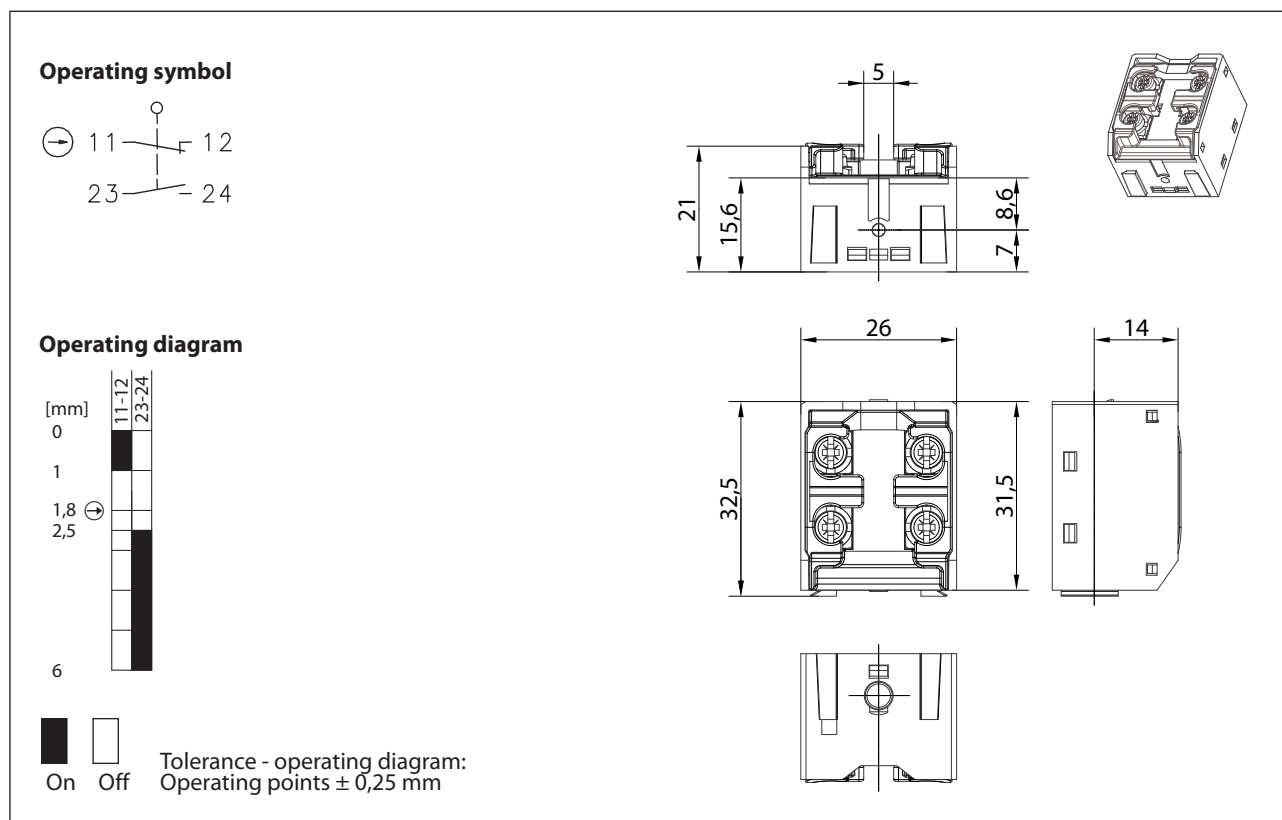


## Mechanical switching device Series C14

Description **C14-U1Z**

Article number **3935149002**



Electrical Data acc. IEC/EN 60947-5-1		
Rated insulation voltage	$U_i$	400 V
Rated impulse withstand voltage	$U_{imp}$	4 kV
Rated operational voltage	$U_e$	240 V AC / 24 V DC
Rated supply frequency AC		50 / 60 Hz
Overvoltage category		II acc. EN 60947-1 annex H table H1
Conventional enclosed thermal current	$I_{the}$	5 A
Minimum current		1 mA
Reliability		acc. EN 60947-5-4 @ 24 V DC, 1 mA, $U_{kd}$ 2,4 V DC
Utilization category and rated values		AC-15, $U_e/I_e$ 240 V / 1,5 A DC-13, $U_e/I_e$ 24 V / 1,5 A (B300 table A.1)
Direct opening action	$\rightarrow$	acc. IEC/EN 60947-5-1, annex K
Short-circuit protective device		Fuse 4 A gG
Rated conditional short-circuit current		400 A
Max. contact resistance		25 mOhm (unused)
Electrical life		on request

Mechanical data	
Enclosure	Thermoplastic, glass fibre reinforced (UL 94-V0)
Fastening	Locking connection with switches of the BERNSTEIN AG
Actuator	Plunger (Thermoplastic, glass fibre reinforced (UL 94-V0))
Min. actuating force	$F_{bmin}$ 14 N
Max. force at stroke end	$F_{bmax}$ 30 N
Direct opening force	$F_{\ominus}$ 18 N
Operating temperature	-30 °C ... +75 °C
Storage temperature	-40 °C ... +80 °C
Protection type	IP00 acc. EN 60529
Pollution degree	3
Contact material	silver
Device class	Category E (MC3 + CC2 + SC1) acc. EN 60947-1 annex Q
Contact type	1 N.C. (Form Zb), 1 N.O.
Gap between NC-contacts	4 mm ( 2 x 2 mm)
Operating rate	$V$ 0,06 m/min $\leq V \leq$ 30 m/min
Bounce duration	ms The value depends on the operating rate
Switchover time	ms The value depends on the operating rate
Switching frequency	$\leq$ 100 / min.
Mechanical life	30 x 10 <sup>6</sup> operating cycles
Mission time	20 years
Connection	4 screw connections (M3)
Conductor cross-sections	Solid or Litz wire with ferrules 0,34 mm <sup>2</sup> - 1,5 mm <sup>2</sup> ; AWG 22 - 16
Weight	$\approx$ 0,02 kg
Installation position	operator definable

Actuation
The push bolt actuator is mainly intended to be actuated along its axis.

ID for safety engineering	
B10d N.C.	30 x 10 <sup>6</sup> cycles (check acc. to DIN EN 60947-5-1)
B10d N.O.	1 x 10 <sup>6</sup> cycles (when the contacts are loaded with $\leq$ 10 % of the maximum electrical values for an ohmic load)

Standards
VDE 0660 T100, DIN EN 60947-1, IEC 60947-1
VDE 0660 T200, DIN EN 60947-5-1, IEC 60947-5-1
VDE 0660 T211, DIN EN 60947-5-4, IEC 60947-5-4
UL 60947-1, CAN/CSA-22.2 No. 60947-1-13
UL 60947-5-1, CAN/CSA-C22.2 No. 60947-5-1-14
DIN EN ISO 13849-1
DIN EN ISO 13849-2

EU Conformity
acc. to directive 2014/35/EU (Low-Voltage-Directive)

**Approvals**

cUR<sub>US</sub> (Mechanical switching device without protection type)  
CCC

**Notes**

Because of the open construction of the device there is no special protection against ingesting of water and touching parts under voltage.