

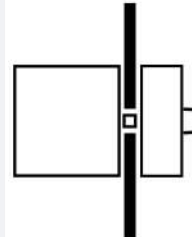
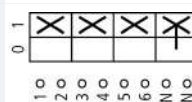
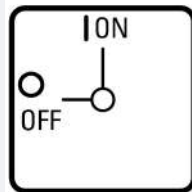




Main switch, 3 pole + N, 25 A, Emergency-Stop function, Lockable in the 0 (Off) position, flush mounting

Part no. P1-25/EA/SVB/N
Article no. 081587

Delivery programme

Product range			Main switch maintenance switch Repair switch
Part group reference			P1
STOPP-Funktion			Emergency switching off 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	0
		N/C	0
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			Front IP65
Design			flush mounting 
Contact sequence			
Function			
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	11
Rated uninterrupted current	I _u	A	25

Technical data

General			
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL Switch-disconnector according to IEC/EN 60947-3 NEMA3R, 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		g	15
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 + N
Auxiliary contacts			
		N/O	0
		N/C	0
Electrical characteristics			
Rated operational voltage	U_e	V AC	690
Rated uninterrupted current	I_u	A	25
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	25
Rated short-time withstand current (1 s current)	I_{cw}	A_{rms}	640
Note on rated short-time withstand current I_{cw}			Current for a time of 1 second
Rated conditional short-circuit current	I_q	kA	50

Switching capacity

cos ϕ rated making capacity as per IEC 60947-3		A	240
Rated breaking capacity cos ϕ to IEC 60947-3		A	
230 V		A	190
400/415 V		A	150
500 V		A	170
690 V		A	150
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I_e		W	1.1
Lifespan, mechanical	Operations	$\times 10^6$	> 0.3
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	5.5
400 V 415 V	P	kW	7.5
500 V	P	kW	7.5
690 V	P	kW	7.5
Rated operational current motor load switch			
230 V	I_e	A	19.6
400V 415 V	I_e	A	15.2
500 V	I_e	A	12.1
690 V	I_e	A	8.8
AC-21A			
Rated operational current switch			
440 V	I_e	A	25
AC-23A			
Motor rating AC-23A, 50 - 60 Hz			
230 V	P	kW	5.5
400 V 415 V	P	kW	11
500 V	P	kW	11

690 V	P	kW	11
Rated operational current motor load switch			
230 V	I _e	A	25
400 V 415 V	I _e	A	25
500 V	I _e	A	17.4
690 V	I _e	A	12.6
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current			
	I _e	A	25
Voltage per contact pair in series			
		V	60
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current			
	I _e	A	25
Contacts			
		Quantity	1
48 V			
Rated operational current			
	I _e	A	25
Contacts			
		Quantity	2
60 V			
Rated operational current			
	I _e	A	25
Contacts			
		Quantity	2
120 V			
Rated operational current			
	I _e	A	12
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 (1,5 - 6) 2 x (1,5 - 6)
Flexible with ferrules to DIN 46228		mm ²	1 x (1 - 4) 2 x (1 - 4)
Terminal screw			M4
Max. tightening torque		Nm	1.6

Technical safety parameters:

Notes			B10 _d values as per EN ISO 13849-1, table C1
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Approbierte Leistungsdaten

Terminal capacity			
Terminal screw			M4
Tightening torque		lb-in	14.128

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	25
Heat dissipation per pole, current-dependent	P _{vid}	W	1.1
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			
			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 6.0

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@ss8.1-27-37-14-03 [AKF060010])			
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
Max. rated operation voltage U _e AC	V		690
Rated operating voltage	V		690 - 690
Rated permanent current I _u	A		25
Rated permanent current at AC-21, 400 V	A		25
Rated operation power at AC-3, 400 V	kW		7.5
Rated short-time withstand current I _{cw}	kA		0.64
Rated operation power at AC-23, 400 V	kW		13
Switching power at 400 V	kW		13
Conditioned rated short-circuit current I _q	kA		80
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 center			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

Approvals

UL 508; CSA-C22.2 No. 14-05; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking

E36332

NLRV

12528

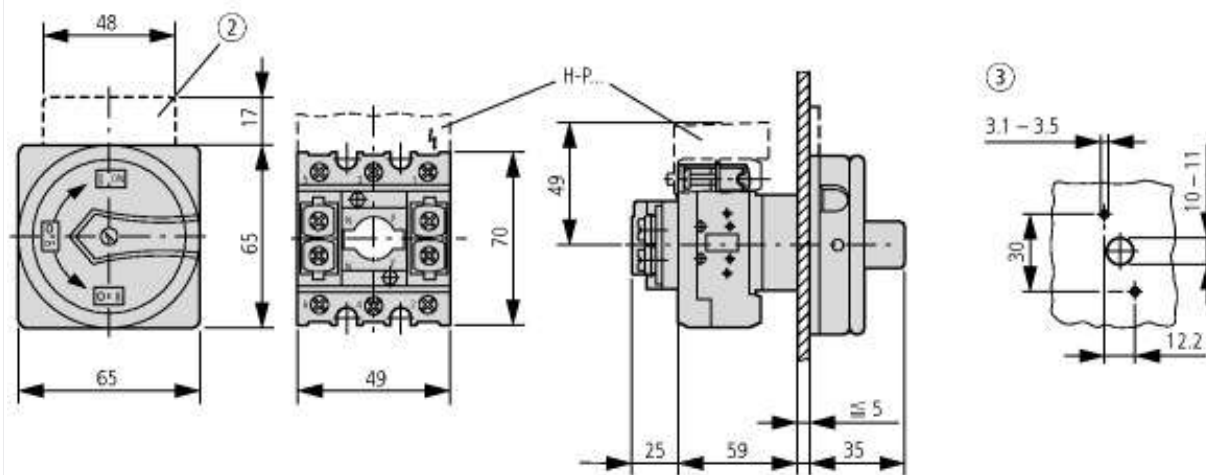
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UL listed, CSA certified

Branch circuits, suitable as motor disconnect

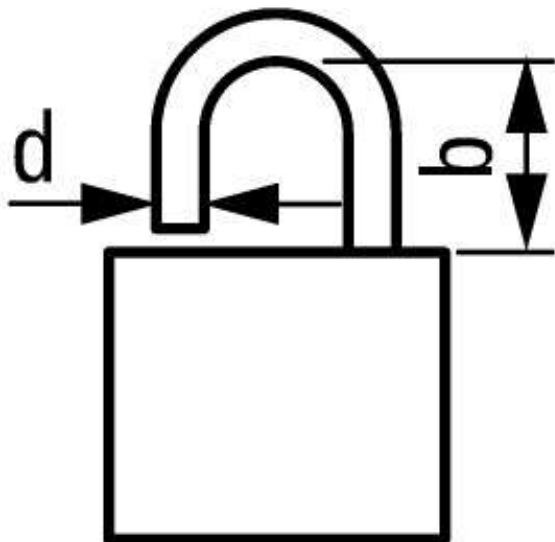
IEC: IP65; UL/CSA Type 1, 12

Dimensions



② ZFS... Label mount not included as standard

③ Drilling dimensions door



$d = 4 - 8 \text{ mm}$

$b + d \leq 47 \text{ mm}$

$d = 0.16 - 0.31''$

$b + d \leq 1.85''$

 3 padlocks

Additional product information (links)

IL03802003Z (AWA1150-1890) Switch-Disconnectors for flush mounting

IL03802003Z (AWA1150-1890) Switch-Disconnectors for flush mounting

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03802003Z2015_02.pdf

Form for ordering non-standard front plates

<http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=4.87>

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
UL/CSA: Rating data for approved types	http://ecat.moeller.net/flip-cat/?edition=HPLTF&startpage=4.90