DATASHEET - P1-32/V/SVB



Main switch, P1, 32 A, rear mounting, 3 pole, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position



Part no. P1-32/V/SVB Catalog No. 095676

EL-Nummer 0001456116 (Norway)

Delivery program			
Product range			Main switch maintenance switch Repair switch
Part group reference			P1
Stop Function			Emergency switching off function
			With red rotary handle and yellow locking ring
Information about equipment supplied			Auxiliary contact or neutral conductor fitted by user.
Number of poles			3 pole
Auxiliary contacts			
1		N/0	0
7		N/C	0
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			Front IP65
Design			rear mounting
Contact sequence			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Function			OFF O
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	15
Rated uninterrupted current	l _u	Α	32
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.
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Technical data

delieral		
Standards		IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL Switch-disconnector according to IEC/EN 60947-3 NEMA12
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	Сппр		15
Mounting position		g	As required
Contacts			As required
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	Iu	A	32
	'u	^	Rated uninterrupted current I_u is specified for max. cross-section.
Note on rated uninterrupted current !u			nated difficent upled current i _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	50
Rated short-time withstand current (1 s current)	I _{cw}	A_{rms}	640
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	80
Switching capacity			
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 l _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	le	Α	26.4
400V 415 V	le	Α	26.4
500 V	l _e	Α	23.4
690 V	I _e	Α	14.7
AC-21A			
Rated operational current switch			
440 V	I _e	A	32
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
230 V	P	kW	7.5
400 V 415 V	P	kW	15

Rated operational current motor load switch 230 V 1	F00.14	D	130/	40.5	
Raced operational current motor lead exhibit	500 V	Р	kW	18.5	
200		Р	kW	15	
400 V 415 V 415 V 42	Rated operational current motor load switch				
SIDY	230 V	I _e	Α	32	
CO CO CO CO CO CO CO CO	400 V 415 V	I _e	Α	32	
Both	500 V	l _e	Α	30	
DC-1, Lead-drowlaw workchert LM* 1 mins IV A 30 Vollage pet serieste spair in series V 60 DC-2L, more frait without IM* 1 mins V 60 DC-2L, more frait without IM* 1 mins V 60 2 NV 2NV V Basted apperational current Ig A 25 Certories Guarding 2 20 Basted apperational current Ig A 25 Certories Guarding 2 2 Basted apperational current Ig A 2 Certories Guarding 2 2 Certories Guarding 2 2 Certories Guarding 2 2 Certories Guarding 2 2 Certories Guarding 3 1 1 Certories Guarding 3 1 1 1 1 1 1 1 1 1 1 1 1 1			۸		
DC-1, Load-break switched LNR = 1 ms		'e	A	13.0	
Rated aperational current Value aperational current					
Voltage per contact pair in series Voltage p					
DC-22A motor load switch UR = 15 ms 2	Rated operational current	l _e	Α	32	
Rate operational current	Voltage per contact pair in series		V	60	
Rated operational current 48 V Connects	DC-23A, motor load switch L/R = 15 ms				
Contacts	24 V				
Contracts	Rated operational current	I _e	Α	25	
Auto operational current Image			Quantity	1	
Rated operational current I			Quartery		
Contracts			^	25	
Final dispersational current		1 _e			
Rated operational current			Quantity	2	
Contacts 120 V	60 V				
120 V Rated operational current	Rated operational current	le	Α	25	
Rated operational current Iq Au 12 Contacts Quantity Ignality Iq 2 of 3 of 1 fault in 100000 operations Eterminal capacities Sould or stranded Iq Iq 2 of 3 of 1 fault in 100000 operations Flexible with forrules to DIN 46228 Iq Iq 2 of 2 of 1 of 1 of 1 of 1 of 1 of 1 of	Contacts		Quantity	2	
Rated operational current Iq Au 12 Contacts Quantity Ignality Iq 2 of 3 of 1 fault in 100000 operations Eterminal capacities Sould or stranded Iq Iq 2 of 3 of 1 fault in 100000 operations Flexible with forrules to DIN 46228 Iq Iq 2 of 2 of 1 of 1 of 1 of 1 of 1 of 1 of	120 V				
Contacts	Rated operational current	ام	Α	12	
Control circuit reliability at 24 V DC, 10 mA Feature probability Hy Evolution 1000000 operations Terminal capacities Val. 5, -6) Solid or stranded mm² 2, 2 (1,5 -6) Floxible with ferrules to DIN 48228 mm² 3, 2 (1,5 -6) Torminal screw M 44 Tightening torque for terminal screw mm² 3, 2 (1,5 -6) 16 Torminal screw Nm 1,6 16 Rating data for approved types Rating data for approved types Rated operational voltage Up VAC 60 General use A 30 9 General use A 30 60 Switching capacity A 4500 60 <		6			
Principal capacities		Fle			
Solid or stranded mm² 1x (1.5-6) Flexible with ferrules to DIN 46228 mm² 1x (1.4) Terminal screw 1x (1.4) 2x (1.4) Tightening torque for teminal screw 1x (1.4) 4x (1.4) Tightening torque for teminal screw 1x (1.4) 4x (1.4) Tightening torque for teminal screw 1x (1.4) 4x (1.4) Tightening torque for teminal screw 1x (1.4) 4x (1.4) Tightening torque for teminal screw 1x (1.4) 4x (1.4) Tightening torque for teminal screw 1x (1.4) 4x (1.4) Tightening torque for teminal screw 1x (1.4) 4x (1.4) Tight to grade for teminal screw 1x (1.4) 4x (1.4) Rated uninterrupted current max 2x (1.4) 4x (1.4) Auxiliary contacts 3x (1.4) 4x (1.4) General Use 4x (1.4) 4x (1.4) Auxiliary contacts 4x (1.4) 4x (1.4) Fluid Duty 4x (1.4) 4x (1.4) Switching capacity 4x (1.4) 4x (1.4) Maximum mort raig 4x (1.4) 4x (1.4)	Control circuit reliability at 24 V DC, 10 mA		HF	< 10 ⁻⁵ , < 1 fault in 100000 operations	
Flexible with ferrules to DIN 46228	Terminal capacities				
Flexible with ferrules to DIN 46228 I x [1 · 4] 2 x [1 · 4] 2 x [1 · 4] 2 x [1 · 4] Terminal screw Nm 1.6 Toth class afety parameters: With the parameters and the parameters are proved types With the parameter by the parameters are proved types Rated operational voltage Ue VAC 600 Rated uninterrupted current max. Washilary contacts A 30 General use Ue VAC 90 General Use Maxiliary contacts A 90 Switching capacity B 1 Single-phase B 2 120 VAC HP 2 240 VAC HP 3 340 VAC HP 5 340 VAC HP 5 450 VAC </td <td>Solid or stranded</td> <td></td> <td>mm²</td> <td>1 x (1,5 - 6)</td>	Solid or stranded		mm ²	1 x (1,5 - 6)	
Tarminal screw X 1-4 Tightening torque for terminal screw M 4 Tightening torque for terminal screw M 8. Tightening torque for terminal screw W M 8. Total casety parameters: W B 10 _d values as per EN ISO 13849-1, table C1 Rated perational voltage W V AC 600 Rated operational voltage V AC 600 AC Rated operational voltage V AC 600 AC AC General use Main conducting paths A 9 AC					
Terminal screw MM 1.6 Technical safety parameters: Wotes John data for approved types Contacts VAC Biolog values as per EN ISO 13849-1, table C1 Rated operational voltage VAC 600 Rated on interrupted current max. VAC 600 Main conducting paths A 3 General use Iu A 0 Auxiliary contacts Iu A 10 Pilot Duty A 10 400 Switching capacity PROPER PROPER PROPER Maximum motor rating II IP 1 Single-phase IP 1 2 200 V AC IP 2 2 200 V AC IP 3 3 Three-phase IP 3 3 240 V AC IP 3 3 340 V AC IP 3 3 450 V AC IP 3 3	Flexible with ferrules to DIN 46228		mm ²	1 x (1 - 4) 2 x (1 - 4)	
Tightening torque for terminal screw Name 1.6 Technical safety parameters: Notes B10 _d values as per EN ISO 13849-1, table C1 Rating data for approved types VAC 600 Rated operational voltage VBC 600 Rated uninterrupted current max. Amain conducting paths Amailiary contacts Amailiary co	Terminal screw				
Total safety parameters: Motes Bl0d values as per EN ISO 13849-1, table C1 Rating data for approved types Up VAC Bl0d values as per EN ISO 13849-1, table C1 Rated operational voltage Up VAC 600 Rated uninterrupted current max. Main conducting paths General use A DO Auxiliary contacts IU A 600 Pliet Duty A 600 Pool Per Book Switching capacity A 600 Maximum motor rating IP A 600 Single-phase IP IP Pool 2 200 V AC IP IP <th colspan<="" td=""><td></td><td></td><td>Nm</td><td></td></th>	<td></td> <td></td> <td>Nm</td> <td></td>			Nm	
Notes					
Rated operational voltage	Notes			B10 _d values as per EN ISO 13849-1, table C1	
Contacts Ue V AC 600 Rated operational voltage V AC 600 Rated uninterrupted current max. V AC 100 Main conducting paths AU 300 Auxiliary contacts Iu AU 100 General Use Iu AU 4600 Pilot Duty AU 4600 P600 Switching capacity HP 100 Maximum motor rating HP 1 200 V AC HP 2 240 V AC HP 3 Three-phase HP 3 200 V AC HP 7.5 480 V AC HP 7.5 480 V AC HP 10 480 V AC HP 10 600 V AC HP 10 600 V AC HP 10 600 V AC HP 10	Rating data for approved types				
Rated operational voltage Ue V AC 600 Rated uninterrupted current max. A 4 Main conducting paths A 30 General use Auxiliary contacts A 10 General Use Pilot Duty A 600 P 600 Pilot Duty A 600 P 600 P 600 Switching capacity P 600 P 600 Single-phase P P 1 1 200 V AC P P 2 2 240 V AC P P 3 3 Three-phase P P 3 3 200 V AC P P 3 3 480 V AC P P 0 10	Contacts				
Rated uninterrupted current max. Keneral use Auxiliary contacts Auxiliary contacts Auxiliary Contacts Auxiliary Acquains Auxiliary Contacts Auxiliary Acquains Auxiliary Contacts Auxiliary Acquains Auxiliary Contacts Auxiliary Conta		U _o	V AC	600	
Main conducting paths Amount of paths Amou		-6		•••	
General use Auxiliary contacts Auxiliary cont					
Auxiliary contacts Iu A 10 General Use Iu A 10 Pilot Duty A 600 P600 600 P600 Switching capacity					
Fliot Duty			Α	30	
Pilot Duty A 600 P 600 Switching capacity A 600 P 600 Maximum motor rating B 1 Single-phase HP 1 120 V AC HP 2 200 V AC HP 3 Three-phase HP 3 200 V AC HP 3 200 V AC HP 3 480 V AC HP 7.5 480 V AC HP 10 600 V AC HP 15	Auxiliary contacts				
Switching capacity P 600 Maximum motor rating ————————————————————————————————————	General Use	l _U	Α	10	
Switching capacity Maximum motor rating Feet Three-phase HP 1 120 V AC HP 2 200 V AC HP 3 Three-phase HP 3 200 V AC HP 3 200 V AC HP 3 480 V AC HP 7.5 480 V AC HP 10 600 V AC HP 15	Pilot Duty				
Maximum motor rating Feature 1 Single-phase HP 120 V AC HP 200 V AC HP 240 V AC HP 3 Three-phase 200 V AC HP 480 V AC HP 480 V AC HP 600 V AC HP 15	Switching canacity			r out	
Single-phase HP 1 120 V AC HP 2 240 V AC HP 3 Three-phase HP 3 200 V AC HP 3 240 V AC HP 7.5 480 V AC HP 10 600 V AC HP 15					
120 V AC HP 1 200 V AC HP 2 240 V AC HP 3 Three-phase HP 3 200 V AC HP 3 240 V AC HP 7.5 480 V AC HP 10 600 V AC HP 15					
200 V AC HP 2 240 V AC HP 3 Three-phase HP 3 200 V AC HP 3.5 480 V AC HP 10 600 V AC HP 15					
240 V AC HP 3 Three-phase 480 V AC HP 3 480 V AC HP 7.5 480 V AC HP 10 600 V AC HP 15				1	
Three-phase HP 3 200 V AC HP 7.5 480 V AC HP 10 600 V AC HP 15	200 V AC		HP	2	
200 V AC HP 3 240 V AC HP 7.5 480 V AC HP 10 600 V AC HP 15	240 V AC		HP	3	
240 V AC HP 7.5 480 V AC HP 10 600 V AC HP 15	Three-phase				
240 V AC HP 7.5 480 V AC HP 10 600 V AC HP 15	200 V AC		HP	3	
480 V AC					
600 V AC HP 15					
Short Girduit Guirent Rating SCUR			ПГ	10	

Basic Rating	kA	5
max. Fuse	Α	110
High fault rating	kA	10
max. Fuse	А	50, Class J
Terminal capacity		
Solid or flexible conductor with ferrule	AWG	14 - 8
Terminal screw		M4
Tightening torque	lb-in	14.1

Design verification as per IEC/EN 61439

Design vermeation as per 120/214 01-35			
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			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])

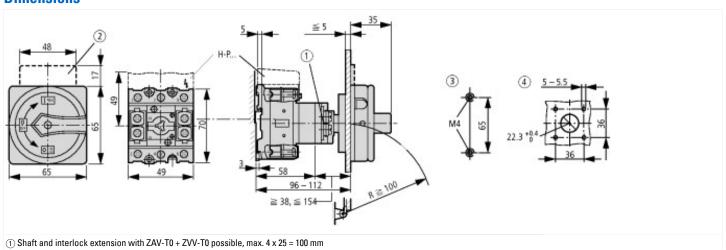
[AKT000013])			
Version as main switch	Yes		
Version as maintenance-/service switch	Yes		
Version as safety switch	No		
Version as emergency stop installation	Yes		
Version as reversing switch	No		

Number of switches		1
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	A	32
Rated permanent current at AC-23, 400 V	A	32
Rated permanent current at AC-21, 400 V	А	32
Rated operation power at AC-3, 400 V	kW	13
Rated short-time withstand current lcw	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
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 centre		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Colour control element		Red
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)		12

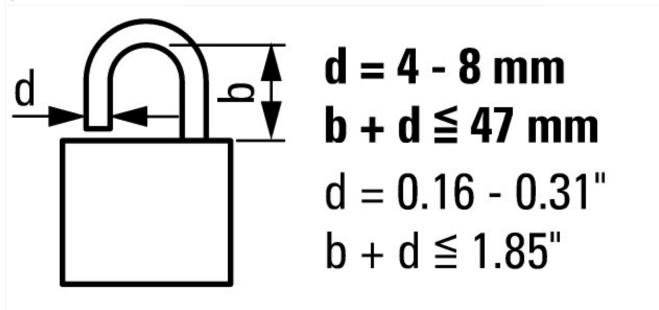
Approvals

• •	
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
Suitable for	Branch circuits, suitable as motor disconnect
Degree of Protection	IEC: IP65; UL/CSA Type 1, 12

Dimensions



Drilling dimensions door



≦3 padlocks

Assets (links)

Declaration of CE Conformity

00003102

Instruction Leaflets

IL03802004Z2018_05