

Rope pull switch

Series MN78

Description MN78-31 RP	Article number 6087000101
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Operating symbol

Operating diagram

11-12
 21-22
 31-32
 43-44

[mm] 5.5
 2.8
 2.6
 1.8
 0.0

[N] 90
 56-61
 2
 5.3
 60
 10.6
 4.8

42.5
 6
 16
 Ø5
 5
 30.9
 17.5
 30
 42.5
 M20x1.5

Tolerance:
 Operating point ± 0,6 mm
 Direct opening action + 0,6 mm
 Operating force ± 20 %

ON OFF

Key ring loosely enclosed

 D = 30 mm
 D1 = 2 mm

Electrical Data		
Rated insulation voltage	U_i	250 V
Rated impulse withstand voltage	U_{imp}	2,5 kV
Rated operational voltage	U_e	240 V AC / 24 V DC
Rated supply frequency AC		50 / 60 Hz
Conv. thermal current	I_{the}	5 A
Minimum current		1 mA
Utilization category		AC 15, U_e/I_e 240 V / 1,5 A; DC 13, U_e/I_e 24 V / 1,5 A
Direct opening action	⊖	acc. IEC/EN 60947-5-1, annex K; direct opening force: 120 N
Short-circuit protective device		Fuse 4 A gG
Rated conditional short-circuit current		400 A
Protection class		I

Mechanical data	
Enclosure	Die-cast aluminium
Cover	Sheet aluminium
Actuator	Pull ring (Zn-die cast), secured against rotation
Key ring	Steel nickel plated
Operating temperature	-30 °C ... +75 °C
Storage temperature	-40 °C ... +80 °C
Protection type	IP66 / IP67 acc. EN 60529, Type 4X
Pollution degree (built-in switch)	3
Contact material	silver
Contact type	3 N.C. (Form Zb), 1 N.O.
Switching frequency	≤ 60 / min.
Mechanical life	10 x 10 ⁶ operating cycles
Mission time	≤ 20 years
Connection	8 screw connections (M3,5)
Earth bolt	1 x M3,5
Conductor cross-sections	Solid or Litz wire with ferrules 0,34 mm ² - 1,5 mm ² ; AWG 22-16
Cable entrance	1 x M20 x1,5
Weight	≈ 0,26 kg
Installation position	operator definable

Actuation
By lifting the clamp the actuation assembly can be rotated in 90° increments. The actuation assembly is to be again fastened to the housing by lowering the clamp.

ID for safety engineering	
B10d N.C.	20 x 10 ⁶ cycles
B10d N.O.	1 x 10 ⁶ cycles

Standards	
	DIN EN 60947-5-1
	UL 508 / CSA C22.2 No.14
	DIN EN ISO 13849-1
	DIN EN ISO 13849-2

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

Approvals
CCC
cUL _{US}

Notes
The degree of protection (IP code) specified applies solely to a property closed cover and the use of an equivalent cable gland with adequate cable.
The key ring is enclosed loosely.