

Panic switches, 3 pole, 32 A, Cylinder lock SVA, front plate 0-1, 90 °, maintained, flush mounting, P

Powering Business Worldwide

Part no. P1-32/E/SVA(S) Article no. 044977



U11			
Delivery program			
Product range			Switch with locking mechanism
Part group reference			P1
Basic function			Panic switches
			with black thumb grip and front plate
Information about equipment supplied			Auxiliary contact or neutral conductor fitted by user. with two keys
Number of poles			3 pole
Auxiliary contacts			
\ ¹		N/0	0
7		N/C	0
locking arrangement			Cylinder lock SVA
Notes			If the key is withdrawn in position 1 the switch can be switched off but not on again without the key.
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			Front IP65
Design			flush mounting
Contact sequence			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Switching angle		0	90
Switching performance			maintained
Front plate no.			FS 908
front plate			0-1
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	15
Rated uninterrupted current	Iu	Α	32

Technical data General

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			bump field, cyclic, to led doddo 2 dd
Open		°C	-25 - +50
Enclosed		°C	-25 - +40
Overvoltage category/pollution degree		Ü	III/3
Rated impulse withstand voltage	U _{imp}	V AC	6000
Mechanical shock resistance	Oimp		
		g	15 As required
Mounting position Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Contacts			Tinger and back-of-hand proof
Mechanical variables			
Number of poles			3 pole
Auxiliary contacts			
		N/0	0
		N/C	0
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	Iu	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 l _e	2
AB 40 % DF		x l _e	1.6
AB 60 % DF			
		x I _e	1.3
Short-circuit rating		A =: C/=:I	ro.
Fuse Rated short-time withstand current (1 s current)		A gG/gL	
	I _{cw}	A _{rms}	640
Note on rated short-time withstand current lcw	I.e.	1. 4	Current for a time of 1 second
Rated conditional short-circuit current Switching capacity	Iq	kA	80
cos φ rated making capacity as per IEC 60947-3		Α	320
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		Α	260
400/415 V		Α	300
500 V		Α	290
690 V		Α	250
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I _e		W	1.8
Lifespan, mechanical	Operations	x 10 ⁶	> 0.3
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	Р	kW	
220 V 230 V	Р	kW	7.5
400 V 415 V	P	kW	13
500 V	Р	kW	18.5
690 V	Р	kW	15
Rated operational current motor load switch			
230 V	I _e	Α	26.4
400V 415 V	l _e	Α	26.4
500 V	I _e	Α	23.4

690 V	I _e	Α	14.7
AC-21A			
Rated operational current switch			
440 V	I _e	Α	32
AC-23A			
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	18.5
690 V	Р	kW	15
Rated operational current motor load switch			
230 V	I _e	Α	32
400 V 415 V	l _e	A	32
500 V	I _e	A	30
690 V		A	19.8
	I _e	Α	13.0
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	Α	32
Voltage per contact pair in series		V	60
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I _e	Α	25
Contacts		Quantity	1
48 V			
Rated operational current	I _e	Α	25
Contacts		Quantity	2
60 V			
Rated operational current	I _e	Α	25
Contacts		Quantity	2
120 V			
Rated operational current	I _e	Α	12
Contacts		Quantity	3
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 (1,5 - 6) 2 x (1,5 - 6)
Flexible with ferrules to DIN 46228		mm ²	1 x (1 - 4) 2 x (1 - 4)
Terminal screw			M4
Max. tightening torque		Nm	1.6
Technical safety parameters:			
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Terminal capacity			
Terminal screw			M4
Tightening torque		lb-in	14.128

Design verification as per IEC/EN 61439

3			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	32
Heat dissipation per pole, current-dependent	P _{vid}	W	1.8
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		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

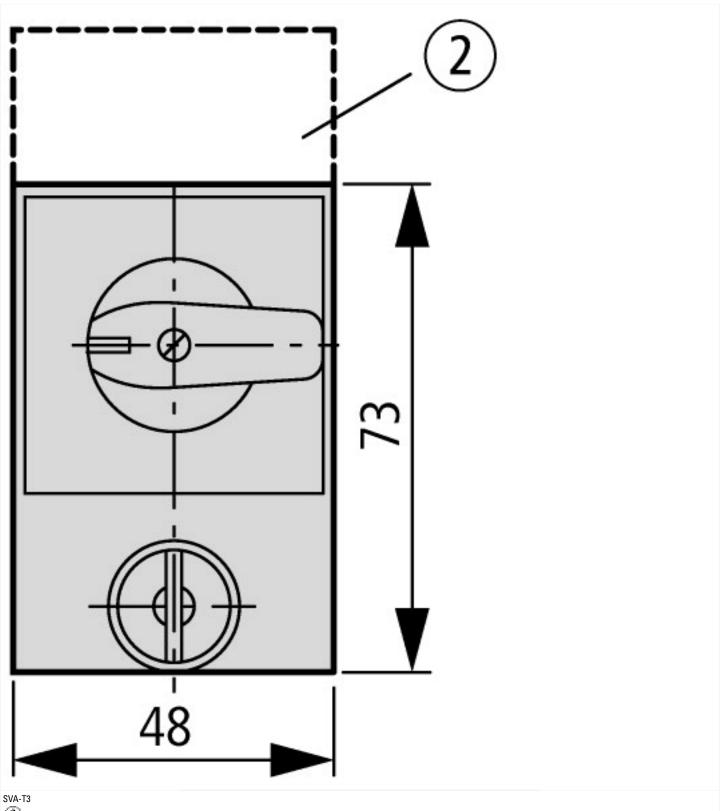
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

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

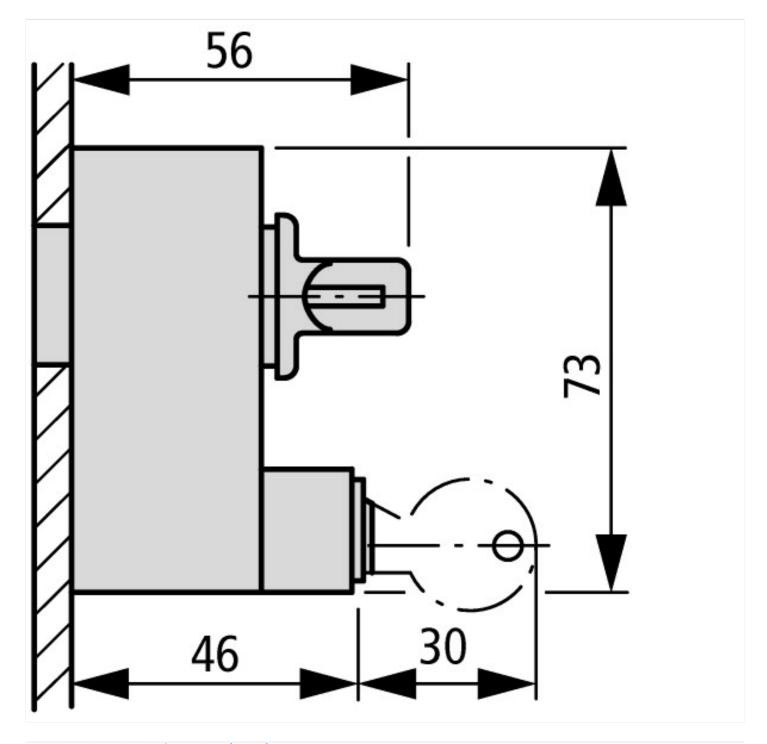
Version as maintenance-/service switch Version as safety switch Version as emergency stop installation Version as reversing switch Max. rated operation voltage Ue AC Rated operating voltage Rated permanent current lu Rated permanent current at AC-21,400 V Rated operation power at AC-3,400 V Rated short-time withstand current lcw Rated operation power at AC-3,400 V Rated short-time withstand current lcw Rated operation power at AC-3,400 V Rated short-time withstand current lcw Rated operation power at AC-3,400 V Rated short-time withstand current lcw Rated operation power at AC-3,400 V Rated short-time withstand current lcw Rated operation power at 400 V Rated operation power at AC-3,400 V Rated operation power at AC-3	[AKF060010])	3,7	
Version as safety switch Version as emergency stop installation Version as reversing switch Max. rated operation voltage Ue AC Rated operating voltage Rated permanent current lu Rated permanent current at AC-21, 400 V Rated permanent current at AC-21, 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-3, 400 V Rated operation power at AC-23, 400 V Rated operation power at AC-3, 400 V Routed operation power at AC-3, 400 V	Version as main switch		No
Version as emergency stop installation No Version as reversing switch Vo 690 Max. rated operation voltage Ue AC V 690 - 690 Rated operating voltage V 690 - 690 Rated permanent current Iu A 3 Rated permanent current at AC-21, 400 V A 32 Rated operation power at AC-3, 400 V kW 13 Rated short-time withstand current lew kA 0.64 Rated operation power at AC-23, 400 V kW 15 Switching power at 400 V kW 15 Conditioned rated short-circuit current Iq kA 80 Number of poles kA 80 Number of auxiliary contacts as normally closed contact kA 90 Number of auxiliary contacts as change-over contact KA No Motor drive optional KA No Motor drive integrated KA No Voltage release optional No No Device construction KA No	Version as maintenance-/service switch		No
Version as reversing switch Max. rated operation voltage Ue AC Rated operating voltage Rated permanent current lu Rated permanent current at AC-21, 400 V Rated permanent current at AC-3, 400 V Rated short-time withstand current lcw Rated short-time withstand current lcw Rated short-time withstand current lcw Rated short-time viltagrated short-circuit current lq No No No No No No No No No N	Version as safety switch		No
Max. rated operation voltage Ue AC V 690 Rated operating voltage V 690 - 690 Rated permanent current Iu A 32 Rated permanent current at AC-21, 400 V A 32 Rated operation power at AC-3, 400 V kW 13 Rated permanent current Icw kA 0.64 Rated operation power at AC-23, 400 V kW 15 Switching power at 400 V kW 15 Conditioned rated short-circuit current Iq kA 80 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 0 0 Number of auxiliary contacts as normally open contact 0 0 Motor drive optional No No Motor drive integrated No No Voltage release optional No No Device construction Built-in device fixed built-in technique	Version as emergency stop installation		No
Rated operating voltage Rated permanent current lu Rated permanent current at AC-21, 400 V 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 Rated operation power at AC-23, 400 V Rated operation power at AC-23, 400 V Rated short-circuit current lcw Rated operation power at 400 V Conditioned rated short-circuit current lq Rated short-circuit current lq Rated short-circuit current lq Rated operation power at 400 V Conditioned rated short-circuit current lq Rated operation power at 400 V Rothing power at 400 V Rot	Version as reversing switch		No
Rated permanent current lu 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 Rated operation power at AC-23, 400 V RW Rated operation power at AC-23, 400 V RW Roted operation power at AC-23, 400 V RW Rote of auxiliary contacts as normally closed contact Rumber of poles Rumber of auxiliary contacts as normally open contact Rumber of auxiliary contacts as normally open contact Rumber of auxiliary contacts as change-over contact Rumber of auxiliary contacts as normally open contact Rumber of auxiliary contacts as normally open contact Rumber of auxiliary contacts as normally closed cont	Max. rated operation voltage Ue AC	V	690
Rated permanent current at AC-21,400 V Rated operation power at AC-3, 400 V Rated short-time withstand current Icw Rated operation power at AC-23,400 V Rated operation power at AC-23,400 V Rated operation power at AC-23,400 V RW Switching power at 400 V RW Switching power at 400 V RW Rougher of poles Rumber of poles Rumber of auxiliary contacts as normally closed contact Rumber of auxiliary contacts as normally open contact Rumber of auxiliary contacts as change-over contact Rumber of auxiliary contacts as change-over contact Rumber of integrated Ru	Rated operating voltage	V	690 - 690
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-23, 400 V Rw Switching power at 400 V Roditioned rated short-circuit current Iq Rumber of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of inventional Motor drive optional Motor drive integrated Voltage release optional Device construction Rated operation power at AC-3, 400 V Rw 13 Rated operation power at AC-3, 400 V Rw 15 Rated operation power at AC-3, 400 V Rw 15 Selection Short Sho	Rated permanent current lu	А	32
Rated short-time withstand current Icw Rated operation power at AC-23, 400 V WW 15 Switching power at 400 V Conditioned rated short-circuit current Iq Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated Voltage release optional Device construction Rated short-time withstand current Icw RW 15 80 80 80 80 80 80 80 80 80 8	Rated permanent current at AC-21, 400 V	А	32
Rated operation power at AC-23, 400 V KW 15 Conditioned rated short-circuit current Iq KA 80 Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional Motor drive integrated Voltage release optional Device construction KW 15 6 0 0 0 0 0 0 0 0 0 0 0 0	Rated operation power at AC-3, 400 V	kW	13
Switching power at 400 V Conditioned rated short-circuit current Iq kA 80 Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Notor drive optional Motor drive integrated Voltage release optional Device construction kW 15 0 0 0 0 0 0 0 0 0 0 0 0 0	Rated short-time withstand current lcw	kA	0.64
Conditioned rated short-circuit current Iq kA 80 Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Notor drive optional Motor drive integrated Voltage release optional Device construction KA 80 3 4 4 4 5 6 7 7 8 8 8 8 8 8 8 8 8 8 8	Rated operation power at AC-23, 400 V	kW	15
Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No Voltage release optional Device construction 3 No 3 No No No Built-in device fixed built-in technique	Switching power at 400 V	kW	15
Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional No Voltage release optional No Device construction Device construction O O O O O O O O O O O O O	Conditioned rated short-circuit current Iq	kA	80
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Notor drive optional Notor drive integrated Notor drive integrated Notor drive optional Notor drive integrated	Number of poles		3
Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No Voltage release optional Device construction O Device on the contacts as change-over contact No Built-in device fixed built-in technique	Number of auxiliary contacts as normally closed contact		0
Motor drive optional No Motor drive integrated No Voltage release optional No Device construction Built-in device fixed built-in technique	Number of auxiliary contacts as normally open contact		0
Motor drive integrated No Voltage release optional No Device construction No Built-in device fixed built-in technique	Number of auxiliary contacts as change-over contact		0
Voltage release optional No Device construction Built-in device fixed built-in technique	Motor drive optional		No
Device construction Built-in device fixed built-in technique	Motor drive integrated		No
	Voltage release optional		No
Suitable for ground mounting No	Device construction		Built-in device fixed built-in technique
	Suitable for ground mounting		No

Suitable for front mounting 4-hole	Yes
Suitable for front mounting center	No
Suitable for distribution board installation	No
Suitable for intermediate mounting	No
Colour control element	Black
Type of control element	Toggle
Interlockable	No
Type of electrical connection of main circuit	Screw connection
Degree of protection (IP), front side	IP65

Dimensions



2 ZFS-... Label mount not included as standard



Additional product information (links)

IL03801015Z (AWA1150-1367, AWA115-1368) Cylinder lock, Padlocking feature		
IL03801015Z (AWA1150-1367, AWA115-1368) Cylinder lock, Padlocking feature	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801015Z2016_07.pdf	
Form for ordering non-standard front plates	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=4.87	
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	