



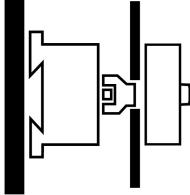
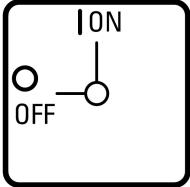
Main switch, P5, 125 A, rear mounting, 3 pole, Emergency switching off function, With red rotary handle and yellow locking ring, Lockable in the 0 (Off) position

EATON
Powering Business Worldwide™

Part no. P5-125/V/SVB
Catalog No. 280914

**EL-Nummer
(Norway)** 1417177

Delivery program

Product range	Main switch maintenance switch Repair switch																		
Part group reference	P5																		
Stop Function	Emergency switching off function																		
Information about equipment supplied	With red rotary handle and yellow locking ring																		
Number of poles	Auxiliary contact or neutral conductor fitted by user.																		
Auxiliary contacts	<table border="1"> <tr> <td>N/O</td><td>0</td> </tr> <tr> <td>N/C</td><td>0</td> </tr> </table>		N/O	0	N/C	0													
N/O	0																		
N/C	0																		
Locking facility	Lockable in the 0 (Off) position																		
Degree of Protection	Front IP65																		
Design	rear mounting																		
Contact sequence	 <table border="1"> <tr> <td>0</td><td>1</td><td>X</td><td>X</td><td>X</td> </tr> <tr> <td>1L1</td><td>O</td><td>1T1</td><td>O</td><td>1L2</td><td>O</td><td>1T2</td><td>O</td><td>1L3</td><td>O</td><td>1T3</td><td>O</td> </tr> </table>		0	1	X	X	X	1L1	O	1T1	O	1L2	O	1T2	O	1L3	O	1T3	O
0	1	X	X	X															
1L1	O	1T1	O	1L2	O	1T2	O	1L3	O	1T3	O								
Function																			
Motor rating AC-23A, 50 - 60 Hz																			
400 V	P	kW	45																
Rated uninterrupted current	I _u	A	125																
Note on rated uninterrupted current I _u	Rated uninterrupted current I _u is specified for max. cross-section.																		

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		
Open	°C	-25 - +50
Enclosed	°C	-25 - +40

Overtoltage category/pollution degree			III/3
Rated impulse withstand voltage	U_{imp}	V AC	8000
Mounting position	As required		
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	125
Note on rated uninterrupted current I_u		Rated uninterrupted current I_u is specified for max. cross-section.	
Load rating with intermittent operation, class 12			
AB 25 % DF		$\times I_e$	2
AB 40 % DF		$\times I_e$	1.6
AB 60 % DF		$\times I_e$	1.3
Short-circuit rating			
Fuse		A gG/gL	125
Rated short-time withstand current (1 s current)	I_{cw}	A_{rms}	2500
Note on rated short-time withstand current I_{cw}		Current for a time of 1 second	
Rated conditional short-circuit current	I_q	kA	30
Switching capacity			
cos ϕ rated making capacity as per IEC 60947-3		A	850
Rated breaking capacity cos ϕ to IEC 60947-3		A	
230 V		A	800
400/415 V		A	750
500 V		A	650
690 V		A	340
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I_e		W	8
Lifespan, mechanical	Operations	$\times 10^6$	> 0.1
Maximum operating frequency	Operations/h		50
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	22
400 V 415 V	P	kW	37
500 V	P	kW	45
690 V	P	kW	30
Rated operational current motor load switch			
230 V	I_e	A	72
400V 415 V	I_e	A	66
500 V	I_e	A	58
690 V	I_e	A	32
AC-21A			
Rated operational current switch			
440 V	I_e	A	125
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	30
400 V 415 V	P	kW	45
500 V	P	kW	55

690 V	P	kW	37
Rated operational current motor load switch			
230 V	I _e	A	96
400 V 415 V	I _e	A	80
500 V	I _e	A	78
690 V	I _e	A	39
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	A	125
Voltage per contact pair in series		V	42
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I _e	A	125
Contacts		Quantity	3
48 V			
Rated operational current	I _e	A	125
Contacts		Quantity	3
60 V			
Rated operational current	I _e	A	125
Contacts		Quantity	3
120 V			
Rated operational current	I _e	A	40
Contacts		Quantity	3
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H _F	< 10 ⁻⁵ , < 1 failure in 100,000 switching operations

Terminal capacities

Solid or stranded		mm ²	1 x 95 2 x 35
Flexible with ferrules to DIN 46228		mm ²	1 x 70 2 x 25
Copper strip	Number of segments x width x thickness	mm	1 x 13 x 3 2 x 13 x 1.5
Terminal screw			Allen screw 5
Tightening torque for terminal screw		Nm	14

Technical safety parameters:

Notes		B10 _d values as per EN ISO 13849-1, table C1
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Rating data for approved types

Contacts			
Rated operational voltage	U _e	V AC	600
Rated uninterrupted current max.			
Main conducting paths			
General use		A	150
Auxiliary contacts			
General Use	I _U	A	10
Pilot Duty			A 600
Switching capacity			
Maximum motor rating			
Single-phase			
120 V AC		HP	7.5
240 V AC		HP	20
277 V AC		HP	20
Three-phase			
120 V AC		HP	15
240 V AC		HP	30
480 V AC		HP	60

600 V AC	HP	60
Short Circuit Current Rating	SCCR	
Basic Rating	kA	10
max. Fuse	A	350 Class RK1
High fault rating	kA	65
max. Fuse	A	300, Class J
Terminal capacity		
Solid or flexible conductor with ferrule	AWG	3/0
Flexible	AWG	2/0
Terminal screw		Allen screw 5
Tightening torque	lb-in	125

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	125
Heat dissipation per pole, current-dependent	P_{vid}	W	3.1
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])

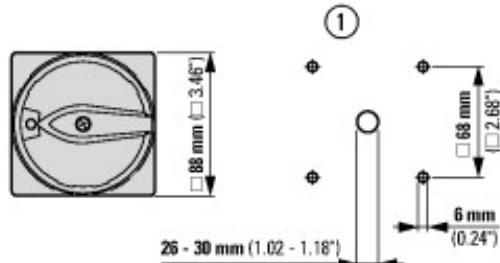
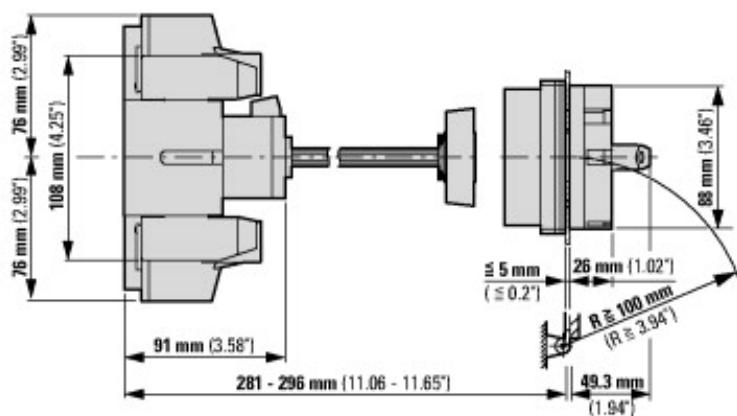
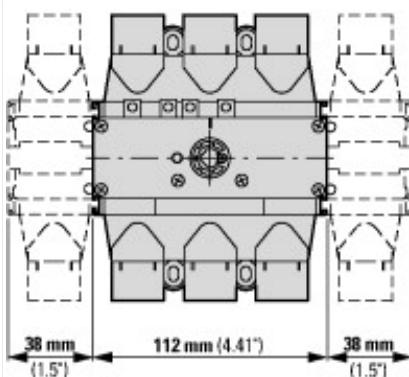
Version as main switch		Yes
Version as maintenance-/service switch		Yes

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 I _u	A	125
Rated permanent current at AC-23, 400 V	A	80
Rated permanent current at AC-21, 400 V	A	125
Rated operation power at AC-3, 400 V	kW	37
Rated short-time withstand current I _{cw}	kA	2.5
Rated operation power at AC-23, 400 V	kW	45
Switching power at 400 V	kW	45
Conditioned rated short-circuit current I _q	kA	30
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		Yes
Colour control element		Red
Type of control element		Door coupling rotary drive
Interlockable		Yes
Type of electrical connection of main circuit		Frame clamp
Degree of protection (IP), front side		IP65
Degree of protection (NEMA)		12

Approvals

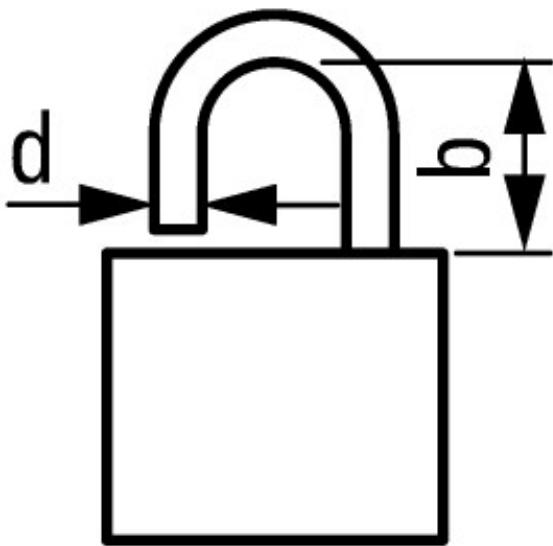
Product Standards		UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking
UL File No.		E36332
UL Category Control No.		NLRV, NLRV7
CSA File No.		223805
CSA Class No.		3211-05
North America Certification		UL listed, CSA certified
Suitable for		Branch circuits, suitable as motor disconnect
Degree of Protection		IEC: IP65; UL/CSA Type 1, 12

Dimensions



① Drilling dimensions door

Distance from mounting plate to front with complete axis.



$d = 4 - 8 \text{ mm}$
 $b + d \leq 47 \text{ mm}$
 $d = 0.16 - 0.31 \text{ in}$
 $b + d \leq 1.85 \text{ in}$

≤ 3 padlocks

Additional product information (links)

IL03802011Z Cam Switch: Main switch, On-Off-switch

IL03802011Z Cam Switch: Main switch, On-Off-switch ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03802011Z2018_04.pdf

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>