



SBCR03 series

Control unit
Type 2



Control unit
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features

- Up to 6 sets of safety photocells M18 (SH4-IA) or M30 (TH6-IA) interconnectable
- DIN RAIL Mounting
- Body protection and access control
- Cat. 2 according to EN 61496-1
- Cat. 2 / PL c according to EN ISO 13849-1; SIL CL 1 according to EN 62061 / IEC 61508
- Models with single/double channel Muting and Override functions
- Response time less than 5 ms
- 2 OSSD outputs



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- Catalogue / Manuals



code description

SBCR03 / S - A 0

series	SBCR03	Safety control unit for safety photocells
power supply	S	24 Vcc operating voltage
inputs	A	Suitable for safety photocells
type	0	Standard model
	M	Muting/Override model

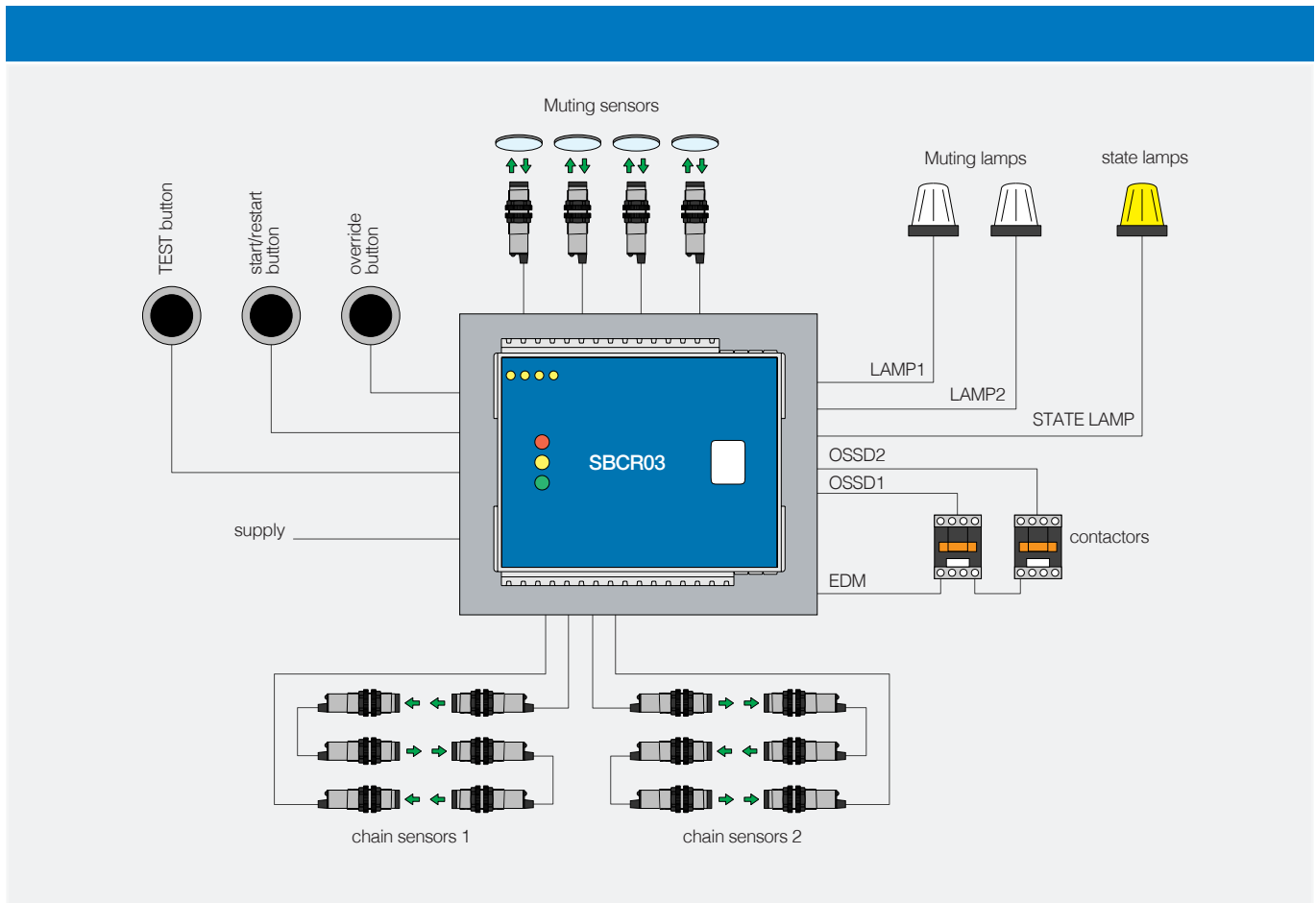
connectable devices

series	photocell	operating distance
SH4 - IA	M18	until 10 m
TH6 - IA	M30	until 60 m

	SBCR03/S-A0	SBCR03/S-AM
operating voltage	24 Vdc	
tolerance on operating voltage	- 30...+ 20 %	
voltage ripple	5 Vpp	
absorbed current	100 mA	
available functions	Safety function	
	START / RESTART / INTERLOCK ≤ 125 ms	
	EDM (300 ms relay switching time monitoring)	
	-	muting
muting sequence	-	double muting
	-	override
muting Time-Out	-	3 s (selectable)
muting sensors type	-	3 min (selectable)
muting lamp output	-	4 x PNP, NO
status lamp output	-	2 lamps 1 to 10 W, from 1 to 10 W, 24 Vcc
output voltage drop	-	from 1 to 10 W, 24 Vdc
response time	2.5 V @ 500 mA	
recovery time	≤ 5 ms	
IP mechanical protection	≥ 100 ms	
operating temperature	to be mounted inside a cabin with IP54 minimum	
storage temperature	-20°...+60°C	
housing material	-25°...+75°C	
weight	ABS UL VO	
	700 g	

safety parameters

Category 2 safety control unit	
safety integrity level	SIL3 (IEC 61508), SIL CL 3 (EN 62061) ⁽¹⁾
Type	4 (EN ISO 13849) ⁽¹⁾
performance level	PL e (EN ISO 13849) ⁽¹⁾
maximum frequency of request ⁽³⁾	60/min (EN ISO 13849)
PFH _d ⁽⁴⁾	8.1 x 10 ⁻⁶
TM (life time)	20 years



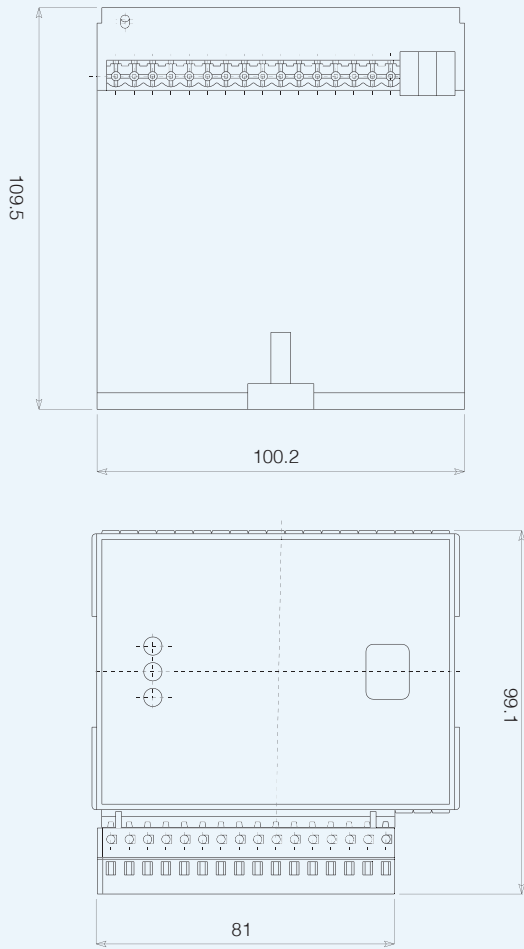
Muting conditions

n° of Muting sensors	Muting signals combinations
2	M1 & M2
3	M3 followed by M1 & M2 (direction recognition)
2+2	M1 & M2 and/or M3 & M4 M1 M2 muting is independent from M3 M4

Muting conditions and Muting sequence control

n° of Muting sensors	Muting signals combinations
2	M1 & M2 must be active within 3 s
3	M1 & M2 must be active within 3 s (with M3 is active)
2+2	M1 & M2 and / or M3 & M4 must be active within 3 s Muting sequence of M1 M2 is independent from Muting sequence of M3 M4

SBCR03/S-A0



SBCR03/S-AM

