### **DATASHEET - T0-4-15126/I1**



Auxiliary winding switch, T0, 20 A, surface mounting, 4 contact unit(s), Contacts: 8, 45  $^{\circ}$ , maintained, With 0 (Off) position, with spring-return from both directions to 0, 2-START>0<Start-1, Design no. 15126



Part no. T0-4-15126/l1 Catalog No. 218152



Similar to illustration

Control switches Product range Product range Product range Production PRES Page of Production PRES Production PRES PRES PRES PRES PRES PRES PRES PRES	similar to illustration			
Part group reference  Assist function  Assistany minding switch with black thumb grip and front plate  8  PS  Intellify insulated  Switching angle  Switching angle  Switching angle  Switching angle  Switching angle  Switching angle  Totally insulated  Switching angle  Switching angle  Totally insulated  Switching angle  Switching angle  Totally insulated  Switching angle  Switching angle  Switching angle  START Switching angle  Switching an	Delivery program			
Auxiliary winding switch virth black thumb grip and front plate  8  Design  De	Product range			
with black thumb grip and front plate  B Design  Design numbor  This is pecified for max. cross-section.  The property of the property of the pasted of	Part group reference			
Contacts Degree of Protoction  Possign  Contact sequence  Contact	Basic function			
Design  Design  Design  Design  Design  Switching angle Switching angle Switching angle Switching angle Switching angle Switching angle Switching performance  Start plate no.  START START  START  START START  START START  START START  START START  START START  START START  START START  START START  START START  START  START START  START  START START  S				with black thumb grip and front plate
Totally insulated surface mounting surface mounting  Solitact sequence  Solitact sequence  **  45  **  **  **  **  **  **  **  **	Contacts			8
surface mounting  Switching angle  * 45  Switching performance  With (0th position with spring-return from both directions to 0  Toront plate no.  Toront plate no.  Toront plate  Word P	Degree of Protection			IP65
Switching angle Switching angle Switching engle Switching performance Switching engle				totally insulated
Switching angle  switching performance  maintained With 0 (Off) position with spring-return from both directions to 0  Design number  Front plate no.  START START 2 1  FS 142074  2-START-0-Start-1  Wotor rating AC-23A, 50 - 60 Hz  400 V P RW 5.5  Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section.  Number of contact units  Switching angle  a 45  maintained With 0 (Off) position with spring-return from both directions to 0  START START 2 1  FS 142074  2-START-0-Start-1  Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section.	Design			surface mounting
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### Technical data General

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			
Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			111/3
Rated impulse withstand voltage	U <sub>imp</sub>	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	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.
Load rating with intermittent operation, class 12			
AB 25 % DF		x I <sub>e</sub>	2
AB 40 % DF		x I <sub>e</sub>	1.6
AB 60 % DF		x l <sub>e</sub>	1.3
Short-circuit rating			
Fuse		A gG/gL	20
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		11113	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		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 l <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	Operations/ii		1200
AC-3			
Rating, motor load switch	P	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			
230 V	I <sub>e</sub>	Α	11.5
230 V star-delta	l <sub>e</sub>	A	20
400 V 415 V	l <sub>e</sub>	A	11.5
400 V star-delta	l <sub>e</sub>	Α	20

500 V		Α	9
500 V star-delta	l <sub>e</sub>	A	15.6
690 V	l <sub>e</sub>		4.9
	l <sub>e</sub>	A	
690 V star-delta	l <sub>e</sub>	Α	8.5
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	3
400 V 415 V	P	kW	5.5
500 V	P P	kW	7.5
690 V  Rated operational current motor load switch	۲	kW	5.5
230 V		Α	13.3
400 V 415 V	l <sub>e</sub>		
	l <sub>e</sub>	A	13.3
500 V	l <sub>e</sub>	Α	13.3
690 V	l <sub>e</sub>	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	le	Α	5
Contacts		Quantity	3
240 V			
Rated operational current	l <sub>e</sub>	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	$H_{F}$	$< 10^{-5}$ , $< 1$ 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			$\mathrm{B10}_\mathrm{d}$ 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

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 <sub>vs</sub>	W	0
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	40
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 [ACN998011])

[ACN998011])		
Type of switch		Reverser
Number of poles		2
Max. rated operation voltage Ue AC	V	690
Rated permanent current lu	Α	20
Number of switch positions		5
With 0 (off) position		Yes
With retraction in 0-position		Yes
Device construction		Surface mounted 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		No
Complete device in housing		Yes

Type of control element	Toggle
Front shield size	48x48 mm
Degree of protection (IP), front side	IP65
Degree of protection (NEMA), front side	Other

## **Dimensions**



