DATASHEET - T5B-4-8903/I4-SI-SW

Safety switch, T5B, 63 A, 6 pole, 2 N/O, STOP function, With black rotary handle and locking ring, Lockable in position 0 with cover interlock, with warning label „safety switch"

Part no. **T5B-4-8903/I4-SI-SW**
207259

Product name	Eaton Moeller® series T5B Safety switch
Part no.	T5B-4-8903/I4-SI-SW
EAN	4015082072599
Product Length/Depth	152 millimetre
Product height	175 millimetre
Product width	125 millimetre
Product weight	1.435 kilogram
Certifications	VDE 0660 IEC/EN 60947 IEC/EN 60204 IEC/EN 60947-3
Product Tradename	T5B
Product Type	Safety switch
Product Sub Type	None
Catalog Notes	Rated Short-time Withstand Current (Icw) for a time of 1 second
Features	Version as safety switch
Fitted with:	Black rotary handle and locking ring Warning label "Safety switch"
Functions	STOP function Interlockable
Locking facility	Lockable in the 0 (Off) position (cover interlock)
Number of poles	6
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	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	Ground mounting
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 capacity	1 x (1 - 25) mm^2, flexible with ferrules to DIN 46228 2 x (1.5 - 10) mm^2, flexible with ferrule to DIN 46228 1 x (2.5 - 35) mm^2, solid or stranded 2 x (2.5 - 16) mm^2, solid or stranded

Screw size	M6, Terminal screw
Tightening torque	35.4 lb-in, Screw terminals 4 Nm, Screw terminals
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 l/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 operational voltage (Ue) at AC - min	690 V
Rated operational voltage (Ue) at AC - max	690 V
Rated uninterrupted current (Iu)	63 A
Uninterrupted current	Rated uninterrupted current Iu is specified for max. cross-section.
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 protection rating	80 A gG/gL, Fuse, Contacts
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
Rated making capacity up to 690 V (cos phi to IEC/EN 60947-3)		800 A
Voltage per contact pair in series		60 V
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)		2
Actuator color		Black
Actuator type		Door coupling rotary drive
Equipment heat dissipation, current-dependent Pvid		4.5 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 8.0

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch		No
Version as maintenance-/service switch		No
Version as safety switch		Yes
Version as emergency stop installation		No
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	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			6
Number of auxiliary contacts as normally closed contact			0
Number of auxiliary contacts as normally open contact			2
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			Black
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

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