## **DATASHEET - T5B-4-15682/I4-SI-SW**



Safety switch, T5B, 63 A, 6 pole, 1 N/O, 1 N/C, STOP function, With black rotary handle and locking ring, Lockable in position 0 with cover interlock, with warning label "safety switch"



Part no. T5B-4-15682/I4-SI-SW Catalog No. 207255

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Delivery program			
Product range			safety switch
Part group reference			T5B
Stop Function			STOP function
			With black rotary handle and locking ring
Notes			with warning label "safety switch"
Number of poles			6 pole
Auxiliary contacts			
1		N/0	1
7		N/C	1
Locking facility			Lockable in position 0 with cover interlock
Degree of Protection			IP65
			totally insulated
Design			surface mounting
Contact sequence			
Design number			15682
Function			O OFF
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 $I_{\rm u}$ is specified for max. cross-section.
Number of contact units		contact unit(s)	4

#### **Technical data** General

delicial	
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	

Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000
Mechanical shock resistance	ШР	g	15
Mounting position		9	As required
Contacts			7.6.10quillo
Mechanical variables			
Number of poles			6 pole
Auxiliary contacts			
		N/0	1
		N/C	1
Electrical characteristics			
Rated operational voltage	U <sub>e</sub>	V AC	690
Rated uninterrupted current	I <sub>u</sub>	Α	63
Note on rated uninterrupted current !u			Rated uninterrupted current $I_u$ is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x l <sub>e</sub>	2
AB 40 % DF		x l <sub>e</sub>	1.6
AB 60 % DF			1.3
		x l <sub>e</sub>	1.0
Short-circuit rating		A =: C/=:I	
Fuse  Petrol chart time withstand ourset (1 a ourset)		A gG/gL	
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	A <sub>rms</sub>	1300
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 cos φ rated making capacity as per IEC 60947-3		Α	800
Rated breaking capacity cos φ to IEC 60947-3		A	000
230 V		A	520
400/415 V		A	600
500 V		A	480
690 V		A	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		> 0.5
	Operations	x 10 <sup>6</sup>	
Maximum operating frequency	Operations/h		1200
AC			
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	Р	kW	22
Rated operational current motor load switch			m.
230 V	l <sub>e</sub>	A	51
230 V star-delta	l <sub>e</sub>	Α	63
400V 415 V	le	Α	41
	1	Α	63
400 V star-delta	I <sub>e</sub>	^	

500 V star-delta	I <sub>e</sub>	Α	57.2
690 V	l <sub>e</sub>	Α	17
690 V star-delta	l <sub>e</sub>	Α	29.4
AC-21A			
Rated operational current switch			
440 V	le	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	Р	kW	22
Rated operational current motor load switch			
230 V	I <sub>e</sub>	Α	63
400 V 415 V	I <sub>e</sub>	Α	63
500 V		Α	33
	l <sub>e</sub>		
690 V	l <sub>e</sub>	Α	23.8
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	l <sub>e</sub>	Α	63
Voltage per contact pair in series		V	60
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	l <sub>e</sub>	Α	50
Contacts		Quantity	1
48 V			
Rated operational current	le	Α	50
Contacts		Quantity	2
60 V			
Rated operational current	l <sub>e</sub>	Α	50
Contacts		Quantity	3
120 V			
Rated operational current	l <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	. 6	V	24
Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA	Fault		
CONTROL CITCUIT TEHRADITLY AT 24 V DG, TO IIIA	probability	HF	< 10 <sup>-5</sup> ,< 1 failure in 100,000 switching operations
Terminal capacities			
Solid or stranded		$\text{mm}^2$	1 x (2,5 - 35) 2 x (2,5 - 16)
Flexible with ferrules to DIN 46228		2	1 x (1 - 25)
FIGURE WITH THE THE TOTAL PROPERTY OF THE TO		mm <sup>2</sup>	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			
Terminal capacity			
Terminal screw			M6
Tightening torque		lb-in	35.32

Design verification as per II	EC/EN 61439
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Technical data for design verification

Rated operational current for specified heat dissipation	In	Α	63
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	4.5
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
IEC/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 $ \frac{1}{2} \left( \frac{1}{2} \right) = \frac{1}{2} \left( \frac{1}{2} \right) \left($			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 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 switch gear must be observed. $\label{eq:constraint}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

### **Technical data ETIM 7.0**

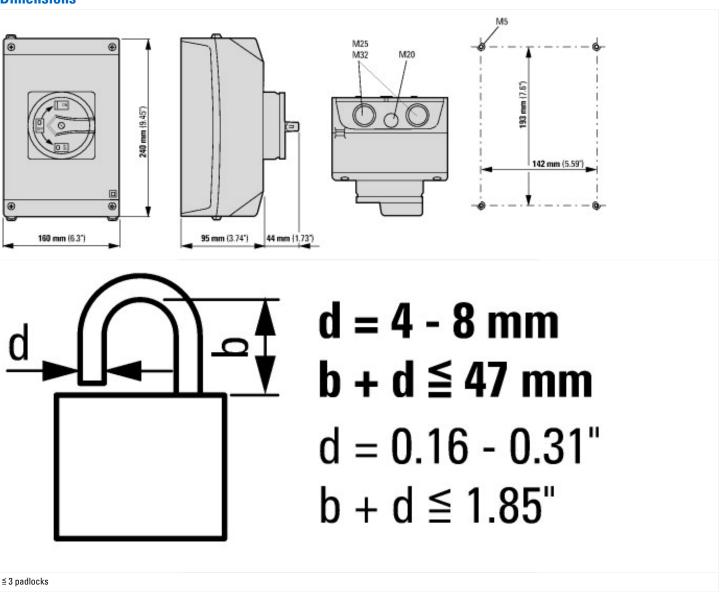
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

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])

[AKI 0000 TO])		
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 lu	А	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	k	kW	30
Conditioned rated short-circuit current Iq	k	kA	2
Number of poles			6
Number of auxiliary contacts as normally closed contact			1
Number of auxiliary contacts as normally open contact			1
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 ground 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)			Other

#### **Dimensions**



## Assets (links)

**Declaration of CE Conformity** 

00003073

**Instruction Leaflets** 

IL03801009Z2018\_05

# **Additional product information (links)**

IL03801009Z (AWA1150-1692) Cam switch: swi	tch-disconnector
IL03801009Z (AWA1150-1692) Cam switch: switch-disconnector	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801009Z2018_05.pdf
Display flip catalog page.	http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=41
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