

**Main switch, T5B, 63 A, flush mounting, 1 contact unit(s), 2 pole,  
Emergency switching off function, With red rotary handle and yellow  
locking ring, Lockable in the 0 (Off) position**

**Part no. T5B-1-102/EA/SVB**  
**094469**  
**EL Number 1417115**  
**(Norway)**

<b>General specifications</b>		
Product name		Eaton Moeller® series T5B Main switch
Part no.		T5B-1-102/EA/SVB
EAN		4015080944690
Product Length/Depth		123 millimetre
Product height		88 millimetre
Product width		88 millimetre
Product weight		0.47 kilogram
Certifications		IEC/EN 60204 CSA CSA-C22.2 No. 94 CSA-C22.2 No. 60947-4-1-14 UL Category Control No.: NLRV UL CE IEC/EN 60947-3 IEC/EN 60947 CSA Class No.: 3211-05 VDE 0660 CSA File No.: 012528 UL 60947-4-1 UL File No.: E36332
Product Tradename		T5B
Product Type		Main switch
Product Sub Type		None
Catalog Notes		Rated Short-time Withstand Current (Icw) for a time of 1 second
<b>Features &amp; Functions</b>		
Features		Version as main switch Version as emergency stop installation Version as maintenance-/service switch
Fitted with:		Red rotary handle and yellow locking ring
Functions		Emergency switching off function Interlockable
Locking facility		Lockable in the 0 (Off) position
Number of poles		2
<b>General information</b>		
Degree of protection		NEMA 12
Degree of protection (front side)		IP65
Lifespan, mechanical		500,000 Operations
Mounting method		Flush 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		Branch circuits, suitable as motor disconnect, (UL/CSA) Front mounting center
Switching angle		90 °
<b>Climatic environmental conditions</b>		

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
<b>Terminal capacities</b>		
Terminal capacity		2 x (2.5 - 16) mm <sup>2</sup> , solid or stranded 12 - 4 AWG, solid or flexible with ferrule 1 x (1 - 25) mm <sup>2</sup> , flexible with ferrules to DIN 46228 1 x (2.5 - 35) mm <sup>2</sup> , solid or stranded 2 x (1.5 - 10) mm <sup>2</sup> , flexible with ferrule to DIN 46228
Screw size		M6, Terminal screw
Tightening torque		35.4 lb-in, Screw terminals 4 Nm, Screw terminals
<b>Electrical rating</b>		
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.
<b>Short-circuit rating</b>		
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
<b>Switching capacity</b>	
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-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
<b>Motor rating</b>	
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
<b>Contacts</b>	
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
<b>Actuator</b>	
Actuator color	Red
Actuator type	Door coupling rotary drive
<b>Design verification</b>	
Equipment heat dissipation, current-dependent Pvid	0 W
Heat dissipation capacity Pdis	0 W
Heat dissipation per pole, current-dependent Pvid	4.5 W
Rated operational current for specified heat dissipation (In)	63 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 8.0

Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ec@ss10.0.1-27-37-14-03 [AKF060013])			
Version as main switch			Yes
Version as maintenance-/service switch			Yes
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		690
Rated operating voltage	V		690 - 690
Rated permanent current Iu	A		63
Rated permanent current at AC-23, 400 V	A		
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			Built-in device fixed built-in technique
Suitable for floor mounting			No
Suitable for front mounting 4-hole			No
Suitable for front mounting centre			Yes
Suitable for distribution board installation			No
Suitable for intermediate mounting			No
Colour control element			Red
Type of control element			Door coupling rotary drive
Interlockable			Yes
Type of electrical connection of main circuit			Screw connection
Degree of protection (IP), front side			IP65
Degree of protection (NEMA)			12