DATASHEET - T5B-1-8200/I4/SVB-SW



Main switch, T5B, 63 A, surface mounting, 1 contact unit(s), 1 pole, STOP function, With black rotary handle and locking ring, Lockable in the 0 (Off) position



Part no. T5B-1-8200/I4/SVB-SW Catalog No. 207241

Catalog No. 207241			
Delivery program			
Product range			Main switch maintenance switch Repair switch
Part group reference			T5B
Stop Function			STOP function
			With black rotary handle and locking ring
Number of poles			1 pole
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP65
			totally insulated
Design			surface mounting
Contact sequence			10 0 7
Switching angle		0	90
Design number			8200
Function			ION OFF
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	30
Rated uninterrupted current	I _u	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	1
		unit(s)	

Technical data

General	
Standards	IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL 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_{imp}	V AC	6000
Mechanical shock resistance		g	15
Mounting position			As required
Contacts			
Mechanical variables			
Number of poles			1 pole
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	I _u	Α	63
Note on rated uninterrupted current !u			Rated uninterrupted current $I_{\rm u}$ is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x I _e	2
AB 40 % DF		x I _e	1.6
AB 60 % DF		x I _e	1.3
Short-circuit rating			
Fuse		A gG/gL	80
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	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			
$\cos \phi$ 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 _e		W	4.5
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	4.5
Lifespan, mechanical	Operations	x 10 ⁶	> 0.5
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	P	kW	22
Rated operational current motor load switch			
230 V	l _e	Α	51
230 V star-delta	l _e	Α	63
400V 415 V	l _e	Α	41
400 V star-delta	I _e	Α	63
500 V	I _e	Α	33
500 V star-delta	I _e	Α	57.2
690 V	I _e	A	17

690 V star-delta	l _e	Α	29.4
AC-21A			
Rated operational current switch			
440 V	l _e	Α	63
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	18.5
400 V 415 V	P	kW	30
500 V	P	kW	22
690 V	P	kW	22
Rated operational current motor load switch			
230 V	I _e	Α	63
400 V 415 V	le	Α	63
500 V	I _e	Α	33
690 V	I _e	Α	23.8
DC	-		
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	l _e	A	63
Voltage per contact pair in series	C	V	60
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	l _e	A	50
Contacts	'e	Quantity	
48 V		Quantity	'
Rated operational current	1	A	50
	l _e		
Contacts		Quantity	2
60 V			
Rated operational current	l _e	Α	50
Contacts		Quantity	3
120 V			
Rated operational current	I _e	Α	25
Contacts		Quantity	3
240 V			
Rated operational current	le	Α	20
Contacts		Quantity	6
DC-13, Control switches L/R = 50 ms			
Rated operational current	l _e	Α	25
Voltage per contact pair in series		V	24
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H _F	$< 10^{-5}$, < 1 failure in 100,000 switching operations
Terminal capacities	propability		
Solid or stranded		mm ²	1 x (2,5 - 35)
			2 x (2,5 - 16)
Flexible with ferrules to DIN 46228		mm^2	1 x (1 - 25) 2 x (1.5 - 10)
Terminal screw			M6
Tightening torque for terminal screw		Nm	4
Technical safety parameters:			
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Contacts			
Rated operational voltage	U _e	V AC	600
Rated uninterrupted current max.			
Main conducting paths			
General use		Α	63
Switching capacity			
General use		A	63

Maximum mater retina		
Maximum motor rating		
Single-phase		
120 V AC	HP	3
200 V AC	HP	7.5
240 V AC	HP	10
Three-phase		
200 V AC	HP	15
240 V AC	HP	15
480 V AC	HP	40
600 V AC	HP	40
Short Circuit Current Rating	SCCR	
High fault rating	kA	10
max. Fuse	А	100, Class J
Terminal capacity		
Solid or flexible conductor with ferrule	AWG	12 - 4
Terminal screw		M6
Tightening torque	lb-in	35.4

Design verification as per IEC/EN 61439

3			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	63
Heat dissipation per pole, current-dependent	P _{vid}	W	4.5
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	0
Heat dissipation capacity	P _{diss}	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			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 switchgear must be observed.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switchgear must b 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)

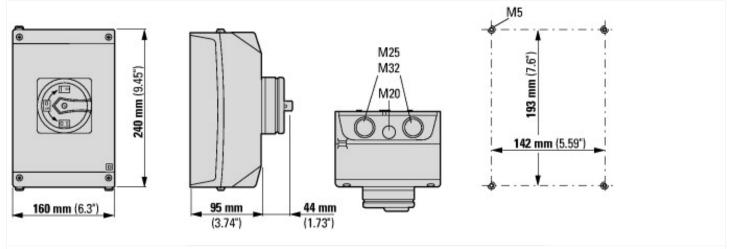
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch Version as maintenance-/service switch Version as safety switch Version as semergency stop installation Version as reversing switch No No Number of switches 1 Max. rated operation voltage Ue AC Rated operating voltage Rated permanent current lu A 63 Rated permanent current at AC-23, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-23, 400 V Routing power at 400 V Conditioned rated short-circuit current Iq KA 2 Number of poles	
Version as safety switch Version as emergency stop installation Version as reversing switch No Number of switches I1 Max. rated operation voltage Ue AC Rated operating voltage V 690 - 690 Rated permanent current lu A 63 Rated permanent current at AC-23, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-3, 400 V Round A Switching power at 400 V Round A Switching power at 400 V Round A Conditioned rated short-circuit current lq Rated short-circuit current lq Rated operation power at 400 V Round A Switching power at 400 V Round A Switching switch Rated short-circuit current lq Rated short-circuit cur	
Version as emergency stop installation Version as reversing switch No Number of switches I Max. rated operation voltage Ue AC Rated operating voltage Rated permanent current lu A 63 Rated permanent current at AC-23, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V	
Version as reversing switch Number of switches 1 Max. rated operation voltage Ue AC Rated operating voltage Rated permanent current lu A 63 Rated permanent current at AC-23, 400 V Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-23, 400 V Rated operation power at 400 V	
Number of switches Max. rated operation voltage Ue AC Rated operating voltage Rated permanent current lu A 63 Rated permanent current at AC-23, 400 V Rated permanent current at AC-21, 400 V A 63 Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V	
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Rated permanent current at AC-23, 400 V Rated permanent current at AC-21, 400 V A 63 Rated operation power at AC-3, 400 V Rated short-time withstand current lcw kA 1.3 Rated operation power at AC-23, 400 V kW 30 Switching power at 400 V Conditioned rated short-circuit current lq kA 2	
Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Row 30 Switching power at 400 V Conditioned rated short-circuit current Iq A 63 kW 22 Rated operation power at AC-23, 400 V kW 30 Conditioned rated short-circuit current Iq kA 2	
Rated operation power at AC-3, 400 V	
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	
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	
Switching power at 400 V	
Conditioned rated short-circuit current Iq kA 2	
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Number of poles 1	
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 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	
begree of protection in a fitting size	

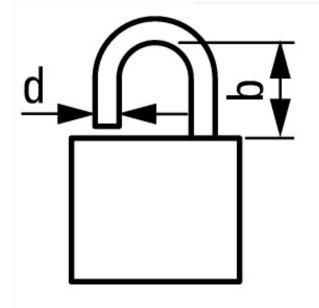
Approvals

7.pp. oraio	
Product Standards	UL 60947-4-1;CSA - C22.2 No. 60947-4-1-14; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking
UL File No.	E36332
UL Category Control No.	NLRV
CSA File No.	12528
CSA Class No.	3211-05
North America Certification	UL listed, CSA certified
Specially designed for North America	Yes, with an alternative front plate and/or terminal markings to those of the IEC type and with additional labeling according to UL on the enclosure in combination with "+NA-I4" (105868)
Suitable for	Branch circuits, suitable as motor disconnect
Degree of Protection	IEC: IP65; UL/CSA Type 1, 12

Dimensions



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



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

≦3 padlocks

Assets (links)

Declaration of CE Conformity

00003073

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		
Display flip catalog page.	http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=130		
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		