

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 adaptor (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
98100690 _____ Auxiliary switch Series 90



SUITABLE MIXING VALVES

- Series F

ADAPTOR KITS

Required adaptor kits for easily fitting onto an ESBE rotary mixing valve is available in two different styles. Adaptor kit designed for ESBE mixing valve series MG, G, F, BIV, H, HG is supplied with each controller. Adaptor kits for ESBE mixing valve series VRG, VRH, VRB and VBF can be ordered separately.

Art. No.

16051300 (= supplied with controller)

_____ ESBE valve series MG, G, F, BIV, T, TM, H, HG

16053300 _____ ESBE valve series VRG, VRH, VRB

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

Art. No.

16053600 _____ BRV, Meibes, Oventrop, Watts

16053900 _____ Honeywell Centra ZR, DR, DRG, DRU (DN15-50)

16051700 _____ Honeywell Centra Kompakt DRK/ZRK

16051300 _____ Sauter MH32...H42...

16052600 _____ Schneider Electric/TAC-TRV

16052500 _____ Siemens VBG31, VBI31, VBF21, VCI31

16051400 _____ TA-VTR, TA-STM

16051500 _____ Viessmann (DN20-25)

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

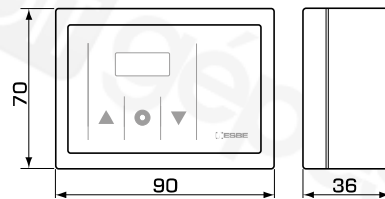
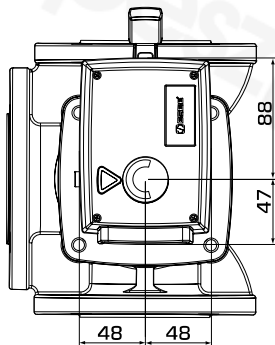
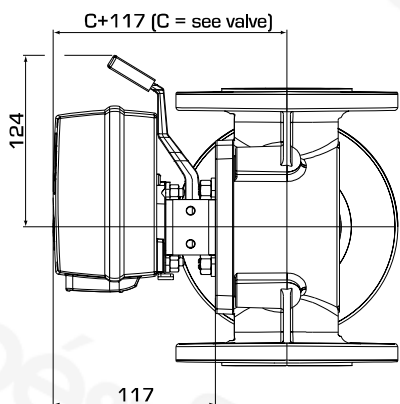
ErP Temperature controls class: _____ III

Energy efficiency contribution: _____ 1,5%

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

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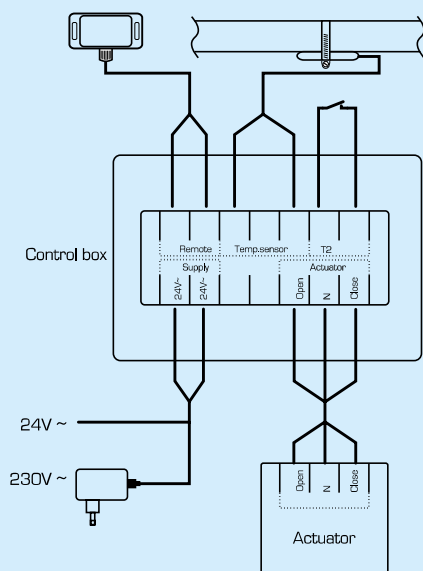
Installation dimensions for Actuator Series CRC120 with ESBE series MG, G, F, T/TM, H/HG and BIV mixing valves

Installation dimensions for Control box

SERIES CRC120

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

