

On-Off switch, 6 pole, 20 A, 90 °, rear mounting, Basic switch

Part no. Article no.

T0-3-8342/XZ 013506



Delivery program

Product range			On-Off switch
Part group reference			то
Number of poles			6 pole
Design			rear mounting Basic switch
Contact sequence			
Switching angle		0	90
Front plate no.			FS 908
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	5.5
Rated uninterrupted current	lu	A	20
Number of contact units		contact unit(s)	3

Technical data

General			
Standards			IEC/EN 60947, VDE 0660, 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			111/3
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			6 pole
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	lu	А	20
Note on rated uninterrupted current $\boldsymbol{!}_{u}$			Rated uninterrupted current lu is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x l _e	2
AB 40 % DF		x l _e	1.6
AB 60 % DF		x l _e	1.3
Short-circuit rating			
Fuse		A gG/gL	20

Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	320
	'cw	Arms	
Note on rated short-time withstand current low	1	1.4	Current for a time of 1 second
Rated conditional short-circuit current Switching capacity	lq	kA	6
cos φ rated making capacity as per IEC 60947-3		А	130
Rated breaking capacity cos φ to IEC 60947-3		A	
230 V		A	100
400/415 V		A	110
500 V		A	80
690 V		A	60
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I_e		W	0.6
		CO	
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)	0		0.6
Lifespan, mechanical	Operations	x 10 ⁶	> 0.4
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	Р	kW	
220 V 230 V	Р	kW	3
230 V Star-delta	Р	kW	5.5
400 V 415 V	Р	kW	5.5
400 V Star-delta	Р	kW	7.5
500 V	Р	kW	5.5
500 V Star-delta	Р	kW	7.5
690 V	Р	kW	4
690 V Star-delta	Р	kW	5.5
Rated operational current motor load switch			
230 V	۱ _e	А	11.5
230 V star-delta	Ι _e	А	20
400V 415 V	I _e	А	11.5
400 V star-delta	le	A	20
500 V	Ι _e	A	9
500 V star-delta	l _e	A	15.6
690 V	le	A	4.9
690 V star-delta			
	le	A	8.5
AC-21A			
Rated operational current switch			
440 V	le	A	20
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
230 V	Р	kW	3
400 V 415 V	Р	kW	5.5
500 V	Р	kW	7.5
690 V	Р	kW	5.5
Rated operational current motor load switch			
230 V	Ie	А	13.3
400 V 415 V	Ι _e	А	13.3
500 V	۱ _e	А	13.3
690 V	I _e	A	7.6
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	Ι _e	A	10
Voltage per contact pair in series		v	60

DC-21A	le	А	
Rated operational current	I _e	А	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	le	А	10
Contacts		Quantity	1
48 V			
Rated operational current	le	А	10
Contacts		Quantity	2
60 V			
Rated operational current	I _e	А	10
Contacts		Quantity	3
120 V			
Rated operational current	I _e	А	5
Contacts		Quantity	3
240 V			
Rated operational current	le	А	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	I _e	А	10
Voltage per contact pair in series		V	32
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 - 2,5) 2 x (1 - 2,5)
Flexible with ferrules to DIN 46228		mm ²	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)
Terminal screw			M3.5
Max. tightening torque		Nm	1
Technical safety parameters:			
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Terminal capacity Terminal screw			M3.5
Terminal Sciew			L'OIN
Design verification as per IEC/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	A	20
Heat dissipation per pole, current-dependent	P _{vid}	w	0.6
Equipment heat dissipation, current-dependent	r vid 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			Mosts the product standard's convicements
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 10.2.3.3 Verification of resistance of insulating materials to abnormal heat			Meets the product standard's requirements. Meets the product standard's requirements.
and fire due to internal electric effects			
10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting			Please enquire 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])

[AKFU6UU1U])		
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
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	А	20
Rated permanent current at AC-21, 400 V	А	20
Rated operation power at AC-3, 400 V	kW	5.5
Rated short-time withstand current lcw	kA	0.32
Rated operation power at AC-23, 400 V	kW	5.5
Switching power at 400 V	kW	5.5
Conditioned rated short-circuit current Iq	kA	6
Number of poles		6
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		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting center		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		Yes
Colour control element		Black
Type of control element		Toggle
Interlockable		No
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP00

Additional product information (links)

Display flip catalog page.

http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=41