

Technical data

Approvals



Operating and display elements

Occupancy diagram L1

Item	Color	Extras	Note slide-in label	Version	Switching element	Slide-in label	Number	Designation1	LED
2				Illuminated pushbutton	1NO				
3				Illuminated pushbutton	1NO				

Electrical connection values

Rated insulation voltage U_i	30 V
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Rated impulse voltage U_{imp} 1.5 kV

Discrepancy time	
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between FO1A and FO1B max. 10 ms

Utilization category

DC-13 24V 200mA

(Caution: outputs must be protected with a free-wheeling diode in case of inductive loads.)

Risk time according to EN 60947-5-3	max. 350 ms
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Risk time according to EN 60947-5-3, extension for each additional device max. 5 ms

Safety class	III
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Transponder coding Unicode

Degree of contamination (external, according to EN 60947-1)	3
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Solenoid control input IMP1, IMP2, IMM

Test pulse duration	max. 5 ms
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Test pulse interval min. 100 ms

Controls and indicators

Breaking capacity max. 0.25 W

Switching voltage U_A V

Switching current 1 ... 10 mA

LED power supply 24 V DC

Monitoring outputs OD, OT, OL, OI

Output type Semiconductor outputs, p-switching, short circuit-proof

Output voltage $U_A - 2V \dots U_A$ V DC
(Value at a switching current of 50mA without taking into account the cable lengths)

Output current max. 50 mA

Safety outputs FO1A, FO1B

Output type Semiconductor outputs, p-switching, short circuit-proof

Output voltage

U_{FO1A} / U_{FO1B} LOW 0 ... 1 V DC

U_{FO1A} / U_{FO1B} HIGH $U_B - 2V \dots U_B$ V DC

(Value at a switching current of 50mA without taking into account the cable lengths)

Output current

per safety output FO1A / FO1B 1 ... 200 mA

Test pulse duration max. 1 ms

Test pulse interval min. 100 ms

Power supply U_A

Operating voltage DC

U_A 24 V DC -15% ... +10%
(reverse polarity protected, regulated, residual ripple < 5%, PELV)

Current consumption

I_{UA} max. 375 mA
(with energized guard locking solenoid and unloaded outputs OD, OT, OL, OI, +20 °C, 24V)

Power supply U_B

Operating voltage DC

U_B

24 V DC -15% ... +10%

((reverse polarity protected, regulated, residual ripple<5%, PELV))

Current consumption

I_{UB} max. 80 mA
(no load on outputs)

Mechanical values and environment

Connection type Plug connector RC18
(x6)

Installation orientation Door hinge DIN left

Switching frequency 0.25 Hz

Storage temperature -25 ... 70 °C

Mechanical life

1×10^6

in case of use as door stop, and 1 Joule
impact energy 0.1×10^6

Degree of protection IP65

Ambient temperature

at $U_B = 24$ V DC -20 ... 55 °C

Material

Housing Fiber glass reinforced plastic; nickel-plated die-cast zinc;
stainless steel

Locking force F_{Zh} 2000 N

Guard locking principle Open-circuit current principle

Characteristic values according to EN ISO 13849-1 and EN IEC 62061

	PL	Maximum SIL	PFH _D	Category	Mission time
Monitoring of the guard position	PL e	-	3.7×10^{-9}	4	20 y
Guard lock monitoring	PL e	-	3.7×10^{-9}	4	20 y

Miscellaneous

Slide-in label

Number Labeling Note