## **DATASHEET - T0-2-15088/XZ**



Control switch, 1p, le=12A, 45°, momentary, replacement switch, base fixing



Part no. T0-2-15088/XZ Catalog No. 011248

Similar to illustration

Delivery program			
Product range			Control switches
Part group reference			ТО
Contacts			3
Design			rear mounting Basic switch
Contact sequence			1 0 X X 3 0 X 4 0 X 5 0 6 0 X
Switching angle		o	90
Design number			15088
Front plate no.			FS 141617
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	5.5
Rated uninterrupted current	l <sub>u</sub>	Α	20
Note on rated uninterrupted current !u			Rated uninterrupted current $\mathbf{I}_{\mathbf{U}}$ is specified for max. cross-section.
Number of contact units		contact unit(s)	2

## **Technical data**

General

deliciai			
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
Contacts			
Electrical characteristics			

Rated operational voltage	U <sub>e</sub>	V AC	690
Rated uninterrupted current	Iu	A	20
Note on rated uninterrupted current !u	·u	, ·	Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section.
Load rating with intermittent operation, class 12			nated difficent upted current in its specified for max. cross-section.
AB 25 % DF		x I <sub>e</sub>	2
AB 40 % DF		x l <sub>e</sub>	1.6
AB 60 % DF		x l <sub>e</sub>	1.3
Short-circuit rating		A = C/=1	00
Fuse		A gG/gL	
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	A <sub>rms</sub>	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 $\phi$ to IEC 60947-3		A	
230 V		Α	100
400/415 V		A	110
500 V		A	80
690 V		Α	60
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I <sub>e</sub>		W	0.6
Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)		CO	0.6
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	> 0.4
Maximum operating frequency	Operations/h	X 10	1200
AC	орогиноподп		
AC-3			
Rating, motor load switch	Р	kW	
220 V 230 V	P	kW	3
230 V Star-delta	P	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	P	kW	7.5
690 V	Р	kW	4
690 V Star-delta	P	kW	5.5
Rated operational current motor load switch			
230 V	l <sub>e</sub>	Α	11.5
230 V star-delta	l <sub>e</sub>	Α	20
400V 415 V	le	Α	11.5
400 V star-delta	le	Α	20
500 V	I <sub>e</sub>	Α	9
500 V star-delta	I <sub>e</sub>	Α	15.6
690 V	I <sub>e</sub>	Α	4.9
690 V star-delta	I <sub>e</sub>	Α	8.5
AC-21A			
Rated operational current switch			
440 V	l <sub>e</sub>	Α	20
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
230 V	P	kW	3
400 V 415 V	P	kW	5.5
500 V	P	kW	7.5
690 V	P	kW	5.5

Rated operational current motor load switch			
230 V	le	Α	13.3
400 V 415 V	I <sub>e</sub>	Α	13.3
500 V	l <sub>e</sub>	Α	13.3
690 V	Ie	Α	7.6
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	l <sub>e</sub>	Α	10
Voltage per contact pair in series		V	60
DC-21A	l <sub>e</sub>	Α	
Rated operational current	l <sub>e</sub>	Α	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	l <sub>e</sub>	Α	10
Contacts		Quantity	1
48 V			
Rated operational current	l <sub>e</sub>	Α	10
Contacts		Quantity	2
60 V			
Rated operational current	l <sub>e</sub>	Α	10
Contacts		Quantity	3
120 V			
Rated operational current	l <sub>e</sub>	Α	5
Contacts		Quantity	3
240 V			
Rated operational current	le	Α	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	l <sub>e</sub>	Α	10
Voltage per contact pair in series		V	32
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H <sub>F</sub>	< 10 <sup>-5</sup> ,< 1 failure in 100,000 switching operations
Terminal capacities	probability		
Solid or stranded		mm <sup>2</sup>	1 x (1 - 2,5) 2 x (1 - 2,5)
Flexible with ferrules to DIN 46228		mm <sup>2</sup>	1 x (0.75 - 2.5) 2 x (0.75 - 2.5)
Terminal screw			M3.5
Tightening torque for terminal screw		Nm	1
Technical safety parameters:			
Notes			$\mathrm{B10_{d}}$ values as per EN ISO 13849-1, table C1
Rating data for approved types			
Terminal capacity			Mor
Terminal screw			M3.5

# Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	20
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0.6
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	50
IEC/EN 61439 design verification			

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	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	UV resistance only in connection with protective shield.
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.
0.3 Degree of protection of ASSEMBLIES	Does not apply, since the entire switchgear needs to be evaluated.
0.4 Clearances and creepage distances	Meets the product standard's requirements.
0.5 Protection against electric shock	Does not apply, since the entire switchgear needs to be evaluated.
0.6 Incorporation of switching devices and components	Does not apply, since the entire switchgear needs to be evaluated.
0.7 Internal electrical circuits and connections	Is the panel builder's responsibility.
0.8 Connections for external conductors	Is the panel builder's responsibility.
0.9 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.
0.10 Temperature rise	The panel builder is responsible for the temperature rise calculation. Eaton provide heat dissipation data for the devices.
0.11 Short-circuit rating	Is the panel builder's responsibility. The specifications for the switchgear mobserved.
0.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear mobserved.
0.13 Mechanical function	The device meets the requirements, provided the information in the instruct leaflet (IL) is observed.

#### **Technical data ETIM 7.0**

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@ss10.0.1-27-37-14-14 [ACN998011])

[ACN330011])		
Type of switch		On/Off switch
Number of poles		1
Max. rated operation voltage Ue AC	V	690
Rated permanent current lu	Α	20
Number of switch positions		2
With 0 (off) position		Yes
With retraction in 0-position		No
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		Other
Front shield size		48x48 mm
Degree of protection (IP), front side		Other
Degree of protection (NEMA), front side		Other

#### **Assets (links)**

**Declaration of CE Conformity** 00003075

### **Additional product information (links)**

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

Ordering form for SOND switches and SOND front plates(DE_EN)	$ftp://ftp.moeller.net/DOCUMENTATION/PDF/MZ008005ZU\_Orderform\_Customized\_Switch.pdf$
Ordering form for SOND switches and SOND front plates(DE_EN)	$ftp://ftp.moeller.net/DOCUMENTATION/PDF/MZ008006ZU\_Orderform\_Customized\_Switch.pdf$