DATASHEET - P3-63/V/SVB-SW



Main switch, P3, 63 A, rear mounting, 3 pole, STOP function, With black rotary handle and locking ring, Lockable in the 0 (Off) position



Part no. P3-63/V/SVB-SW Catalog No. 060230

Delivery program			
Product range			Main switch maintenance switch Repair switch
Part group reference			P3
Stop Function			STOP function
			With black rotary handle and locking ring
Information about equipment supplied			Auxiliary contact or neutral conductor fitted by user.
Number of poles			3 pole
Auxiliary contacts			
C		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			O OFF
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	30
Rated uninterrupted current	I _u	Α	63

Technical data

Note on rated uninterrupted current !u

General		
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 uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section.

Rated impulse withstand voltage	U_{imp}	V AC	6000
Mechanical shock resistance		g	15
Mounting position			As required
Contacts			
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	I _u	Α	63
Note on rated uninterrupted current !u			Rated uninterrupted current $I_{\rm u}$ 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 l _e	1.3
		v 16	1.0
Short-circuit rating		A = C/=1	00
Fuse Rated short-time withstand current (1 s current)		A gG/gL	1260
	I _{cw}	A _{rms}	
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	4
Switching capacity cos φ rated making capacity as per IEC 60947-3		Α	800
Rated breaking capacity os φ to IEC 60947-3		A	000
230 V			640
		A	
400/415 V		A	600
500 V		A	590
690 V		Α	340
Safe isolation to EN 61140		V AC	440
between the contacts		V AC	440
Current heat loss per contact at l _e	•	W	4.5
Lifespan, mechanical	Operations	x 10 ⁶	> 0.1
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	Р	kW	
220 V 230 V	P	kW	15
400 V 415 V	P	kW	30
500 V	P	kW	30
690 V	P	kW	30
Rated operational current motor load switch			
230 V	l _e	Α	51
400V 415 V	l _e	Α	55
500 V	l _e	Α	44
690 V	I _e	Α	22.1
AC-21A			
Rated operational current switch			
440 V	I _e	Α	63
AC-23A	Ü		
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	18.5
400 V 415 V	P	kW	30
500 V	P	kW	45
			-

690 V	P	kW	55		
Rated operational current motor load switch					
230 V	I _e	Α	63		
400 V 415 V	l _e	Α	63		
500 V	I _e	Α	63		
690 V	I _e	A	63		
DC					
DC-1, Load-break switches L/R = 1 ms					
Rated operational current	I _e	A	63		
	·e	V	60		
Voltage per contact pair in series		V	60		
DC-23A, motor load switch L/R = 15 ms					
24 V					
Rated operational current	le	Α	50		
Contacts		Quantity	1		
48 V					
Rated operational current	l _e	Α	50		
Contacts		Quantity	2		
60 V					
Rated operational current	I _e	Α	50		
Contacts		Quantity	2		
120 V					
Rated operational current	I _e	Α	25		
Contacts		Quantity	3		
Control circuit reliability at 24 V DC, 10 mA	Fault	H _F	< 10 ⁻⁵ ,< 1 failure in 100,000 switching operations		
	probability		CTO / CTIONAGE IN 1886/000 SWIGHTING OPERATION		
Terminal capacities					
Solid or stranded		mm ²	1 x (2,5 - 35) 2 x (2,5 - 10)		
Flexible with ferrules to DIN 46228		mm ²	1 x (1.5 - 25)		
			2 x (1.5 - 6)		
Terminal screw			M5		
Tightening torque for terminal screw		Nm	3		
Technical safety parameters:					
Notes B10 _d values as per EN ISO 13849-1, table C1					
Rating data for approved types Contacts					
Rated operational voltage		V AC	000		
	U _e	V AC	600		
Rated uninterrupted current max.					
Main conducting paths					
General use		Α	60		
Auxiliary contacts					
General Use	I _U	Α	10		
Pilot Duty			A 600 P 600		
Switching capacity					
Maximum motor rating					
Single-phase					
120 V AC		НР	3		
200 V AC		HP	7.5		
240 V AC		нР НР			
		TH	10		
Three-phase		Пυ	15		
200 V AC		HP	15		
240 V AC		HP	15		
480 V AC		HP	40		
600 V AC		HP	50		
Short Circuit Current Rating		SCCR			
Basic Rating		kA	10		

max. Fuse	А	150
Terminal capacity		
Solid or flexible conductor with ferrule	AWG	14 - 2
Terminal screw		M5
Tightening torque	lb-in	26.5

Design verification as per IEC/EN 61439

besign vermountion as per 120/214 01403			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	63
Heat dissipation per pole, current-dependent	P _{vid}	W	4.5
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 switch gear must be observed. $\label{eq:specifications}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
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])

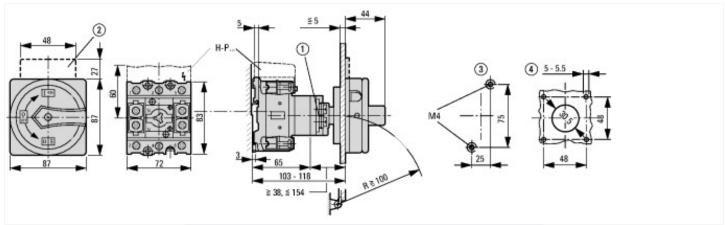
[AKF060013])			
Version as main switch			Yes
Version as maintenance-/service switch			Yes
Version as safety switch			No
Version as emergency stop installation			No
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage Ue AC	V	1	690
Rated operating voltage	V	1	690 - 690

Rated permanent current lu	A	A	63
Rated permanent current at AC-23, 400 V	A	A	63
Rated permanent current at AC-21, 400 V	A	A	63
Rated operation power at AC-3, 400 V	k	kW	30
Rated short-time withstand current lcw	k	kA	1.26
Rated operation power at AC-23, 400 V	k	kW	30
Switching power at 400 V	k	kW	30
Conditioned rated short-circuit current Iq	k	kA	4
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			Yes
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			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)			12

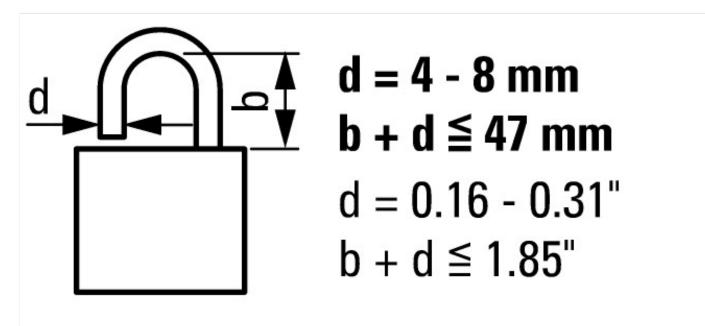
Approvals

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



- 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



≦3 padlocks