Changeover switches, T0, 20 A, center mounting, 2 contact unit(s), Contacts: 4, With spring-return from START, 45°, momentary/maintained, AUTO-0-HAND<START, Design number 15907



Part no. T0-2-15907/EZ 069304

General specifications	
Product name	Eaton Moeller® series TO Changeover switch
Part no.	T0-2-15907/EZ
EAN	4015080693048
Product Length/Depth	106 millimetre
Product height	48 millimetre
Product width	48 millimetre
Product weight	0.124 kilogram
Certifications	CSA File No.: 012528 IEC/EN 60204 CE UL VDE 0660 UL 60947-4-1 CSA-C22.2 No. 60947-4-1-14 IEC/EN 60947-3 CSA Class No.: 3211-05 UL Category Control No.: NLRV IEC/EN 60947 CSA-C22.2 No. 94 UL File No.: E36332 CSA
Product Tradename	ТО
Product Type	Changeover 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	" AUTO-0-HAND <start "<="" td=""></start>
Number of poles	Two-pole
General information	
Degree of protection	IP65 NEMA 12 NEMA 1
Degree of protection (front side)	IP65 NEMA 12
Lifespan, mechanical	400,000 Operations
Mounting method	Center mounting
Mounting position	As required
Number of contact units	2
Operating frequency	1200 Operations/h
Overvoltage category	III
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	Changeover switch
Climatic environmental conditions	

50 °C -25 °C 40 °C Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78  2 × (0.75 - 2.5) mm², ferrules to DIN 46228 1 × (0.75 - 2.5) mm², ferrules to DIN 46228 18 - 14  2 × (1 - 2.5) mm² 1 × (1 - 2.5) mm² M3.5, Terminal screw  1 Nm, Screw terminals 8.8 lb-in, Screw terminals 100 A 110 A 80 A 60 A 690 V 11.5 A 11.5 A 9 A
40 °C  Damp heat, cyclic, to IEC 60068-2-30 Damp heat, constant, to IEC 60068-2-78  2 x (0.75 - 2.5) mm², ferrules to DIN 46228 1 x (0.75 - 2.5) mm², ferrules to DIN 46228 18 - 14  2 x (1 - 2.5) mm² 1 x (1 - 2.5) mm² M3.5, Terminal screw  1 Nm, Screw terminals 8.8 lb-in, Screw terminals 100 A 110 A 80 A 60 A 690 V 11.5 A 11.5 A
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1 x (0.75 - 2.5) mm², ferrules to DIN 46228  18 - 14  2 x (1 - 2.5) mm² 1 x (1 - 2.5) mm²  M3.5, Terminal screw  1 Nm, Screw terminals 8.8 lb-in, Screw terminals  100 A  110 A  80 A  60 A  690 V  11.5 A  11.5 A
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2 x (1 - 2.5) mm <sup>2</sup> 1 x (1 - 2.5) mm <sup>2</sup> M3.5, Terminal screw  1 Nm, Screw terminals 8.8 lb-in, Screw terminals  100 A  110 A  80 A  60 A  690 V  11.5 A  11.5 A
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1 Nm, Screw terminals 8.8 lb-in, Screw terminals  100 A  110 A  80 A  60 A  690 V  11.5 A  11.5 A  9 A
8.8 lb-in, Screw terminals  100 A  110 A  80 A  60 A  690 V  11.5 A  11.5 A
110 A 80 A 60 A 690 V 11.5 A 11.5 A
110 A 80 A 60 A 690 V 11.5 A 11.5 A
80 A 60 A 690 V 11.5 A 11.5 A
60 A 690 V 11.5 A 11.5 A
690 V 11.5 A 11.5 A 9 A
11.5 A 11.5 A 9 A
11.5 A 9 A
9 A
40 A
4.9 A
20 A
13.3 A
13.3 A
13.3 A
7.6 A
10 A
10 A
1 A
10 A
10 A
10 A
5 A
5 A
20 A
20 A
15.6 A
8.5 A
5.5 kW
5.5 kW
4 kW
3 kW
5.5 kW
7.5 kW
5.5 kW
5.5 kW
7.5 kW
7.5 kW
5.5 kW
20 A
Rated uninterrupted current lu is specified for max. cross-section.

Pated conditional chart circuit aureant (In)	6 k
Rated conditional short-circuit current (Iq)  Rated short-time withstand current (Icw)	6 kA 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	2 x l# (with intermittent operation class 12, 25 % duty factor) 1.6 x l# (with intermittent operation class 12, 40 % duty factor) 1.3 x l# (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  Number of contacts	1 failure per 100,000 switching operations statistically determined, at 24 V DC, 10 mA)
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Actuator Actuator function  Actuator type	Spring-return to MANUAL With 0 (Off) position Spring-return from START Maintained/momentary Toggle
Number of switch positions	4
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])

p 10.13000101,		
Type of switch		Reverser
Number of poles		2
Max. rated operation voltage Ue AC	V	690
Rated permanent current lu	Α	20
Number of switch positions		4
With zero (off) position		Yes
With retraction in 0-position		No
Device construction		Built-in device
Width in number of modular spacings		0
Suitable for floor mounting		No
Suitable for front mounting		Yes
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Complete device in housing		No
Type of control element		Toggle
Front shield size		48x48 mm
Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side		12