

**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**

**Part no. TM-1-8290/E/SVB
045477**

General specifications	
Product name	Eaton Moeller® series TM Accessory Control circuit isolator
Part no.	TM-1-8290/E/SVB
EAN	4015080454779
Product Length/Depth	77 millimetre
Product height	48 millimetre
Product width	30 millimetre
Product weight	0.069 kilogram
Certifications	UL Category Control No.: NLRV IEC/EN 60947-5-1 CSA-C22.2 No. 14-05 UL File No.: E36332 Certified by UL for use in Canada UL VDE 0660 CSA IEC/EN 60947-3 CE UL 508 IEC/EN 60947 UL report applies to both US and Canada CSA-C22.2 No. 94
Product Tradename	TM
Product Type	Accessory
Product Sub Type	Control circuit isolator
Catalog Notes	up to 250 V AC per contact
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
General information	
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
Rated impulse withstand voltage (Uimp)	4000 V AC
Suitable for	Front mounting 4-hole
Switching angle	90 °
Type	Control circuit switch
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
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 (I _e) 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 uninterrupted current (I _u)	10 A
Uninterrupted current	Rated uninterrupted current I _u is specified for max. cross-section.
Short-circuit rating	
Rated conditional short-circuit current (I _q)	0 kA
Rated short-time withstand current (I _{cw})	0 kA
Short-circuit protection rating	10 A gG/gL, Fuse, Contacts
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)
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 P _{vid}	0 W
Heat dissipation capacity P _{diss}	0 W
Heat dissipation per pole, current-dependent P _{vid}	0.15 W
Rated operational current for specified heat dissipation (I _n)	10 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	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.

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Switch disconnecter (low voltage) (EC000216)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss13-27-37-14-03 [AKF060018])			
Version as main switch			No
Version as maintenance-/service switch			No
Version as safety switch			No
Version as emergency stop installation			Yes
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage Ue AC		V	
Rated operating voltage		V	690 - 690
Rated permanent current Iu		A	10
Rated permanent current at AC-23, 400 V		A	
Rated permanent current at AC-21, 400 V		A	0
Rated operation power at AC-3, 400 V		kW	0
Rated short-time withstand current Icw		kA	0
Rated operation power at AC-23, 400 V		kW	3
Switching power at 400 V		kW	0
Conditioned rated short-circuit current Iq		kA	0
Number of poles			1
Number of auxiliary contacts as normally closed contact			0
Number of auxiliary contacts as normally open contact			0
Number of auxiliary contacts as change-over contact			0
Motor drive optional			No
Motor drive integrated			No
Voltage release optional			No
Device construction			Built-in device fixed built-in technique
Suitable for floor mounting			No
Suitable for front mounting 4-hole			Yes
Suitable for front mounting centre			No
Suitable for distribution board installation			No
Suitable for intermediate mounting			No
Colour control element			Red
Type of control element			Door coupling rotary drive
Interlockable			Yes
Type of electrical connection of main circuit			Screw connection
With pre-assembled cabling			No
Degree of protection (IP), front side			IP65
Degree of protection (NEMA)			12
Width		mm	30
Height		mm	48
Depth		mm	77

