

CONTROLLERS

# CONTROLLER SERIES CRD100

ESBE series CRD100 is a combined weather compensating and indoor sensor based controller with an advanced adaptation to make it really simple for the user who only need to decide the indoor temperature.

### OPERATION

The ESBE series CRD100 is designed to provide a high level of comfort and at the same time save energy for the house owner, this is accomplished by using the input from both the outdoor- as well as the indoor sensor. The controller include an advanced adaptation that will build the ideal characteristic heating curve for the specific building so that the user only need to decide one thing, the required indoor temperature.

The controller consist of three parts, the actuator unit, the room display unit and the outdoor sensor.

- 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 is connected to the room display unit by wireless radio connection for easy installation. To provide the best comfort, the room display should be placed in a central open area in the house, out of direct sunlight.
- Outdoor sensor with 20 m cable. The sensor shall be mounted on the north side of the building under the eaves in order to protect the sensor from direct sunlight and rain.

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, for example the ESBE GSM-module CRB915. With this equipment the target temperature can be changed easily from a cell phone.

### MOUNTING

Power supply by 230 V AC adapter (complete with transformer, cable and wall socket plug).

Flow pipe sensor comes with 1,5m cable included (longer cable available as accessory). The sensor must be carefully insulated from ambient temperature.

Thanks to the special interface between the controller series CRD100 and the ESBE series VRG, VRH and VRB, the unit as a whole has a unique stability and precision when regulating.

### OPTIONAL EQUIPMENT

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



CRD122  
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. \_\_\_\_\_ 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

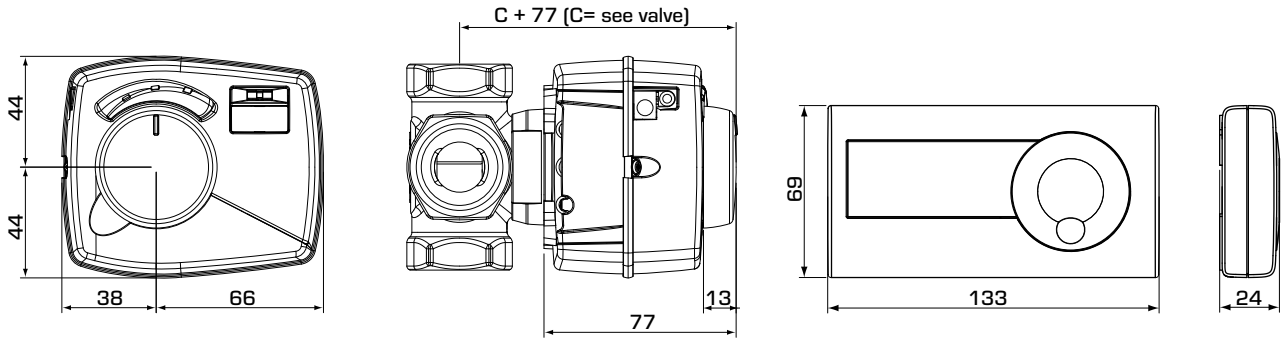
### TECHNICAL DATA

Ambient temperature: \_\_\_\_\_ max. +55°C  
\_\_\_\_\_ min. -5°C  
Sensors: \_\_\_\_\_ Temperature sensor type NTC  
Temperature range:  
Flow pipe sensor \_\_\_\_\_ +5 to +95°C  
Room sensor \_\_\_\_\_ +5 to +30°C  
Outdoor sensor \_\_\_\_\_ -50 to +70°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  
Torque: \_\_\_\_\_ 6 Nm  
Running time at max. speed: \_\_\_\_\_ 30s  
ErP Temperature controls class: \_\_\_\_\_ VII  
Energy efficiency contribution: \_\_\_\_\_ 3,5%  
Radio frequency CRD120: \_\_\_\_\_ 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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# CONTROLLER SERIES CRD100



Installation dimensions for Controller Series CRD100 with ESBE VRG100, VRG200, VRG300;VRH100 and VRB100 mixing valves

Installation dimensions for Room display units

## SERIES CRD100

Art. No.	Reference	Voltage [V AC]	Torque [Nm]	Room display unit	Weight [kg]	Note	Replaces
12682200	CRD122	230	6	Wireless	1,2		

## INSTALLATION EXAMPLES

