DATASHEET - T0-2-15313/E



On switches, T0, 20 A, flush mounting, 2 contact unit(s), Contacts: 3, 45°, momentary, Without 0 (Off) position, With spring-return to STOP, STOP<START, design no. 15313



Similar to illustration

Part no. T0-2-15313/E Catalog No. 011334

Delivery program			
Product range			Control switches
Part group reference			ТО
Basic function			On switches
			with black thumb grip and front plate
Contacts			3
Degree of Protection			Front IP65
Design			flush mounting
Contact sequence			10 20 30 40 50 60
Switching angle		0	45
Switching performance			momentary Without 0 (Off) position With spring-return to STOP
Design number			15313
Front plate no.			FS 141879
front plate			STOP <start< td=""></start<>
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	5.5
Rated uninterrupted current	I _u	Α	20
Note on rated uninterrupted current !u			Rated uninterrupted current I _u is specified for max. cross-section.
Number of contact units		contact unit(s)	

Technical data General

donoral			
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			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 _e	V AC	690
Rated uninterrupted current	Iu	Α	20
Note on rated uninterrupted current $\boldsymbol{!}_{\boldsymbol{u}}$			Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ 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	٦		
$\cos \phi$ rated making capacity as per IEC 60947-3		Α	130
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		Α	100
400/415 V		Α	110
500 V		Α	80
690 V		Α	60
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I _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		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			
Rated operational current motor load switch 230 V	I _e	A	11.5
	l _e	A A	11.5

400 V story delta		٨	00
400 V star-delta	l _e	A	20
500 V	l _e	Α	9
500 V star-delta	l _e	Α	15.6
690 V	l _e	Α	4.9
690 V star-delta	l _e	Α	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	l _e	Α	13.3
400 V 415 V	l _e	Α	13.3
500 V	l _e	Α	13.3
690 V	l _e	Α	7.6
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	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	I _e	Α	10
Contacts	-	Quantity	1
48 V		,	
Rated operational current	I _e	A	10
Contacts	C	Quantity	
60 V		Zuumary	_
Rated operational current	I _e	A	10
Contacts	·e	Quantity	
120 V		Quantity	
Rated operational current	I _e	A	5
Contacts	'e		
Contacts 240 V		Quantity	
		A	5
Rated operational current	l _e		
Contacts DC-13, Control switches L/R = 50 ms		Quantity	J
		۸	10
Rated operational current	le	A	10
Voltage per contact pair in series	Fault	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)
TOARDO WITH TOTALIOS TO DITY TOZZO		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 40	000
Rated operational voltage	U _e	V AC	600

Rated uninterrupted current max.			
Main conducting paths			
General use		Α	16
Auxiliary contacts			
General Use	I _U	Α	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
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		Α	50
High fault rating		kA	10
max. Fuse		Α	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

Jesign verification as per IEC/EN 61439			
echnical data for design verification			
Rated operational current for specified heat dissipation	In	Α	20
Heat dissipation per pole, current-dependent	P_{vid}	W	0.6
Equipment heat dissipation, current-dependent	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
EC/EN 61439 design verification			
10.2 Strength of materials and parts			
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.
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 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])

	On/Off switch
	3
V	690
Α	20
	2
	No
	No
	Built-in device
	0
	No
	Yes
	No
	No
	No
	Toggle
	48x48 mm
	IP65
	12

Approvals

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

