

CONTROLLERS

CONTROLLER SERIES CRB100

ESBE series CRB100 is an indoor sensor based controller with integrated actuator, highly user friendly interface and quick and simple installation. Settings are done via a room display unit with integrated indoor sensor, which can either be connected to the actuator unit through cable (CRB110) or through wireless radio connection (CRB120).

OPERATION

The series CRB100 controller is designed to provide a high level of comfort and at the same time provide energy savings for the house owner.

The controller consists of two main parts, the actuator unit and the room display unit.

- Room display unit in modern design, which contains the indoor temperature sensor and in which all settings, such as day to day climate adjustments as well as the internal day and weekly program, are set.
- The actuator unit can be connected to the room display unit either by wireless radio connection (CRB120) for easy installation or by cable (CRB110).

With the inbuilt timer, with day and week program, there are possibilities to have day and night settings with an alternative temperature for even further energy savings. The alternative temperature can also be activated by an external equipment. With this equipment the target temperature can be changed easily from a cell phone.

CRB114 is available with auxiliary switch pump control based on valve position, including a pre-assembled external connection box for easy installation.

MOUNTING

To provide the best comfort, the room display unit should be placed in a central open area in the house, out of direct sunlight.

Power supply by 230 V AC adapter complete with transformer, 1,5 m cable and wall socket plug. Flow pipe sensor with 1,5 m cable included (longer cable is available as accessory). The flow sensor must be carefully insulated from the ambient temperature.

Thanks to the special interface between the controller series CRB100 and the ESBE valve series VRG, VRB and VRH, the unit as a whole has a unique stability and precision when regulating.

OPTIONAL EQUIPMENT

Art. No. 17053100 _____ CRA911 Flow pipe sensor, 5m cable



CRB111
Cable



CRB114
Cable, timer, pump control



CRB122
Wireless, timer

SUITABLE MIXING VALVES

- Series VRG100
 - Series VRG200
 - Series VRG300
 - Series VRH100
 - Series VRB100
 - Series MG*
 - Series G
 - Series F ≤ DN50
 - Series BIV
 - Series T and TM
 - Series H and HG
- * Not 5MG

ADAPTOR KITS

Required adaptor kits for easily fitting onto an ESBE rotary mixing valve series VRG, VRB and VRH is supplied with each controller. Adaptor kits can also be ordered separately.

Art. No. 16000500 _____ ESBE valve series VRG, VRH, VRB, G, MG, F, BIV, T, TM, H, HG

Adaptor kits for other mixing valves are available as follows:
Art. No.

16000600 _____ Meibes
16000700 _____ Watts
16000800 _____ Honeywell Corona
16000900 _____ Lovato
16001000 _____ PAW
16001100 _____ Wita Minimix, Maximix

TECHNICAL DATA

Ambient temperature: _____ max. +55°C
_____ min. -5°C

Temperature range:
Flow pipe sensor _____ +5 to +95°C
Room sensor _____ +5 to +30°C

Enclosure rating - Actuator unit: _____ IP41
- Room display unit: _____ IP20

Protection class: _____ II

Power supply - Actuator unit: _____ 230 ± 10% VAC, 50 Hz
- Room display unit - wireless: _____ 2x 1,5 V LR6/AA

Power consumption - 230 V AC: _____ 10 VA

Battery endurance, wireless room display unit: _____ 1 year

Rating auxiliary switch: _____ 6(3) A 250 V AC

Torque: _____ 6 Nm

Running time at max. speed: _____ 30s

ErP Temperature controls class: _____ IV

Energy efficiency contribution: _____ 2%

Weight: _____ 0,9 kg

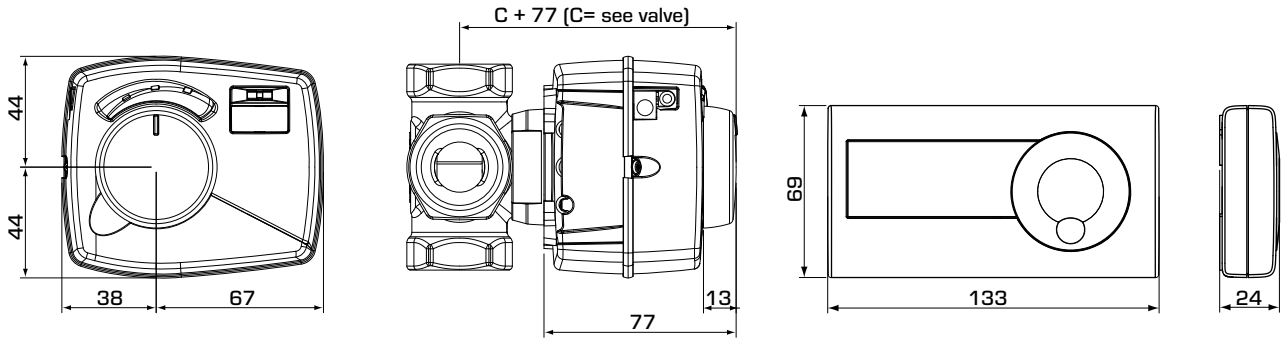
Room display unit cable: _____ 20m

Radio frequency CRB120: _____ 868MHz
_____ ITU region 1 approved acc. to EN 300220-2

CE LVD 2014/35/EU
EMC 2014/30/EU
RoHS 2011/65/EU
RED 2014/53/EU

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Installation dimensions for Controller Series CRB100 with ESBE VRG100, VRG200, VRG300, VRH100 and VRB100 mixing valves

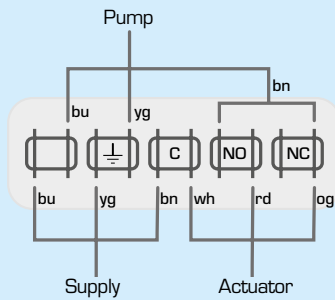
Installation dimensions for Room display units

SERIES CRB100

Art. No.	Reference	Voltage [V AC]	Torque [Nm]	Room display unit	Note	Replaces
12660100	CRB111	230	6	Cable	Without internal timer	
12661400	CRB114				With pump control wire box	12660300
12662200	CRB122			Wireless		12662100

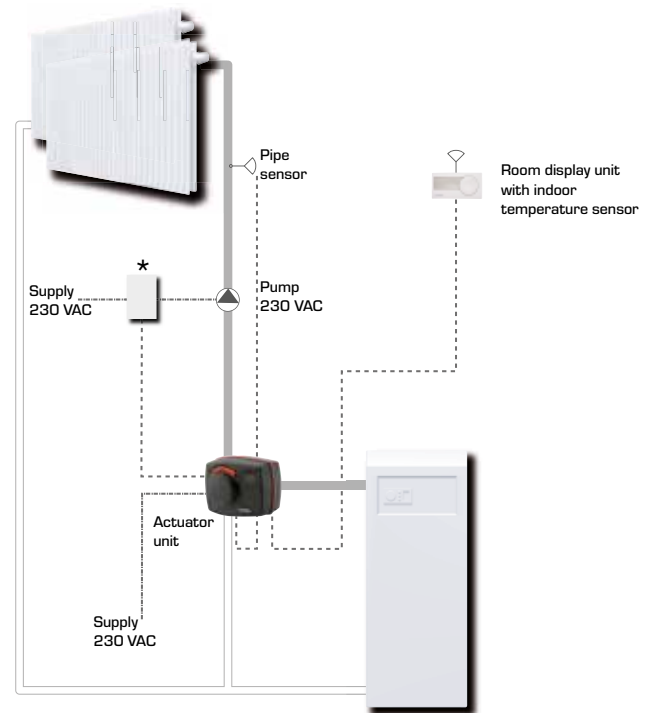
WIRING

The controller should be preceded by a multi-pole contact breaker in the fixed installation.



Controller with pump control wire box, series CRB114

INSTALLATION EXAMPLE



* Only for CRB114, Controller with pump control wire box