

Control circuit switches, STOP function, Contacts: 3, 10 A, 90 °, flush mounting, up to 250 V AC per contact



Part no. TM-2-8292/E/SVB-SW Article no. 210955

	ILLOPI	/ P3 P	COL	COM
112	livery	,		

Product range Contr Part group reference TM	trol switches
Part group reference TM	
Basic function Contr	trol circuit switches
Stop Function STOP	P function
With	n black rotary handle and locking ring
Notes up to	o 250 V AC per contact
Contacts 3	
Locking facility Locket	kable in the 0 (Off) position
Degree of Protection Front	nt IP65
Design flush	n mounting
Contact sequence	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Switching angle ° 90	
Front plate no.	
Motor rating AC-23A, 50 - 60 Hz	
400 V P kW 3	
Rated uninterrupted current I _u A 10	
Number of contact units contact unit(s) 2	

Technical data

Electrical characteristics

Rated operational voltage

Rated uninterrupted current

General

Standards			IEC/EN 60947, VDE 0660, CSA, UL Control switch as per IEC/EN 60947-5-1 Auxiliary switch as per IEC/EN 60947-5-1
Climatic proofing			Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30
Ambient temperature			
Open		°C	-25 - +50
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	U _{imp}	V AC	4000
Mounting position			As required
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Contacts			

V AC

500

10

 U_{e}

Iu

Note on rated uninterrupted current !u			Rated uninterrupted current lu is specified for max. cross-section.
Short-circuit rating			
Fuse		A gG/gL	10
Switching capacity		A gu/gL	10
Safe isolation to EN 61140			
Current heat loss per contact at I _e		W	0.15
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	0.15
Lifespan, mechanical	Operations	x 10 ⁶	>1
Maximum operating frequency	Operations/h	X IU	1200
AC	operations, ii		
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
400 V 415 V	P	kW	3
Control circuit reliability at 24 V DC, 10 mA	Fault	H _F	< 10 ⁻⁵ , < 1 fault in 100000 operations
	probability		< 10 , < 1 ault in 100000 operations
Terminal capacities			
Solid or stranded		mm ²	1 x 1,5 2 x 1,5
Flexible		mm ²	1 x 1.5 2 x 1.5
Terminal screw			M2.5
Max. tightening torque		Nm	0.35
Rating data for approved types			
Contacts			
Rated operational voltage	U _e	V AC	300
Rated uninterrupted current max.			
Main conducting paths			
General use	I _U	Α	10
Auxiliary contacts			
General Use	lu	Α	10
Pilot Duty			A 300
Switching capacity			
Maximum motor rating			
Single-phase			
120 V AC		HP	0.33
240 V AC		HP	0.75
277 V AC		HP	0.75
Three-phase			
120 V AC		HP	0.75
240 V AC		HP	1
Terminal capacity			
Solid or flexible conductor with ferrule		AWG	16 - 14
Flexible		AWG	16 2 x 16
Terminal screw			M2.5

Design verification as per IEC/EN 61439

Tightening torque

echnical data for design verification			
Rated operational current for specified heat dissipation	In	Α	10
Heat dissipation per pole, current-dependent	P _{vid}	W	0.15
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

lb-in

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 disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss8.1-27-37-14-03 [AKF060010])

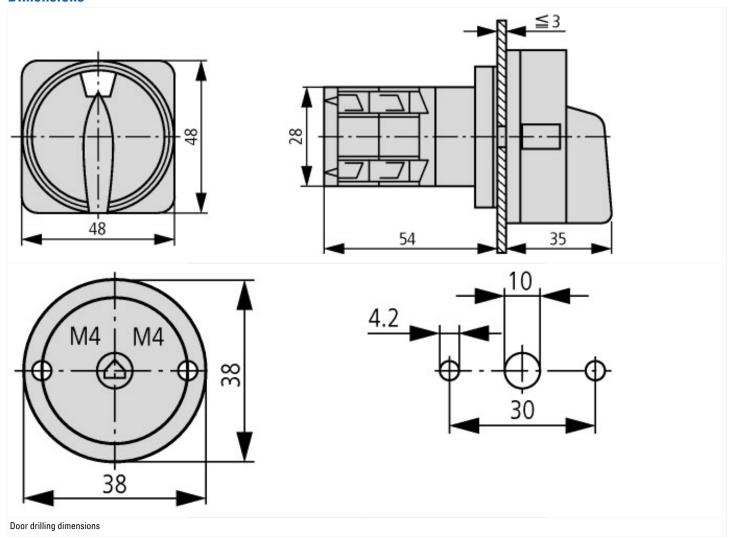
Suitable for front mounting 4-hole		Yes
Device construction Suitable for ground mounting		Built-in device fixed built-in technique No
Voltage release optional		No
Motor drive integrated		No
Motor drive optional		No
Number of auxiliary contacts as change-over contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as normally closed contact		0
Number of poles		3
Conditioned rated short-circuit current Iq	kA	0
Switching power at 400 V	kW	0
Rated operation power at AC-23, 400 V	kW	0
Rated short-time withstand current lcw	kA	0
Rated operation power at AC-3, 400 V	kW	0
Rated permanent current at AC-21, 400 V	А	0
Rated permanent current lu	Α	10
Rated operating voltage	V	500 - 500
Max. rated operation voltage Ue AC	V	500
Version as reversing switch		No
Version as emergency stop installation		No
Version as safety switch		No
Version as maintenance-/service switch		No
Version as main switch		Yes

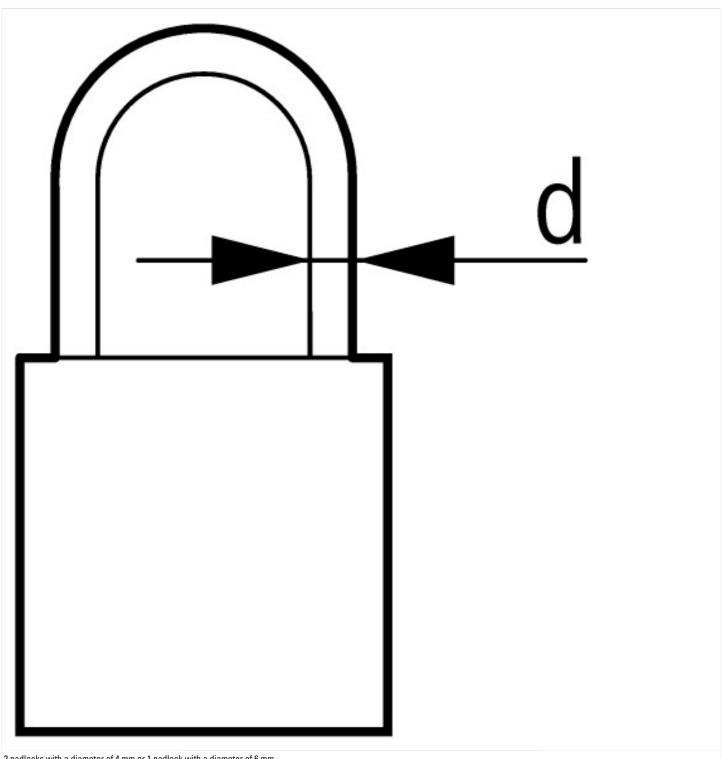
Suitable for front mounting center	No
Suitable for distribution board installation	No
Suitable for intermediate mounting	No
Colour control element	Black
Type of control element	Door coupling rotary drive
Interlockable	Yes
Type of electrical connection of main circuit	Screw connection
Degree of protection (IP), front side	IP65

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.	UL report applies to both US and Canada
North America Certification	UL listed, certified by UL for use in Canada
Degree of Protection	IEC: IP65; UL/CSA Type: –

Dimensions





2 padlocks with a diameter of 4 mm or 1 padlock with a diameter of 6 mm

Additional product information (links)

IL03801028Z Mini-Nockenschalter: main switch		
IL03801028Z Mini-Nockenschalter: main switch	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801028Z2014_12.pdf	
Form for ordering non-standard front plates	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=4.87	
Display flip catalog page.	http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=40	
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	