Construction readiness

for the indoor unit for a single-phase RTC heat pump

RegulusHBOX

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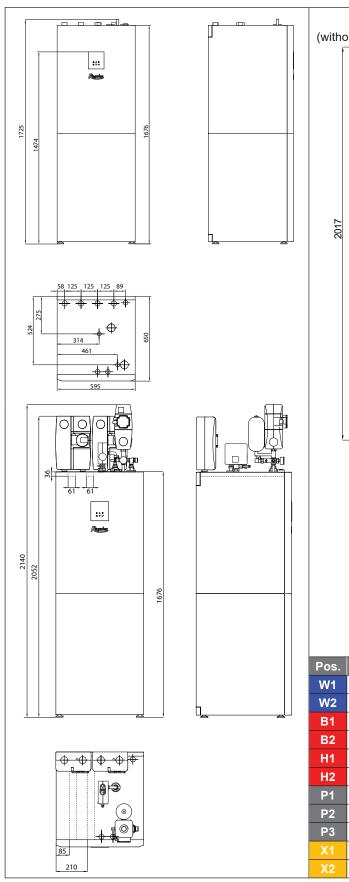
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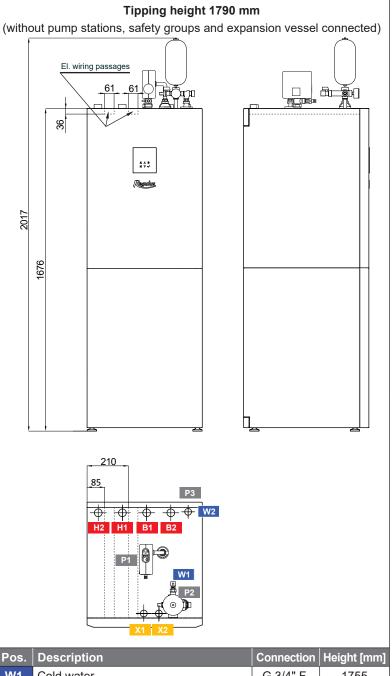
■ Installation Site Requirements

- RegulusHBOX shall be installed indoor only.
- Ensure that no water can enter RegulusHBOX 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 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 RegulusHBOX is designed to be installed also in a narrow space.

Installation

Dimensions

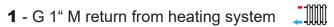




Pos.	Description	Connection	Height [mm]
W1	Cold water	G 3/4" F	1755
W2	Hot water	G 3/4" M	1700
B1	Incoming from heat pump	G 1" M	1700
B2	Return to heat pump	G 1" M	1700
H1	Flow to heating system	G 1" M	1700
H2	Return from heating system	G 1" M	1700
P1	Safety group – heating system	G 1" M	1705
P2	Safety kit – DHW	G 3/4" Fu	1725
P3	Waste pipe from safety valves	hose DN 20	1600
X1	Incoming from solar thermal system (optional)	G 3/4" M	1700
Х2	Return to solar thermal system (optional)	G 3/4" M	1700

■ Hydraulic Connection

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





- **3** G 1" M incoming from heat pump
- 4 G 1" M return to heat pump
- **5** G 3/4" M hot water
- 6 G 1" M heating system safety group
- 7 G 3/4" F cold water safety cold water connection
- **8** Waste pipe from safety valves, DN 20 hose (from the rear)
- **9** Passages for connecting an optional solar module



Electrical Wiring

RegulusHBOX contains two heating elements with a total output of 12 kW (2x6 kW), switched in 2kW 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	12,2 kW (without a heat pump connected)				
Heating elements	2 x 6 kW (3 x 2 kW – each 230 V)				
IP rating	IP20				
Min. upstream circuit breaker for RegulusHBOX	3 x 25 A char. B				
Circuit breaker for heat pump	B 20A 1p				
Circuit breaker for measurement and control	B6A 1p				

Cable feed

For the electrical connection of the RegulusHBOX, it is necessary to remove the upper front cover and the wiring cover located below it.

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

Note: The power supply cable is used not only to supply RegulusHBOX, but also to supply the heat pump! Under normal conditions, it is recommended to prefer the cross-section of the copper conductors of the power supply cable 4 mm².

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 5Jx4
Power supply of RTC heat pump from RegulusBOX	CYKY 3Jx4
Ripple control signal from the main fuseboard, zone valves or other appliances w. 2+N connection	CYKY 3Jx1,5
Circulation pumps or other appliances with 1+PE+N connection	CYKY 3Jx1,5
Outdoor and room temperature sensors	JYTY 4Dx1 (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)

<u>Warning:</u> 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

