DATASHEET - P3-63/EA/SVB/N



Delivery program

Main switch, P3, 63 A, flush mounting, 3 pole \pm N, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position



Part no. P3-63/EA/SVB/N

Catalog No. 010398

EL-Nummer 0001417003

(Norway)

Product range Main switch maintenance switch Repair switch Part group reference Р3 Emergency switching off function Stop Function With red rotary handle and yellow locking ring Information about equipment supplied auxiliary contact fitted by user. Number of poles 3 pole + N **Auxiliary contacts** N/O n N/C 0 Locking facility Lockable in the 0 (Off) position Degree of Protection Front IP65 Design flush mounting

Function ION OFF

400 V P kW 30

Rated uninterrupted current I_u A 63

Note on rated uninterrupted current I_u is specified for max. cross-section.

Technical data

Motor rating AC-23A, 50 - 60 Hz

Contact sequence

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			111/3
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 + N
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 $\mathbf{I}_{\mathbf{u}}$ 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	80
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	1260
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	Ч		
cos φ rated making capacity as per IEC 60947-3		Α	800
Rated breaking capacity $\cos \phi$ to IEC 60947-3		Α	
230 V		Α	640
400/415 V		Α	600
500 V		Α	590
690 V		Α	340
Safe isolation to EN 61140			
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	Р	kW	15
400 V 415 V	Р	kW	30
500 V	Р	kW	30
690 V	P	kW	30
Rated operational current motor load switch			
230 V	le	Α	51
400V 415 V	I _e	Α	55
500 V	I _e	Α	44
690 V	I _e	Α	22.1
AC-23A			
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			
		^	co.
230 V	l _e	Α	63
400 V 415 V	l _e	Α	63
500 V	I _e	Α	63
690 V	I _e	Α	63
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	Α	63
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	50
Contacts	e	Quantity	
48 V		Quantity	
		٨	50
Rated operational current	I _e	A	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		
Terminal capacities Solid or stranded		2	1 x (2,5 - 35)
Solid of Straffided		mm ²	2 x (2,5 - 33)
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:			Pile I Fill 100 control I I I I
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Contacts Petrol constitute lumbars		V AC	600
Rated operational voltage	U _e	V AC	000
Rated uninterrupted current max.			
Main conducting paths			
General use		Α	60
Auxiliary contacts			
General Use			
	l _U	Α	10
Pilot Duty	IU	A	A 600
Pilot Duty	lu	Α	
Pilot Duty Switching capacity	lu	A	A 600
Pilot Duty Switching capacity Maximum motor rating	lu	A	A 600
Pilot Duty Switching capacity Maximum motor rating Single-phase	lu		A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC	lu	НР	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC	lu	HP HP	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC	lu	НР	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC Three-phase	lu	HP HP	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC	lu	HP HP	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC Three-phase	lu	HP HP	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC Three-phase 200 V AC	lu	HP HP	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC Three-phase 200 V AC 240 V AC	lu	HP HP HP	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC Three-phase 200 V AC 240 V AC 480 V AC 600 V AC	lu	HP HP HP	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC Three-phase 200 V AC 240 V AC 480 V AC	lu	HP HP HP HP	A 600 P 600

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

Design vernication as per 1EG/EN 01453			
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 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])

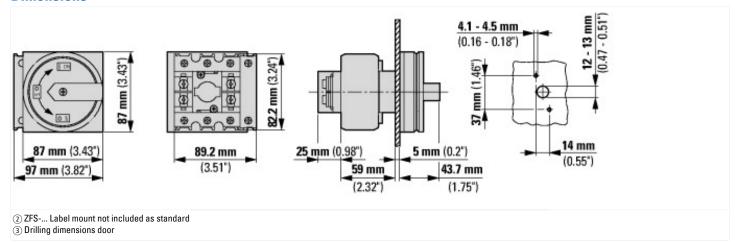
p was essential		
Version as main switch		Yes
Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		Yes
Version as reversing switch		No
Number of switches		1
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	А	63

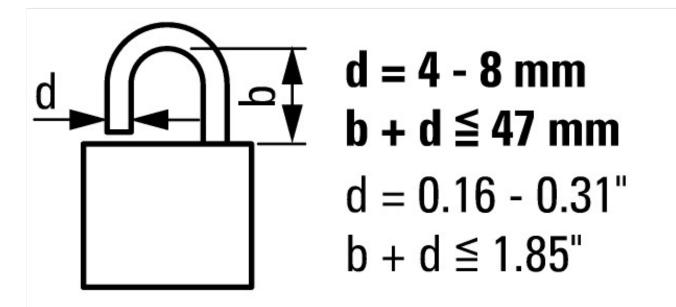
Rated permanent current at AC-23, 400 V	А	4	63
Rated permanent current at AC-21, 400 V	А	4	63
Rated operation power at AC-3, 400 V	k'	κW	30
Rated short-time withstand current lcw	k	κA	1.26
Rated operation power at AC-23, 400 V	k'	κW	30
Switching power at 400 V	k'	κW	30
Conditioned rated short-circuit current Iq	k	κA	4
Number of poles			4
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			Yes
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





≦3 padlocks