

# CRT<sub>C</sub>

Installation – Commissioning – Maintenance

20230428

## Accessories

### Actuator:

Sauter ASM115SK005, ASM124SK002, 24 V AC, standard actuators depending on size.

Other actuators must be ordered, see actuator table page 3.

Wiring diagrams are displayed on page 2.

### Knob:

CRTT-1 for manual control.

### Quick connection:

FSR. Clamp with quick-acting lock.

## Installation

Insert the damper into the connecting duct and fix it in position with blind rivets or by means of an FSR clamp. See Figure 1.

## Commissioning

The damper has no measurement function of its own. Turn the damper blade at the desired position and lock it.

### Maintenance

Clean the damper whenever needed by means of a vacuum-cleaner and brush nozzle or by wiping surfaces with a cloth.

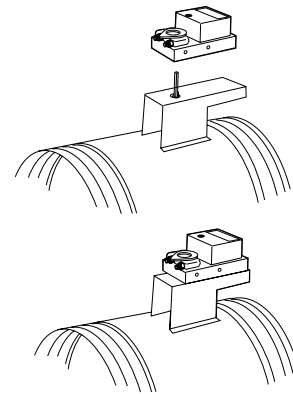


Figure 3. Installation, actuator size 100-400.

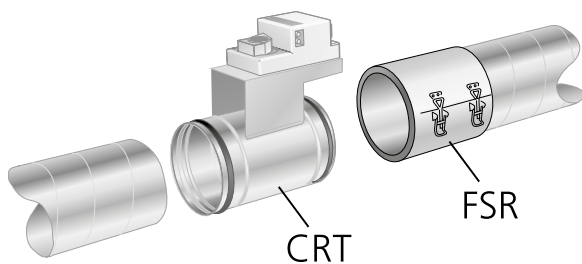


Figure 1. Installation.

## Installation of accessories

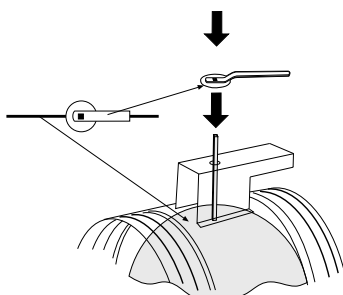


Figure 2. Installation, handle CRTT-1

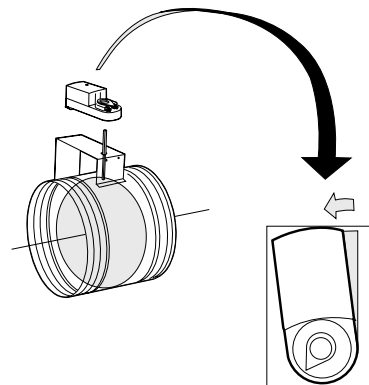


Figure 4. Installation of actuator CRT, size 500 and 630. First, close the damper entirely, then install the actuator exactly straight and lock it against the damper shaft. Turn the actuator 5° past closed setting and lock the position of the actuator.

Wiring diagrams

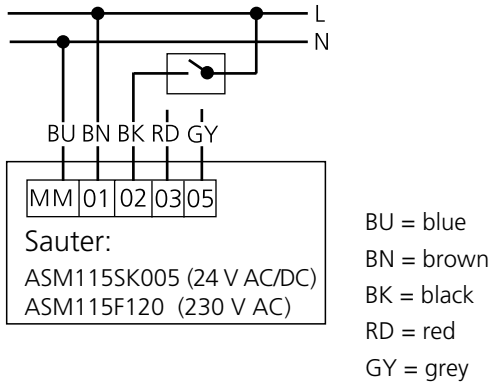


Figure 5. Wiring diagram for Sauter, 2 point regulation.

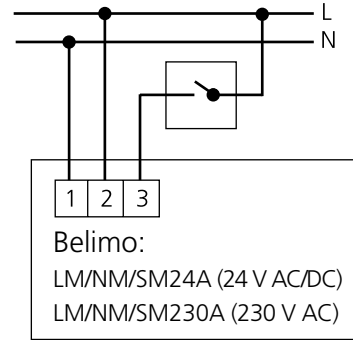


Figure 8. Wiring diagram for Belimo, 2 point regulation.

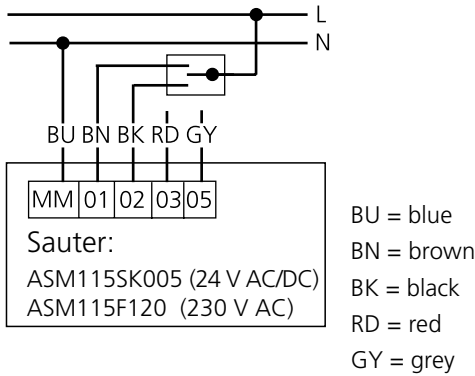


Figure 6. Wiring diagram for Sauter, 3 point regulation.

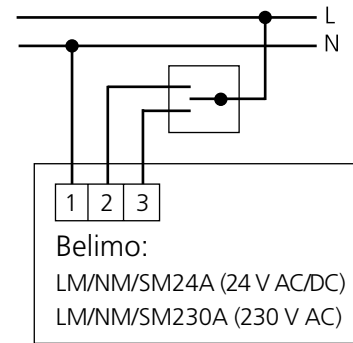


Figure 9. Wiring diagram for Belimo, 3 point regulation.

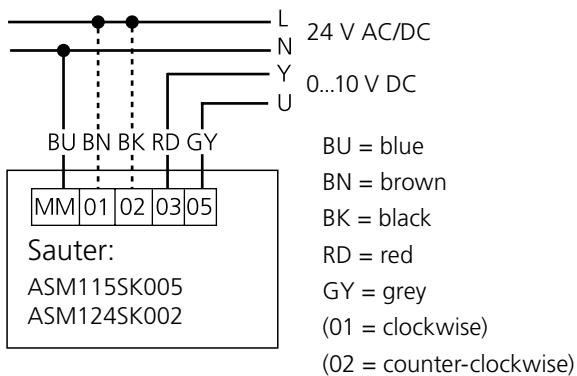


Figure 7. Wiring diagram for Sauter, 0-10 V stepless/modulating regulation.

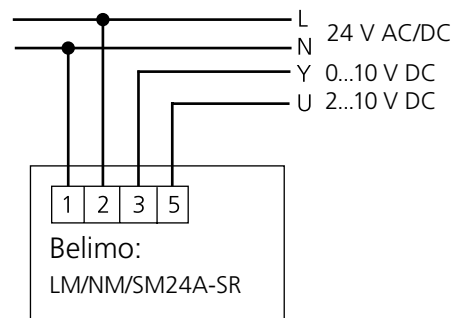


Figure 10. Wiring diagram for Belimo, 0-10 V stepless / modulating regulation.

**Actuator tables**

- Actuators: Sauter 24 V AC, ASM115SK005 and ASM124SK002 are standard and kept in stock.
- All other actuators are order items.

**2 or 3 point regulation – 24 V AC**

Size	Torque	Designation	
		Sauter	Belimo
100-250	5 Nm	ASM115SK005	LM24A
315-400	10 Nm	ASM115SK005	NM24A
500-630	15 Nm	ASM124SK002	SM24A

**2 or 3 point regulation – 230 V AC**

Size	Torque	Designation	
		Sauter	Belimo
100-250	5 Nm	ASM115F120	LM230A
315-400	10 Nm	ASM115F120	NM230A
500-630	15 Nm	-	SM230A

**0-10 V stepless/modulating regulation – 24 V AC**

Size	Torque	Designation	
		Sauter	Belimo
100-250	5 Nm	ASM115SK005	LM24A-SR
315-400	10 Nm	ASM115SK005	NM24A-SR
500-630	15 Nm	ASM124SK002	SM24A-SR

**Electrical data**

**Actuators – Supply voltage 24 V AC**

Make / Model	Ambient temp.	Power Consumption
Sauter ASM115SK005	-20...+55°C	8.7 VA
Sauter ASM124SK002	-20...+55°C	4.4 VA
Belimo LM24A / -SR	-30...+55°C	2.0 VA
Belimo NM24A / -SR	-30...+55°C	3.5 VA
Belimo SM24A / -SR	-30...+55°C	4.0 VA

**Actuators – Supply voltage 230 V AC**

Make / Model	Ambient temp.	Power Consumption
Sauter ASM115F120	-20...+55°C	4.0 VA
Belimo LM230A	-30...+55°C	4.0 VA
Belimo NM230A	-30...+55°C	6.0 VA
Belimo SM230A	-30...+55°C	6.5 VA

**Dimensions and Weights**

Size ØD (mm)	Dimensions (mm)		Weight (Kg)	Torque*) (Nm)
	A	H		
100	210	70	0.7	<3
125	210	70	0.8	<3
160	210	75	0.9	<3
200	210	75	1.0	4
250	210	75	1.2	5
315	210	75	1.5	6
400	255	80	2.6	8
500	255	80	4.2	12
630	255	80	6.0	15

\*) The torque moment refers to the recommended force necessary for secure control.

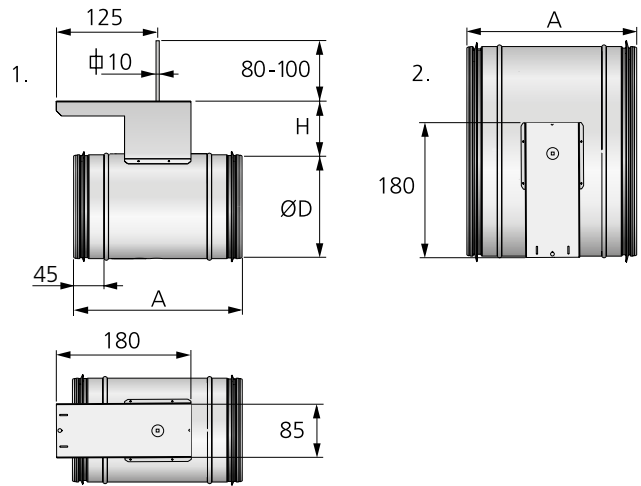


Figure 11. Dimensions (mm), CRT.  
1. CRT-(100-400)-4  
2. CRT-(500-630)-4

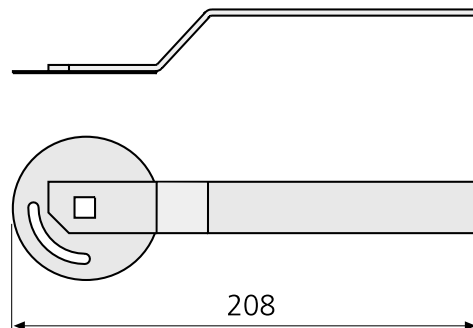


Figure 12. Dimensions (mm), CRT-1 knob.