

## CONTROLLERS

# CONTROLLER SERIES CRC110

ESBE series CRC110 is a combined actuator and a weather-compensating control unit with quick and simple installation. Settings are done by an easy-to-use joystick and display interface. For valves up to DN50, especially suited for ESBE valves series VRG and series VRB.

## OPERATION

The ESBE series CRC110 is designed to provide a high level of comfort thanks to the possibility to set a perfect characteristic heating curve and at the same time provide energy savings for the house owner. The controller consist of two parts:

- actuator unit, to be mounted to the mixing valve controlling the heat supply.
- outdoor sensor, to be mounted on the north side of the building

The regulation is based on outdoor sensor feedback and an adjustable characteristic heating curve. An offset / parallel adjustment of the characteristic heating curve may be activated by an external signal for example night settings. For applications with well insulated building and quick heating systems such as radiator circuit can a temperature filter be activated to delay an outdoor temperature change to avoid an imbalance between estimated and actual heating demand.

CRC113 is available with auxiliary switch pump control based on valve position, including a pre-assembled external connection box for easy installation.

## MOUNTING

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

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

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.

Thanks to the special interface between the controller series CRC110 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.  
16200700 \_\_\_\_\_ ARA801 Auxiliary switch kit  
17053100 \_\_\_\_\_ CRA911 Flow pipe sensor, 5m cable



CRC111/CRC115  
230 VAC



CRC113  
Pump control

## 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.

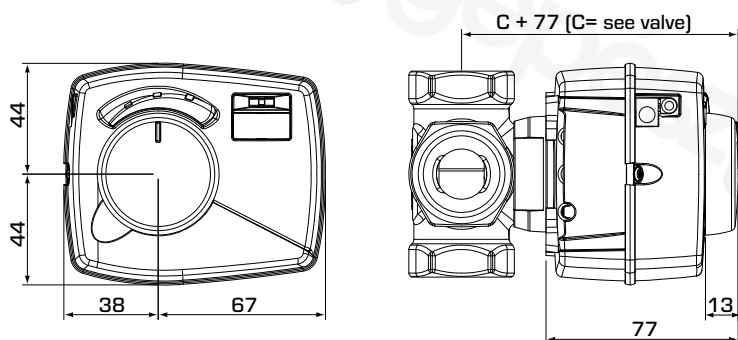
16000600 \_\_\_\_\_ Meibes  
16000700 \_\_\_\_\_ Watts  
16000800 \_\_\_\_\_ Honeywell Corona  
16000900 \_\_\_\_\_ Lovato  
16001000 \_\_\_\_\_ PAW  
16001100 \_\_\_\_\_ Wita Minimix, Maximix

## TECHNICAL DATA

Ambient temperature: \_\_\_\_\_ max. +55°C  
\_\_\_\_\_ min. -5°C  
Temperature range,  
Flow pipe sensor: \_\_\_\_\_ +5 to +95°C  
Outdoor sensor: \_\_\_\_\_ -50 to +70°C  
Enclosure rating: \_\_\_\_\_ IP41  
Protection class: \_\_\_\_\_ II  
Power supply: \_\_\_\_\_ 230 ± 10% V AC, 50 Hz  
Power consumption - 230 V AC: \_\_\_\_\_ 10 VA  
Torque: \_\_\_\_\_ 6 Nm  
Running time at max. speed: \_\_\_\_\_ 30s  
ErP Temperature controls class: \_\_\_\_\_ III  
Energy efficiency contribution: \_\_\_\_\_ 1,5%  
Weight: \_\_\_\_\_ 0,9 kg

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

# CONTROLLER SERIES CRC110



Installation dimensions for Controller Series  
CRC110 with ESBE VRG100, VRG200,  
VRG300, VRH100 and VRB100 mixing valves

## SERIES CRC110

Art. No.	Reference	Voltage [V AC]	Torque [Nm]	Note
12820100	CRC111	230	6	
12820300	CRC113			With pump control wire box
12820500	CRC115			Transformer with UK plug

## INSTALLATION EXAMPLES

