DATASHEET - T5-3-7/Z



Multi-speed switches, Contacts: 6, 100 A, 2 speeds, front plate: 2-0-1, 60 $^\circ$, maintained, rear mounting



T5-3-7/Z Catalog No. 096472

Part no.

EL-Nummer

(Norway)

0001456907

Similar to illustration

Delivery program

Product range			Control switches
Part group reference			T5
Basic function			Multi-speed switches
			with black thumb grip and front plate
Contacts			6
Degree of Protection			Front IP65
Design			rear mounting
Contact sequence			
switching function			2 speeds
Switching angle		0	60
Switching performance			maintained With 0 (Off) position
Design number			7
Front plate no.			FS 621
front plate			2-0-1
Motor rating AC-23A, 50 - 60 Hz			
400 V	Р	kW	55
Rated uninterrupted current	lu	A	100
Note on rated uninterrupted current !u			Rated uninterrupted current ${\sf I}_{\sf u}$ 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 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	- mp	g	15
Mounting position		9	As required
Contacts			
Electrical characteristics			
Rated operational voltage	Ue	V AC	690
Rated uninterrupted current	lu	A	100
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 l _e	1.6
AB 60 % DF		x l _e	1.3
Short-circuit rating		····e	
Fuse		A gG/gL	100
Rated short-time withstand current (1 s current)	I _{cw}	A go/gc	1700
Note on rated short-time withstand current lcw	CVV	11115	Current for a time of 1 second
Rated conditional short-circuit current	lq	kA	2
Switching capacity	'q	10.1	-
$\cos \phi$ rated making capacity as per IEC 60947-3		А	950
Rated breaking capacity $\cos \phi$ to IEC 60947-3		A	
230 V		A	760
400/415 V		A	740
500 V		A	590
690 V		A	420
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at l _e		W	7.5
Current heat loss per auxiliary circuit at I _e (AC-15/230 V)		C0	7.5
Lifespan, mechanical	Operations	x 10 ⁶	> 0.5
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	Р	kW	
220 V 230 V	Р	kW	22
230 V Star-delta	Р	kW	30
400 V 415 V	Р	kW	30
400 V Star-delta	Ρ	kW	45
500 V	Р	kW	30
500 V Star-delta	Р	kW	45
690 V	Р	kW	15
690 V Star-delta	Р	kW	22
Rated operational current motor load switch			
230 V	l _e	A	71
230 V star-delta	le	A	100
400V 415 V	le	A	55
400 V star-delta	le	A	95.3
500 V	l _e	A	44
500 V star-delta	l _e	A	76.2
690 V	l _e	A	17
690 V star-delta	l _e	A	29.4
AC-21A	·e		
AU-21A			

Rated operational current switch			
440 V	le	А	100
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
230 V	Р	kW	30
400 V 415 V	Р	kW	55
500 V	Р	kW	37
690 V	Р	kW	30
Rated operational current motor load switch			
230 V	le	А	100
400 V 415 V	le	А	100
500 V	l _e	А	55
690 V	le	A	32
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	le	А	80
Voltage per contact pair in series		V	60
Control circuit reliability at 24 V DC, 10 mA	Fault probability	H _F	< 10 $^{-5}$, < 1 fault in 100000 operations
Terminal capacities			
Solid or stranded		mm ²	1 x (2,5 - 35) 2 x (2,5 - 16)
Flexible with ferrules to DIN 46228		mm ²	1 x (1 - 25) 2 x (1.5 - 10)
Terminal screw			M6
Tightening torque for terminal screw		Nm	4
Technical safety parameters:			
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Terminal capacity			
Terminal screw			M6

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	А	100
Heat dissipation per pole, current-dependent	P _{vid}	W	7.5
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 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.

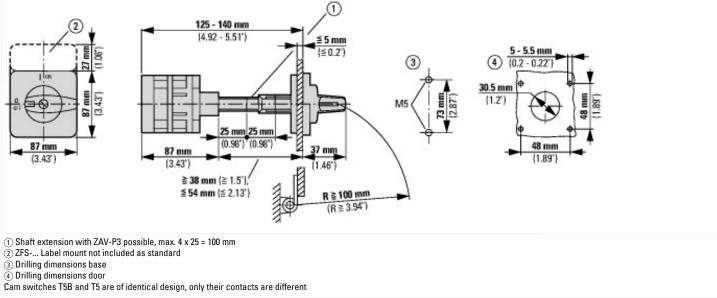
Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Off-load switch (EC001105)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Changeover switch (ecl@ss10.0.1-27-37-14-05 [AKF062013])

Model		Pole switch
Number of poles		3
With 0 (off) position		Yes
With retraction in 0-position		No
Rated permanent current lu	А	100
Rated operation current le at AC-3, 400 V	А	55
Rated operation power at AC-3, 400 V	kW	30
Degree of protection (IP), front side		IP65
Degree of protection (NEMA), front side		Other
Number of auxiliary contacts as normally closed contact		0
Number of auxiliary contacts as normally open contact		0
Number of auxiliary contacts as change-over contact		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
Material housing		Plastic
Type of control element		Toggle
Type of electrical connection of main circuit		Screw connection

Dimensions



Assets (links)

Declaration of CE Conformity 00003073 Instruction Leaflets IL03801009Z2018_05