DATASHEET - P1-25/SE1/N

On-Off switch, P1, 25 A, 3 pole + N, surface mounting, with black thumb grip and front plate, in steel enclosure

Part no. P1-25/SE1/N
Catalog No. 197345

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.
Notes			in steel enclosure
Number of poles			3 pole + N
Auxiliary contacts			
		N/O	0
		N/C	0
Degree of Protection			IP65
Design			surface mounting
Switching angle		°	90
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	11
Rated uninterrupted current	I_u	A	25
Note on rated uninterrupted current $!_u$			Rated uninterrupted current I_u is specified for max. cross-section.

Technical data

General

Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204 Switch disconnector in accordance with IEC/EN 60947-3
Ambient temperature			
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	25
Note on rated uninterrupted current $!_u$			Rated uninterrupted current I_u is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x I_e	2
AB 40 % DF		x I_e	1.6
AB 60 % DF		x 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 Icw			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	x 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-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
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
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 failure in 100,000 switching 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
Tightening torque for terminal screw		Nm	1.6

Technical safety parameters:

Notes			$B10_d$ values as per EN ISO 13849-1, table C1

Rating data for approved types

Terminal capacity			
Terminal screw			M4
Tightening torque		lb-in	14.13

Technical data ETIM 8.0

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@ss10.0.1-27-37-14-03 [AKF060013])

Version as main switch			No
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 Ue AC		V	690
Rated operating voltage		V	690 - 690
Rated permanent current Iu		A	25
Rated permanent current at AC-23, 400 V		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 Icw		kA	0.64
Rated operation power at AC-23, 400 V		kW	13
Switching power at 400 V		kW	11
Conditioned rated short-circuit current Iq		kA	50
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			Complete device in housing
Suitable for floor mounting			Yes
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)			12

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