

Number of contact units

Main switch, 9-pole, 32 A, STOP function, 90 °, flush mounting

Powering Business Worldwide*

Part no. T3-5-8345/EA/SVB-SW Article no. 003171

Article no. 0031	171		
Delivery program			
Product range			Main switch maintenance switch Repair switch
Part group reference			T3
Stop Function			STOP function
			With black rotary handle and locking ring
Number of poles			9-pole
Degree of Protection			Front IP65
Design			flush mounting
Contact sequence			0 1 1 0
Switching angle		0	90
Function			OFF OFF
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	15
Rated uninterrupted current	I _u	Α	32

contact 5 unit(s)

Technical data General

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			
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
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Contacts			
Mechanical variables			
Number of poles			9-pole
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	I _u	Α	32
Note on rated uninterrupted current !u			Rated uninterrupted current lu 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 l _e	1.3
Short-circuit rating		-	
Fuse		A gG/gL	35
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	650
Note on rated short-time withstand current lcw	···		Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	1
Switching capacity	1		
$\cos\phi$ rated making capacity as per IEC 60947-3		Α	320
Rated breaking capacity $\cos \phi$ to IEC 60947-3		Α	
230 V		Α	260
400/415 V		Α	260
500 V		Α	240
690 V		Α	170
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at l _e		W	1.1
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	1.1
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	5.5
230 V Star-delta	P	kW	7.5
400 V 415 V	P	kW	11
400 V Star-delta	P	kW	15
500 V	P	kW	15
500 V Star-delta	P	kW	18.5
500 V Star-delta 690 V	P P	kW	11
690 V	Р	kW	11

230 V star-delta	I _e	Α	32
400V 415 V	l _e	A	23.7
400 V star-delta	I _e	A	32
500 V	I _e	A	23.7
500 V star-delta	I _e	A	32
690 V	I _e	A	14.7
690 V star-delta	I _e	A	25.5
AC-21A	'e	^	23.3
Rated operational current switch			
440 V	I _e	Α	32
AC-23A	C		
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
230 V	Р	kW	7.5
400 V 415 V	Р	kW	15
500 V	Р	kW	15
690 V	Р	kW	15
Rated operational current motor load switch			
230 V	I _e	Α	32
400 V 415 V	I _e	Α	32
500 V	l _e	Α	26.4
690 V	I _e	Α	17
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	Α	25
Voltage per contact pair in series		V	60
DC-21A	l _e	Α	
Rated operational current	le	Α	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	l _e	Α	25
Contacts		Quantity	1
48 V			
Rated operational current	l _e	Α	25
Contacts		Quantity	2
60 V			OF.
Rated operational current	l _e	Α	25
Contacts 120 V		Quantity	ð
Rated operational current	I.	Α	12
Contacts	l _e	Quantity	
240 V		Quantity	
Rated operational current	I _e	Α	5
Contacts	e	Quantity	
DC-13, Control switches L/R = 50 ms		Lucinity	
Rated operational current	I _e	Α	20
Voltage per contact pair in series	Ü	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 (1 - 6) 2 x (1 - 6)
Flexible with ferrules to DIN 46228		mm ²	1 x (0.75 - 4) 2 x (0.75 - 4)
Terminal screw			M4

Notes B10g values as per EN ISO 13849-1, table C1 Rating data for approved types VAC 600 Rated operational voltage Ua VAC 600 Rated uninterrupted current max. VAC 600 Main conducting paths Ua A 25 Auxiliary contacts Ig A 10 General Use Ig A 10 Pilot Duty A 600 P 800 P800 Switching capacity Ig A 500 P 800 Maximum motor rating Ig IP 15 Single-phase IP 3 IP 200 V AC IP 3 IP 200 V AC IP 3 IP 480 V AC IP 3 IP	Max. tightening torque		Nm	1.6
Rating data for approved types Rated operational voltage	Technical safety parameters:			
Contacts Read durinterrupted current max. VAC 600 Main conducting paths VAC Path durinterrupted current max. Main conducting paths VAC 25 General use VAC 400 Auxiliary contacts VAC 100 Pilot Duty A600 Pe00 Switching capacity VAC 4600 Maximum motor rating VAC 15 Single-phase PP 15 200 V AC PP 3 200 V AC PP 3 340 V AC PP 3 480 V AC PP 10 560 V AC PP 10 600 V AC PP 10 8 Facting SCCR PR 8 Facting SCCR PR 8 Facting A 4 9 Facting	Notes			B10 _d values as per EN ISO 13849-1, table C1
Rated operational voltage U _u V AC 6000 Rated unintarrupted current max. Iu A 25 General Use Iu A 25 Auxiliary contacts Iu A 10 General Use Iu A 10 Pilot Duty A 10 Switching capacity Feb. A6000 Single-phase Feb. Feb. 120 V AC HP 1.5 200 V AC HP 3 Three-phase HP 3 200 V AC HP 3 430 V AC HP 3 430 V AC HP 3 430 V AC HP 7.5 430 V AC HP 7.5 800 V AC HP 7.5 Basic Rating KA 5 Hat Fautrating KA 5 max. Fuse KA 4 High Fautrating KA 6 max. Fuse KA	Rating data for approved types			
Rated uninterrupted current max. Main conducting paths U A 25 Auxiliary contacts IU A D Concent Use Main conducting paths B D Concent Use AB00 P600	Contacts			
Main conducting paths IU A 25 Auxiliary contacts IU A 10 Pilot Duty A 600 P 600 P600 Switching capacity P600 P600 Maximum motor rating IV A IV Single-phase IV IV IV IV 200 V AC IP IV IV </td <td>Rated operational voltage</td> <td>U_e</td> <td>V AC</td> <td>600</td>	Rated operational voltage	U _e	V AC	600
General use Iu A 25 Auxiliary contacts Iu A 10 General Use Iu A 10 Pilot Duty A600 600 Switching capacity F000 600 Maximum motor rating Image: Maximum motor rating </td <td>Rated uninterrupted current max.</td> <td></td> <td></td> <td></td>	Rated uninterrupted current max.			
Auxiliary contacts Iu A 10 General Use Iu A 10 Pilot Duty A 600 P 600 Switching capacity Image: Control of the pilot of the	Main conducting paths			
	General use	I _U	Α	25
Pilot Duty	Auxiliary contacts			
Switching capacity P 600 Maximum motor rating P 600 Single-phase P 7 120 V AC P 9 200 V AC P 9 240 V AC P 9 Three-phase P 9 200 V AC P 9 480 V AC P 9 480 V AC P 9 480 V AC P 9 5600 V AC P 9 8basic Rating SCCR Basic Rating K A max. Fuse A High fault rating K A max. Fuse A High fault rating K A Solid or flexible conductor with ferrule A Solid or flexible conductor with ferrule AWG Terminal screw AWG 14-10	General Use	I_{U}	Α	10
Maximum motor rating He 15 120 V AC HP 3 240 V AC HP 3 240 V AC HP 3 Three-phase HP 3 200 V AC HP 3 480 V AC HP 3 480 V AC HP 3 600 V AC HP 7.5 8bort Circuit Current Rating SCCR Basic Rating KA 5 max. Fuse A 40 High fault rating KA 10 max. Fuse A 40, Class J Terminal capacity AWG 14-10 Terminal screw MWG 14-10	Pilot Duty			
Single-phase HP 1.5 200 V AC HP 3 240 V AC HP 3 Three-phase HP 3 200 V AC HP 3 240 V AC HP 3 480 V AC HP 7.5 600 V AC HP 10 Short Circuit Current Rating SCCR Basic Rating KA 5 max. Fuse A 40 High fault rating KA 10 max. Fuse A 40, Class J Terminal capacity AWG 14 - 10 Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4 40	Switching capacity			
120 V AC HP 1.5 200 V AC HP 3 240 V AC HP 3 200 V AC HP 3 240 V AC HP 3 480 V AC HP 7.5 600 V AC HP 10 Short Circuit Current Rating SCCR Basic Rating KA 5 max. Fuse A 40 High fault rating KA 10 max. Fuse A 40, Class J Terminal capacity AWG 14 - 10 Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw W4 40	Maximum motor rating			
200 V AC HP 3 240 V AC HP 3 200 V AC HP 3 240 V AC HP 3 480 V AC HP 7.5 600 V AC HP 10 Short Circuit Current Rating SCCR Basic Rating KA 5 max. Fuse A 40 High fault rating KA 10 max. Fuse A 40, Class J Terminal capacity AWG 14 - 10 Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4 M4	Single-phase			
240 V AC HP 3 Three-phase HP 3 200 V AC HP 3 480 V AC HP 7.5 600 V AC HP 10 Short Circuit Current Rating SCCR Fraction of the properties of the propertie	120 V AC		HP	1.5
Three-phase HP 3 200 V AC HP 3 480 V AC HP 7.5 600 V AC HP 10 Short Circuit Current Rating SCCR Basic Rating kA 5 max. Fuse A 40 High fault rating kA 10 max. Fuse A 40, Class J Terminal capacity AWG 14 - 10 Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4 M4	200 V AC		HP	3
200 V AC HP 3 240 V AC HP 3 480 V AC HP 7.5 600 V AC HP 10 Short Circuit Current Rating SCCR Basic Rating kA 5 max. Fuse A 40 High fault rating kA 10 max. Fuse A 40, Class J Terminal capacity AWG 14 - 10 Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4 M4	240 V AC		HP	3
240 V AC HP 3 480 V AC HP 7.5 600 V AC HP 10 Short Circuit Current Rating SCCR Basic Rating kA 5 max. Fuse A 40 High fault rating kA 10 max. Fuse A 40, Class J Terminal capacity AWG 14 - 10 Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4	Three-phase			
480 V AC HP 7.5 600 V AC HP 10 Short Circuit Current Rating SCCR Basic Rating kA 5 max. Fuse A 40 High fault rating kA 10 max. Fuse A 40, Class J Terminal capacity A 40, Class J Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4 M4	200 V AC		HP	3
600 V AC HP 10 Short Circuit Current Rating SCCR Basic Rating kA 5 max. Fuse A 40 High fault rating kA 10 max. Fuse A 40, Class J Terminal capacity A 40, Class J Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4	240 V AC		HP	3
Short Circuit Current Rating Basic Rating kA 5 max. Fuse A 40 High fault rating max. Fuse A 40, Class J Terminal capacity Solid or flexible conductor with ferrule Terminal screw SHORE SHORE MA MA MA MA MA MA MA MA MA M	480 V AC		HP	7.5
Basic Rating max. Fuse A 40 High fault rating max. Fuse A 40, Class J Terminal capacity Solid or flexible conductor with ferrule Terminal screw A 44-10 M4	600 V AC		HP	10
max. Fuse A 40 High fault rating kA 10 max. Fuse A 40, Class J Terminal capacity Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4	Short Circuit Current Rating		SCCR	
High fault rating kA 10 max. Fuse A 40, Class J Terminal capacity Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4	Basic Rating		kA	5
max. Fuse A 40, Class J Terminal capacity Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4	max. Fuse		Α	40
Terminal capacity Solid or flexible conductor with ferrule Terminal screw AWG 14 - 10 M4	High fault rating		kA	10
Solid or flexible conductor with ferrule AWG 14 - 10 Terminal screw M4	max. Fuse		Α	40, Class J
Terminal screw M4	Terminal capacity			
	Solid or flexible conductor with ferrule		AWG	14 - 10
Tightening torque Ib-in 17.6	Terminal screw			M4
	Tightening torque		lb-in	17.6

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	32
Heat dissipation per pole, current-dependent	P _{vid}	W	1.1
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
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.
${\bf 10.2.3.2\ Verification\ of\ resistance\ of\ insulating\ materials\ to\ normal\ heat}$			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			Please enquire
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 6.0

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@ss8.1-27-37-14-03 [AKF060010])

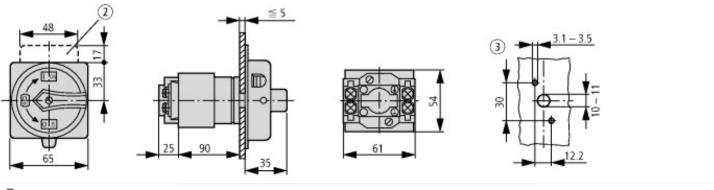
Version as main switch		Yes
Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	Α	32
Rated permanent current at AC-21, 400 V	А	32
Rated operation power at AC-3, 400 V	kW	11
Rated short-time withstand current lcw	kA	0.65
Rated operation power at AC-23, 400 V	kW	15
Switching power at 400 V	kW	15
Conditioned rated short-circuit current Iq	kA	1
Number of poles		9
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		No
Suitable for front mounting center		Yes
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

Approvals

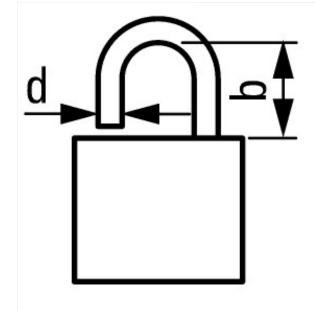
Product Standards	UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking
UL File No.	E36332

UL Category Control No.	NLRV
CSA File No.	12528
CSA Class No.	3211-05
North America Certification	UL listed, CSA certified
Suitable for	Branch circuits, suitable as motor disconnect
Degree of Protection	IEC: IP65; UL/CSA Type 1, 12

Dimensions



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



d = 4 - 8 mm $b + d \le 47 \text{ mm}$ d = 0.16 - 0.31 d = 0.85

Additional product information (links)

IL03801020Z (AWA1150-0586) Cam switches: flush mounting		
IL03801020Z (AWA1150-0586) Cam switches: flush mounting	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801020Z2016_07.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	

≦ 3 padlocks