

**On-Off switch, T5B, 63 A, surface mounting, 1 contact unit(s), 2 pole,
Emergency switching off function, with red thumb grip and yellow front
plate**

**Part no. T5B-1-102/I4-RT
207216**

General specifications		
Product name		Eaton Moeller® series T5B On-Off switch
Part no.		T5B-1-102/I4-RT
EAN		4015082072162
Product Length/Depth		240 millimetre
Product height		162 millimetre
Product width		160 millimetre
Product weight		1.039 kilogram
Certifications		CSA IEC/EN 60947 UL 60947-4-1 CSA-C22.2 No. 94 IEC/EN 60204 CSA File No.: 012528 UL Category Control No.: NLRV CSA-C22.2 No. 60947-4-1-14 CE VDE 0660 CSA Class No.: 3211-07 UL File No.: E36332 UL IEC/EN 60947-3 UL CSA
Product Tradename		T5B
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		
Features		Version as emergency stop installation
Fitted with:		Red thumb grip and yellow front plate
Functions		Emergency switching off function
Inscription		0-1
Number of poles		Two-pole
General information		
Degree of protection		NEMA 12
Degree of protection (front side)		IP65
Lifespan, mechanical		500,000 Operations
Mounting method		Surface 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)		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		Ground mounting Branch circuits, suitable as motor disconnect, (UL/CSA)
Switching angle		90 °
Climatic environmental conditions		
Ambient operating temperature - min		-25 °C

Ambient operating temperature - max	40 °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	2 x (2.5 - 16) mm ² , solid or stranded 1 x (2.5 - 35) mm ² , solid or stranded 12 - 4 AWG, solid or flexible with ferrule 2 x (1.5 - 10) mm ² , flexible with ferrule to DIN 46228 1 x (1 - 25) mm ² , flexible with ferrules to DIN 46228
Screw size	M6, Terminal screw
Tightening torque	35.4 lb-in, Screw terminals 4 Nm, Screw terminals
Electrical rating	
Rated breaking capacity at 220/230 V (cos phi to IEC 60947-3)	520 A
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	600 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)	480 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	340 A
Rated operational current (Ie) at AC-3, 220 V, 230 V, 240 V	51 A
Rated operational current (Ie) at AC-3, 380 V, 400 V, 415 V	41 A
Rated operational current (Ie) at AC-3, 500 V	33 A
Rated operational current (Ie) at AC-3, 660 V, 690 V	17 A
Rated operational current (Ie) at AC-21, 440 V	63 A
Rated operational current (Ie) at AC-23A, 230 V	63 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V	63 A
Rated operational current (Ie) at AC-23A, 500 V	33 A
Rated operational current (Ie) at AC-23A, 690 V	23.8 A
Rated operational current (Ie) at DC-1, load-break switches I/r = 1 ms	63 A
Rated operational current (Ie) at DC-13, control switches L/R = 50 ms	25 A
Rated operational current (Ie) at DC-23A, 24 V	50 A
Rated operational current (Ie) at DC-23A, 48 V	50 A
Rated operational current (Ie) at DC-23A, 60 V	50 A
Rated operational current (Ie) at DC-23A, 120 V	25 A
Rated operational current (Ie) at DC-23A, 240 V	20 A
Rated operational current (Ie) star-delta at AC-3, 220/230 V	63 A
Rated operational current (Ie) star-delta at AC-3, 380/400 V	63 A
Rated operational current (Ie) star-delta at AC-3, 500 V	57.2 A
Rated operational current (Ie) star-delta at AC-3, 690 V	29.4 A
Rated operational power at AC-3, 380/400 V, 50 Hz	22 kW
Rated operational power at AC-3, 415 V, 50 Hz	22 kW
Rated operational power at AC-3, 500 V, 50 Hz	22 kW
Rated operational power at AC-3, 690 V, 50 Hz	15 kW
Rated operational power at AC-23A, 220/230 V, 50 Hz	18.5 kW
Rated operational power at AC-23A, 400 V, 50 Hz	30 kW
Rated operational power at AC-23A, 500 V, 50 Hz	22 kW
Rated operational power at AC-23A, 690 V, 50 Hz	22 kW
Rated operational power star-delta at 220/230 V, 50 Hz	18.5 kW
Rated operational power star-delta at 380/400 V, 50 Hz	30 kW
Rated operational power star-delta at 500 V, 50 Hz	37 kW
Rated operational power star-delta at 690 V, 50 Hz	22 kW
Rated uninterrupted current (Iu)	63 A
Uninterrupted current	Rated uninterrupted current Iu is specified for max. cross-section.
Short-circuit rating	
Rated conditional short-circuit current (Iq)	2 kA
Rated short-time withstand current (Icw)	1.3 kA 1,3 kA, Contacts, 1 second
Short-circuit current rating (high fault)	10 kA, SCCR (UL/CSA)

	100 A, Class J, max. Fuse, SCCR (UL/CSA)
Short-circuit protection rating	80 A gG/gL, Fuse, Contacts
Switching capacity	
Load rating	1.6 x I _# (with intermittent operation class 12, 40 % duty factor) 1.3 x I _# (with intermittent operation class 12, 60 % duty factor) 2 x I _# (with intermittent operation class 12, 25 % duty factor)
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	6
Switching capacity (main contacts, general use)	63 A, Rated uninterrupted current max. (UL/CSA)
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)	800 A
Voltage per contact pair in series	60 V
Motor rating	
Assigned motor power at 115/120 V, 60 Hz, 1-phase	3 HP
Assigned motor power at 200/208 V, 60 Hz, 1-phase	7.5 HP
Assigned motor power at 200/208 V, 60 Hz, 3-phase	15 HP
Assigned motor power at 230/240 V, 60 Hz, 1-phase	10 HP
Assigned motor power at 230/240 V, 60 Hz, 3-phase	15 HP
Assigned motor power at 460/480 V, 60 Hz, 3-phase	40 HP
Assigned motor power at 575/600 V, 60 Hz, 3-phase	40 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 function	Maintained
Actuator type	Short thumb-grip
Design verification	
Equipment heat dissipation, current-dependent P _{vid}	4.5 W
Heat dissipation capacity P _{diss}	0 W
Heat dissipation per pole, current-dependent P _{vid}	4.5 W
Rated operational current for specified heat dissipation (I _n)	63 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 (ec@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	63
Rated permanent current at AC-23, 400 V	A	63
Rated permanent current at AC-21, 400 V	A	63
Rated operation power at AC-3, 400 V	kW	22
Rated short-time withstand current Icw	kA	1.3
Rated operation power at AC-23, 400 V	kW	30
Switching power at 400 V	kW	30
Conditioned rated short-circuit current Iq	kA	2
Number of poles		2
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		Complete device in housing
Suitable for floor mounting		Yes
Suitable for front mounting 4-hole		No
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		Short thumb-grip
Interlockable		No
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	160
Height	mm	162
Depth	mm	240
Width in number of modular spacings		