DATASHEET - T5B-4-15682/I4/SVB



Main switch, 6 pole + 1 N/O + 1 N/C, 63 A, Emergency-Stop function, 90 °, Lockable in the 0 (Off) position, surface mounting



T5B-4-15682/I4/SVB 207246

EL-Nummer (Norway)

Part no. Catalog No.

0001456961

Delivery program

Product range			Main switch maintenance switch Repair switch
Part group reference			T5B
Stop Function			Emergency switching off function
			With red rotary handle and yellow locking ring
Number of poles			6 pole
Auxiliary contacts			
τ		N/0	1
7		N/C	1
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP65
			totally insulated
Design			surface mounting
Contact sequence			
Switching angle		0	90
Design number			15682
Function			
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	30
Rated uninterrupted current	lu	А	63
Note on rated uninterrupted current !u			Rated uninterrupted current $\boldsymbol{I}_{\boldsymbol{u}}$ is specified for max. cross-section.
Number of contact units		contact unit(s)	4
Technical data			

Technical data

General Standards

06/25/2019

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		U	111/3
Rated impulse withstand voltage	11.	V AC	6000
	U _{imp}		
Mechanical shock resistance		g	15
Mounting position Contacts			As required
Mechanical variables			
Number of poles			6 pole
Auxiliary contacts			
-		N/0	1
		N/C	1
Electrical characteristics			
Rated operational voltage	Ue	V AC	690
Rated uninterrupted current	l _u	A	63
Note on rated uninterrupted current ! _u	·u		Rated uninterrupted current $I_{\rm u}$ is specified for max. cross-section.
Load rating with intermittent operation, class 12 AB 25 % DF		хI	2
		x l _e	
AB 40 % DF		x l _e	1.6
AB 60 % DF		x l _e	1.3
Short-circuit rating			
Fuse		A gG/gL	
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	lq	kA	2
Switching capacity			
cos φ rated making capacity as per IEC 60947-3		A	800
Rated breaking capacity cos φ to IEC 60947-3		A	
230 V		A	520
400/415 V		A	600
500 V 690 V		A	480
Safe isolation to EN 61140		A	340
between the contacts		V AC	440
Current heat loss per contact at l _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	Р	kW	
220 V 230 V	Р	kW	15
230 V Star-delta	Р	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	Ρ	kW	22
Rated operational current motor load switch			
230 V	le	A	51
230 V star-delta	l _e	A	63
400V 415 V	l _e	A	41
400 V star-delta	l _e	А	63

500 V	Ι _e	А	33
500 V star-delta	l _e	А	57.2
690 V	Ι _e	Α	17
690 V star-delta	I _e	A	29.4
AC-21A			
Rated operational current switch			
440 V	l _e	A	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	l _e	А	63
400 V 415 V	Ι _e	А	63
500 V	I _e	A	33
690 V	Ι _e	A	23.8
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	A	63
Voltage per contact pair in series		V	60
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I _e	A	50
Contacts		Quantity	1
48 V			
Rated operational current	I _e	A	50
Contacts		Quantity	2
60 V			
Rated operational current	I _e	A	50
Contacts		Quantity	3
120 V			
Rated operational current	le	Α	25
Contacts		Quantity	3
240 V			
Rated operational current	۱ _e	Α	20
Contacts		Quantity	6
DC-13, Control switches L/R = 50 ms			
Rated operational current	Ιe	A	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 fault in 100000 operations
Terminal capacities			
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:			P10, voluce co. per EN ISO 12840.1 toble C1
Notes Rating data for approved types			B10 _d values as per EN ISO 13849-1, table C1
Contacts			
Rated operational voltage	Ue	V AC	600
Rated uninterrupted current max.	- 0		

Main conducting paths		
General use	А	63
Switching capacity		
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

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	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.

10.13 Mechanical function

Is the panel builder's responsibility. The specifications for the switchgear must be observed.

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)

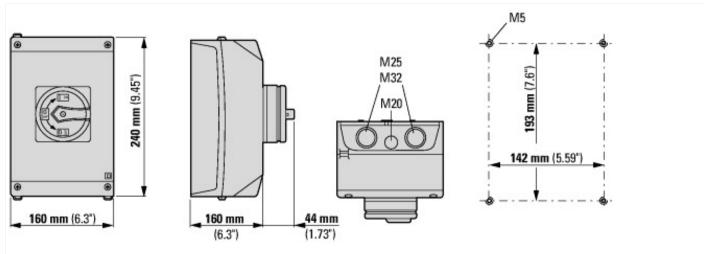
Electric engineering, automation, process control engineering / Low-voltage switc [AKF060013])	h technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03	
Version as main switch	Vca	

Version as aftery switch Image: Provide and sensitive structures of the sensitive structure stru	Version as main switch		Yes
Version as energency stop installation Image: Provide a severing switch No Number of switches Image: Provide a severing switch No Number of switches Image: Provide a severing switch Image: Provide a severing switch Askar deparation strugted Ue AC Image: Provide a severing switch Image: Provide a severing switch Rated operation strugted Ue AC Image: Provide a severing switch Image: Provide a severing switch Rated operation strugted Ue AC Image: Provide a severing switch Image: Provide a severing switch Rated operation sover at AC-3, 400 V Image: Provide a severing switch Image: Provide a severing switch Rated operation sover at AC-3, 400 V Image: Provide a severing switch Image: Provide a severing switch Rated operation sover at AC-3, 400 V Image: Provide a severing switch severin switch severing switch severing switch severing switch severing	Version as maintenance-/service switch		Yes
Variation as reversing which No Number of switches I Max. rated operation voltage Ue AC S0 Rated operation voltage Ue AC V S0 Rated operation voltage Ue AC I S0 Rated operation voltage Ue AC S0 S0 Rated operation voltage Ue AC I S0 Rated operation router ut AC-23, 400 V I Rated aperation power at AC-23, 400 V I Rated operation power at AC-23, 400 V I Rated aperation power at AC-23, 400 V I Rated paration power at AC-23, 400 V I	Version as safety switch		No
Number of switches Image: space of	Version as emergency stop installation		Yes
Max. rated operation voltage Ue ACV80800Rated operation voltage Ue ACS0S0S0Rated operation current IuS0S0S0Rated permanent current at AC-23, 400 VCS0S0Rated operation power at AC-3, 400 VKWS0S0Rated operation power at AC-3, 400 VKWS0S0Rated operation power at AC-3, 400 VKWS0S0Switching power at AC-3, 400 VKWS0S0Number of power at AC-3, 400 VS0S0S0Number of power at AC-3, 400 VKWS0S0Number of power at AC-3, 400 VS0S0S0Number of power at AC-3, 400 VS0S0S0Number of power at AC-3, 400 VS0S0S0Suitable for fort mounting + 100 VS0S0S0S0Suitable for fort mounting + 100 VS0<	Version as reversing switch		No
Rate operament current lu 69-690 Rated permanent current lu 69-690 Rated permanent current lu 63 Rated permanent current at AC-23, 400 V 64 Rated operament current at AC-23, 400 V 64 Rated operation power at AC-23, 400 V 64 Rated operation power at AC-23, 400 V 64 Rated operation power at AC-23, 400 V 64 Switching power at AC-23, 400 V 74 Switching power at AC-23, 400 V 74 Switching power at AC-24, 400 V 74	Number of switches		1
Red permanent current lu Red permanent current lu Red permanent current lu AC-23, 400 V Rated permanent current la AC-23, 400 V Rated permanent current la AC-21, 400 V Red operation power at AC-23, 400 V Red op	Max. rated operation voltage Ue AC	V	690
Rated permanent current at AC-23, 400 V A 6 Rated operation power at AC-3, 400 V KW 2 Rated operation power at AC-3, 400 V KW 3 Rated operation power at AC-23, 400 V KW 3 Rated short-time withistand current two KW 3 Switching power at 400 V KW 3 Conditioned rated short-tircuit current lq KW 3 Number of auxiliary contacts as normally closed contact F 6 Number of auxiliary contacts as change-over contact F 6 Number of auxiliary contacts as change-over contact F 7 Number of auxiliary contacts as change-over contact F 7 Number of auxiliary contacts as change-over contact F 7 Number of auxiliary contacts as change-over contact F 7 Number of auxiliary contacts as change-over contact F 7 Number of auxiliary contacts as change-over contact F 7 Notor drive ptional F 7 7 Sutable for from numting 4-hole F 7 7 Sutable for informounting contro F 7 7 <td>Rated operating voltage</td> <td>V</td> <td>690 - 690</td>	Rated operating voltage	V	690 - 690
Atted permanent current tAC-21,400 V P B Rated operation power at AC-3,400 V KW 2 Rated short-time withstand current lcw KW 3 Rated operation power at AC-23,400 V KW 3 Switching power at 400 V KW 3 Number of auxiliary contacts as normally closed contact KW 1 Number of auxiliary contacts as normally closed contact No 3 Number of auxiliary contacts as normally closed contact Combet device in housing Switch for fort mounting 4-hole Combet device in housing Switch for fort mounting 4-hole No No Suitable for in dinvincuini first dilation Comec	Rated permanent current lu	Α	63
Anard operation power at AC-3, 400 V KW 2 Rated operation power at AC-33, 400 V KW 30 Switching power at AC-23, 400 V KW 30 Switching power at A00 V KW 30 Conditioned rated short-circuit current Iq KM 30 Number of poles F 6 Number of auxiliary contacts as normally closed contact F 6 Number of auxiliary contacts as normally copen contact F 1 Number of auxiliary contacts as normally copen contact F 0 Number of auxiliary contacts as normally copen contact F No Number of auxiliary contacts as normally copen contact F No Number of auxiliary contacts as normally copen contact F No Number of auxiliary contacts as normally copen contact F No Number of auxiliary contacts as normally copen contact F No Number of auxiliary contacts as normally copen contact F No State for from numing 4-hole F No No Suitable for from numining centre F No <	Rated permanent current at AC-23, 400 V	А	63
Rated short-time withstand current low Image: Rated operation power at AC-23, 400 V Image: Rated operation power at AC-23, 400 V Switching power at 400 V Image: Rated operation power at A00 V Image: Rated operation power at A00 V Switching power at 400 V Image: Rated operation power at A00 V Image: Rated operation power at A00 V Conditioned rated short-circuit current lq Image: Rated operation power at A00 V Image: Rated operation power at A00 V Number of auxiliary contacts as normally open contact Image: Rated operation power ontact Image: Rated operation power ontact Number of auxiliary contacts as normally open contact Image: Rated operation power ontact Image: Rated operation power ontact Number of auxiliary contacts as normally open contact Image: Rated operation power ontact Image: Rated operation power ontact Number of auxiliary contacts as normally open contact Image: Rated operation power ontact Image: Rated operation power ontact Number of auxiliary contacts as normally open contact Image: Rated operation power ontact Image: Rated operation power ontact Number of auxiliary contacts as normally open contact Image: Rated open power ontact Image: Rated open power ontact Number of auxiliary contacts as normally open contact Image: Rated open power ontact Image: Rated open power ontact <td< td=""><td>Rated permanent current at AC-21, 400 V</td><td>А</td><td>63</td></td<>	Rated permanent current at AC-21, 400 V	А	63
Reted operation power at AC-23, 400 V INV 0 Switching power at 400 V INV 0 Conditioned rated short-circuit current Iq INV 0 Number of poles I I Number of auxiliary contacts as normally closed contact I I Number of auxiliary contacts as normally closed contact I I Number of auxiliary contacts as normally closed contact I I Number of auxiliary contacts as change-over contact I I Motor drive optional I I I Noter first expression I I I I Suitable for front mounting 4-hole I<	Rated operation power at AC-3, 400 V	kW	22
Withing power at 400 V IMW 0 Conditioned rated short-circuit current Iq FA 0	Rated short-time withstand current lcw	kA	1.3
A A A Number of poles 6 6 Number of auxiliary contacts as normally closed contact 1 1 Number of auxiliary contacts as normally closed contact 1 0 Number of auxiliary contacts as normally closed contact 1 0 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Number of auxiliary contacts as change-over contact 0 0 Suitable for fort mounting centre 0 0 0 Suitable for intermediate mounting 0 0	Rated operation power at AC-23, 400 V	kW	30
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 normally open contact 0 Motor drive optional No Motor drive integrated No Voltage release optional No Device construction Complete device in housing Suitable for front mounting 4-hole No Suitable for intermediate mounting No Suitable for	Switching power at 400 V	kW	30
Number of auxiliary contacts as normally closed contact I I Number of auxiliary contacts as normally open contact I I Number of auxiliary contacts as normally open contact I I Motor drive optional I I I Motor drive integrated No I I Voltage release optional I	Conditioned rated short-circuit current Iq	kA	2
Number of auxiliary contacts as normally open contact I 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 intermediate mounting Yes Suitable for intermediate mounting No Suitable for intermediate mounting Yes Suitable for intermediate mounting Yes <td< td=""><td>Number of poles</td><td></td><td>6</td></td<>	Number of poles		6
Number of auxiliary contacts as change-over contact Image: second s	Number of auxiliary contacts as normally closed contact		1
Motor drive optional Modor drive integrated No Motor drive integrated So No Voltage release optional So No Device construction So So Suitable for ground mounting So Yes Suitable for front mounting 4-hole So No Suitable for front mounting centre So No Suitable for intermediate mounting So So Suitable for intermediate mounting So	Number of auxiliary contacts as normally open contact		1
Motor drive integrated Moder drive integrated<	Number of auxiliary contacts as change-over contact		0
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 Yes Suitable for intermediate mounting No Colour control element Yes Type of electrical connection of main circuit Yes Type of electrical connection (IP), front side Yes	Motor drive optional		No
Device construction Complete device in housing Suitable for ground mounting Yes Suitable for front mounting centre No Suitable for fint mounting centre No Suitable for intermediate mounting Yes Colour control element Yes Type of control element Yes Type of electrical connection of main circuit Yes Type of electrical connection (IP), front side Yes Burger of protectori (IP), front side Yes	Motor drive integrated		No
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 No Type of control element Pes Type of electrical connection of main circuit Yes Buge of protection (IP), front side Image: State of the state	Voltage release optional		No
Suitable for front mounting 4-holeNoSuitable for front mounting centreNoSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementRedType of control elementDoor coupling rotary driveInterlockableYesType of electrical connection of main circuitSectionDegree of protection (IP), front sideSo	Device construction		Complete device in housing
Suitable for front mounting centreNoSuitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementRedType of control elementDoor coupling rotary driveInterlockableYesType of electrical connection of main circuitSciew connectionDegree of protection (IP), front sideMo	Suitable for ground mounting		Yes
Suitable for distribution board installationNoSuitable for intermediate mountingNoColour control elementRedType of control elementDoor coupling rotary driveInterlockableYesType of electrical connection of main circuitScrew connectionDegree of protection (IP), front sideMo	Suitable for front mounting 4-hole		No
Suitable for intermediate mountingNoColour control elementRedType of control elementDoor coupling rotary driveInterlockableYesType of electrical connection of main circuitScrew connectionDegree of protection (IP), front sideMo	Suitable for front mounting centre		No
Colour control elementRedType of control elementDoor coupling rotary driveInterlockableYesType of electrical connection of main circuitScrew connectionDegree of protection (IP), front sideMain	Suitable for distribution board installation		No
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 1065	Suitable for intermediate mounting		No
Interlockable Yes Type of electrical connection of main circuit Screw connection Degree of protection (IP), front side IP65	Colour control element		Red
Type of electrical connection of main circuit Screw connection Degree of protection (IP), front side IP65	Type of control element		Door coupling rotary drive
Degree of protection (IP), front side	Interlockable		Yes
	Type of electrical connection of main circuit		Screw connection
Degree of protection (NEMA) 12	Degree of protection (IP), front side		IP65
	Degree of protection (NEMA)		12

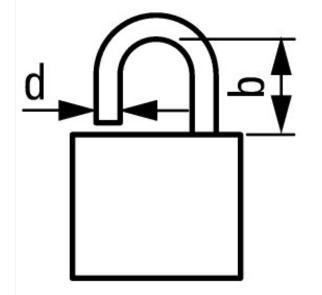
Approvals

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, 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 mm d = 0.16 - 0.31" b + d ≦ 1.85"

≦ 3 padlocks

Assets (links)

Declaration of CE Conformity 00003073 Instruction Leaflets IL03801009Z2018_05