DATASHEET - T0-2-8260/I1



Step switches, T0, 20 A, surface mounting, 2 contact unit(s), Contacts: 4, 45 $^{\circ}$, maintained, With 0 (Off) position, 0-2, design no. 8260



Part no. T0-2-8260/I1 Catalog No. 222619



Similar to illustration			
Delivery program			
Product range			Control switches
Part group reference			ТО
Basic function			Step switches
			with black thumb grip and front plate
Contacts			4
Degree of Protection			IP65
			totally insulated
Design			surface mounting
Contact sequence			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Switching angle		0	45
Switching performance			maintained With 0 (Off) position
Design number			8260
Front plate no.			FS 418
front plate			0-2
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	5.5
Rated uninterrupted current	Iu	Α	20
Note on rated uninterrupted current !u			Rated uninterrupted current $I_{\rm u}$ is specified for max. cross-section.
Number of contact units		contact unit(s)	2

Technical data

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		-	III/3
Rated impulse withstand voltage	U _{imp}	V AC	6000
Mechanical shock resistance	· IIIIp	g	15
Mounting position		9	As required
Contacts			no required
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	I _u	Α	20
Note on rated uninterrupted current !u			Rated uninterrupted current I_u is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x l _e	2
AB 40 % DF		x I _e	1.6
AB 60 % DF		x l _e	13
Short-circuit rating		7. ·e	
Fuse		A gG/gL	20
Rated short-time withstand current (1 s current)	1	A go/gL A _{rms}	320
, ,	I _{cw}	Arms	
Note on rated short-time withstand current lcw		LΛ	Current for a time of 1 second
Rated conditional short-circuit current Switching capacity	Iq	kA	6
cos φ rated making capacity as per IEC 60947-3		Α	130
Rated breaking capacity cos φ to IEC 60947-3		A	
230 V		A	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	X 10	1200
AC	Ореганопадп		1200
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		7.5
500 V	Р	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 _e	Α	11.5
230 V star-delta	I _e	Α	20
400V 415 V	I _e	A	11.5
400 V star-delta	I _e	A	20
400 V Stat-delta 500 V			9
	l _e	A	
500 V star-delta	l _e	A	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	P	kW	5.5
Rated operational current motor load switch		KVV	J.0
230 V	l _e	Α	13.3
400 V 415 V		A	13.3
	l _e		
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	l _e	Α	10
Voltage per contact pair in series		V	60
DC-21A	l _e	Α	
Rated operational current	l _e	Α	1
Contacts		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	l _e	Α	10
Contacts		Quantity	1
48 V			
Rated operational current	l _e	Α	10
Contacts		Quantity	2
60 V			
Rated operational current	le	Α	10
Contacts		Quantity	3
120 V			
Rated operational current	I _e	Α	5
Contacts		Quantity	3
240 V		,	
Rated operational current	I _e	A	5
Contacts	•	Quantity	
DC-13, Control switches L/R = 50 ms			-
Rated operational current	l _e	Α	10
Voltage per contact pair in series	C	V	32
Control circuit reliability at 24 V DC, 10 mA	Fault	H _F	
	probability	114	< 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		mm ²	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			
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 _{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	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.

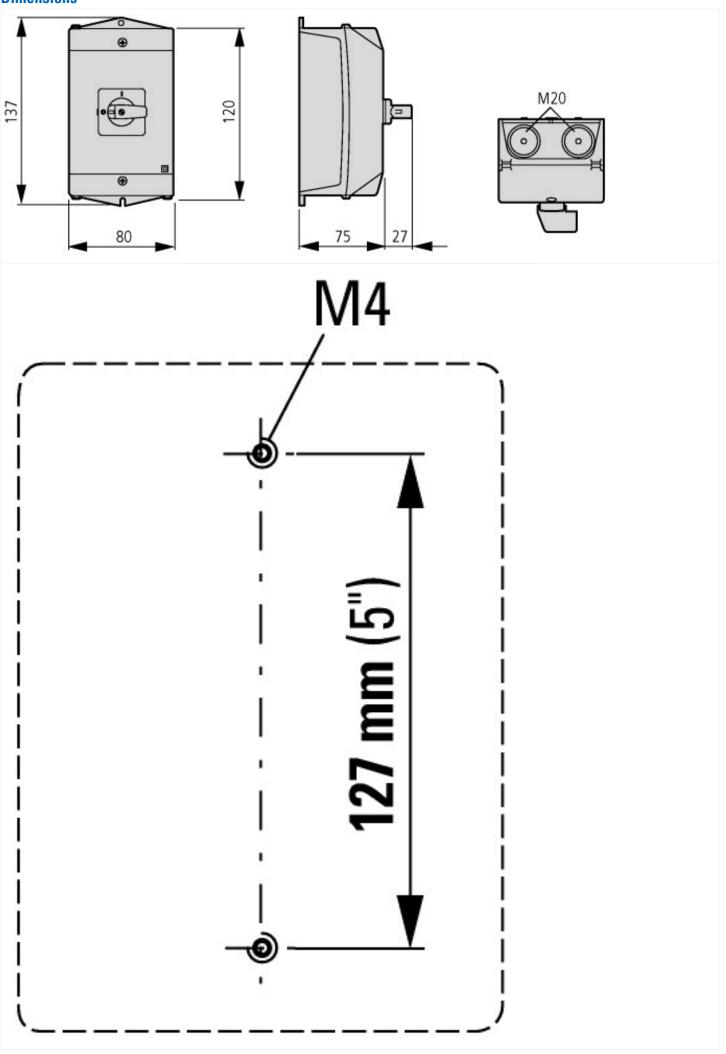
Technical data ETIM 7.0

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])

Number of poles Max. rated operation voltage Ue AC Rated permanent current lu Number of switch positions With 0 (off) position With retraction in 0-position With retraction in 0-position Device construction Width in number of modular spacings Suitable for ground mounting Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting Complete device in housing Complete device in housing Type of control element Front shield size Degree of protection (IP), front side	[ACN998011])		
Max. rated operation voltage Ue AC Rated permanent current lu Number of switch positions With 0 (off) position With note of the construction Device construction With in number of modular spacings Suitable for ground mounting Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting No Suitable for intermediate mounting Hospitalization No Suitable for intermediate mounting No No Suitable for intermediate mounting No No No No No No No No No N	Type of switch		Level switch
Rated permanent current lu Number of switch positions With 0 (off) position With retraction in 0-position Device construction Width in number of modular spacings Suitable for ground mounting Suitable for front mounting 4-hole Suitable for intermediate mounting Suitable for intermediate mounting Complete device in housing Type of control element Front shield size Degree of protection (IP), front side A 20 3 3 3 3 Yes No No Surface mounted device Ves No No Yes No No Toggle 48x48 mm 1P65	Number of poles		2
Number of switch positions With 0 (off) position With petraction in 0-position No Device construction Width in number of modular spacings Suitable for ground mounting Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting Suitable for intermediate mounting Complete device in housing Tyes Type of control element Front shield size Degree of protection (IP), front side 3 3 Yes No Surface mounted device No Surface mounted device No Yes No Tyes Tyes Toggle 48x48 mm 1P65	Max. rated operation voltage Ue AC	V	690
With 0 (off) position With retraction in 0-position Device construction Width in number of modular spacings Width in number of modular spacings Suitable for ground mounting Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting Complete device in housing Type of control element Front shield size Degree of protection (IP), front side Yes Ves Yes Type of control side Asx48 mm IP65	Rated permanent current lu	Α	20
With retraction in 0-position Device construction Width in number of modular spacings O Suitable for ground mounting Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting Complete device in housing Type of control element Front shield size Degree of protection (IP), front side No Surface mounted device O Surface mounted device No Ves Yes No No Types Typ	Number of switch positions		3
Device construction Surface mounted device O Suitable for ground mounting Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting Complete device in housing Type of control element Front shield size Degree of protection (IP), front side Surface mounted device O Surface mounted device No Surface mounted	With 0 (off) position		Yes
Width in number of modular spacings Suitable for ground mounting Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting Complete device in housing Type of control element Front shield size Degree of protection (IP), front side O Yes O O O O O O O O O O O O O	With retraction in 0-position		No
Suitable for ground mounting Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting Complete device in housing Type of control element Front shield size Degree of protection (IP), front side Yes Yes Toggle 48x48 mm IP65	Device construction		Surface mounted device
Suitable for front mounting 4-hole Suitable for distribution board installation No Suitable for intermediate mounting No Complete device in housing Yes Type of control element Front shield size Degree of protection (IP), front side No INO IND	Width in number of modular spacings		0
Suitable for distribution board installation Suitable for intermediate mounting No Complete device in housing Type of control element Front shield size Degree of protection (IP), front side No Yes Type of control element Toggle 48x48 mm IP65	Suitable for ground mounting		Yes
Suitable for intermediate mounting Complete device in housing Type of control element Front shield size Degree of protection (IP), front side No Toggle 48x48 mm IP65	Suitable for front mounting 4-hole		No
Complete device in housing Yes Type of control element Toggle Front shield size Degree of protection (IP), front side Yes Toggle 48x48 mm IP65	Suitable for distribution board installation		No
Type of control element Toggle Front shield size 48x48 mm Degree of protection (IP), front side IP65	Suitable for intermediate mounting		No
Front shield size 48x48 mm Degree of protection (IP), front side IP65	Complete device in housing		Yes
Degree of protection (IP), front side	Type of control element		Toggle
	Front shield size		48x48 mm
Degree of protection (NEMA), front side Other	Degree of protection (IP), front side		IP65
	Degree of protection (NEMA), front side		Other





Drilling dimensions base