DATASHEET - T0-8-15290/E



Step switches, T0, 20 A, flush mounting, 8 contact unit(s), Contacts: 16, 45 °, maintained, With 0 (Off) position, 0-8, design no. 15290



Part no. Catalog No. T0-8-15290/E 016099

Similar to illustration

		Control switches
		то
		Step switches
		with black thumb grip and front plate
		16
		Front IP65
		flush mounting
	0	45
		maintained With 0 (Off) position
		15290
		FS 313
		0-8
Р	kW	5.5
lu	А	20
		Rated uninterrupted current $\boldsymbol{I}_{\boldsymbol{u}}$ is specified for max. cross-section.
	contact unit(s)	8
		P kW Iu A

Technical data

General			
Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204, CSA, UL 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

Contacts

Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	lu	A	20
Note on rated uninterrupted current !u			Rated uninterrupted current \mathbf{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	20
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	4		
cos φ rated making capacity as per IEC 60947-3		А	130
Rated breaking capacity $\cos \phi$ 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 l _e		W	0.6
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	0.6
Lifespan, mechanical	Operations	x 10 ⁶	> 0.4
Maximum operating frequency	Operations/h	X IU	1200
AC	Operations/II		
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	P	kW	5.5
400 V Star-delta	P	kW	7.5
500 V	P	kW	5.5
500 V Star-delta	P	kW	7.5
690 V	P	kW	4
690 V Star-delta	P	kW	5.5
Rated operational current motor load switch		KVV	
230 V	1	A	11.5
230 V 230 V star-delta	l _e		
	l _e	A	20
400V 415 V	l _e	A	11.5
400 V star-delta	le	A	20
500 V	le	А	9
500 V star-delta	le	А	15.6
690 V	le	А	4.9
690 V star-delta	le	А	8.5
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	le	A	13.3
400 V 415 V	le	А	13.3
500 V	le	А	13.3
690 V	l _e	A	7.6
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	le	A	10
Voltage per contact pair in series		V	60
DC-21A	le	A	
Rated operational current	l _e	A	1
Contacts	·e	Quantity	
DC-23A, motor load switch L/R = 15 ms		Quantity	
24 V			
Rated operational current	l _e	A	10
Contacts	'e	Quantity	
48 V		Quantity	
40 V Rated operational current		А	10
	l _e		
Contacts		Quantity	2
60 V		٨	10
Rated operational current	l _e	A	10
Contacts		Quantity	3
120 V			
Rated operational current	l _e	A	5
Contacts		Quantity	3
240 V			
Rated operational current	le	A	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	le	A	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 failure in 100,000 switching operations
Terminal capacities			
Solid or stranded		mm ²	1 x (1 - 2,5) 2 x (1 - 2,5)
Flexible with ferrules to DIN 46228		2	1 x (0.75 - 2.5)
		mm ²	2 x (0.75 - 2.5)
Terminal screw			M3.5
Tightening torque for terminal screw		Nm	1
Technical safety parameters:			
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Contacts		V A C	500
Rated operational voltage	U _e	V AC	600
Rated uninterrupted current max.			
Main conducting paths			
General use		A	16
Auxiliary contacts			
General Use	IU	A	10
Pilot Duty			A 600 P 300
Switching capacity			
Maximum motor rating			
Single-phase			
120 V AC		HP	0.5
200 V AC		HP	1

2401/ 40	UD	15
240 V AC	HP	1.5
Three-phase		
200 V AC	HP	3
240 V AC	HP	3
480 V AC	HP	7.5
600 V AC	HP	7.5
Short Circuit Current Rating	SCCR	
Basic Rating	kA	5
max. Fuse	А	50
High fault rating	kA	10
max. Fuse	А	20, Class J
Terminal capacity		
Solid or flexible conductor with ferrule	AWG	18 - 14
Terminal screw		M3.5
Tightening torque	lb-in	8.8

Design verification as per IEC/EN 61439

Rado generational corrent or specified has tisspation Rado generational constructive dependent Rado generation Rado ge	Technical data for design verification			
Heat dissipation per pole, current-dependent Puid Wei 6.5 Equipment heat dissipation, current-dependent Puid W 0 Static heat dissipation, current-dependent Puid W 0 Operating ambient temperature min. Pains W 0 Operating ambient temperature max. So So 10.2.5 trength of materials and parts So So 10.2.2 Corresion resistance Instantials and parts Meats the product standard's requirements. 10.2.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric offers Meats the product standard's requirements. 10.2.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric offers Meats the product standard's requirements. 10.2.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric indects Meats the product standard's requirements. 10.2.5 Lifting Does not apply, since the entire switchgar needs to be avaluated. 10.2.5 Lifting Does not apply, since the entire switchgar needs to be avaluated. 10.2.6 Normation of avakting devection attensite. Does not apply, since the entire switchgar needs to be avaluated. 10.	-	l.	Δ	20
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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 Is the panel builder's responsibile 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, provide the information in the instruction	10.9 Insulation properties			
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	10.12 Electromagnetic compatibility			
	10.13 Mechanical function			

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])

[ACN998011])		
Type of switch		Level switch
Number of poles		2
Max. rated operation voltage Ue AC	V	690
Rated permanent current lu	А	20
Number of switch positions		9
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		No
Suitable for front mounting 4-hole		Yes
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Complete device in housing		No
Type of control element		Toggle
Front shield size		48x48 mm
Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side		12

Approvals

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Product Standards	UL 60947-4-1;CSA - C22.2 No. 60947-4-1-14; CSA-C22.2 No. 94; IEC/EN 60947-3; CE marking
UL File No.	E36332
UL Category Control No.	NLRV
CSA File No.	12528
CSA Class No.	3211-05
North America Certification	UL listed, CSA certified
Suitable for	Branch circuits, suitable as motor disconnect
Degree of Protection	IEC: IP65; UL/CSA Type 1, 12

Dimensions

