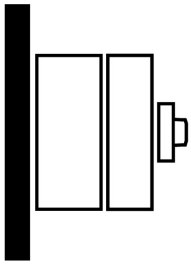
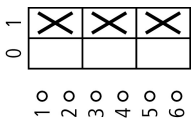
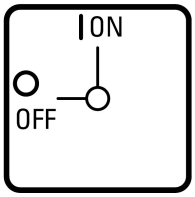
Main switch, +housing, 3p, 32A, handle red yellow, lockable

Part no. P1-32/I2/SVB
Article no. 207314

Powering Business Worldwide

Delivery programme

Product range			Main switch maintenance switch Repair switch
Part group reference			P1
Emergency STOP			Emergency-Stop function
			With red rotary handle and yellow locking ring
Notes			auxiliary contact or neutral conductor fitted by user
Number of poles			3 pole
Auxiliary contacts			
		N/O	0
		N/C	0
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP65
			totally insulated
Design			surface mounting
			
Contact sequence			
Function			
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	15
Rated uninterrupted current	I_u	A	32

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		°C	

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			3 pole
Auxiliary contacts			
		N/O	0
		N/C	0
Electrical characteristics			
Rated operational voltage	U_e	V AC	690
Rated uninterrupted current	I_u	A	32
Note on rated uninterrupted current $!_u$			Rated uninterrupted current Iu 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	50
Rated short-time withstand current (1 s current)	I_{cw}	A_{rms}	640
Note on rated short-time withstand current Icw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	In = 80: 50

Switching capacity

cos φ rated making capacity as per IEC 60947-3		A	320
Rated breaking capacity cos φ to IEC 60947-3		A	
230 V		A	260
400/415 V		A	300
500 V		A	290
690 V		A	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	P	kW	
220 V 230 V	P	kW	7.5
400 V 415 V	P	kW	13
500 V	P	kW	18.5
690 V	P	kW	15
Rated operational current motor load switch			
230 V	I_e	A	26.4
400V 415 V	I_e	A	26.4
500 V	I_e	A	23.4
690 V	I_e	A	14.7
AC-21A			
Rated operational current switch			
440 V	I_e	A	32
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	

230 V	P	kW	7.5
400 V 415 V	P	kW	15
500 V	P	kW	18.5
690 V	P	kW	15
Rated operational current motor load switch			
230 V	I_e	A	32
400 V 415 V	I_e	A	32
500 V	I_e	A	30
690 V	I_e	A	19.8
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I_e	A	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	A	25
Contacts		Quantity	1
48 V			
Rated operational current	I_e	A	25
Contacts		Quantity	2
60 V			
Rated operational current	I_e	A	25
Contacts		Quantity	2
120 V			
Rated operational current	I_e	A	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

Data for design verification according to IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	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
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 5.0

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@ss8-27-37-14-03 [AKF060009])

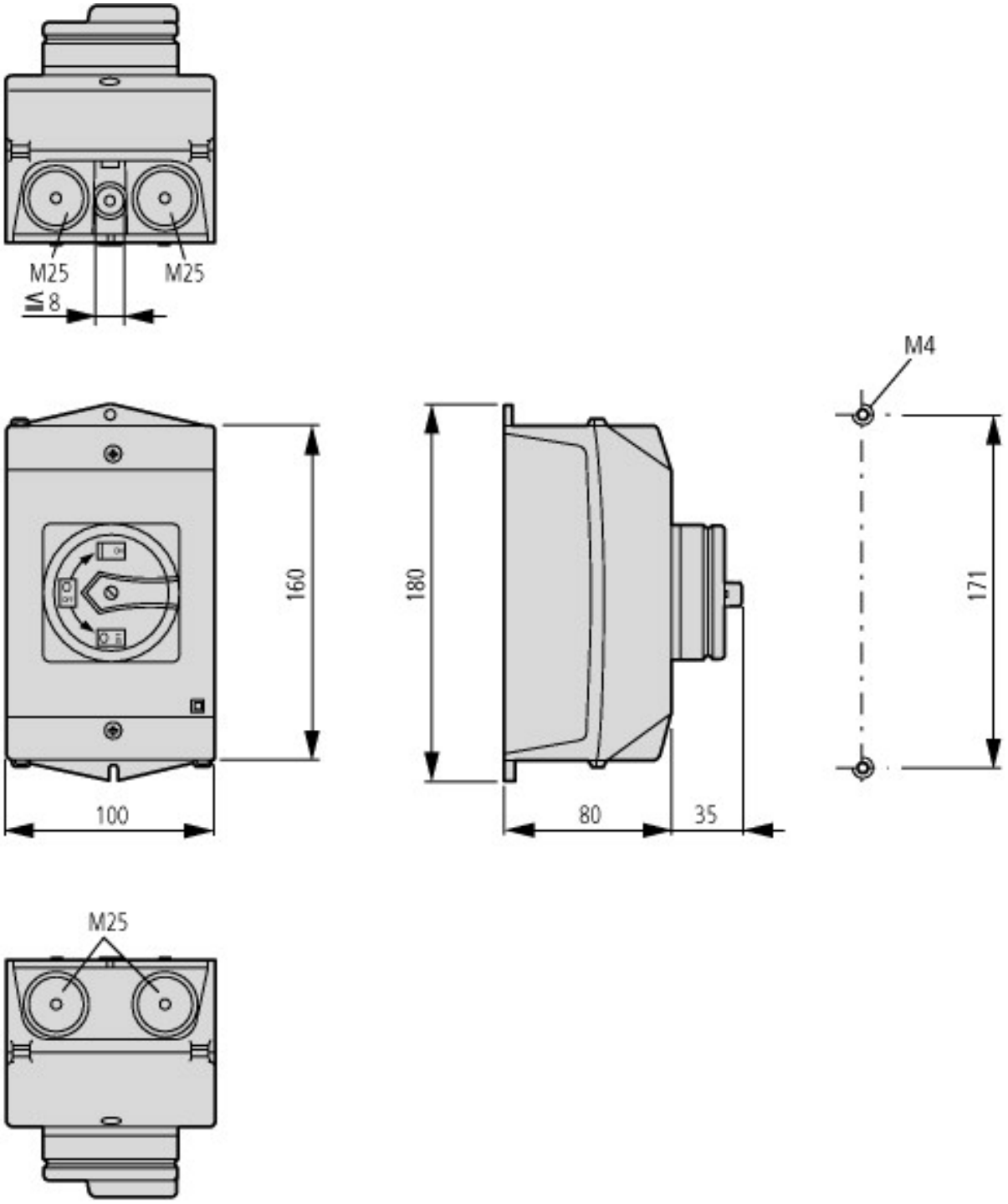
Version as switch disconnector compact		Yes
Version as main switch		Yes
Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		Yes
Max. rated operation voltage Ue AC	V	690
Rated permanent current Iu	A	32
Rated operation power AC-3, 400 V	kW	13
Rated operation power at AC-23, 400 V	kW	15
Conditioned rated short-circuit current Iq	kA	80
Number of poles		3
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		No
Suitable for front mounting center		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Type of control element		-
Interlockable		Yes
Connection type main current circuit		Screw connection
Degree of protection (IP), front side		IP65

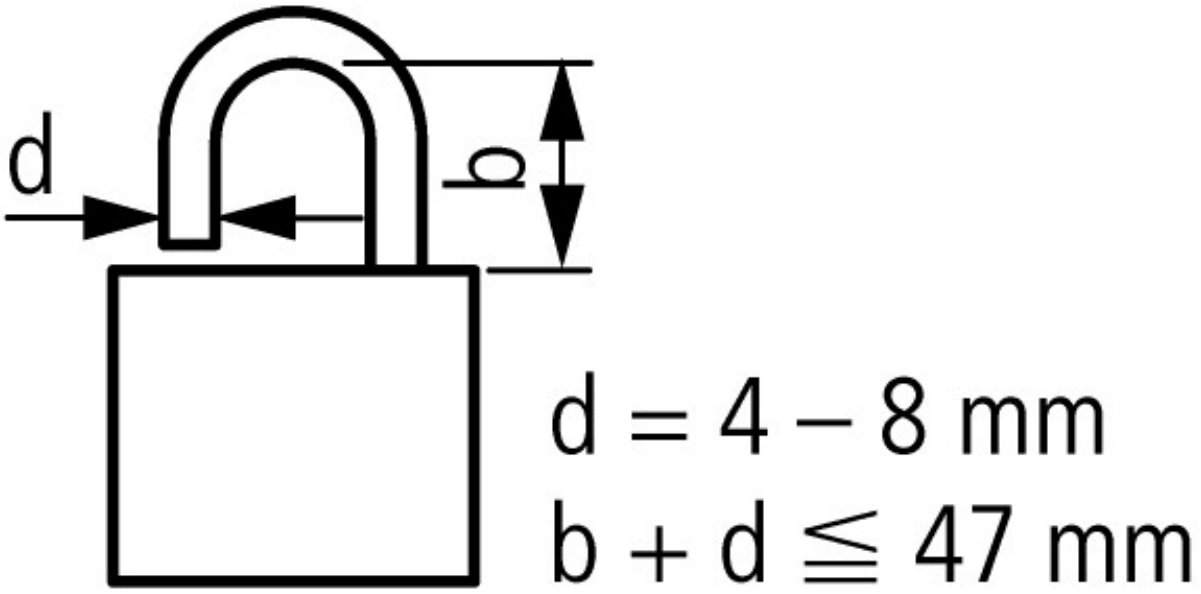
Approvals

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
Specially designed for North America		Yes, in combination with "+NA-I2" (105866)
Suitable for		Branch circuits, suitable as motor disconnect
Degree of Protection		IEC: IP65; UL/CSA Type 1, 3R, 12

Dimensions





3 padlocks

Additional product information (links)

IL03802001Z (AWA1150-1689) Switch-Disconnectors in insulated enclosures	
IL03802001Z (AWA1150-1689) Switch-Disconnectors in insulated enclosures	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03802001Z2015_02.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 Zone 22	http://www.coopercrouse-hinds.eu/en/products/10-ex-safety-and-main-current-switches.html
UL/CSA: Rating data for approved types	http://ecat.moeller.net/flip-cat/?edition=HPLTF&startpage=4.90