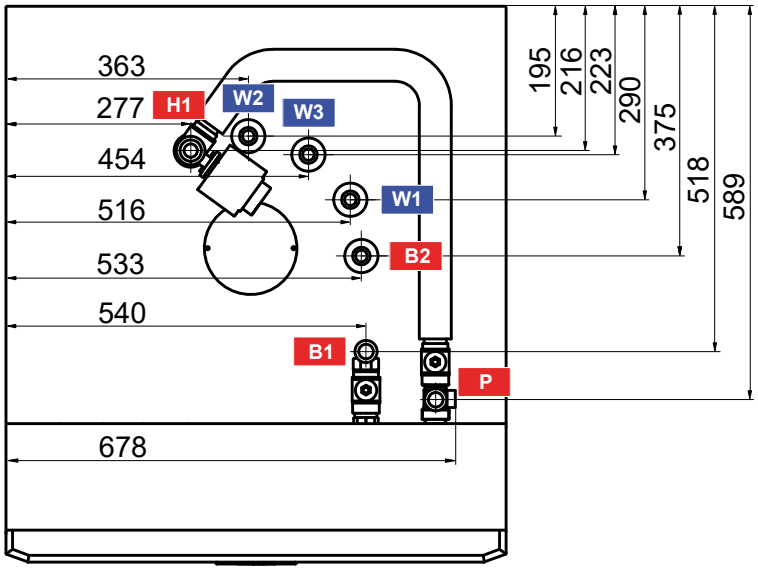
Install RegulusHBOX K on a level floor with sufficient floor loading capacity - the weight of RegulusHBOX K without heating water is 166 kg, with water it is 350 kg.

Level RegulusHBOX K vertically using its adjustable feet.



Dimensions





Pos.	Description	Connection	Height [mm]
W1	Cold water	G 3/4" M	1022
W2	Hot water	G 3/4" M	1022
W3	Recirculation	G 3/4" M	1022
B1	Incoming from heat pump	G 1" M	1073
B2	Return to heat pump	G 3/4" M	1022
H1	Flow to heating system	G 1" M	1155
P	Safety valve - heating s.	G 3/4" F	1176

Hydraulic Connection

The pipe connection outlets are marked with the respective pictograms on the upper side of RegulusHBOX K.

1 - G 1“M flow to heating system

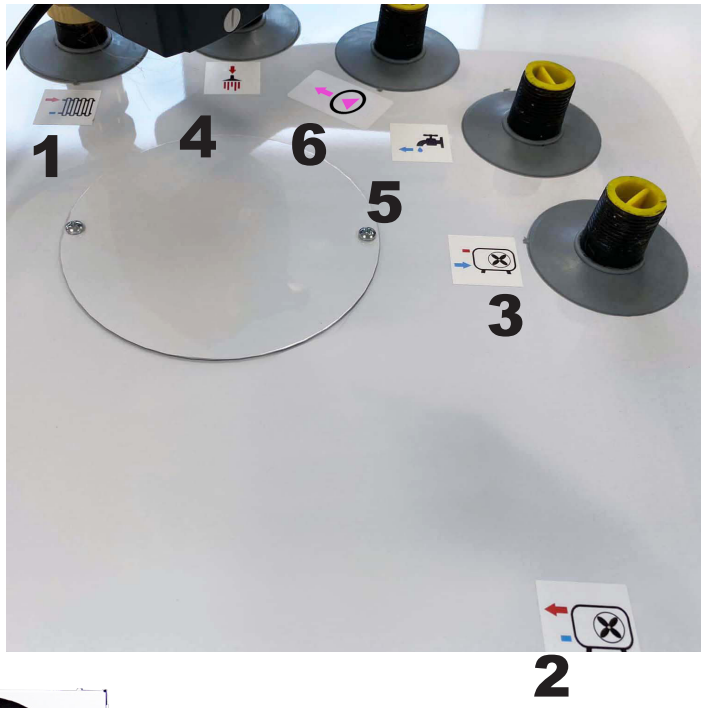
2 - G 1“ M incoming from heat pump

3 - G 1“ M return to heat pump

4 - G 3/4“ M hot water

5 - G 3/4“ M cold water

6 - G 3/4“ M hot water recirculation



Safety valve PV-UT (see the hydraulic diagram of the internal conenction)
G 1/2“ M x 3/4“ F - supplied separately, attached to the T-piece intended for its installation - see the pic.

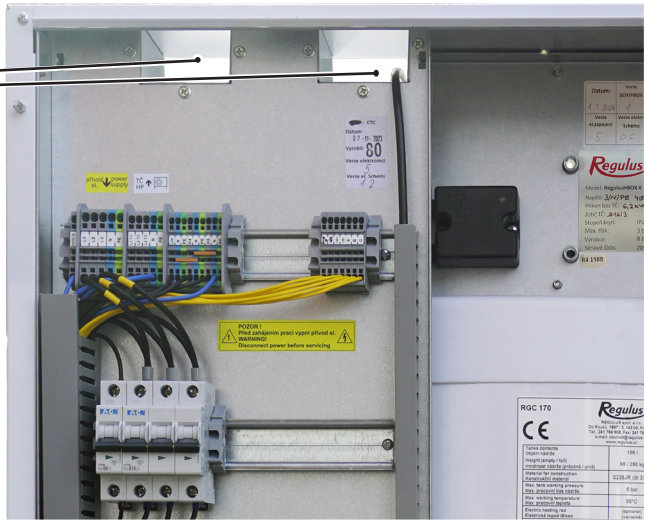
Electrical Wiring

RegulusHBOX K unit involves one 6 kW heating element with gradual switching in 2 kW steps.

Electric Data	
Power supply	3/N/PE ~ 400 / 230 V 50 Hz
Max. cross section of power cable	4 mm^2 (stranded) / 6 mm^2 (solid)
Nominal power input	6,2 kW (without a heat pump connected)
Heating element	1 x 6 kW (3 x 2 kW - 230 V) – possibility to connect a second heating element 6 kW
IP rating	IP20
Min. upstream circuit breaker for RegulusHBOX K	3 x 20 A char. B
Circuit breaker for heat pump	B16A 3p
Circuit breaker for measurement and control	B6A 1p

Cable feed

To make the electrical connection of the RegulusHBOX K unit, it is necessary to remove the upper front cover and the wiring cover located below it.



Two passages under the lid of the RegulusHBOX K are used to connect cables.

Note: The power supply cable is used not only to supply RegulusHBOX K, but also to supply the heat pump!

We do not recommend the use of wire ferrules when connecting the maximum cross-section of the stranded wire to the connection terminal block. Wire ferrules are suitable for wires with a smaller cross-section (typically sensors, PWM, etc.).

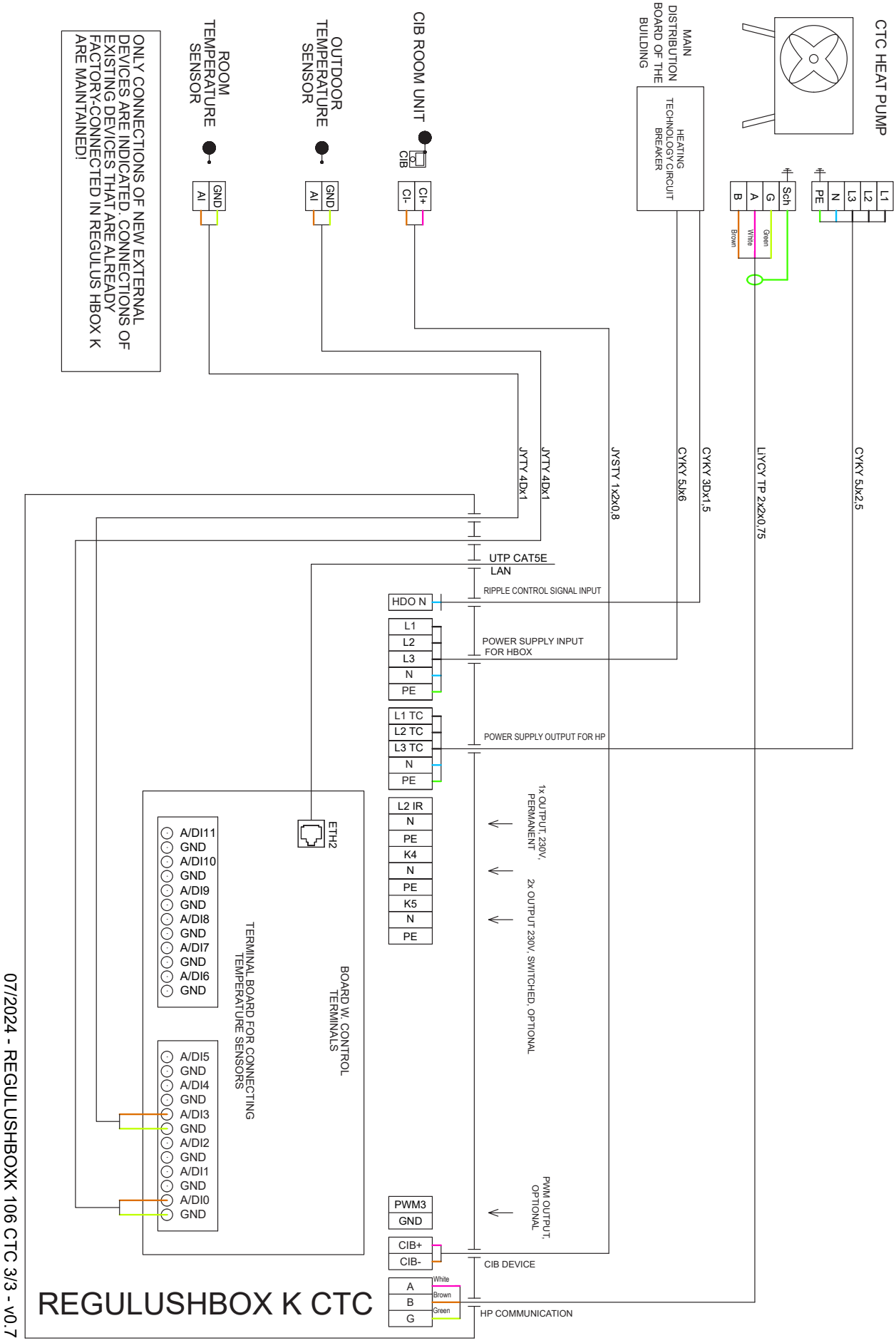
Minimum stripping length 9 mm.

Wiring Specifications

Application	**Cable**
Power supply for RegulusBOX	CYKY-J 5x4
Power supply of CTC heat pump from RegulusBOX	CYKY-J 5x2,5
Ripple control signal from the main fuseboard, zone valves or other appliances w. 2+N connection	CYKY-O 3x1,5
Circulation pumps or other appliances with 1+PE+N connection	CYKY-J 3x1,5
Outdoor and room temperature sensors	JYTY-D 4x1 (1 pair as spare)
CIB bus (room unit, electricity meter, modules etc.)	JYSTY 1x2x0,8
Communication with heat pump (15m cable included in HP supply)	LiYCY TP 4x2x0,5
Connection of RegulusBOX to LAN	UTP Cat5e (or higher)

Warning: The above wiring is suitable for use in most common installations, but it does not replace a qualified design by an expert who will assess the conditions of the specific installation (such as ambient temperature, length and method of laying cables, etc.).

Wiring Diagram of M&R Peripherals to RegulusHBOX K



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