

Step switches, T3, 32 A, rear mounting, 3 contact unit(s), Contacts: 6, 45 °, maintained, With 0 (Off) position, 0-3, design no. 15131



Part no. T3-3-15131/Z Catalog No. 018773



Similar to illustration			
Delivery program			
Product range			Control switches
Part group reference			Т3
Basic function			Step switches
			with black thumb grip and front plate
Contacts			6
Degree of Protection			Front IP65
Design			rear mounting
Contact sequence			11 0 0 1 2 3 1 1 0 0 1 2 3 1 1 0 0 1 2 3 1 1 0 0 1 2 3 1 0 1 0 0 1 2 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0 0 0 0 1 0
Switching angle		0	45
Switching performance			maintained With 0 (Off) position
Design number			15131
Front plate no.			FS 420
front plate			0-3
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	15
Rated uninterrupted current	l _u	Α	32
Note on rated uninterrupted current !u			Rated uninterrupted current I _u is specified for max. cross-section.
Number of contact units		contact unit(s)	3

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

Rated impulse withstand voltage Mechanical shock resistance Mounting position Contacts Electrical characteristics Rated operational voltage Rated uninterrupted current lu Note on rated uninterrupted current lu AB 55 % DF AB 40 % DF AB 40 % DF AB 60 % DF AB 6				111/0
Monitor persions 100 monitor	Overvoltage category/pollution degree		V 40	111/3
Nometon Description New Transmisted Control New Transmisted C		U _{imp}		
Content Con			g	
Biested journationality (1986) Part Pa				As required
Rested spentional voltage U ₂				
Note of marted seminarrogand corrent No. No. Seminarization control seminarrogand corrent No. N		П	۷۸۲	690
Note on rated uninternuted current l ₁ use persions, class 17 cm				
Lead rating with intermitment operation, class 12 4 x kg 2 AB 59 50 IP 5, 12 1.5 1.5 AB 59 50 IP 7, 12 2.2 1.5 Short-currating 9 45 50 1.5 Rate abort-cline withstand current I/o a current I/o		'u	А	
AB 05 % 16 F K 16 kg 1 kg				Hated uninterrupted current $I_{\mathbf{u}}$ is specified for max. cross-section.
AB 88 No Fine A leg Lig				
Short-circutating			x l _e	2
Profession Pro	AB 40 % DF		x I _e	1.6
Fates	AB 60 % DF		x I _e	1.3
Rated short-time withstand current (vs current)	Short-circuit rating			
Note on ratioal short-time withstand current low	Fuse		A gG/gL	35
Name Part	Rated short-time withstand current (1 s current)	I _{cw}	A_{rms}	650
Switching capacity cosp or IEC 80947-3	Note on rated short-time withstand current lcw			Current for a time of 1 second
Roce of prated making capacity as per IEC 68947-3 4 3 20 ARead breaking capacity ose you IEC 68947-3 4 26 20 400415 V 4 20 20 550 V 4 20 20 680 V 5 40 20 15 te isolation to IN S1100 5 40 40 15 current heat loss per contact at I ₁ VAC 40 40 15 current heat loss per auxiliary circuit at I ₁ (AC-15/230 V) 7 1 1 15 current heat loss per auxiliary circuit at I ₁ (AC-15/230 V) 7 20 1 15 current heat loss per auxiliary circuit at I ₁ (AC-15/230 V) 7 20 1 15 current heat contacts 9 10 20 1 16 current heat contacts 9 10 20 20 Maximum portation for da witch P NW 25 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20 20	Rated conditional short-circuit current	Iq	kA	1
Reted broaking capacity cas on tile 68947-3 A 280 230 V A 280 480(415 V A 280 580 V A 240 860 V Bere isolation to EN 61140 VAC 440 Current heat loss per contact at l _e VAC 40 Current heat loss per auxiliary circuit st l _e (AC-15/230 V) Operations 1.0° Miximum operating frequency Operations 1.0° AC-3 Reting, motor load switch P KW Reating, motor load switch P KW 5 Red 400 V Star-delta P KW 1 400 V Star-delta P KW 1 500 V Star-delta P KW 15 980 V Star-delta P KW 15 980 V Star-delta P KW 15 980 V Star-delta P KW 15 19 ABRITO CARRELL P KW 15 19 ABRITO CARRELL SA 23 19 ABRITO CARRELL	Switching capacity			
230 \	$\cos \phi$ rated making capacity as per IEC 60947-3		Α	320
Moder 1	Rated breaking capacity cos φ to IEC 60947-3		Α	
Sign	230 V		Α	260
Sale isolation to EN 61140 Service metha contacts 1	400/415 V		Α	260
Safe isolation to EN 61140 Hotevamen the contacts VAC 40 Current hear loss per contact at I ₆ W VAC 40 Current hear loss per contact at I ₆ VAC 11 Current hear loss per contact at I ₆ (AC-15/230 V) VAC VAC Meximum operating frequency Operations // XAC YAC AC-3 TAC-3 TAC-3 Rating, motor load switch P VAV 220 V 230 V P VAV 400 V Star-delta P VAV 400 V Star-delta P VAV 500 V Star-delta P VAV 600 V Star-delta P VAV 8ated operational current motor load switch P VAV 230 V star-delta I ₆ A 23 400 V Star-delta I ₆ <td>500 V</td> <td></td> <td>Α</td> <td>240</td>	500 V		Α	240
between the contacts VAC 440 Current heat loss per contact at la VAC 1.1 Current heat loss per auxiliary circuit at la (AC-15/230 V) Operations by a 1.1 1.1 Litiespan, mechanical Operations by a 1.2 2.0 Maximum operating frequency Operations by a 1.2 200 AC-3 Post of the part of the pa	690 V		Α	170
Current heat loss per contact at le Current heat loss per auxiliary circuit at le (AC-15/230 V) V 11 Liflespan, mechanical Operations y 150 generating frequency > 0.5 AC-3 200 AC-3 - V AC-3 (200 y 230 V) N V 200 Y 230 V P kW 5.5 400 V 15 V P kW 1.0 400 V 15 V P kW 1.5 500 V P kW 1.5 680 V Star-delta P kW 1.5 230 V Star-delta P kW 2.2 400 V Star-delta P kW 2.3 400 V Star-delta P A 2.3 400 V Star-delta P A 2.3 500 V V Star-delta P A <td>Safe isolation to EN 61140</td> <td></td> <td></td> <td></td>	Safe isolation to EN 61140			
Current heat loss per auxiliary circuit at l _e (AC-15/230 V) CD 1.1 Lifespan, mechanical Operations x x 10 ⁶ v >0.5 Maximum operating frequency Operations x 10 ⁶ v 200 AC-3 The company of	between the contacts		V AC	440
Lifespan, mechanical Operations x 108 Maximum operating frequency Operations/ AC	Current heat loss per contact at I _e		W	1.1
Maximum operating frequency AC-3 Rating, motor load switch 220 V 230 V 200 V 154r-delta 400 V 154r-delta 500 V V 154r-delta 680 V 680 V 78	Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		CO	1.1
AC-3 Rating_motor load switch Rating_motor loa	Lifespan, mechanical	Operations	x 10 ⁶	> 0.5
AC-3 Rating, motor load switch P kW 220 V 230 V P kW 5.5 230 V Star-delta P kW 7.5 400 V 415 V P kW 11 400 V Star-delta P kW 15 500 V P kW 15 500 V Star-delta P kW 11 690 V Star-delta P kW 11 690 V Star-delta P kW 11 88ted operational current motor load switch 230 V 230 V 230 V 230 V star-delta I ₀ A 23.7 400 V 415 V I ₀ A 23.7 400 V star-delta I ₀ A 23.7 500 V I ₀ A 23.7 500 V star-delta I ₀ A 23.7 500 V star-delta I ₀ A 23.7 500 V star-delta I ₀ A 32 690 V star-delta I ₀ A 32 690 V star-delta I ₀ A 25.5	Maximum operating frequency	Operations/h		1200
Rating, motor load switch P kW 220 V 230 V P kW 5.5 230 V Star-delta P kW 7.5 400 V 415 V P kW 11 400 V Star-delta P kW 15 500 V P kW 18.5 690 V Star-delta P kW 11 690 V Star-delta P kW 22 Rated operational current motor load switch 230 V le A 23.7 230 V star-delta le A 32 400 V star-delta le A 23.7 400 V star-delta le A 23.7 500 V le A 23.7 500 V star-delta le A 23.7 690 V star-delta le A 22.5 690 V star-delta le A 25.5 AC-23A Motor rating AC-23A, 50 - 60 Hz P kW	AC			
220 V 230 V P	AC-3			
230 V Star-delta	Rating, motor load switch	Р	kW	
A00 V 415 V P kW 15	220 V 230 V	Р	kW	5.5
400 V Star-delta P kW 15 500 V Star-delta P kW 15 500 V Star-delta P kW 18.5 690 V C Star-delta P kW 11 690 V Star-delta P kW 22 Rated operational current motor load switch	230 V Star-delta	Р	kW	7.5
SOO V Star-delta	400 V 415 V	Р	kW	11
S00 V Star-delta	400 V Star-delta	Р	kW	15
S00 V Star-delta		P	kW	
690 V Star-delta P kW 22 Rated operational current motor load switch Ie A 23.7 230 V star-delta Ie A 32 400 V star-delta Ie A 23.7 400 V star-delta Ie A 32 500 V Ie A 23.7 500 V star-delta Ie A 32 690 V Ie A 14.7 690 V star-delta Ie A 14.7 690 V star-delta Ie A 25.5 AC-23A AC-23A, 50 - 60 Hz P KW	500 V Star-delta	P	kW	18.5
Rated operational current motor load switch Ie A 23.7 230 V star-delta Ie A 32 400V 415 V Ie A 23.7 400 V star-delta Ie A 32 500 V Ie A 23.7 500 V star-delta Ie A 32 690 V Ie A 32 690 V star-delta Ie A 14.7 690 V star-delta Ie A 25.5 AC-23A Motor rating AC-23A, 50 - 60 Hz P kW	690 V	Р	kW	11
230 V star-delta Ie	690 V Star-delta	P	kW	22
230 V star-delta Ie	Rated operational current motor load switch			
230 V star-delta Ie		I _e	Α	23.7
400V 415 V Ie A 23.7 400 V star-delta Ie A 32 500 V Ie A 23.7 500 V star-delta Ie A 32 690 V Ie A 14.7 690 V star-delta Ie A 25.5 AC-23A B WW	230 V star-delta	l _e	Α	32
400 V star-delta	400V 415 V		Α	23.7
500 V				
500 V star-delta				
690 V I _e A 14.7 690 V star-delta I _e A 25.5 AC-23A Motor rating AC-23A, 50 - 60 Hz P kW				
690 V star-delta				
AC-23A Motor rating AC-23A, 50 - 60 Hz P kW				
Motor rating AC-23A, 50 - 60 Hz		le	А	20.0
230 V P kW 7.5				
	230 V	۲	kVV	1.5

400 V 415 V	P	kW	15
500 V	P	kW	15
690 V	P	kW	15
Rated operational current motor load switch			
230 V	I _e	Α	32
400 V 415 V	I _e	Α	32
500 V	I _e	Α	26.4
690 V	I _e	A	17
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	A	25
Voltage per contact pair in series	·e	V	60
DC-21A	I _e	A	
			1
Rated operational current	I _e	A	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I _e	Α	25
Contacts		Quantity	1
48 V			
Rated operational current	I _e	Α	25
Contacts		Quantity	2
60 V			
Rated operational current	l _e	Α	25
Contacts		Quantity	3
120 V			
Rated operational current	I _e	Α	12
Contacts		Quantity	3
240 V			
Rated operational current	I _e	Α	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	I _e	Α	20
Voltage per contact pair in series		٧	24
Control circuit reliability at 24 V DC, 10 mA	Fault	H _F	< 10 ⁻⁵ ,< 1 failure in 100,000 switching operations
Terminal conscition	probability		
Terminal capacities Solid or stranded		mm ²	1 x (1 - 6)
		ШП	2 x (1 - 6)
Flexible with ferrules to DIN 46228		mm ²	1 x (0.75 - 4)
Terminal corow			2 x (0.75 - 4)
Terminal screw		Nm	M4
Tightening torque for terminal screw Technical safety parameters:		Nm	1.6
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Contacts			
Rated operational voltage	U _e	V AC	600
Rated uninterrupted current max.			
Main conducting paths			
General use		Α	25
Auxiliary contacts			
General Use	I _U	Α	10
Pilot Duty			A 600
Switching capacity			
Maximum motor rating			

Single-phase		
120 V AC	НР	1.5
200 V AC	HP	3
240 V AC	НР	3
Three-phase		
200 V AC	НР	3
240 V AC	НР	3
480 V AC	НР	7.5
600 V AC	НР	10
Short Circuit Current Rating	SCCR	
Basic Rating	kA	5
max. Fuse	Α	40
High fault rating	kA	10
max. Fuse	Α	40, Class J
Terminal capacity		
Solid or flexible conductor with ferrule	AWG	14 - 10
Terminal screw		M4
Tightening torque	lb-in	17.7

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	32
Heat dissipation per pole, current-dependent	P _{vid}	W	1.1
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
IEC/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 switch gear must be observed. $\label{eq:constraint}$
10.12 Electromagnetic compatibility			Is the panel builder's responsibility. The specifications for the switch gear must be observed. $\label{eq:constraint}$
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)

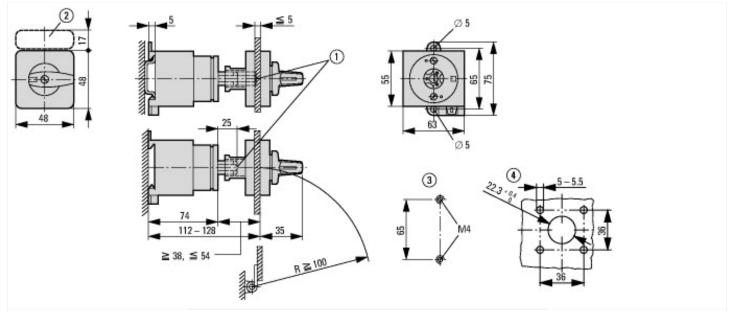
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Control switch (ecl@ss10.0.1-27-37-14-14

Type of switch		Level switch
Number of poles		2
Max. rated operation voltage Ue AC	V	690
Rated permanent current lu	Α	32
Number of switch positions		4
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		Toggle
Front shield size		48x48 mm
Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side		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



- Shaft extension with ZAV-T0 possible, max. 4 x 25 = 100 mm
 ZFS-... Label mount not included as standard
 Drilling dimensions base
 Drilling dimensions door