DATASHEET - M22-CK02

Contact element, Cage Clamp, Front fixing, 2 NC, 24 V 3 A, 220 V 230 V 240 V 4 A

Part no.	**M22-CK02** **107899**
EL Number (Norway)	**4355493**

General specifications

Product name			Eaton Moeller® series M22 Accessory Contact element
Part no.			M22-CK02
EAN			4015081075362
Product Length/Depth			43 millimetre
Product height			10 millimetre
Product width			38 millimetre
Product weight			0.012 kilogram
Compliances			CE Marked
Certifications			CSA Std. C22.2 No. 14-05 EN 60947-5 UL 508 CSA Std. C22.2 No. 94-91 IEC 60947-5 IEC/EN 60947-5 UL File No.: E29184 CSA Class No.: 3211-03 CE UL/CSA IEC 60947-5-1 CSA-C22.2 No. 14-05 CSA UL IEC CSA-C22.2 No. 94-91 CSA File No.: 012528 UL Category Control No.: NKCR
Product Tradename			M22
Product Type			Accessory
Product Sub Type			Contact element
Catalog Notes			Any combinations of the auxiliary contact types are possible. Contacts with safety function, by positive opening to IEC/EN 60947-5-1 General trip indication '+', when tripped by shunt release, overload release, short-circuit release or by the residual-current release due to residual-current. Not in combination with switch-disconnector PN… On combination with remote operator NZM-XR... the right mounting location of standard auxiliary contact HIN can be fitted only with individual contacts. Suitable for NZM1/2/3/4 When using emergency switching off actuators M22-PV… max. 2 contact elements = 4 NC / N/O contacts

Features & Functions

Electric connection type			Spring clamp connection

General information

Degree of protection			IP20
Model			Top mounting and integrable
Mounting method			Front fastening
Operating frequency			3600 Operations/h
Overvoltage category			III
Pollution degree			3
Product category			Accessories
Rated impulse withstand voltage (Uimp)			4000 V AC
Type			Auxiliary contact
Used with			Can be used with NZM1 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. 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 NZM2 size circuit-breaker: a standard 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.

Climatic environmental conditions

Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		70 °C
Climatic proofing		Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

Terminal capacities

Terminal capacity (AWG)		1 x (20 - 18) 2 x (20 - 18)
Terminal capacity (flexible with ferrule)		0.5 - 1.5 mm²
Terminal capacity (solid)		0.5 - 1.5 mm²
Terminal capacity (solid/flexible with ferrule)		1 x (0,5 - 1,5) mm² 2 x (0,5 - 0,75) mm²
Terminal capacity (stranded)		0.5 - 1.5 mm²

Electrical rating

Conventional thermal current ith of auxiliary contacts (1-pole, open)		4 A
Rated insulation voltage (Ui)		250 V
Rated operational current (Ie) at AC-15, 115 V		4 A
Rated operational current (Ie) at AC-15, 220 V, 230 V, 240 V		6 A
Rated operational current (Ie) at DC-13, 110 V		0.5 A
Rated operational current (Ie) at DC-13, 220 V, 230 V		0.3 A
Rated operational current (Ie) at DC-13, 24 V		3 A
Rated operational current (Ie) at DC-13, 42 V		1 A
Rated operational current (Ie) at DC-13, 60 V		0.8 A
Rated operational voltage (Ue) at AC - max		230 V
Rated operational voltage (Ue) at DC - max		220 V

Short-circuit rating

Rated conditional short-circuit current (Iq)		1 kA
Short-circuit protection		PKZM0-10/FAZ-B6/1, Contacts, Max. short-circuit protective device, Fuseless
Short-circuit protection rating		Max. 10 A gG/gL, Fuse, Contacts Max. 10 A gG/gL, Fuse, Auxiliary contacts

Communication

Connection to SmartWire-DT		No
Connection type		Front fixing Double contact Cage Clamp

Actuator

Actuating force - max		10 N
Actuator travel and actuation force (DIN EN 60947-5-1)		4.8 mm
Knob travel		5.7 mm

Contacts

Control circuit reliability		1 failure per 5,000,000 switching operations (statistically determined, at 5 V DC/1 mA) 1 failure per 10,000,000 switching operations (Statistically determined, at 24 V DC/5 mA)
Force for positive opening - min		20 N
Number of contacts (change-over contacts)		0
Number of contacts (normally closed contacts)		2
Number of contacts (normally open contacts)		0

Design verification

Equipment heat dissipation, current-dependent Pvid		0 W
Heat dissipation capacity Pdiss		0 W
Heat dissipation per pole, current-dependent Pvid		0.05 W
Rated operational current for specified heat dissipation (In)		4 A
Static heat dissipation, non-current-dependent Pvs		0 W
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 9.0

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@ss13-27-37-13-02 [AKN342018])		
Number of contacts as change-over contact		0
Number of contacts as normally open contact		0
Number of contacts as normally closed contact		2
Number of fault-signal switches		0
Rated operation current Ie at AC-15, 230 V	A	6
Type of electric connection		Spring clamp connection
Model		Top mounting and integrable
Mounting method		Front fastening
Lamp holder		None