

Specifications



Eaton 045477

Eaton Moeller® series TM Control circuit switches, TM, 10 A, flush mounting, Contacts: 1, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position

General specifications

PRODUCT NAME	Eaton Moeller® series TM Accessory Control circuit isolator
CATALOG NUMBER	045477
EAN	4015080454779
PRODUCT LENGTH/DEPTH	77 mm
PRODUCT HEIGHT	48 mm
PRODUCT WIDTH	30 mm
PRODUCT WEIGHT	0.069 kg
CERTIFICATIONS	Certified by UL for use in Canada IEC/EN 60947 UL File No.: E36332 UL UL report applies to both US and Canada CSA UL Category Control No.: NLRV CE CSA-C22.2 No. 14-05 CSA-C22.2 No. 94 UL 508 IEC/EN 60947-3 IEC/EN 60947-5-1 VDE 0660
CATALOG NOTES	up to 250 V AC per contact
MODEL CODE	TM-1-8290/E/SVB



Powering Business Worldwide

Features & Functions

FEATURES	Version as emergency stop installation
FITTED WITH:	Red rotary handle and yellow locking ring
FUNCTIONS	Interlockable Emergency switching off function
LOCKING FACILITY	Lockable in the 0 (Off) position
NUMBER OF POLES	1

Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE - MAX	50 °C
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

General

DEGREE OF PROTECTION	NEMA 12
DEGREE OF PROTECTION (FRONT SIDE)	IP65
LIFESPAN, MECHANICAL	1,000,000 Operations
MOUNTING METHOD	Flush mounting
MOUNTING POSITION	As required
NUMBER OF CONTACT UNITS	1
OPERATING FREQUENCY	1200 Operations/h
OVERVOLTAGE CATEGORY	III
POLLUTION DEGREE	3
PRODUCT CATEGORY	Control switches
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4000 V AC
SUITABLE FOR	Front mounting 4-hole
SWITCHING ANGLE	90 °
TYPE	Control circuit switch

Terminal capacities

TERMINAL CAPACITY	1 x 1.5 mm ² , flexible 2 x 1.0 mm ² , flexible with ferrules to DIN 46228 1 x 1.0 mm ² , flexible with ferrules to DIN 46228 1 x 1.5 mm ² , solid or stranded 2 x 1.5 mm ² , flexible 14 AWG, solid or flexible with ferrule 2 x 1,5 mm ² , solid or stranded
SCREW SIZE	M2.5, Terminal screw
TIGHTENING TORQUE	0.4 Nm, Screw terminals 3.5 lb-in, Screw terminals

Electrical rating

RATED OPERATIONAL CURRENT (IE) AT AC-21, 440 V	10 A
---	------

RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	0 kW
--	------

RATED OPERATIONAL POWER AT AC-23A, 400 V, 50 HZ	3 kW
--	------

RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	500 V
---	-------

RATED UNINTERRUPTED CURRENT (IU)	10 A
---	------

UNINTERRUPTED CURRENT	Rated uninterrupted current Iu is specified for max. cross-section.
----------------------------------	---

Switching capacity

SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)	10 A, Rated uninterrupted current max. (UL/CSA)
--	--

SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)	10A, IU, (UL/CSA)
---	-------------------

SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)	A300 (UL/CSA)
--	---------------

Short-circuit rating

RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	0 kA
---	------

RATED SHORT-TIME WITHSTAND CURRENT (ICW)	0 kA
---	------

SHORT-CIRCUIT PROTECTION RATING	10 A gG/gL, Fuse, Contacts
--	----------------------------

Motor rating

ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE	0.33 HP
--	---------

ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 3-PHASE	0.75 HP
--	---------

ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	0.75 HP
--	---------

ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE	1 HP
--	------

ASSIGNED MOTOR POWER AT 277 V, 60 HZ, 1-PHASE	0.75 HP
--	---------

Contacts

CONTROL CIRCUIT RELIABILITY	1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)
--	--

NUMBER OF AUXILIARY CONTACTS (CHANGE- OVER CONTACTS)	0
---	---

NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
--	---

NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
--	---

Actuator

ACTUATOR COLOR	Red
-----------------------	-----

ACTUATOR TYPE	Door coupling rotary drive
----------------------	----------------------------

Design verification

EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	0 W
---	-----

HEAT DISSIPATION CAPACITY PDISS	0 W
--	-----

HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	0.15 W
--	--------

RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	10 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	UV resistance only in connection with protective shield.
---	--

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.

Resources

BROCHURES

[Brochure - T Rotary Cam switch and P Switch-disconnector](#)

CATALOGUES

[P Switch-disconnectors and T Rotary cam switches catalogue CA042001EN](#)

DECLARATIONS OF CONFORMITY

[DA-DC-00004922.pdf](#) [DA-DC-00004893.pdf](#)

DRAWINGS

[eaton-general-padlock-tm-accessory-dimensions.eps](#)

	eaton-rotary-switches-control-tm-accessory-dimensions.eps eaton-rotary-switches-mounting-tm-accessory-dimensions.eps eaton-rotary-switches-control-tm-accessory-symbol.eps eaton-general-mounting-p1-main-switch-symbol.eps eaton-rotary-switches-mounting-p1-main-switch-3d-drawing.eps
ECAD MODEL	DA-CE-ETN.TM-1-8290 E_SVB
INSTALLATION INSTRUCTIONS	IL03801028Z
INSTALLATION VIDEOS	Eaton's P Switch-disconnectors used in a factory
MCAD MODEL	DA-CS-tm1_e_svb DA-CD-tm1_e_svb
PRODUCT NOTIFICATIONS	MZ008005ZU_Orderform_Customized_Switch.pdf MZ008006ZU_Orderform_Customized_Switch.pdf
WIRING DIAGRAMS	eaton-rotary-switches-on-off-switch-t0-on-off-switch-wiring-diagram.eps

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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

© 2025 Eaton. All Rights Reserved.

Follow us on social media to get the latest product and support information.

