DATASHEET - T0-1-15071/E

ON-OFF switches, T0, 20 A, flush mounting, 1 contact unit(s), Contacts: 1, 45 °, maintained, With 0 (Off) position, 0-1, Design number 15071



Part no. T0-1-15071/E 009128

General specifications	
Product name	Eaton Moeller® series T0 On-Off switch
Part no.	T0-1-15071/E
EAN	4015080091288
Product Length/Depth	76 millimetre
Product height	48 millimetre
Product width	48 millimetre
Product weight	0.083 kilogram
Certifications	CSA-C22.2 No. 60947-4-1-14 UL 60947-4-1 IEC/EN 60947-3 IEC/EN 60204 CSA-C22.2 No. 94 CE UL Category Control No.: NLRV CSA Class No.: 3211-05 CSA UL IEC/EN 60947 VDE 0660 UL File No.: E36332 CSA File No.: 012528
Product Tradename	ТО
Product Type	On-Off switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
Features & Functions	
Fitted with:	Black thumb grip and front plate 0 (off) position
Inscription	0-1
Number of poles	Single-pole
General information	
Degree of protection	NEMA 12 NEMA 1 IP65
Degree of protection (front side)	IP65 NEMA 12
Lifespan, mechanical	400,000 Operations
Mounting method	Flush mounting
Mounting position	As required
Number of contact units	1
Operating frequency	1200 Operations/h
Overvoltage category	
Pollution degree	3
Product category	Control switches
Rated impulse withstand voltage (Uimp)	6000 V AC
Safe isolation	440 V AC, Between the contacts, According to EN 61140
Safety parameter (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
Shock resistance	15 g, Mechanical, According to IEC/EN 60068-2-27, Half-sinusoidal shock 20 ms
Suitable for	Branch circuits, suitable as motor disconnect, (UL/CSA) Front mounting
Switching angle	45 °
Туре	0N-0FF switch
Climatic environmental conditions	
Ambient operating temperature - min	-25 °C

Ambient operating temperature - max	50 °C
Ambient operating temperature (enclosed) - min	-25 °C
Ambient operating temperature (enclosed) - max	40 °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)	1 x (0.75 - 2.5) mm², ferrules to DIN 46228 2 x (0.75 - 2.5) mm², ferrules to DIN 46228
Terminal capacity (solid/flexible with ferrule AWG)	18 - 14
Terminal capacity (solid/stranded)	2 x (1 - 2.5) mm ² 1 x (1 - 2.5) mm ²
Screw size	M3.5, Terminal screw
Tightening torque	8.8 lb-in, Screw terminals 1 Nm, Screw terminals
Electrical rating	
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)	100 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	110 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)	80 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	60 A
Rated operating voltage (Ue) at AC - max	690 V
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V	11.5 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	11.5 A
Rated operational current (Ie) at AC-3, 500 V	9 A
Rated operational current (Ie) at AC-3, 660 V, 690 V	4.9 A
Rated operational current (Ie) at AC-21, 440 V	20 A
Rated operational current (Ie) at AC-23A, 230 V	13.3 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V	13.3 A
Rated operational current (Ie) at AC-23A, 500 V	13.3 A
Rated operational current (Ie) at AC-23A, 690 V	7.6 A
Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms	10 A
Rated operational current (Ie) at DC-13, control switches L/R = 50 ms	10 A
Rated operational current (Ie) at DC-21, 240 V	1 A
Rated operational current (Ie) at DC-23A, 24 V	10 A
Rated operational current (Ie) at DC-23A, 48 V	10 A
Rated operational current (Ie) at DC-23A, 60 V	10 A
Rated operational current (Ie) at DC-23A, 120 V	5 A
Rated operational current (Ie) at DC-23A, 240 V	5 A
Rated operational current (Ie) star-delta at AC-3, 230 V	20 A
Rated operational current (Ie) star-delta at AC-3, 400 V	20 A
Rated operational current (Ie) star-delta at AC-3, 500 V	15.6 A
Rated operational current (Ie) star-delta at AC-3, 690 V	8.5 A
Rated operational power at AC-3, 415 V, 50 Hz	5.5 kW
Rated operational power at AC-3, 500 V, 50 Hz	5.5 kW
Rated operational power at AC-3, 690 V, 50 Hz	4 kW
Rated operational power at AC-23A, 220/230 V, 50 Hz	3 kW
Rated operational power at AC-23A, 400 V, 50 Hz	5.5 kW
Rated operational power at AC-23A, 500 V, 50 Hz	7.5 kW
Rated operational power at AC-23A, 690 V, 50 Hz	5.5 kW
Rated operational power star-delta at 220/230 V, 50 Hz	5.5 kW
Rated operational power star-delta at 380/400 V, 50 Hz	7.5 kW
Rated operational power star-delta at 500 V, 50 Hz	7.5 kW
Rated operational power star-delta at 690 V, 50 Hz	5.5 kW
Rated uninterrupted current (lu)	20 A
Uninterrupted current	Rated uninterrupted current lu is specified for max. cross-section.
Short-circuit rating	
Rated conditional short-circuit current (Iq)	6 kA

Rated short-time withstand current (Icw)	320 A, Contacts, 1 second
Short-circuit current rating (basic rating)	5 kA, SCCR (UL/CSA)
, , , , , , , , , , , , , , , , , , ,	50A, max. Fuse, SCCR (UL/CSA)
Short-circuit current rating (high fault)	20 A, Class J, max. Fuse, SCCR (UL/CSA) 10 kA, SCCR (UL/CSA)
Short-circuit protection rating	20 A gG/gL, Fuse, Contacts
Switching capacity	
Load rating	1.6 x I# (with intermittent operation class 12, 40 % duty factor) 2 x I# (with intermittent operation class 12, 25 % duty factor) 1.3 x I# (with intermittent operation class 12, 60 % duty factor)
Number of contacts in series at DC-21A, 240 V	1
Number of contacts in series at DC-23A, 24 V	1
Number of contacts in series at DC-23A, 48 V	2
Number of contacts in series at DC-23A, 60 V	3
Number of contacts in series at DC-23A, 120 V	3
Number of contacts in series at DC-23A, 240 V	5
Switching capacity (main contacts, general use)	16 A, Rated uninterrupted current max. (UL/CSA)
Switching capacity (auxiliary contacts, general use)	10A, IU, (UL/CSA)
Switching capacity (auxiliary contacts, pilot duty)	P300 (UL/CSA) A600 (UL/CSA)
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)	130 A
Voltage per contact pair in series	60 V
Motor rating	
Assigned motor power at 115/120 V, 60 Hz, 1-phase	0.5 HP
Assigned motor power at 200/208 V, 60 Hz, 1-phase	1 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase	3 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase	1.5 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase	3 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase	7.5 HP
Assigned motor power at 575/600 V, 60 Hz, 3-phase	7.5 HP
Contacts	
Control circuit reliability	1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)
Number of contacts	1
Actuator	
Actuator function	With 0 (Off) position Maintained
Actuator type	Toggle
Number of switch positions	2
Design verification	
Equipment heat dissipation, current-dependent Pvid	0 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	0.6 W
Rated operational current for specified heat dissipation (In)	20 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.

Technical data ETIM 9.0

Low-voltage industrial components (EG000017) / Control switch (EC002611)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Control switch (ecl@ss13-27-37-14-14 [ACN998016])

Type of switch Model Model for switch Model for switch Number of poles V 60 Rated permanent current lu V 60 Number of switch positions V 60 Yuth zero (off position V 70 With retraction in 0-position V 70 Poteo construction V 70 Vith in number of modular spacings V 70 Suitable for front mounting V 70 Suitable for intermediatemounting 70 70			
Max. rated operation voltage Ue AC V 690 Rated permanent current lu A 0 Number of switch positions 2 2 With zero (off) position V Yes With zero (off) position Yes Built-in device Vith retraction in 0-position Yes Built-in device Vith retraction Yes Suitable for floor mounting Suitable for floor mounting Yes Yes Suitable for distribution board installation Yes Yes Suitable for intermediate mounting Yes Yes Yes Yes Yes Yes <td>Type of switch</td> <td></td> <td>On/Off switch</td>	Type of switch		On/Off switch
Rated permanent current lu A 20 Number of switch positions 2 With zero (off) position Yes With retraction in 0-position Mo Device construction Mo With in number of modular spacings Mo Suitable for floor mounting Yes Suitable for distribution board installation Yes Suitable for distribution board installation Yes Suitable for intermediate mounting No	Number of poles		1
Number of switch positions 2 With zero (off) position Yes With retraction in 0-position No Device construction Built-in device With in number of modular spacings Image: Sector Sect	Max. rated operation voltage Ue AC	V	690
With zero (off) positionMeMeWith zero (off) positionMesNoWith retraction in 0-positionMesBuilt-in deviceDevice constructionMesBuilt-in deviceWith in number of modular spacingsMesOSuitable for floor mountingMesMesSuitable for floor mountingMesMesSuitable for distribution board installationMesMesSuitable for intermediate mountingMesMesSuitable for intermediate mountingMesMesMesMesMesMesMesMesMesMesMesMesMes	Rated permanent current lu	А	20
With retraction in 0-positionNoDevice constructionBuilt-in deviceWith in number of modular spacingsCSuitable for floor mountingCSuitable for front mountingCSuitable for distribution board installationCSuitable for intermediate mountingCSuitable for intermediate mountingC<	Number of switch positions		2
Device construction Built-in device Width in number of modular spacings 0 Suitable for floor mounting Mo Suitable for front mounting Mo Suitable for distribution board installation Mo Suitable for intermediate mounting Mo	With zero (off) position		Yes
Width in number of modular spacingsImage: Space of the spa	With retraction in 0-position		No
Suitable for floor mounting No Suitable for fort mounting Yes Suitable for distribution board installation No Suitable for intermediate mounting No	Device construction		Built-in device
Suitable for front mounting Yes Suitable for distribution board installation No Suitable for intermediate mounting No	Width in number of modular spacings		0
Suitable for distribution board installation No Suitable for intermediate mounting No	Suitable for floor mounting		No
Suitable for intermediate mounting No	Suitable for front mounting		Yes
	Suitable for distribution board installation		No
Complete device in housing No	Suitable for intermediate mounting		No
	Complete device in housing		No
Type of control element Toggle	Type of control element		Toggle
Front shield size 48x48 mm	Front shield size		48x48 mm
Degree of protection (IP), front side IP65	Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side 12	Degree of protection (NEMA), front side		12