

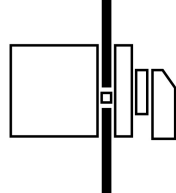
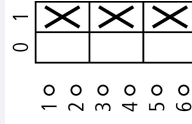
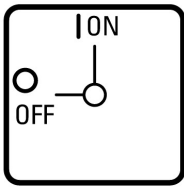




On-Off switch, 3p, 125A, flush mounting

Part no. P5-125/E
Article no. 280897

Delivery programme

Product range			On-Off switch
Part group reference			P5
			with black thumb grip and front plate
Notes			auxiliary contact or neutral conductor fitted by user
Number of poles			3 pole
Auxiliary contacts			
		N/O	0
		N/C	0
Locking facility			Not lockable
Degree of Protection			Front IP65
Design			flush mounting
			
Contact sequence			
Front plate no.			 FS 908
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	45
Rated uninterrupted current	I_u	A	125

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	
Open		°C	-25 - +50
Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	U_{imp}	V AC	8000
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	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	$I_n = 30: 125$

Switching capacity

$\cos \varphi$ rated making capacity as per IEC 60947-3		A	850
Rated breaking capacity $\cos \varphi$ 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
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			
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
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 fault in 100000 operations

Terminal capacities

Solid or stranded		mm ²	1 x (10 - 95) 2 x (10 - 35)
Flexible with ferrules to DIN 46228		mm ²	1 x (16 - 70) 2 x (16 - 25)
Copper strip	Number of segments x width x thickness	mm	6 x 9 x 0.8 (1 flat conductor)
Terminal screw			Allen screw 5
Max. tightening torque		Nm	14

Technical safety parameters:

Notes			B10 _d values as per EN ISO 13849-1, table C1
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Data for design verification according to 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	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.

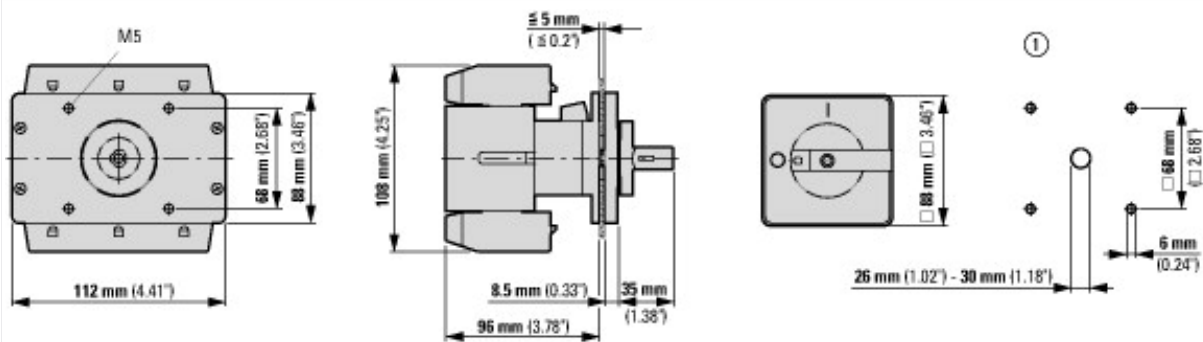
Technical data ETIM 5.0

Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)		
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss8-27-37-14-03 [AKF060009])		
Version as switch disconnecter compact		Yes
Version as main switch		No
Version as maintenance-/service switch		No
Version as safety switch		No
Version as emergency stop installation		No
Max. rated operation voltage Ue AC	V	690
Rated permanent current Iu	A	125
Rated operation power AC-3, 400 V	kW	37
Rated operation power at AC-23, 400 V	kW	45
Conditioned rated short-circuit current Iq	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		Yes
Suitable for front mounting center		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Type of control element		Toggle
Interlockable		No
Connection type main current circuit		Frame clamp
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.		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 3R, 12

Dimensions



① Drilling dimensions door

Additional product information (links)

IL03802010Z Cam Switch: Main switch, On-Off-switch

IL03802010Z Cam Switch: Main switch, On-Off-switch	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03802010Z2014_10.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 Zone 22	http://www.coopercrouse-hinds.eu/en/products/10-ex-safety-and-main-current-switches.html