



Break contact,Front

Part no. M22-K01

Article no. 216378






Powering Business Worldwide™

Switching with the main contacts

Used for indicating and interlocking tasks

Program

Range			RMQ-Titan (drilling dimensions 22.5 mm)
Basic function			Accessories
Range			Accessories
Accessories			Standard auxiliary contact, trip-indicating auxiliary switch
Standard/Approval			UL/CSA, IEC
Construction size			NZM1/2/3/4
Single unit/Complete unit			Element
Connection technique			Screw terminals
Fixing			Front fixing
Auxiliary contacts:  = safety function, by positive opening to IEC/EN 60947-5-1			
N/C = Normally closed			1 N/C 
Contact sequence			

Contact sequence			
Contact travel diagram, stroke in connection with front element			
Configuration			
Protection type			IP20
Connection to SmartWire-DT			no
Connection type			Single contact
Description standard auxiliary contact HIN			<p>Switching with the main contacts Used for indicating and interlocking tasks.</p> <p>Can be used with NZM1 circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker.</p> <p>Can be used with NZM2 size circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker.</p> <p>Can be used with NZM3, 4 circuit-breaker: up to three standard auxiliary contacts can be clipped into the circuit-breaker.</p> <p>Any combinations of the auxiliary contact types are possible.</p> <p>Marking on switch: HIN.</p> <p>On combination with remote operator NZM-XR... the right mounting location of standard auxiliary contact HIN can be fitted only with individual contacts.</p>
For use with			<p>NZM1(-4), 2(-4), 3(-4), 4(-4)</p> <p>PN1(-4), 2(-4), 3(-4)</p> <p>N(S)1(-4), 2(-4), 3(-4), 4(-4)</p>

Approbationen

UL approval	Yes
CSA approval	Yes
Product Standards	IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking
UL File No.	E29184
UL CCN	NKCR
CSA File No.	012528
CSA Class No.	3211-03
NA Certification	UL listed, CSA certified
Degree of Protection	UL/CSA Type: -

General

Standards			IEC/EN 60947 VDE 0660
Lifespan, mechanical	Operations	x 10 ⁶	> 5
Operating frequency	Operations/ h		3600
Actuating force		n	5
Operating torque (screw terminals)		Nm	0.8

Protection type			IP20
Climatic proofing			Damp heat, constant to IEC 60068-2-78 Damp heat, cyclic to IEC 60068-2-30
Ambient temperature		°C	
Open		°C	- 25 - + 70
Mounting position			As required
Mechanical shock resistance		g	30 Shock duration 11 ms Sinusoidal according to IEC 60068-2-27
Terminal capacities		mm ²	
Solid		mm ²	0.75 - 2.5
Stranded		mm ²	0.5 - 2.5
Flexible with ferrule		mm ²	0.5 - 1.5

Contacts

Rated impulse withstand voltage	U_{imp}	V AC	6000
Rated insulation voltage	U_i	V	500
Overtoltage category/pollution degree			III/3
Control circuit reliability			
at 24 V DC/5 mA	H_F	Fault probability	$< 10^{-7}$ (i.e. 1 failure to 10^7 operations)
at 5 V DC/1 mA	H_F	Fault probability	$< 5 \times 10^{-6}$ (i.e. 1 failure in 5×10^6 operations)
Max. short-circuit protective device			
Fuseless		Type	PKZM0-10/FAZ-B6/1
Fuse	gG/gL	A	10

Switching capacity

Rated operational current	I_e	A	
AC-15			
115 V	I_e	A	4
230 V	I_e	A	4
400 V	I_e	A	2
500 V	I_e	A	2
DC-13			
24 V	I_e	A	3
42 V	I_e	A	1.7
60 V	I_e	A	1.2
110 V	I_e	A	0.8
220 V	I_e	A	0.3
Lifespan, electrical			
AC-15			
230 V/0.5 A	Operations	$\times 10^6$	1.6
230 V/1.0 A	Operations	$\times 10^6$	1
230 V/3.0 A	Operations	$\times 10^6$	0.7
DV-13			
12 V/2.8 A	Operations	$\times 10^6$	1.2

Auxiliary contacts

Rated operational voltage	U_e	V	
Rated operational voltage	U_e	V AC	500
Rated operational voltage, max.	U_e	V DC	220
Conventional thermal current	$I_{th}=I_e$	CSA	4
Rated operational current	I_e	A	

Different rated operational currents when used as auxiliary contact for NZM circuit-breaker				bei AC = 50/60 Hz			
				Bemessungsbetriebsstrom	M22-K...	M22-CK...	XHIV
			AC-15	15 A	4	4	4
			230 V	15 A	4	4	4
			400 V	15 A	2	-	2
			500 V	15 A	1	-	1
			DC-124	15 A	3	3	3
			42 V	15 A	1.7	1	1.5
			60 V	15 A	1.2	0.8	0.8
			110 V	15 A	0.8	0.5	0.5
			220 V	15 A	0.3	0.2	0.2
Short-circuit protection							
max. fuse		A gG/ gL		10			
Max. miniature circuit-breaker		A		PKZM0-10/FAZ-B6			
Operating times							
					<p>Early-make time of the HIV compared to the main contacts during with make and break switching.</p> <p>(switch times with manual operation):</p> <p>NZM1, PN1, N(S)1: ca. 20 ms</p> <p>NZM2, PN2, N(S)2: ca. 20 ms</p> <p>NZM3, PN3, N(S)3: ca. 20 ms</p> <p>NZM4, N(S)4: approx. 90 ms, the HIV switch early Offswitching not forward.</p>		
Terminal capacities		mm ²					
Solid or flexible conductor with ferrule		mm ²			1 x (0.75 - 2.5)	2 x (0.75 - 2.5)	
		AWG			1 x (18 - 14)	2 x (18 - 14)	
UL/CSA							
Rated operational current	I _e	A			10 A – 600 V AC	1 A - 250 V DC	
Pilot Duty					A600/P300	above 300 V AC same polarity	
Other technical data (sheet catalogue)					Maximum equipment and position of the internal accessories		
Indoor and protected outdoor installation							

Technical data according to ETIM 4.0

Suitable for earth leakage circuit breaker			No
Type of electric connection			Screw connection
Rated operation current I _e at AC-15, 230 V		A	6
Mounting type			Front mount
Suitable for pendant switch			No
Suitable for front element			YES
Suitable for circuit-breakers			No
Suitable for safety position switches			No
Suitable for step switches			No
Suitable for pressure switch/selector switch actuator			YES
Suitable for cam switches			No
Suitable for motor protective circuit breakers			No
Suitable for series-mounting relays			No
Suitable for solenoid			No

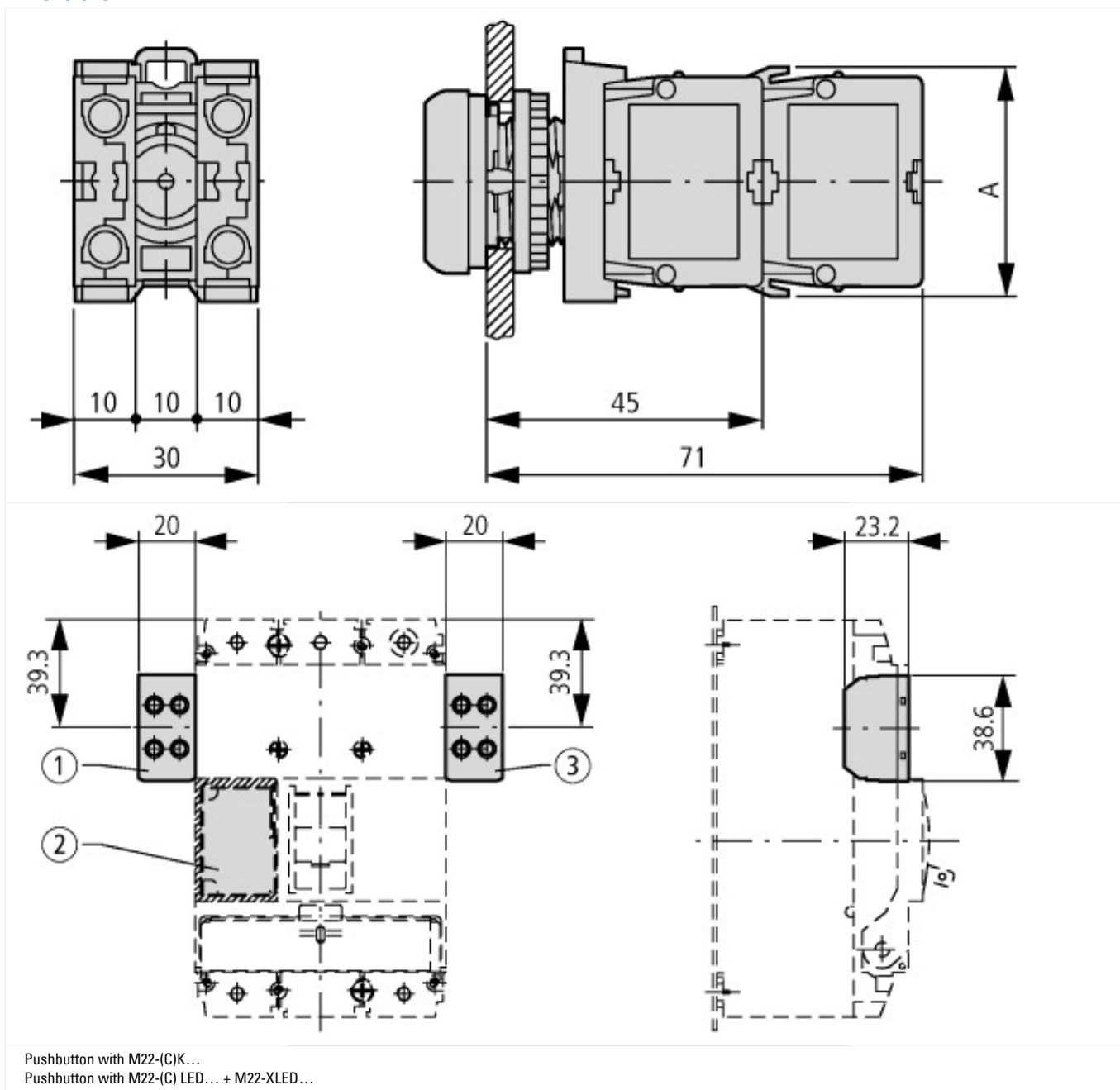
Suitable for compact switch-disconnector		No
Suitable for miniature circuit-breakers		No
Suitable for pulse relay		No
Suitable for contactor relay relay		No
Suitable for pendant pushbutton		No
Suitable for residual current device		No
Number of contacts as change-over contact		0
Number of contacts as N/O		0
Number of contacts as NC		1
Suitable for impulse relays		No
Suitable for position switches		No
Suitable for switch-disconnector/residual current device		No
Suitable for contactors		No
Suitable for installation contactor / installation relay		No

CAD-Data

Product standards CAD data:

<http://eaton-moeller.partcommunity.com>

Dimensions



Additional product information (links)

IL04716002Z (AWA1160-1745) RMQ-Titan System

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04716002Z2011_03.pdf

