

Specifications



Eaton EP-401609

Eaton Moeller® series M22 Contact element,
PCB connection, 1 NC

General specifications

PRODUCT NAME	Eaton Moeller® series M22 contact element
CATALOG NUMBER	EP-401609
MODEL CODE	M22-KP01
EAN	4015082971717
PRODUCT LENGTH/DEPTH	17.275 mm
PRODUCT HEIGHT	9.8 mm
PRODUCT WIDTH	15 mm
PRODUCT WEIGHT	0.0012 kg
CERTIFICATIONS	UL recognized IEC/EN 60947-5-5 IEC/EN 60947 RoHS REACH CE

Actuator

ACTUATING FORCE - MAX	4.5 N
KNOB TRAVEL	5.8 mm

Communication

CONNECTION TO SMARTWIRE-DT	No
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Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MAX	70 °C
AMBIENT STORAGE TEMPERATURE - MAX	85 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MIN	-40 °C
CLIMATIC PROOFING	Dry heat to IEC 60068-2-2 Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

Contacts

FORCE FOR POSITIVE OPENING - MIN	20 N
NUMBER OF CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS)	1
NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS)	0

Design verification

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.
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	Does not apply, since the

Electrical rating

CONVENTIONAL THERMAL CURRENT ITH OF AUXILIARY CONTACTS (1-POLE, OPEN) 1 A

RATED OPERATIONAL CURRENT (IE)	0.2 A at AC-15, 48 V 0.2 A at DC-13, 48 V
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RATED OPERATIONAL CURRENT (IE) AT AC-15, 24 V	0.2 A
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RATED OPERATIONAL CURRENT (IE) AT DC-13, 24 V	0.2 A
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RATED OPERATIONAL CURRENT (IE) AT DC-13, 42 V	0.2 A
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RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	48 V
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RATED OPERATIONAL VOLTAGE (UE) AT AC - MIN	48 V
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RATED OPERATIONAL VOLTAGE (UE) AT DC - MAX	48 V
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AGAINST ELECTRIC SHOCK	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.

Features & functions

ELECTRIC CONNECTION TYPE	PCB connection
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Mounting details

CONNECTION TYPE	Front fixing Single contact
MOUNTING METHOD	PCB

General information

DEGREE OF PROTECTION	IP00
LIFESPAN, ELECTRICAL	2,200,000 Operations
LIFESPAN, MECHANICAL	2,000,000 Operations
MODEL	Top mounting and integrable
PRODUCT CATEGORY	Accessories

Short-circuit rating

RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	1 kA
SHORT-CIRCUIT PROTECTION	1 kA/4 A GL, Contacts, Max. short-circuit protective device, Fuseless
SHORT-CIRCUIT PROTECTION RATING	Max. 4 A gG/gL, Fuse, Auxiliary contacts Max. 4 A gG/gL, Fuse, Contacts Max. 10 A gG/gL, Fuse, Auxiliary contacts Max. 10 A gG/gL, Fuse, Contacts

Resources

CATALOGUES [eaton-pushbuttons-signal-towers-sensors-assortment-overview-catalog-ca047003en-en-us.pdf](#)

DECLARATIONS OF CONFORMITY [eaton-contact-element-declaration-of-conformity-eu260063en.pdf](#)

INSTALLATION INSTRUCTIONS [eaton-rmq-on-pcb-il047033zu.pdf](#)

INSTALLATION VIDEOS [RMQ-Titan contact elements on PCB](#)

MCAD MODEL [eaton-contact-blocks-mcad-drawings-m22-kp01.dwg](#)

[eaton-contact-blocks-mcad-3d-models-m22-kp01.stp](#)

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



Eaton Corporation plc Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

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