

## CONTROLLERS

# CONTROLLER SERIES CRA140

ESBE series CRA140 is a combined constant flow temperature and return temperature controller with integrated actuator made especially for applications where 2 flow temperatures needs to be controlled.

### OPERATION

The ESBE series CRA140 is designed to provide a constant flow temperature and at the same time keep a second flow temperature within a changeable temperature window. Temperature setting is done by an easy-to-use joystick and display interface. Adjustable temperature setting within the range of 5 - 95°C.

The controller consist of a actuator unit with 2 preassembled flow pipe sensors, S1 and S2. The primary function is to keep the set temperature at sensor S1 by opening or closing the valve and at the same time supervise that the temperature at sensor 2 is within the set temperature window. If the temperature at sensor 2 falls outside the temperature window the controller will change mode and open or close the valve to get the temperature at sensor 2 back within the temperature window. In both modes the flow temperature at sensor 1 will never be below the set minimum flow temperature or above the set maximum flow temperature.

An alternative target temperature may be activated by an external signal.

### MOUNTING

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

Flow pipe sensor S1 comes with 1,5m cable and flow pipe sensor S2 comes with 2m cable. All sensors must be carefully insulated from the ambient temperature.

Thanks to the special interface between the controller series CRA100 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.

16200700 \_\_\_\_\_ ARA801 Auxiliary switch kit

17053100 \_\_\_\_\_ CRA911 Flow pipe sensor, 5m cable



CRA141  
230 VAC

### 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

Sensors: \_\_\_\_\_ Temperature sensor type NTC  
Temperature range:

Flow pipe sensor S1 and S2: \_\_\_\_\_ +5 to +95°C

Enclosure rating: \_\_\_\_\_ IP41

Protection class: \_\_\_\_\_ II

Power supply: \_\_\_\_\_ 230 ± 10% V AC, 50 Hz

Power consumption - 230 V AC: \_\_\_\_\_ 10 VA

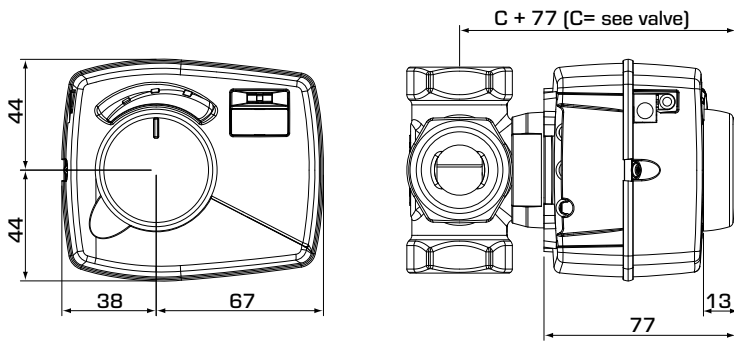
Torque: \_\_\_\_\_ 6 Nm

Running time at max. speed: \_\_\_\_\_ 30s

CE LVD 2014/35/EU  
EMC 2014/30/EU  
RoHS3 2015/863/EU



# CONTROLLER SERIES CRA140



Installation dimensions for Controller Series  
CRA140 with ESBE VRG100, VRG200,  
VRG300, VRH100 and VRB100 mixing valves

## SERIES CRA140

| Art. No. | Reference | Voltage [VAC] | Temp. range | Torque [Nm] | Weight [kg] | Note | Replaces |
|----------|-----------|---------------|-------------|-------------|-------------|------|----------|
| 12724100 | CRA141    | 230           | 5-95°C      | 6           | 0,7         |      |          |

## INSTALLATION EXAMPLES

