

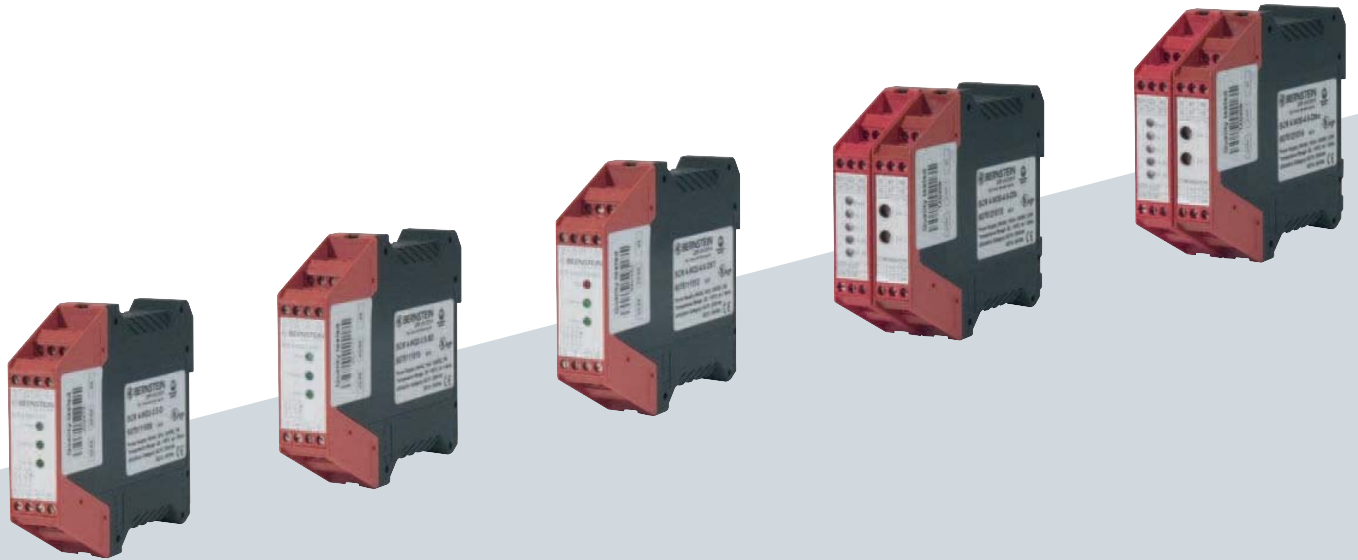


SCR Safety Relais

From Signalling to Evaluation –
Responsible Solutions for Safety Applications

The Rational Solution: Bernstein safety relays for all applications

Bernstein AG offers a complete range of products to suit your particular application, from the safety switch to the safety relay. Our SCR safety relays (safety gate monitoring devices) are designed to reliably monitor input signals, e. g. those generated by Bernstein limit switches, safety-switches, -interlocking switches, -rope pull switches, -sensors or two-hand controls.



13	23	33	41
A1	S34	S33	S12
Power <input type="checkbox"/>			
Channel 2 <input type="checkbox"/>			
Channel 1 <input type="checkbox"/>			
Bernstein			
SCR			
S21	S22	S11	A2
14	24	34	42

13	23	33	41
A1	S34	S33	S12
Power <input type="checkbox"/>			
Channel 2 <input type="checkbox"/>			
Channel 1 <input type="checkbox"/>			
Bernstein			
SCR			
S21	S22	S11	A2
14	24	34	42

13	23	33	43
A1	U1	Y1	Y2
Stop <input type="checkbox"/>			
Channel 2 <input type="checkbox"/>			
Channel 1 <input type="checkbox"/>			
Bernstein			
SCR			
K1	K2	U22	A2
14	24	34	44

S21	S22	A2	31	47	48
A1	S11	S12	32	57	58
Power <input type="checkbox"/>					
Ch. 1 <input type="checkbox"/>					
Ch. 2 <input type="checkbox"/>					
Ch. 3(t) <input type="checkbox"/>					
Ch. 4(t) <input type="checkbox"/>					
Bernstein					
SCR					
S10	S33		13	14	
S35	S34		23	24	

S21	S22	A2	31	47	48
A1	S11	S12	32	57	58
Power <input type="checkbox"/>					
Ch. 1 <input type="checkbox"/>					
Ch. 2 <input type="checkbox"/>					
Ch. 3(t) <input type="checkbox"/>					
Ch. 4(t) <input type="checkbox"/>					
Bernstein					
SCR					
S10	S33		13	14	
S35	S34		23	24	

Des.: SCR 4-W22-3.5-D
Art. Nr.: **607.5111.009**

SCR 4-W22-3.5-SD
607.5111.010

SCR 4-W22-4.6-DXT
607.5111.012

SCR 4-W35-4.6-Dta
607.5121.013

SCR 4-W35-4.6-Dtau
607.5121.014

- EMERGENCY STOP relay/safety gate monitors
- Up to Control Category 4
- 3 NO safety outputs (enabling paths)
- 1 NC auxiliary output (signal output)
- No start button monitoring
- Cross-wire monitoring
- LED display for output status and mains supply
- 24 V AC / DC (electronic fuse)
- Dimensions (WxHxD) 22,5x114,5x99 mm
- CE, TÜV, UL, C-UL

- EMERGENCY STOP relay/safety gate monitors
- Up to Control Category 4
- 3 NO safety outputs (enabling paths)
- 1 NC auxiliary output (signal output)
- Start button monitoring
- Cross-wire monitoring
- LED display for output status and mains supply
- 24 V AC / DC (electronic fuse)
- Dimensions (WxHxD) 22,5x114,5x99 mm
- CE, TÜV, UL, C-UL

- Expansion module for safety relays conforming to VDE 0113
- Up to Control Category 4
- 4 NO safety outputs (enabling paths)
- 1 NC auxiliary output (signal output)
- Cross-wire monitoring
- LED display for output status and mains supply
- 24 V AC / DC (electronic fuse)
- Dimensions (WxHxD) 22,5x114,5x99 mm
- CE, TÜV, UL, C-UL

- EMERGENCY STOP relay/safety gate monitors with adjustable time delay-off safety outputs
- Up to Control Category 4
- Simultaneous (≤ 3 s) operation of inputs required
- 2 NO safety outputs (enabling paths)
- 2 NO timed delay off safety outputs (enabling paths)
- 1 NC auxiliary output (signal output)
- Timer delay range 0.05 s - 600 s adjustable in 64 stages
- Automatic or manual re-start
- Cross-wire monitoring
- LED display for output status
- 24 V AC / DC (electronic fuse)
- Dimensions (WxHxD) 35x114,5x99 mm
- CE, TÜV, UL, C-UL

- EMERGENCY STOP relay/safety gate monitors with adjustable time delay-off safety outputs
- Up to Control Category 4
- No simultaneous operation of inputs required
- 2 NO safety outputs (enabling paths)
- 2 NO timed delay off safety outputs (enabling paths)
- 1 NC auxiliary output (signal output)
- Timer delay range 0.05 s - 600 s adjustable in 64 stages
- Automatic or manual re-start
- Cross-wire monitoring
- LED display for output status
- 24 V AC / DC (electronic fuse)
- Dimensions (WxHxD) 35x114,5x99 mm
- CE, TÜV, UL, C-UL

The technical data sheets for all relays can be downloaded from www.bernstein-ag.de under Download products.

Bernstein SCR relays are housed in slim-line DIN rail housings, but despite their compact dimensions they have a huge range of applications right through to control category 4 in accordance with EN 945-1.

As defined by this standard, the SCR relays monitor the correct position and reliable operation of inputs from the safety sensors or safety switch contacts. Evaluation of this information is made and the safety outputs controlling the power elements such as power contactors or frequency converters will either stop the machine in an emergency or allow re-start when safe to do so. A further check of 'power elements' correct stop function is made via the feedback loop.



S21	S22	A2	31	47	48
A1	S11	S12	32	57	58
Power		○	○	Time 1	
Ch. 1		○	○	Time 2	
Ch. 2		○	○		
Ch. 3(0)		○	○		
Ch. 4(0)		○	○		
Bernstein SCR					
S10	S33		13	14	
S35	S34		23	24	

A1	Y1	13	23
Power			
Channel 2			
Channel 1			
Bernstein SCR			
14	24	Y2	A2

A1	Y1	13	23
Power			
Channel 2			
Channel 1			
Bernstein SCR			
14	24	Y2	A2

A1	13	23	31
	34	Y1	Y2
Power			
Channel 2			
Channel 1			
Bernstein SCR			
S11	S12	S21	S22
14	24	32	A2

13	23	33	BR1
A1	BR2	Y1	Y2
Power			
Channel 2			
Channel 1			
Interlock			
Bernstein SCR			
S11	S12	S22	A2
14	24	34	

SCR 4-W35-4.6-Dton
607.5121.017

SCR 2-W22-2.5
607.5111.015

SCR 2-W22-2.5-S
607.5111.016

SCR 4-W22-2.6-D2H
607.5111.018

SCR ON4-W22-3.6-S
607.5111.019

- EMERGENCY STOP relay/safety gate monitors with adjustable time delay-off safety outputs
- Up to Control Category 4
- No simultaneous operations of inputs required
- 2 NO safety outputs (enabling paths)
- 2 NO timed delay-on safety outputs (enabling paths)
- 1 NC auxiliary output (signal output)
- Timer delay range 0.05s - 600s adjustable in 64 stages
- Automatic or manual re-start
- Cross-wire monitoring
- LED display for output status
- 24 V AC / DC (electronic fuse).
- Dimensions (WxHxD) 35x114,5x99 mm
- CE, (TÜV, UL, C-UL pending)

- EMERGENCY STOP relay/safety gate monitors
- Up to Control Category 2 or 3 (depending on mode of application)
- 2 NO safety outputs (enabling paths)
- No start button monitoring
- LED display for output status and mains supply
- 24 V AC / DC (electronic fuse)
- Dimensions (WxHxD) 22,5x114,5x99 mm
- CE, (TÜV, UL, C-UL pending)

- EMERGENCY STOP relay/safety gate monitors
- Up to Control Category 2 or 3 (depending on of application)
- 2 NO safety outputs (enabling paths)
- Start button monitoring
- LED display for output status and mains supply
- 24 V AC / DC (electronic fuse).
- Dimensions (WxHxD) 22,5x114,5x99 mm
- CE, (TÜV, UL, C-UL pending)

- Two-hand control unit for Type I-III c in accordance with ZH1 / 456 and DIN EN 574
- Up to Control Category 4
- Synchronisation time: 0.5s
- 2 NO safety outputs (enabling paths)
- 1 NC auxiliary output (signal output)
- 1 PLC output
- LED display for output status and mains supply
- 24 V AC / DC (electronic fuse)
- Dimensions (WxHxD) 22,5x114,5x99 mm
- CE, TÜV, UL, C-UL

- Safety emergency stop relay for safety light barriers / curtains
- Up to Control Category 4
- 3 NO safety outputs (enabling paths)
- Monitored start by selectable external jumper lead
- LED display for output status and mains supply
- 24 V AC / DC (electronic fuse)
- No cross-short safety
- Dimensions (WxHxD) 22,5x114,5x99 mm
- CE, TÜV, UL, C-UL

Safety switching devices from Bernstein

Limit switches



- Metal and plastic housings, with forced disconnect of NC contact

Safety switches



- Slim-line plastic housings, with separate actuator

Safety interlocking switches



- Slim-line plastic housings with separate actuator, spring or magnetic locking

Safety rope pull switches



- Insulated plastic housings



- Standard plastic housings, with separate actuator



- Metal housings with separate actuator, spring or magnetic locking

Emergency Stop buttons



- With twist or key reset



- Robust metal housings, with separate actuator

Safety sensors



- Slim-line plastic housings, with integrated hinged actuation



- Safety light curtains multi-beam systems



- Slim-line plastic housings, with integrated actuation



- Safety transponder systems



- Hinge switch, metal housing with integrated actuation

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