# DATASHEET - T5B-1-SOND\*/EA/SVB



Non-standard switch, T5B, 63 A, flush mounting, 1 contact unit(s), Emergency switching off function, With red rotary handle and yellow locking ring



T5B-1-SOND\*/EA/SVB Part no. Catalog No. 907934

Delivery program			
Product range			Non-standard switch
Part group reference			T5B
Stop Function			Emergency switching off function
			With red rotary handle and yellow locking ring
Notes			customized version according to form
Degree of Protection			Front IP65
Design			flush mounting
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	30
Rated uninterrupted current	I <sub>u</sub>	Α	63
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
Number of contact units		contact unit(s)	1

#### Technical data

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General Control of the Control of th				
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch-disconnector according to IEC/EN 60947-3	
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30	
Ambient temperature				
Open		°C	-25 - +50	
Enclosed		°C	-25 - +40	
Overvoltage category/pollution degree			III/3	
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000	
Mechanical shock resistance		g	15	
Mounting position			As required	
Contacts				
Electrical characteristics				
Rated operational voltage	U <sub>e</sub>	V AC	690	

U <sub>e</sub>	V AC	690
I <sub>u</sub>	Α	63
		Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
	x I <sub>e</sub>	2
	x I <sub>e</sub>	1.6
	x I <sub>e</sub>	1.3
	A gG/gL	80
I <sub>cw</sub>	$A_{rms}$	1300
	Iu	Iu A XIe XIe XIe A GG/gL

Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	2
Switching capacity	7		
cos φ rated making capacity as per IEC 60947-3		Α	800
Rated breaking capacity $\cos \phi$ to IEC 60947-3		Α	
230 V		Α	520
400/415 V		Α	600
500 V		Α	480
690 V		Α	340
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I <sub>e</sub>		W	4.5
Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)		CO	4.5
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	> 0.5
Maximum operating frequency	Operations/h	X 10	1200
AC	ороганопо/п		
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	15
230 V Star-delta	P	kW	18.5
400 V 415 V	P	kW	22
400 V Star-delta	P	kW	30
500 V	P	kW	22
500 V Star-delta	P	kW	37
690 V	P	kW	15
690 V Star-delta	P	kW	22
Rated operational current motor load switch	•		-
230 V	l <sub>e</sub>	A	51
230 V star-delta	I <sub>e</sub>	A	63
400V 415 V			
	I <sub>e</sub>	A	41
400 V star-delta	l <sub>e</sub>	Α	63
500 V	I <sub>e</sub>	Α	33
500 V star-delta	l <sub>e</sub>	Α	57.2
690 V	l <sub>e</sub>	Α	17
690 V star-delta	I <sub>e</sub>	Α	29.4
AC-21A			
Rated operational current switch			
440 V	I <sub>e</sub>	Α	63
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
230 V	Р	kW	18.5
400 V 415 V	Р	kW	30
500 V	Р	kW	22
690 V	P	kW	22
Rated operational current motor load switch			
230 V	l <sub>e</sub>	Α	63
400 V 415 V	I <sub>e</sub>	Α	63
500 V	I <sub>e</sub>	Α	33
690 V	I <sub>e</sub>	A	23.8
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I <sub>e</sub>	A	63
Voltage per contact pair in series	-e	V	60
DC-23A, motor load switch L/R = 15 ms		V	
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24 V			
Rated operational current	I <sub>e</sub>	Α	50
Contacts		Quantity	1
48 V			
Rated operational current	I <sub>e</sub>	Α	50
Contacts		Quantity	2
60 V			
Rated operational current	I <sub>e</sub>	Α	50
Contacts		Quantity	3
120 V			
Rated operational current	I <sub>e</sub>	Α	25
Contacts		Quantity	3
240 V			
Rated operational current	I <sub>e</sub>	Α	20
Contacts		Quantity	6
DC-13, Control switches L/R = 50 ms			
Rated operational current	I <sub>e</sub>	Α	25
Voltage per contact pair in series		V	24
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H <sub>F</sub>	< 10 <sup>-5</sup> ,< 1 failure in 100,000 switching operations
Terminal capacities			
Solid or stranded		mm <sup>2</sup>	1 x (2,5 - 35) 2 x (2,5 - 16)
Flexible with ferrules to DIN 46228		mm <sup>2</sup>	1 x (1 - 25) 2 x (1.5 - 10)
Terminal screw			M6
Tightening torque for terminal screw		Nm	4
Technical safety parameters:			
Notes			B10 <sub>d</sub> values as per EN ISO 13849-1, table C1
Rating data for approved types			

# **Design verification as per IEC/EN 61439**

Terminal capacity

Terminal screw

Design verincation as per ille/liv 01433			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	63
Heat dissipation per pole, current-dependent	$P_{\text{vid}}$	W	4.5
Equipment heat dissipation, current-dependent	$P_{\text{vid}}$	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	50
EC/EN 61439 design verification			
10.2 Strength of materials and parts			
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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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.

M6

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 Insulation properties	
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.

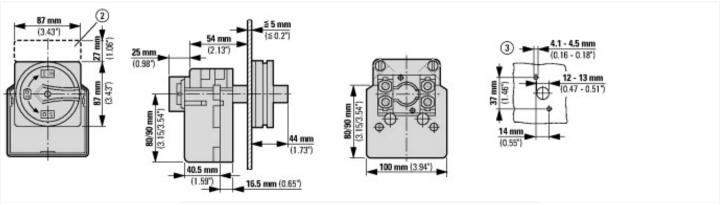
### **Technical data ETIM 7.0**

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])

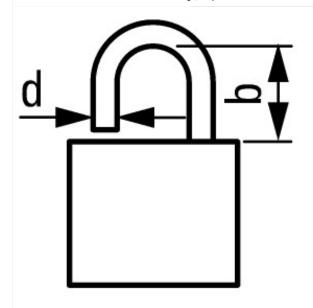
[AKF060013])		
Version as main switch		Yes
Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Number of switches		1
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	Α	63
Rated permanent current at AC-23, 400 V	Α	63
Rated permanent current at AC-21, 400 V	Α	63
Rated operation power at AC-3, 400 V	kW	22
Rated short-time withstand current lcw	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		0
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 ground mounting		No
Suitable for front mounting 4-hole		Yes
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		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)		Other

### **Dimensions**



- ② ZFS-... Label mount not included as standard
- ③ Drilling dimensions door

Cam switches T5B and T5 are of identical design, only their contacts are different



**d** = **4** - **8** mm **b** + **d** ≤ **47** mm d = 0.16 - 0.31" b + d ≤ 1.85"

≦ 3 padlocks

#### **Assets (links)**

#### **Instruction Leaflets**

IL03801009Z2018\_05

## **Additional product information (links)**

IL03801009Z (AWA1150-1692) Cam switch: switch-disconnector				
IL03801009Z (AWA1150-1692) Cam switch: switch-disconnector	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801009Z2018_05.pdf			
Technical overview cam switch, switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.2			
System overview cam switch T	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.4			
System overview switch-disconnector P	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.6			
Key to part numbers Cam switch	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8			
Key to part numbers Switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8			
Switches for ATEX	http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html			
Ordering form for SOND switches and SOND front plates(DE_EN)	ftp://ftp.moeller.net/DOCUMENTATION/PDF/MZ008005ZU_Orderform_Customized_Switch.pdf			
Ordering form for SOND switches and SOND front plates(DE_EN)	ftp://ftp.moeller.net/DOCUMENTATION/PDF/MZ008006ZU_Orderform_Customized_Switch.pdf			