

Contact element, Screw terminals, Front fixing, 1 NC, 24 V 3 A, 220 V 230 V
240 V 6 A

Part no. M22-K01
216378
EL Number 4355364
(Norway)

General specifications	
Product name	Eaton Moeller® series M22 Accessory Contact element
Part no.	M22-K01
EAN	4015082163785
Product Length/Depth	38 millimetre
Product height	10 millimetre
Product width	32 millimetre
Product weight	0.01 kilogram
Compliances	CE Marked
Certifications	IEC 60947-5 CSA Std. C22.2 No. 14-05 UL 508 EN 60947-5 CSA Std. C22.2 No. 94-91 VDE CSA Class No.: 3211-03 CSA-C22.2 No. 14-05 UL Category Control No.: NKCR CSA File No.: 012528 UL File No.: E29184 IEC/EN 60947-5 IEC CE IEC 60947-5-1 CSA-C22.2 No. 94-91 CSA UL UL/CSA
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
Features & Functions	
Electric connection type	Screw connection
General information	
Degree of protection	IP20
Lifespan, electrical	1,200,000 Operations (at 12 V, DC-13, 2.8 A) 1,600,000 Operations (at 230 V, 0.5 A) 700,000 Operations (at 230 V, AC-15, 3 A) 1,000,000 Operations (at 230 V, AC-15, 1 A)
Lifespan, mechanical	5,000,000 Operations
Model	Top mounting and integrable
Mounting method	Front fastening
Operating frequency	3600 Operations/h
Operating torque	0.8 N·m
Overvoltage category	III
Pollution degree	3
Product category	Accessories
Rated impulse withstand voltage (Uimp)	6000 V AC
Type	Auxiliary contact

Used with		<p>Can be used with NZM3, 4 circuit-breaker: up to three standard auxiliary contacts can be clipped into the circuit-breaker.</p> <p>Can be used with NZM4 circuit-breaker: up to two standard auxiliary contacts can be clipped into the circuit-breaker.</p> <p>Can be used with NZM1, 2, 3 circuit-breaker: a trip-indicating 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 NZM1 circuit-breaker: a standard auxiliary contact can be clipped into the circuit-breaker.</p>
Ambient conditions, mechanical		
Shock resistance		30 g, Mechanical, According to IEC/EN 60068-2-27, Sinusoidal shock 11 ms
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 (flexible with ferrule)		0.5 - 1.5 mm ²
Terminal capacity (solid)		0.75 - 2.5 mm ²
Terminal capacity (solid/flexible with ferrule)		2 x (0,5 - 0,75) mm ² 1 x (0,75 - 2,5) mm ²
Terminal capacity (stranded)		0.5 - 2.5 mm ²
Electrical rating		
Conventional thermal current I _{th} of auxiliary contacts (1-pole, open)		4 A
Rated insulation voltage (U _i)		500 V
Rated operational current (I _e)		5 A – 600 V AC 1 A - 250 V DC
Rated operational current (I _e) at AC-15, 115 V		6 A
Rated operational current (I _e) at AC-15, 220 V, 230 V, 240 V		6 A
Rated operational current (I _e) at AC-15, 380 V, 400 V, 415 V		4 A
Rated operational current (I _e) at AC-15, 500 V		2 A
Rated operational current (I _e) at DC-13, 110 V		0.6 A
Rated operational current (I _e) at DC-13, 220 V, 230 V		0.3 A
Rated operational current (I _e) at DC-13, 24 V		3 A
Rated operational current (I _e) at DC-13, 42 V		1.7 A
Rated operational current (I _e) at DC-13, 60 V		1.2 A
Rated operational voltage (U _e) at AC - max		500 V
Rated operational voltage (U _e) at DC - max		220 V
Short-circuit rating		
Rated conditional short-circuit current (I _q)		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 Single contact
Actuator		
Actuating force - max		5 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		15 N
Number of contacts (change-over contacts)		0
Number of contacts (normally closed contacts)		1
Number of contacts (normally open contacts)		0

Design verification		
Equipment heat dissipation, current-dependent Pvid		0 W
Heat dissipation capacity P _{diss}		0 W
Heat dissipation per pole, current-dependent Pvid		0.11 W
Rated operational current for specified heat dissipation (I _n)		6 A
Static heat dissipation, non-current-dependent P _{vs}		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 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 (ec1@ss10.0.1-27-37-13-02 [AKN342013])		
Number of contacts as change-over contact		0
Number of contacts as normally open contact		0
Number of contacts as normally closed contact		1
Number of fault-signal switches		0
Rated operation current I _e at AC-15, 230 V	A	6
Type of electric connection		Screw connection
Model		Top mounting and integrable
Mounting method		Front fastening
Lamp holder		None