

Specifications



Eaton 015256

Eaton Moeller series TM Step switch, 10 A, Center mounting, 2 contact unit(s), Contacts: 3, Maintained, 0-3, Design: 8241

General specifications

PRODUCT NAME	Eaton Moeller® series TM Step switch
CATALOG NUMBER	015256
MODEL CODE	TM-2-8241/EZ
EAN	4015080152569
PRODUCT LENGTH/DEPTH	87 mm
PRODUCT HEIGHT	30 mm
PRODUCT WIDTH	30 mm
PRODUCT WEIGHT	0.042 kg
CERTIFICATIONS	Certified by UL for use in Canada CSA-C22.2 No. 14-05 UL CE IEC/EN 60947-5-1 UL 508 UL File No.: E36332 VDE 0660 CSA CSA-C22.2 No. 94 IEC/EN 60947 IEC/EN 60947-3 UL report applies to both US and Canada UL Category Control No.: NLRV



Powering Business Worldwide

Actuator

ACTUATOR FUNCTION	With 0 (Off) position Maintained
ACTUATOR TYPE	Toggle
NUMBER OF STEPS	3 (45°)
NUMBER OF SWITCH POSITIONS	4

Contacts

CONTROL CIRCUIT RELIABILITY	1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)
NUMBER OF CONTACTS	3

Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MAX	50 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX	40 °C
AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN	-25 °C
CLIMATIC PROOFING	Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78

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	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.
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

Electrical rating

RATED OPERATING VOLTAGE (UE) AT AC - MAX	500 V
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RATED OPERATIONAL CURRENT (IE) AT AC-21, 440 V	10 A
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RATED OPERATIONAL POWER AT AC-23A, 400 V, 50 HZ	3 kW
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RATED UNINTERRUPTED CURRENT (IU)	10 A
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UNINTERRUPTED CURRENT	Rated uninterrupted current Iu is specified for max. cross-section.
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General information

DEGREE OF PROTECTION	IP65
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DEGREE OF PROTECTION (FRONT SIDE)	IP65 NEMA 12
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LIFESPAN, MECHANICAL	1,000,000 Operations
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MOUNTING METHOD	Center mounting
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MOUNTING POSITION	As required
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NUMBER OF CONTACT UNITS	2
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OPERATING FREQUENCY	1200 Operations/h
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OVERVOLTAGE CATEGORY	III
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POLLUTION DEGREE	3
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PRODUCT CATEGORY	Control switches
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RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	4000 V AC
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SUITABLE FOR	Front mounting
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SWITCHING ANGLE	45 °
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TYPE	Step switch
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Short-circuit rating

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

FITTED WITH:	Black thumb grip and front plate 0 (off) position
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INSCRIPTION	0-3
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NUMBER OF POLES	Single-pole
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Motor rating

ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 1-PHASE	0.33 HP
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ASSIGNED MOTOR POWER AT 115/120 V, 60 HZ, 3-PHASE	0.75 HP
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ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 1-PHASE	0.75 HP
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ASSIGNED MOTOR POWER AT 230/240 V, 60 HZ, 3-PHASE	1 HP
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ASSIGNED MOTOR POWER AT 277 V, 60 HZ, 1-PHASE	0.75 HP
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Switching capacity

SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)	10A, IU, (UL/CSA)
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SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)	A300 (UL/CSA)
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SWITCHING CAPACITY (MAIN CONTACTS,	10 A, Rated uninterrupted current max. (UL/CSA)
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Terminal capacities

SCREW SIZE	M2.5, Terminal screw
TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)	2 x 1.0 mm ² , ferrules to DIN 46228 1 x 1.0 mm ² , ferrules to DIN 46228
TERMINAL CAPACITY (FLEXIBLE)	1 x 1.5 mm ² 2 x 1.5 mm ²
TERMINAL CAPACITY (SOLID/FLEXIBLE WITH FERRULE AWG)	14
TERMINAL CAPACITY (SOLID/STRANDED)	2 x 1,5 mm ² 1 x 1.5 mm ²
TIGHTENING TORQUE	0.4 Nm, Screw terminals 3.5 lb-in, Screw terminals

Resources

BROCHURES	Brochure - T Rotary Cam switch and P Switch-disconnector
CATALOGUES	P Switch-disconnectors and T Rotary cam switches catalogue CA042001EN P1-40 Switch-disconnectors
DECLARATIONS OF CONFORMITY	eaton-step-switch-declaration-of-conformity-uk251335en.pdf eaton-step-switch-declaration-of-conformity-eu250852en.pdf
DRAWINGS	eaton-rotary-switches-mounting-tm-step-switch-dimensions-012.eps eaton-rotary-switches-mounting-tm-step-switch-dimensions-018.eps eaton-rotary-switches-mounting-tm-step-switch-dimensions-002.eps eaton-general-rotary-switch-t0-step-switch-symbol-004.eps eaton-rotary-switches-mounting-t0-changeover-switch-3d-drawing-003.eps eaton-rotary-switches-front-plate-tm-step-switch-symbol-007.eps
ECAD MODEL	DA-CE-ETN.TM-2-8241_EZ
INSTALLATION INSTRUCTIONS	IL03801026Z
INSTALLATION VIDEOS	Eaton's P Switch-disconnectors used in a factory

MCAD MODEL	eaton-universal-control-switches-mcad-drawings-tm2-ez.dwg DA-CS-tm2_ez
PRODUCT NOTIFICATIONS	MZ008005ZU_Orderform_Customized_Switch.pdf MZ008006ZU_Orderform_Customized_Switch.pdf
WIRING DIAGRAMS	eaton-rotary-switches-switch-t0-step-switch-wiring-diagram-013.eps

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	