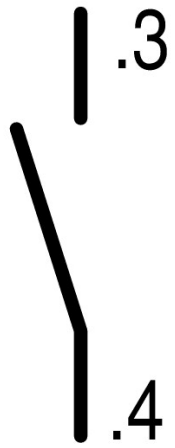
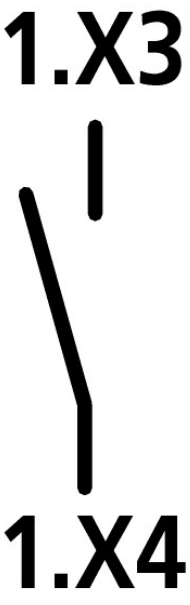
Make contact,Front

Part no. **M22-K10**

Article no. **216376**

Delivery programme

Product range		RMQ-Titan (drilling dimensions 22.5 mm)
Basic function		Accessories
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/O = Normally open		1 N/O
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 of HIA trip-indicating auxiliary contact			General trip indication '+', when tripped by shunt release, overload release, short-circuit release or by the residual-current release due to residual-current. Can be used with NZM1, 2, 3 circuit-breaker: a trip-indicating auxiliary contact can be clipped into the circuit-breaker. Can be used with NZM4 circuit-breaker: up to two standard auxiliary contacts can be clipped into the circuit-breaker. Any combinations of the auxiliary contact types are possible. Not in combination with switch-disconnector PN… Marking on switch: HIA Labeling in FI-Block: HIAFI. If the trip-indicating auxiliary switch in the fault current block is used, the NC contacts operates as a N/O contact and the NC contact operates as an N/O contact.
Description standard auxiliary contact HIN			Switching with the main contacts Used for indicating and interlocking tasks. Can be used with NZM1 circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker. Can be used with NZM2 size circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker. Can be used with NZM3, 4 circuit-breaker: up to three standard auxiliary contacts can be clipped into the circuit-breaker. Any combinations of the auxiliary contact types are possible. Marking on switch: HIN. On combination with remote operator NZM-XR... the right mounting location of standard auxiliary contact HIN can be fitted only with individual contacts.
For use with			NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4) N(S)1(-4), 2(-4), 3(-4), 4(-4)

Notes

For Std. pack:

M22-(C)K… : Std. pack = 20 off

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
Overvoltage 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	6
220 V 230 V 240 V	I_e	A	6
380 V 400 V 415 V	I_e	A	4
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	x 10^6	1.6
230 V/1.0 A	Operations	x 10^6	1
230 V/3.0 A	Operations	x 10^6	0.7
DV-13			
12 V/2.8 A	Operations	x 10^6	1.2

Auxiliary contacts

Rated operational voltage	U_e	V	
Rated operational voltage	Ue	V AC	500
Rated operational voltage, max.	Ue	V DC	220
Conventional thermal current	Ith=Ie	CSA	4
Rated operational current	I_e	A	

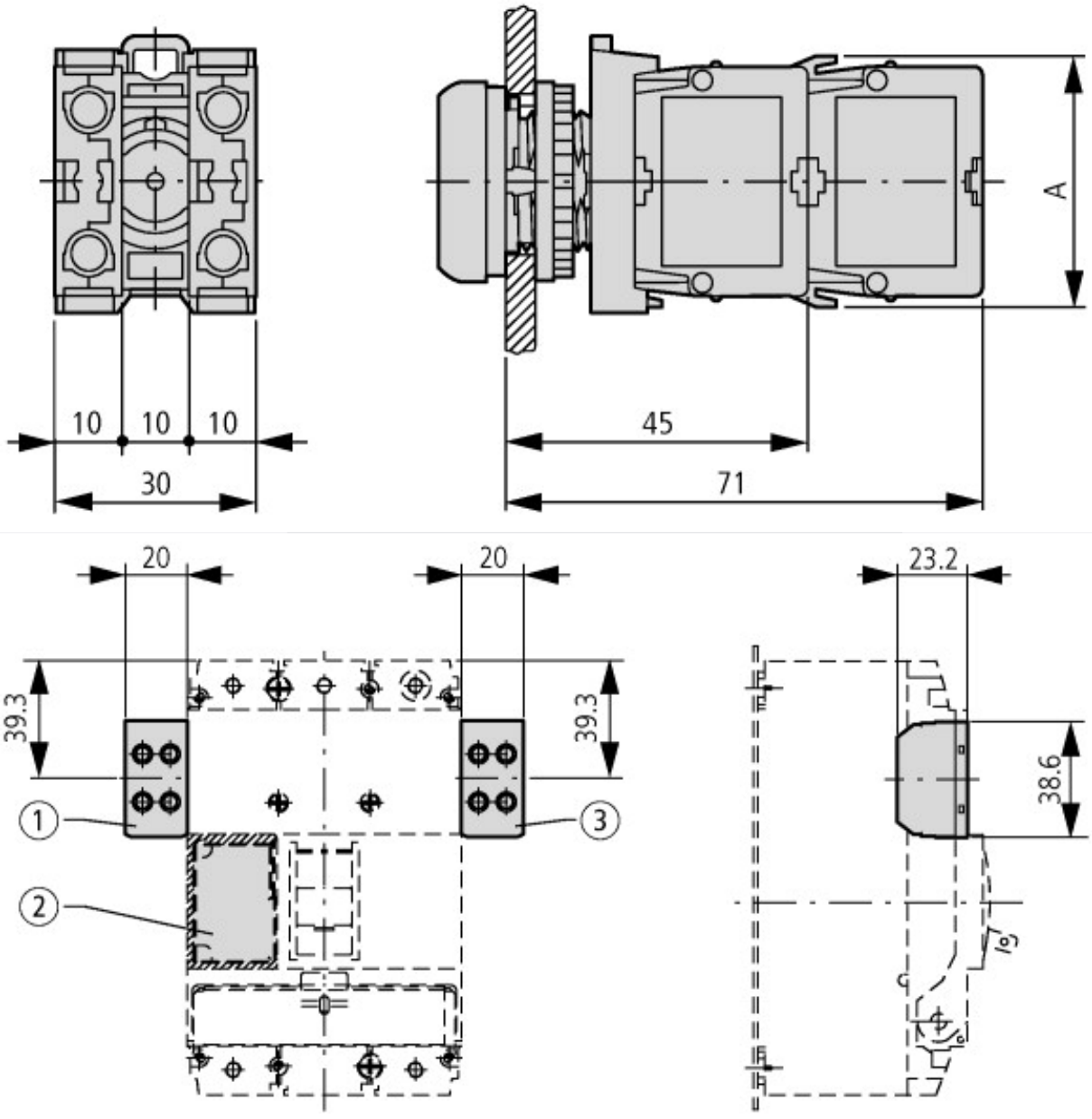
Different rated operational currents when used as auxiliary contact for NZM circuit-breaker						M22-K...	M22-CK...	XHIV
			bei AC = 50/60 Hz					
			Bemessungsbetriebsstrom					
			AC-15	115 V	Ie A	4	4	4
				230 V	Ie A	4	4	4
				400 V	Ie A	2	-	2
				500 V	Ie A	1	-	1
			DC-13	24 V	Ie A	3	3	3
				42 V	Ie A	1.7	1	1.5
				60 V	Ie A	1.2	0.8	0.8
				110 V	Ie A	0.8	0.5	0.5
				220 V	Ie 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								
			Early-make time of the HIV compared to the main contacts during with make and break switching. (switch times with manual operation): NZM1, PN1, N(S)1: ca. 20 ms NZM2, PN2, N(S)2: ca. 20 ms NZM3, PN3, N(S)3: ca. 20 ms NZM4, N(S)4: approx. 90 ms, the HIV switch early **Off**switching **not** forward.					
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 ETIM 4.0

Suitable for earth leakage circuit breaker		No
Type of electric connection		Screw connection
Rated operation current Ie 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			1
Number of contacts as NC			0
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

Dimensions



Pushbutton with M22-(C)K…
Pushbutton with M22-(C) LED… + M22-XLED…

Additional product information (links)

IL04716002Z (AWA1160-1745) RMQ-Titan System	
IL04716002Z (AWA1160-1745) RMQ-Titan System	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL04716002Z2011_03.pdf