Delivery program

Contact element, Cage Clamp, Front fixing, 1 N/O, 24 V 3 A, 220 V 230 V 240 V 6 A



Part no. M22-CK10
Catalog No. 216384
Alternate Catalog M22-CK100

No.

EL-Nummer 4355460

(Norway)

Product range Accessories Contact elements Basic function accessories Accessories Auxiliary contact Accessories Standard auxiliary contact, trip-indicating auxiliary switch UL/CSA, IEC Standard/Approval Construction size NZM1/2/3/4 Description Cage Clamp is a registered trademark of Wago Kontakttechnik GmbH/Minden, Germany Connection technique Cage Clamp Fixing Front fixing Degree of Protection IP20 Connection to SmartWire-DT no NZM1(-4), 2(-4), 3(-4), 4(-4) PN1(-4), 2(-4), 3(-4) For use with N(S)1(-4), 2(-4), 3(-4), 4(-4) **Contacts** 1 N/0 N/O = Normally open Contact sequence

Contact travel diagram, stroke in connection with front element

Contact diagram				
		0	2.8	5.5

Configuration

1/4	3/6	2 _{/5}	

Connection type

Description of HIA trip-indicating auxiliary contact

Single 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.
Connection technique	Cage Clamp

Notes

The following can be clipped into the switches:

- NZM1: a standard auxiliary contact
 NZM2: up to two M22-(C)K... standard auxiliary contacts
 NZM3: up to three M22-(C)K... standard auxiliary contacts
 NZM4: up to three M22-(C)K... standard auxiliary contacts

Any combinations of the auxiliary contact types are possible.

Marking on switch: HIN

In combination with remote operator NZM-XR... only single contacts can be fitted to some installation locations of the standard auxiliary contact.

NZM2: Only single contact can be fitted in left installation location of standard auxiliary contact.

NZM3: Only single contact can be fitted in installation locations of standard auxiliary contact.

NZM4: Only single contact can be fitted in right installation location of standard auxiliary contact.

Technical data

AC-15

General			
Standards			IEC 60947-5-1
Lifespan, mechanical	Operations	x 10 ⁶	>5
Operating frequency	Operations/h		≦ 3600
Actuating force		n	≦ 5
Degree of Protection			IP20
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Open		°C	-25 - +70
Mechanical shock resistance to IEC 60068-2-27 Shock duration 11 ms, half-sinusoidal		g	> 30
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			
Detections also with standards and	11	1/ 10	0000

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Contacts			
Rated impulse withstand voltage	U_{imp}	V AC	6000
Rated insulation voltage	Ui	V	500
Overvoltage category/pollution degree			III/3
Control circuit reliability			
at 24 V DC/5 mA	H _F	Fault probabilit	< 10 ⁻⁷ (i.e. 1 failure to 10 ⁷ operations)
at 5 V DC/1 mA	H _F	Fault probabilit	$< 5 \times 10^{-6}$ (i.e. 1 failure in 5×10^{6} operations)
Max. short-circuit protective device			
Fuseless		Туре	PKZM0-10/FAZ-B6/1
Fuse	gG/gL	Α	10
Switching capacity			
Rated operational current	I _e	Α	

200 V 400 V 415 V		٨	
380 V 400 V 415 V	l _e	A	4
500 V	l _e	Α	2
DC-13		_	
24 V	I _e	Α	3
42 V	I _e	Α	1.7
60 V	le	Α	1.2
110 V	l _e	Α	0.8
220 V	I _e	Α	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		A 10	
Rated operational voltage	U _e	V	
Rated operational voltage	Ue	V AC	500
Rated operational voltage, max.	Ue	V DC	220
Conventional thermal current	I _{th} = I _e	CSA	4
Rated operational current	I _e	A	
Characian in actualization of the characteristic content of the ch			C)K10(01)CK11(02)
Short-circuit protection			
max. fuse		A gG/gL	
Max. miniature circuit-breaker		Α	FAZ-B6/B1
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	,,g,
Solid or flexible conductor, with ferrule		mm ²	1 x (0,75 - 2,5) 2 x (0,75 - 2,5)
Other technical data (sheet catalogue)			Maximum equipment and position of the internal accessories

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	6

Heat dissipation per pole, current-dependent	P _{vid}	W	0.11
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	70
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Does not apply, since the entire switchgear needs to be evaluated.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must be observed.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)

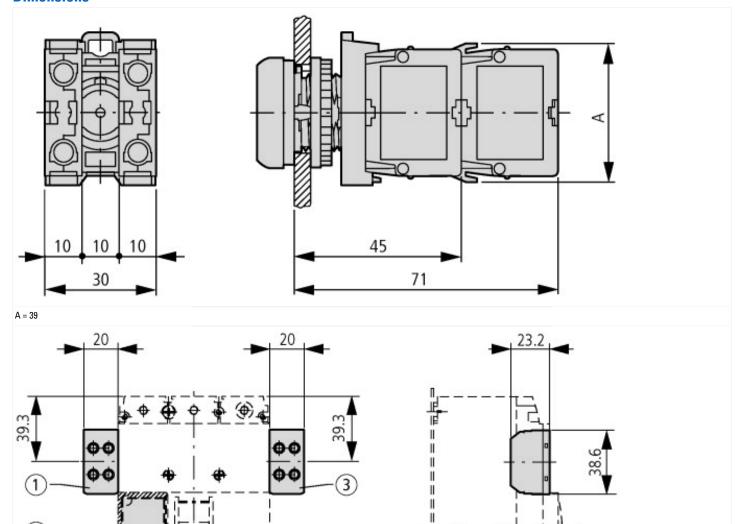
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecl@ss10.0.1-27-37-13-02 [AKN342013])

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Number of contacts as change-over contact		0
Number of contacts as normally open contact		1
Number of contacts as normally closed contact		0
Number of fault-signal switches		0
Rated operation current le at AC-15, 230 V	Α	6
Type of electric connection		Spring clamp connection
Model		Top mounting and integrable
Mounting method		Front fastening
Lamp holder		None

Approvals

IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94-91; CE marking
E29184
NKCR
012528
3211-03
UL listed, CSA certified

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	https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL04716002Z2021_07.pdf			
DGUV Test Mark Customer Information	$http://www.dguv.de/medien/dguv-test-medien/_pdf_zip_doc_ppt/agb-und-pzo/dguv_test_zeichen_infoblatt_kunden.pdf$			
Maximum equipment and position of the internal accessories	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=17.178			