

## CONTROLLERS

# CONTROLLER SERIES CRC120

ESBE series CRC120 is a combined actuator and a weather compensating controller. Recommended for valves of DN65 up to DN150, especially suited for ESBE 3-way valves series F.

### OPERATION

The ESBE series CRC120 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 three parts:

- controller unit, with display included for easy mounting on wall etc, well suited for applications where the actual valve and actuator is located in a hard-to-reach position.
- 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 a temperature filter can be activated to delay an outdoor temperature change to avoid an imbalance between estimated and actual heating demand.

### 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.

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.

The actuator unit is recommended for mounting on ESBE valves series F.

### OPTIONAL EQUIPMENT

Art. No.  
17053100 \_\_\_\_\_ CRA911 Flow pipe sensor, 5m cable  
17055900 \_\_\_\_\_ CRB915 GSM-module  
98100690 \_\_\_\_\_ Auxiliary switch Series 90



CRC121/CRC125  
230 V AC

### SUITABLE MIXING VALVES

- Series F

### ADAPTOR KITS

Required adaptor kits for easily fitting onto an ESBE rotary mixing valve is supplied with each actuator. If required, separate adaptor kits can be ordered as follows.

Art. No.  
16053300 \_\_\_\_\_ ESBE valve series VRG, VRH, VRB  
16051300 (= supplied with actuator)  
\_\_\_\_\_ ESBE valve series MG, G, F, BIV, T, TM, H, HG

Adaptor kits for other mixing valves and valves built-into boilers are available as follows:

Art. No.  
16053500 \_\_\_\_\_ BRV  
16053900 \_\_\_\_\_ Honeywell Centra ZR, DR, DRG, DRU  
\_\_\_\_\_ (DN15-DN50)  
16051700 \_\_\_\_\_ Honeywell Centra Kompakt DRK/ZRK  
16051900 \_\_\_\_\_ CTC, linear movement  
16053600 \_\_\_\_\_ BRV, Meibes, Oventrop, Watts  
16051300 \_\_\_\_\_ Sauter MH32...H42...  
16052500 \_\_\_\_\_ Siemens VBG31, VBI31, VBF21, VCI31  
16051400 \_\_\_\_\_ TA-VTR, TA-STM  
16052600 \_\_\_\_\_ Schneider Electric/TAC-TRV  
16051500 \_\_\_\_\_ Viessmann (DN20-DN25)  
16051800 \_\_\_\_\_ WITA

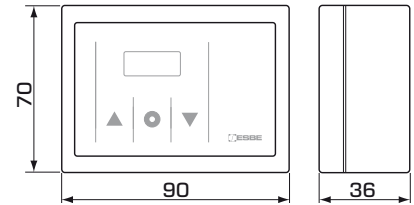
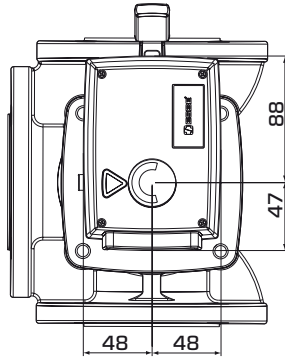
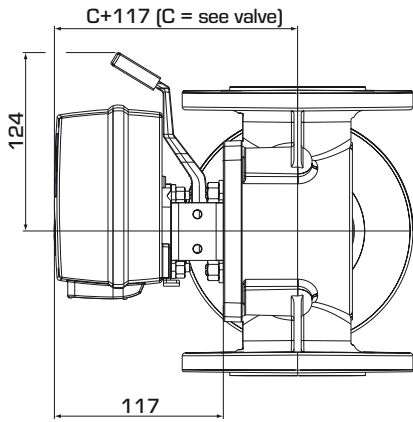
### TECHNICAL DATA

Ambient temperature: \_\_\_\_\_ max. +55°C  
\_\_\_\_\_ min. -5°C  
Sensors: \_\_\_\_\_ Temperature sensor type NTC  
Temperature range,  
Flow pipe sensor: \_\_\_\_\_ +5 to +95°C  
Outdoor sensor: \_\_\_\_\_ -50 to +70°C  
Enclosure rating - Actuator unit: \_\_\_\_\_ IP54  
- Control box: \_\_\_\_\_ IP54  
Protection class: \_\_\_\_\_ II  
Power supply: \_\_\_\_\_ 230 ± 10% V AC, 50 Hz  
Power consumption - 230 V AC: \_\_\_\_\_ 10 VA  
Torque: \_\_\_\_\_ 15 Nm  
Running time at max. speed: \_\_\_\_\_ 120s

CE LVD 2006/95/EC  
EMC 2004/108/EC  
RoHS 2011/65/EC

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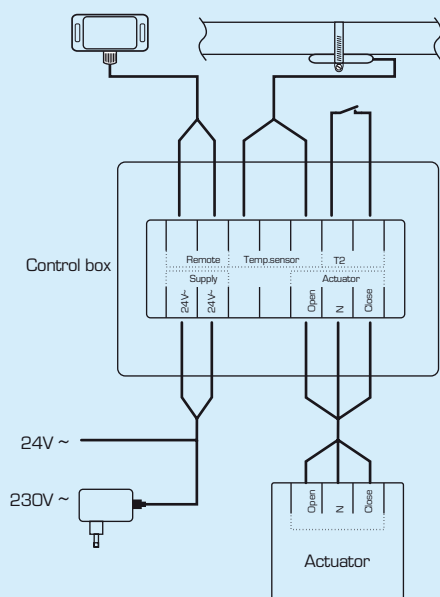
Installation dimensions for Actuator Series CRC120 with ESBE series MG, G, F, T/TM, H/HG and BIV mixing valves

Installation dimensions for Control box

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Art. No.	Reference	Voltage [V AC]	Torque [Nm]	Weight [kg]	Note	Replaces
12842100	CRC121	230	15	1.8		
12842500	CRC125			1.8	Transformer with UK plug	

### WIRING



### INSTALLATION EXAMPLE

