

SLC® Line → slave device

BC24 G2

Technical datasheet

Slave device for fire protection and smoke extraction actuators



Main characteristics

- + plug connection for actuator
- + current measurement of actuator
- + simple damper test
- + runtime monitoring
- + power supply and input for smoke detector
- + tried and tested **SLC®** wiring principle (power supply via communication line)



Compatible actuators

Spring return actuators	BELIMO	BF24-T-ST	(18 Nm)
		BFN24-T-ST	(9 Nm)
		BLF24-T-ST	(6 Nm)
		BFL24-T-ST	(4 Nm)
Smoke extraction actuators	BELIMO	BE24-ST	(40 Nm)
		BLE24-ST	(15 Nm)
		BR24-F-ST	(15 Nm)
		BEE24-ST	(25 Nm)*
		BEN24-ST	(15 Nm)*

***from october 2020**

Cable adapter set for actuators without prefabricated "ST" connection available from BV-Control AG

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1 SUMMARY

The BC24 G2 is the linking element between the SLC® master device (e.g., SLC24-B, SLC24-8B, SLC24-16B) and damper actuator.

Power supply (**for actuator and smoke detector**) and communication take place via an interchangeable two-wire line.

A smoke detector or another safety element can be connected without any additional equipment.

When the smoke or temperature sensor is triggered, the damper is immediately controlled locally to the safety position and the corresponding report is sent to the higher-level system.

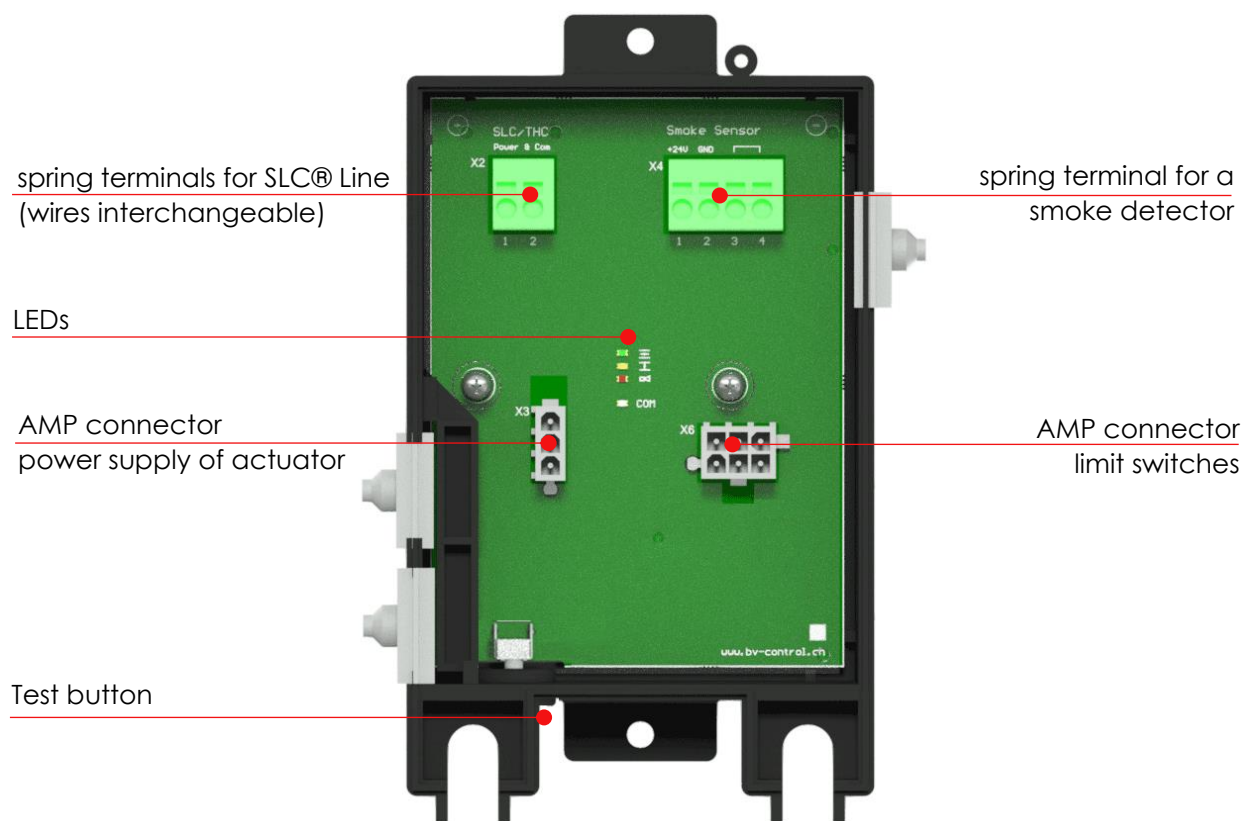


2 TECHNICAL DATA

Electrical data	Rated voltage	Defined by SLC® control device	
	Power consumption	0.5W	
	Connections	Plug connections / spring terminals	
	Power supply for external smoke detector	+24VDC / max. 30mA	
Safety	Protection class	III (safety extra-low voltage)	
	EMC	CE in accordance with 2014/30/EU	
	Mode of operation	Type 1 (EN 60730-1)	
	Rated impulse voltage	2.5 kV (EN60730-1)	
	Pollution degree of environment	3 (EN60730-1)	
	Ambient temperature	-20° ... +50°C	
	Storage temperature	-20° ... +80°C	
	Humidity test	95% rh, non-condensing (EN 60730-1)	
Maintenance	Maintenance-free		
Mechanical data	Dimensions	Width	114 mm
		Height	153 mm
		Depth	54 mm
	Weight	240 g	
	Installation	Screw-fitted	

Table 1 Technical data

3 DEVICE OVERVIEW



4 DISPLAY AND OPERATION

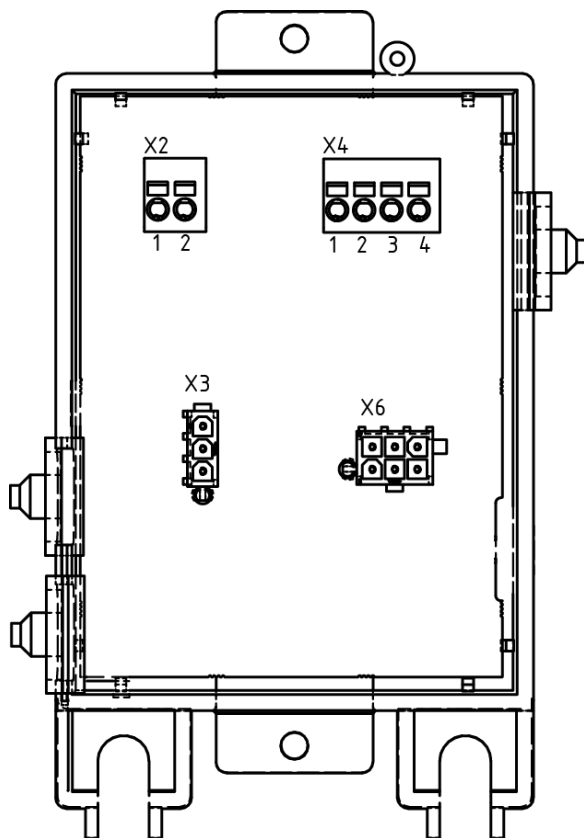
LEDs

Green	on	„damper open“
	blinks	“damper is opening” (from october 2020)
Yellow	on	„damper “
	blinks	“damper is closing” (from october 2020)
White	blinks	SLC-communication ok – control command „close damper“
	flashes	SLC-communication ok – control command „open damper“
Red	blinks	self-test active
		error:
		communication loss
		actuator not connected
		thermoelectric tripping device of actuator triggered
		runtime monitoring / mechanical error triggered
	on	safety element triggered (at X4)

Button

By pressing the button, the command received from the control module is reversed i.e. the damper travels to the opposite direction as long as the button remains pressed. This allows the simple function test on site of the damper. The button operation causes an error message at the control device which has to be reset.

5 TERMINAL ASSIGNMENT



X2 2-pin spring terminal 1/2 (formerly 6 / 7)

Connection for SLC – two-wire line, wires interchangeable. Maximum cable lengths can be calculated with the SLC Planning Tool.

Rule of thumb: 300m@1.5 mm²

X4 4-pin spring terminal

Connection for smoke detector

- 1 +24VDC / max. 30 mA
- 2 GND
- 3 IN1 (external relay contact 1)
- 4 IN2 (external relay contact 2)

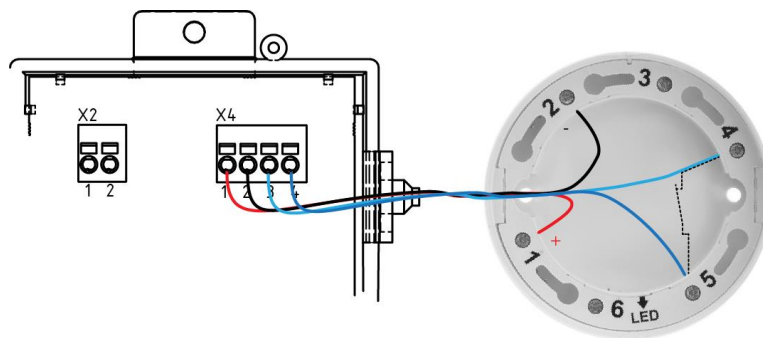
X3 3-pin AMP connector

Power supply for actuator

X6 6-pin AMP connector

Limit switches of the actuator

Example with ORS142 K (Hekatron)



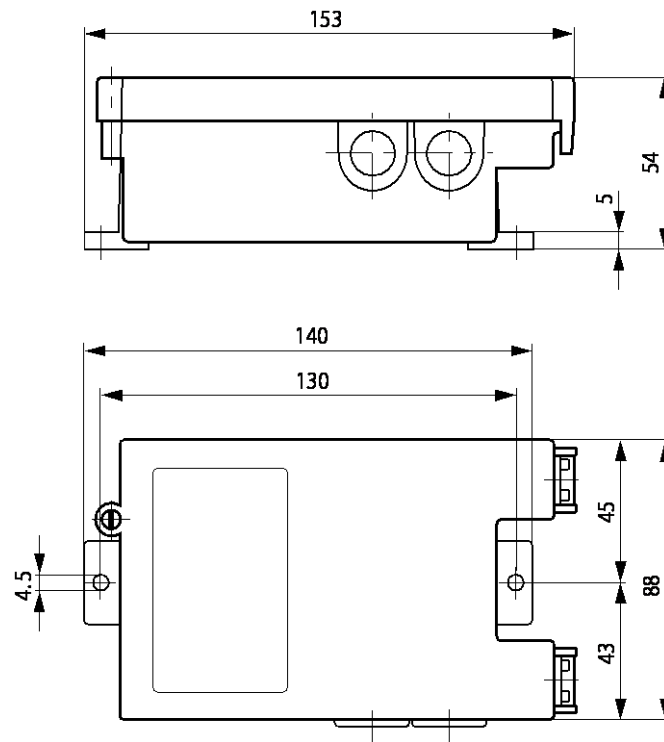
Instead of a smoke detector, any potential-free control contact can be connected to terminals X4: 3/4 (e.g. fire alarm system). When the contact opens, the damper travels to the safety position. At delivery the bridge between X4: 3/4 is present.

Attention

Parallel circuits, i.e. a smoke detector on multiple slave devices are not allowed.

7 DIMENSIONS

Dimensions in mm



A product of

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