DATASHEET - T5-3-SOND*/V/SVB-SW



Non-standard switch, T5, 100 A, rear mounting, 3 contact unit(s), STOP function, With black rotary handle and locking ring



Part no. T5-3-SOND*/V/SVB-SW Catalog No. 908136

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Product range			Non-standard switch
Part group reference			T5
Stop Function			STOP function
			With black rotary handle and locking ring
Notes			customized version according to form
Degree of Protection			Front IP65
Design			rear mounting
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	55
Rated uninterrupted current	I _u	Α	100
Note on rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$			Rated uninterrupted current $\mathbf{I}_{\mathbf{U}}$ is specified for max. cross-section.
Number of contact units		contact unit(s)	3

Technical data

General

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 _{imp}	V AC	6000
Mechanical shock resistance		g	15
Mounting position			As required
Contacts			
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	I _u	Α	100
Note on rated uninterrupted current $!_{u}$			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ 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	100
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	1700
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

Switching capacity			
cos φ rated making capacity as per IEC 60947-3		Α	950
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		Α	760
400/415 V		Α	740
500 V		Α	590
690 V		Α	420
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at l _e		W	7.5
Current heat loss per auxiliary circuit at I_e (AC-15/230 V)		CO	7.5
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	22
230 V Star-delta	P	kW	30
400 V 415 V	P	kW	30
400 V Star-delta	P	kW	45
500 V	P	kW	30
500 V Star-delta	P	kW	45
690 V	P	kW	15
690 V Star-delta	P	kW	22
Rated operational current motor load switch		KVV	
230 V	1	A	71
	l _e		
230 V star-delta	l _e	Α	100
400V 415 V	l _e	Α	55
400 V star-delta	l _e	Α	95.3
500 V	l _e	Α	44
500 V star-delta	l _e	Α	76.2
690 V	le	Α	17
690 V star-delta	Ie	Α	29.4
AC-21A			
Rated operational current switch			
440 V	l _e	Α	100
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	Р	kW	30
400 V 415 V	P	kW	55
500 V	P	kW	37
690 V	P	kW	30
Rated operational current motor load switch			-
230 V	ı	A	100
400 V 415 V	l _e		
	l _e	A	100
500 V	le	Α	55
690 V	l _e	Α	32
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	l _e	Α	80
Voltage per contact pair in series		V	60
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H _F	< 10 ⁻⁵ ,< 1 failure in 100,000 switching operations
Terminal capacities			
Solid or stranded		2	1 x (2 5 - 35)

Solid or stranded $$\rm mm^2 = 1\,x\,(2.5\,\text{-}\,35)$$

2/5

		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		
Terminal capacity		
Terminal screw		M6

Design verification as per IEC/EN 61439

Design verification as per IEC/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	100
Heat dissipation per pole, current-dependent	P _{vid}	W	7.5
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	50
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 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

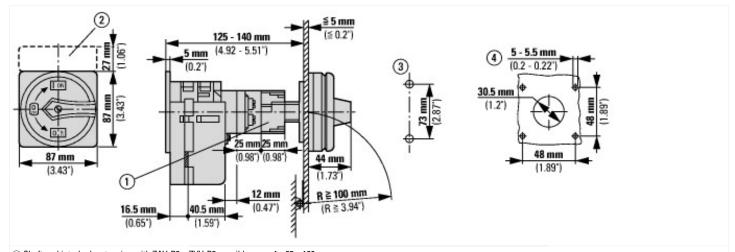
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

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])

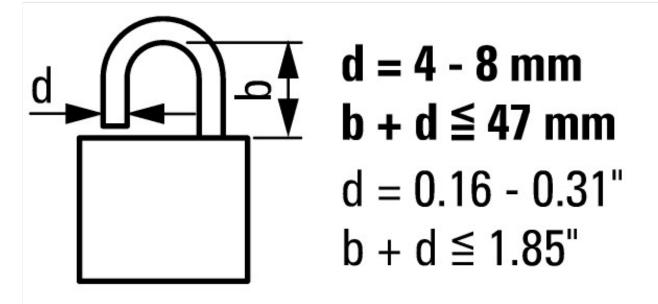
Version as main switch	Yes
Version as maintenance-/service switch	Yes
Version as safety switch	No
Version as emergency stop installation	No

Version as reversing switch			No
Number of switches			1
Max. rated operation voltage Ue AC	1	V	690
Rated operating voltage	,	V	690 - 690
Rated permanent current lu	,	Α	100
Rated permanent current at AC-23, 400 V		Α	100
Rated permanent current at AC-21, 400 V		Α	100
Rated operation power at AC-3, 400 V	I	kW	30
Rated short-time withstand current lcw	ı	kA	1.7
Rated operation power at AC-23, 400 V		kW	55
Switching power at 400 V		kW	55
Conditioned rated short-circuit current Iq	ı	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			Yes
Suitable for front mounting 4-hole			No
Suitable for front mounting centre			No
Suitable for distribution board installation			No
Suitable for intermediate mounting			Yes
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



- Shaft and interlock extension with ZAV-P3 + ZVV-P3 possible; max. 4 x 25 = 100 mm
 ZFS-... Label mount not included as standard
 Drilling dimensions base
 Prilling dimensions door
 Cam switches T5B and T5 have the identical design; the only difference between them is



≦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	