# CONTROLLERS



ESBE series CRA150 is a combined actuator and constant flow temperature controller made especially for applications with heating and cooling possibility in the same circuit.

### OPERATION

The ESBE series CRA150 is an integrated actuator and controller with possibility to control 2 different modes. The primary mode is for example heating; in this mode the controller will mix the hot fluid with the return fluid according to the set temperature. The secondary mode, for example cooling, is activated by an external signal and when active the controller will change working direction and mix the cold fluid with the return fluid according to the alternative set temperature. Temperature setting is done by an easy-to-use joystick and display interface and the temperature setting is adjustable within the range of 5 - 95°C.

### 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 CRA150 and the ESBE series VRG 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



230 VAC

#### SUITABLE MIXING VALVES



Series 3MG
Series 3G
Series 3F ≤ DN50

#### 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, G, MG, F

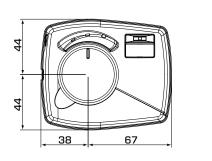
Adaptor kits for other mixing valves are available as follows: Art. No.

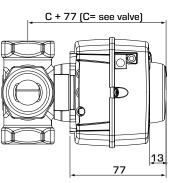
16000600	Meibes
16000700	Watts
16000800	Honeywell Corona
16000900	Lovato
16001000	PAW
16001100	Wita Minimix, Maximix

# TECHNICAL DATA

Ambient temperature:	max. +55°C		
	min5°C		
Sensors:	Temperature sensor type NTC		
Temperature range:			
Flow pipe sensor	+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		





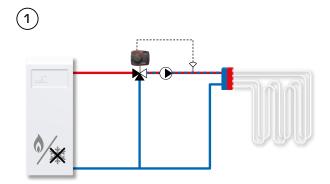


Installation dimensions for Controller Series CRA150 with ESBE VRG100, VRG200, VRG300 and VRH100 mixing valves

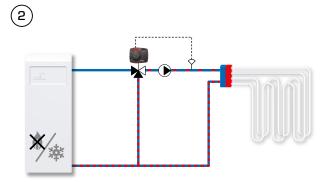
# **SERIES CRA150**

Art. No.	Reference	Voltage [VAC]	Temp. range	Torque [Nm]	Weight [kg]	Note	Replaces
12725100	CRA151	230	5-95°C	6	0,7		

# **INSTALLATION EXAMPLES**



Heating mode



Cooling mode

