



On-Off switch, P1, 40 A, rear mounting, 3 pole + N, with black thumb grip and front plate

Part no. P1-40/Z/N
Catalog No. 199966

Delivery program

Product range			On-Off switch
Part group reference			P1
			with black thumb grip and front plate
Information about equipment supplied			auxiliary contact fitted by user.
Number of poles			3 pole + N
Auxiliary contacts			
		N/O	0
		N/C	0
Degree of Protection			Front IP65
Design			rear mounting
Contact sequence			 1 2 3 4 5 6 N 0
Switching angle		°	90
Front plate no.			 FS 908
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	22
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.

Technical data

General			
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			
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

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	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	P	kW	
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)
-------------------	--	-----------------	----------------

Flexible with ferrules to DIN 46228	mm ²	2 x (1,5 - 10)
		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		
Solid or flexible conductor with ferrule	AWG	14 - 8
Terminal screw		M4
Tightening torque	lb-in	14.1

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	40
Heat dissipation per pole, current-dependent	P _{vid}	W	1.9

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		No
Version as maintenance-/service switch		No
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 _e AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current I _u	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 _{cw}	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 _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 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		Short thumb-grip
Interlockable		No
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	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