



Main switch, P1, 40 A, surface mounting, 3 pole, 1 N/O, 1 N/C, STOP function, With black rotary handle and locking ring, Lockable in the 0 (Off) position, hard knockout version, with assembly sheet screen



Part no. P1-40/I2H/MBS/SVB-SW/HI11  
 Catalog No. 199920

**Delivery program**

Product range			Main switch maintenance switch
Part group reference			P1
Stop Function			STOP function With black rotary handle and locking ring
Number of poles			3 pole
<b>Auxiliary contacts</b>			
		N/O	1
		N/C	1
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP65
Design			surface mounting
Contact sequence			
Switching angle		°	90
Function			
<b>Motor rating AC-23A, 50 - 60 Hz</b>			
400 V	P	kW	22
Rated uninterrupted current	I <sub>u</sub>	A	40
Note on rated uninterrupted current I <sub>u</sub>			Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section.

**Technical data**

<b>General</b>			
Standards			IEC/EN 60947, IEC/EN 60204 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			
Enclosed		°C	-20 - +40
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	U <sub>imp</sub>	V AC	6000

Mechanical shock resistance		g	15
Mounting position			As required

## Contacts

Mechanical variables			
Number of poles			3 pole
Auxiliary contacts			
		N/O	1
		N/C	1
Electrical characteristics			
Rated operational voltage	$U_e$	V AC	690
Rated uninterrupted current	$I_u$	A	40
Note on rated uninterrupted current $I_u$			Rated uninterrupted current $I_u$ is specified for max. cross-section.
Short-circuit rating			
Fuse		A gG/gL	50
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

## Switching capacity

Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at $I_e$		W	3.5
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	7.5
400 V 415 V	P	kW	15
690 V	P	kW	15
Rated operational current motor load switch			
230 V	$I_e$	A	30
400V 415 V	$I_e$	A	30
690 V	$I_e$	A	17
AC-21A			
Rated operational current switch			
400 V 415 V	$I_e$	A	40
500 V	$I_e$	A	40
690 V	$I_e$	A	40
AC-22A			
Rated operational current switch			
400 V 415 V	$I_e$	A	40
500 V	$I_e$	A	40
690 V	$I_e$	A	40
AC-23A			
Motor rating AC-23A, 50 - 60 Hz			
230 V	P	kW	11
400 V 415 V	P	kW	22
690 V	P	kW	17
Rated operational current motor load switch			
230 V	$I_e$	A	40
400 V 415 V	$I_e$	A	40
690 V	$I_e$	A	20
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 (1,5 - 10)
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Flexible with ferrules to DIN 46228			2 x (1,5 - 10)
		mm <sup>2</sup>	1 x (1 - 4) 2 x (1 - 4)
Terminal screw			M4
Tightening torque for terminal screw		Nm	1.6

### Rating data for approved types

Terminal capacity			
Terminal screw			M4

## Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I <sub>n</sub>	A	40
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	3.5

## Technical data ETIM 8.0

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@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			No
Version as reversing switch			No
Number of switches			1
Max. rated operation voltage U <sub>e</sub> AC		V	690
Rated operating voltage		V	690 - 690
Rated permanent current I <sub>u</sub>		A	40
Rated permanent current at AC-23, 400 V		A	40
Rated permanent current at AC-21, 400 V		A	40
Rated operation power at AC-3, 400 V		kW	15
Rated short-time withstand current I <sub>cw</sub>		kA	0.64
Rated operation power at AC-23, 400 V		kW	22
Switching power at 400 V		kW	22
Conditioned rated short-circuit current I <sub>q</sub>		kA	80
Number of poles			3
Number of auxiliary contacts as normally closed contact			1
Number of auxiliary contacts as normally open contact			1
Number of auxiliary contacts as change-over contact			0
Motor drive optional			No
Motor drive integrated			No
Voltage release optional			No
Device construction			Complete device in housing
Suitable for floor 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			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
Degree of protection (NEMA)			

## Additional product information (links)

Technical overview cam switch, switch-disconnector	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.2">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.2</a>
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System overview cam switch T	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.4">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.4</a>
System overview switch-disconnector P	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.6">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.6</a>
Key to part numbers Cam switch	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8</a>
Key to part numbers Switch-disconnector	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8</a>
Switches for ATEX	<a href="http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html">http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html</a>