## **DATASHEET - T5B-4-8244/E**

## Step switches, T5B, 63 A, flush mounting, 4 contact unit(s), Contacts: 6, 45 °, maintained, With 0 (Off) position, 0-6, Design number 8244



	5B-4-8244/E 92096	
General specifications		
Product name		Eaton Moeller® series T5B Step switch
Part no.		T5B-4-8244/E
EAN		4015080920960
Product Length/Depth		141 millimetre
Product height		88 millimetre
Product width		88 millimetre
Product weight		0.725 kilogram
Certifications		IEC/EN 60947 UL UL Category Control No.: NLRV CSA-C22.2 No. 94 UL File No.: E36332 UL 60947-4-1 CSA-C22.2 No. 60947-4-1-14 CSA File No.: 012528 CSA IEC/EN 60204 VDE 0660 CSA Class No.: 3211-07 IEC/EN 60947-3 CE
Product Tradename		Т5В
Product Type		Step switch
Product Sub Type		None
Catalog Notes		Rated Short-time Withstand Current (Icw) for a time of 1 second
Features & Functions Fitted with:		0 (off) position Black thumb grip and front plate
Inscription		0-6
Number of poles		Single-pole
General information		
Degree of protection		IP65 NEMA 12 NEMA 1
Degree of protection (front side)		IP65 NEMA 12
Lifespan, mechanical		500,000 Operations
Mounting method		Flush mounting
Mounting position		As required
Number of contact units		4
Operating frequency		1200 Operations/h
Overvoltage category		
Pollution degree		3 Control quitabas
Product category		Control switches
Rated impulse withstand voltage (Uimp) Safe isolation		6000 V AC
Safety parameter (EN ISO 13849-1)		440 V AC, Between the contacts, According to EN 61140 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		Step 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, constant, to IEC 60068-2-78
	Damp heat, cyclic, to IEC 60068-2-30
Terminal capacities	
Terminal capacity (flexible with ferrule)	2 x (1.5 - 10) mm², ferrule to DIN 46228 1 x (1 - 25) mm², ferrules to DIN 46228
Terminal capacity (solid/flexible with ferrule AWG)	12 - 4
Terminal capacity (solid/stranded)	2 x (2.5 - 16) mm <sup>2</sup> 1 x (2.5 - 35) mm <sup>2</sup>
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 operating voltage (Ue) at AC - max	690 V
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, 230 V	63 A
Rated operational current (Ie) star-delta at AC-3, 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, 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 (lu)	63 A
Uninterrupted current	Rated uninterrupted current lu 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, Contacts, 1 second
Short-circuit current rating (high fault)	100 A, Class J, max. Fuse, SCCR (UL/CSA)

	10 kA, SCCR (UL/CSA)
Short-circuit protection rating	80 A gG/gL, Fuse, Contacts
Switching capacity	
Load rating	1.3 x I# (with intermittent operation class 12, 60 % duty factor) 1.6 x I# (with intermittent operation class 12, 40 % 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	24 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 contacts	6
Actuator	
Actuator function	With 0 (Off) position Maintained
Actuator type	Toggle
Number of switch positions	7
Design verification	
Equipment heat dissipation, current-dependent Pvid	0 W
Heat dissipation capacity Pdiss	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 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		Level switch
Number of poles		1
Max. rated operation voltage Ue AC	V	690
Rated permanent current lu	А	63
Number of switch positions		7
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		88x88 mm
Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side		12