Main switch, T0, 20 A, flush mounting, 4 contact unit(s), 8-pole, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position



Part no. T0-4-8344/EA/SVB 008267

General specifications	
Product name	Eaton Moeller® series TO Main switch
Part no.	T0-4-8344/EA/SVB
EAN	4015080082675
Product Length/Depth	130 millimetre
Product height	74 millimetre
Product width	65 millimetre
Product weight	0.166 kilogram
Certifications	CSA-C22.2 No. 60947-4-1-14 CSA UL File No.: E36332 IEC/EN 60204 UL 60947-4-1 IEC/EN 60947-3 CSA-C22.2 No. 94 VDE 0660 IEC/EN 60947 CSA Class No.: 3211-05 UL UL Category Control No.: NLRV CE CSA File No.: 012528 UL CSA
Product Tradename	ТО
Product Type	Main switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
Features & Functions	
Features	Version as maintenance-/service switch Version as main switch 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	8
General information	
Degree of protection	NEMA 12
Degree of protection (front side)	IP65
Lifespan, mechanical	400,000 Operations
Mounting method	Flush mounting
Mounting position	As required
Number of contact units	4
Operating frequency	1200 Operations/h
Overvoltage category	III
Pollution degree	3
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	Front mounting center Branch circuits, suitable as motor disconnect, (UL/CSA)
Switching angle	90 °

Ambient operating temperature - max Ambient operating temperature (enclosed) - min -25 Ambient operating temperature (enclosed) - max Climatic proofing Barminal capacities Terminal capacity Screw size M3 Tightening torque Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3) 50 0 50 0 40 0	
Ambient operating temperature (enclosed) - min -25 Ambient operating temperature (enclosed) - max 40° Climatic proofing Dar erminal capacities Terminal capacity 2x x 1x	amp heat, cyclic, to IEC 60068-2-30 amp heat, constant, to IEC 60068-2-78 x (1 - 2.5) mm², solid or stranded x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (1 - 2.5) mm², solid or stranded 8 - 14 AWG, solid or flexible with ferrule 13.5, Terminal screw Nm, Screw terminals 8 lb-in, Screw terminals
Ambient operating temperature (enclosed) - max Climatic proofing Parimal capacities Terminal capacity 2 x 1 x 2 x 1 x 2 x 1 x 1 x 2 x 1 x 1 x	amp heat, cyclic, to IEC 60068-2-30 amp heat, constant, to IEC 60068-2-78 x (1 - 2.5) mm², solid or stranded x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (1 - 2.5) mm², solid or stranded 3 - 14 AWG, solid or flexible with ferrule 13.5, Terminal screw Nm, Screw terminals 8 lb-in, Screw terminals 90 A
Climatic proofing Dai Dai Dar	amp heat, cyclic, to IEC 60068-2-30 amp heat, constant, to IEC 60068-2-78 x (1 - 2.5) mm², solid or stranded x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (1 - 2.5) mm², solid or stranded 8 - 14 AWG, solid or flexible with ferrule 13.5, Terminal screw Nm, Screw terminals 8 lb-in, Screw terminals 00 A
### Part	x (1 - 2.5) mm², solid or stranded x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (1 - 2.5) mm², flexible with ferrules to DIN 46228 x (1 - 2.5) mm², solid or stranded 3 - 14 AWG, solid or flexible with ferrule [3.5, Terminal screw] Nm, Screw terminals 8 lb-in, Screw terminals 90 A
Terminal capacity	x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (1 - 2.5) mm², solid or stranded 3 - 14 AWG, solid or flexible with ferrule 13.5, Terminal screw Nm, Screw terminals 8 lb-in, Screw terminals
1 x 2 x 1 x 1 x 1 x 1 x 1 x 1 x 1 x 1 x	x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (0.75 - 2.5) mm², flexible with ferrules to DIN 46228 x (1 - 2.5) mm², solid or stranded 3 - 14 AWG, solid or flexible with ferrule 13.5, Terminal screw Nm, Screw terminals 8 lb-in, Screw terminals
Tightening torque	Nm, Screw terminals 8 lb-in, Screw terminals 00 A 10 A
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3) Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3) Rated breaking capacity at 500 V (cos phi to IEC 60947-3) Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3) Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V Rated operational current (Ie) at AC-3, 500 V Rated operational current (Ie) at AC-3, 660 V, 690 V Rated operational current (Ie) at AC-21, 440 V Rated operational current (Ie) at AC-23A, 230 V Rated operational current (Ie) at AC-23A, 400 V, 415 V Rated operational current (Ie) at AC-23A, 690 V Rated operational current (Ie) at AC-21, load-break switches I/r = 1 ms	00 A 10 A 0 A
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3) Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3) Rated breaking capacity at 500 V (cos phi to IEC 60947-3) Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3) Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V Rated operational current (Ie) at AC-3, 500 V Rated operational current (Ie) at AC-3, 660 V, 690 V Rated operational current (Ie) at AC-21, 440 V Rated operational current (Ie) at AC-23A, 230 V Rated operational current (Ie) at AC-23A, 690 V Rated operational current (Ie) at AC-21, Ioad-break switches I/r = 1 ms	0 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3) 110 Rated breaking capacity at 500 V (cos phi to IEC 60947-3) 80 / Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3) 60 / Rated operational current (le) at AC-3, 220 V, 230 V, 240 V 11.5 Rated operational current (le) at AC-3, 380 V, 400 V, 415 V 11.5 Rated operational current (le) at AC-3, 500 V 9 A Rated operational current (le) at AC-3, 660 V, 690 V 4.9 Rated operational current (le) at AC-21, 440 V 20 / Rated operational current (le) at AC-23A, 230 V 13.3 Rated operational current (le) at AC-23A, 400 V, 415 V 13.4 Rated operational current (le) at AC-23A, 500 V 7.6 Rated operational current (le) at AC-23A, 690 V 7.6 Rated operational current (le) at DC-1, load-break switches l/r = 1 ms 10 /	0 A
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Rated operational current (Ie) at AC-21, 440 V Rated operational current (Ie) at AC-23A, 230 V 13.3 Rated operational current (Ie) at AC-23A, 400 V, 415 V 13.4 Rated operational current (Ie) at AC-23A, 500 V 13.5 Rated operational current (Ie) at AC-23A, 690 V 7.6 Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms 10.7	
Rated operational current (Ie) at AC-23A, 230 V Rated operational current (Ie) at AC-23A, 400 V, 415 V 13.3 Rated operational current (Ie) at AC-23A, 500 V 13.4 Rated operational current (Ie) at AC-23A, 690 V 7.6 Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms 10.7	
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Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms	
Rated operational current (le) at DC-13, control switches L/R = 50 ms	
B	
Rated operational current (le) at DC-21, 240 V 1 A	
Rated operational current (Ie) at DC-23A, 24 V 10 7	
Rated operational current (Ie) at DC-23A, 48 V 10 J	
Rated operational current (Ie) at DC-23A, 60 V 10 /	
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, 220/230 V	
Rated operational current (Ie) star-delta at AC-3, 380/400 V	
	5.6 A
Rated operational current (Ie) star-delta at AC-3, 690 V 8.5	
	5 kW
	5 kW
	5 kW
	kW
Rated operational power at AC-23A, 220/230 V, 50 Hz	
	5 kW
	5 kW
Rated uninterrupted current (Iu) 20 /	5 kW 5 kW

Rated conditional short-circuit current (Iq)	6 kA
Rated short-time withstand current (Icw)	320 A, Contacts, 1 second
	0.32 kA
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)	A600 (UL/CSA) P300 (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 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	0.6 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.
10.1 Giodianicos ana crecipage distanices	mocto dio product standard o requiremento.

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 disconnector (low voltage) (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss13-27-37-14-03 [AKF060018])

Degree of protection (NEMA) Width	mm	65
Degree of protection (IP), front side Degree of protection (NEMA)		IP65 12
With pre-assembled cabling		No Incr
Type of electrical connection of main circuit		Screw connection
Interlockable		Yes
Type of control element		Door coupling rotary drive
Colour control element		Red
Suitable for intermediate mounting		No
Suitable for distribution board installation		No
Suitable for front mounting centre		Yes
Suitable for front mounting 4-hole		No
Suitable for floor mounting		No
Device construction		Built-in device fixed built-in technique
Voltage release optional		No
Motor drive integrated		No
Motor drive optional		No
Number of auxiliary contacts as change-over contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as normally closed contact		0
Number of poles		8
Conditioned rated short-circuit current Iq	kA	6
Switching power at 400 V	kW	5.5
Rated operation power at AC-23, 400 V	kW	5.5
Rated short-time withstand current lcw	kA	0.32
Rated operation power at AC-3, 400 V	kW	5.5
Rated permanent current at AC-21, 400 V	Α	20
Rated permanent current at AC-23, 400 V	Α	
Rated permanent current lu	Α	20
Rated operating voltage	V	690 - 690
Max. rated operation voltage Ue AC	V	
Number of switches		1
Version as reversing switch		No
Version as emergency stop installation		Yes
Version as safety switch		No
Version as maintenance-/service switch		Yes
Version as main switch		Yes
[AKFU6UU18])		

Height	mn	m	74
Depth	mn	m	130
Width in number of modular spacings			