

Contacts: 8, 20 A, 45 °, rear mounting, Basic switch

Powering Business Worldwide*

1/4

Part no. T0-4-15374/XZ Article no. 013717

Delivery program

Product range			Control switches
Part group reference			ТО
Contacts			8
Design			rear mounting Basic switch
Contact sequence			2 0 1 1 0 2 0 X 3 0 X 4 0 X 5 0 6 0 X 7 0 X 8 0 X 11 0 X 11 0 X 11 0 X 12 0 X 13 0 X 14 0 X 15 0 X 16 0 X
Switching angle		o	45
Front plate no.			² ⁰ ¹ FS 458
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	5.5
Rated uninterrupted current	Iu	Α	20
Number of contact units		contact unit(s)	4

Technical data

Electrical characteristics

Rated operational voltage

Rated uninterrupted current

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			III/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			

V AC

Α

690 20

 U_{e}

Note on rated uninterrupted current !u			Rated uninterrupted current lu is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x I _e	2
AB 40 % DF		x l _e	1.6
AB 60 % DF		x l _e	1.3
		^ 'e	1.0
Short-circuit rating		A = C/=1	20
Fuse		A gG/gL	
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	320
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	6
Switching capacity cos φ rated making capacity as per IEC 60947-3		Α	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		A	U
between the contacts		V AC	440
Current heat loss per contact at l _e		W	0.6
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)	0	CO	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	I _e	Α	11.5
230 V star-delta	I _e	Α	20
400V 415 V	I _e	Α	11.5
400 V star-delta	I _e	Α	20
500 V	I _e	Α	9
500 V star-delta	I _e	Α	15.6
690 V	l _e	Α	4.9
690 V star-delta	I _e	A	8.5
AC-21A	6		
Rated operational current switch			
440 V	I _e	Α	20
AC-23A	-е	,	
AC-23A Motor rating AC-23A, 50 - 60 Hz	Р	kW	
230 V	P	kW	3
230 V 400 V 415 V	P P	kW	5.5
500 V	P	kW	7.5
500 V	P	kW	5.5
Rated operational current motor load switch	r	K V V	o.o
230 V		Α	13.3
200 V	l _e	^	10.0

400 V 415 V	I _e	Α	13.3
500 V	I _e	Α	13.3
690 V	I _e	Α	7.6
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	le	Α	10
Voltage per contact pair in series		V	60
DC-21A	I _e	Α	
Rated operational current	I _e	Α	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	le	Α	10
Contacts		Quantity	1
48 V		,	
Rated operational current	l _e	Α	10
Contacts	Ü	Quantity	2
60 V		Quantity	
Rated operational current	l _e	Α	10
Contacts	·e	Quantity	
120 V		Qualitity	
Rated operational current	1	Α	5
Contacts	l _e	Quantity	
		Qualitity	3
240 V		Α	5
Rated operational current	l _e		
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	l _e	Α	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		2	1 x (1 - 2,5)
Solid of Stranded		mm ²	2 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

Design verification as per IEC/EN 61439

In	Α	20
P _{vid}	W	0.6
P _{vid}	W	0
P_{vs}	W	0
P _{diss}	W	0
	°C	-25
	°C	50
		Meets the product standard's requirements.
	P _{vid} P _{vid} P _{vs}	P _{vid} W P _{vid} W P _{vs} W P _{diss} W °C

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) / Control switch (EC002611)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Control switch (ecl@ss8.1-27-37-14-14 [ACN998008])

Type of switch		On/Off switch
Number of poles		4
Max. rated operation voltage Ue AC	V	690
Rated permanent current lu	Α	20
Number of switch positions		3
With 0 (off) position		Yes
With retraction in 0-position		Yes
Device construction		Built-in device
Width in number of modular spacings		0
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		Yes
Complete device in housing		No
Type of control element		-
Front shield size		48x48 mm
Degree of protection (IP), front side		IP00

Additional product information (links)

Display flip catalog page. http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=104