

## Non-standard switch, T3, 32 A, rear mounting, Basic switch, 9 contact unit(s)



Part no. T3-9-SOND\*/XZ Article no. 907910

Similar to illustration

Delivery program			
Product range			Non-standard switch
Part group reference			T3
Notes			customized version according to form
Design			rear mounting Basic switch
Front plate no.			FS 908
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	15
Rated uninterrupted current	l <sub>u</sub>	Α	32
Number of contact units		contact unit(s)	9

## **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			III/3
Rated impulse withstand voltage	$U_{imp}$	V AC	6000
Mechanical shock resistance		g	15
Mounting position			As required
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Contacts			

Contacts			
Electrical characteristics			
Rated operational voltage	U <sub>e</sub>	V AC	690
Rated uninterrupted current	I <sub>u</sub>	Α	32
Note on rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$			Rated uninterrupted current lu 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 I <sub>e</sub>	1.3
Short-circuit rating			
Fuse		A gG/gL	35
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	$A_{rms}$	650
Note on rated short-time withstand current lcw			Current for a time of 1 second

Switching capacity  cos φ rated making capacity as per IEC 60947-3  Rated breaking capacity cos φ to IEC 60947-3  230 V  400/415 V  500 V  690 V		A A A	320 260 260 240
Rated breaking capacity cos φ to IEC 60947-3  230 V  400/415 V  500 V  690 V		A A A	260 260
230 V 400/415 V 500 V 690 V		A A	260
400/415 V 500 V 690 V		A A	260
500 V 690 V		Α	
690 V			240
		Α	
			170
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I <sub>e</sub>			1.1
Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)			1.1
		X 10	> 0.5
	perations/h		1200
AC			
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	18.5
690 V		kW	11
690 V Star-delta P		kW	22
Rated operational current motor load switch			
230 V I <sub>e</sub>		A	23.7
230 V star-delta		Α	32
400V 415 V I <sub>e</sub>			23.7
			32
500 V			23.7
500 V star-delta		Α	32
690 V		Α	14.7
690 V star-delta		Α	25.5
AC-21A			
Rated operational current switch			
440 V		Α	32
AC-23A			
Motor rating AC-23A, 50 - 60 Hz		kW	
230 V P			7.5
400 V 415 V P			15
500 V P			15
690 V P			15
Rated operational current motor load switch			<del></del>
		A	32
400 V 415 V I <sub>e</sub>			32
500 V			26.4
690 V		Α	17
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current		Α	25
Voltage per contact pair in series		V	60
DC-21A I <sub>e</sub>		Α	
Rated operational current			1
. "4			

Contacts				
Rated operational current	Contacts		Quantity	1
Rated operational current   I	DC-23A, motor load switch L/R = 15 ms			
Contacts	24 V			
A8 V   Rated operational current	Rated operational current	Ie	Α	25
Rated operational current	Contacts		Quantity	1
Contacts	48 V			
Rated operational current	Rated operational current	Ie	Α	25
Rated operational current   Ie	Contacts		Quantity	2
Contacts  120 V  Rated operational current  Contacts  240 V  Rated operational current  Rated operational current  Rated operational current  Rated operational current  Contacts  Contacts  Contacts  Contacts  DC-13, Control switches L/R = 50 ms  Rated operational current  Voltage per contact pair in series  Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability brobability  Terminal capacities  Fault probability  Resible with ferrules to DIN 46228	60 V			
Rated operational current Contacts Quantity Rated operational current  Rated operational current Rated operational current Rated operational current  Contacts  DC-13, Control switches L/R = 50 ms Rated operational current Per A 20 Control circuit reliability at 24 V DC, 10 mA Pault probability Probability Probability Refult probability Probability Refult (1-6) 2x (10-5, <1 fault in 100000 operations Refult probability Refult (1-6) 2x (10-75 - 4) 2x (10-75 - 4	Rated operational current	I <sub>e</sub>	Α	25
Rated operational current  Contacts  Quantity  Rated operational current  Ie A 5  Contacts  Quantity 5  Contacts  DC-13, Control switches L/R = 50 ms Rated operational current  Voltage per contact pair in series  Wolf of the minus of the series  Terminal capacities  Terminal capacities  Terminal capacities  Flexible with ferrules to DIN 46228  Residuate of the minus of the series of the	Contacts		Quantity	3
Contacts  Quantity  Rated operational current  Contacts  DC-13, Control switches L/R = 50 ms Rated operational current  Voltage per contact pair in series  Notes  Blud values as per EN ISO 13849-1, table C1	120 V			
Rated operational current Contacts Quantity  DC-13, Control switches L/R = 50 ms Rated operational current Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA Fault probability  Terminal capacities  Solid or stranded  mm² 1 x (1 - 6) 2 x (0.75 - 4) 3 x (0.75 - 4) 4 x (0.75 - 4) 5 x (0.75 - 4) 5 x (0.75 - 4) 6 x (0.75 - 4) 6 x (0.75 - 4) 7 x (0.75 - 4) 8 x (0	Rated operational current	le	Α	12
Rated operational current  Contacts  DC-13, Control switches L/R = 50 ms  Rated operational current  Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability  Terminal capacities  Solid or stranded  Flexible with ferrules to DIN 46228  Terminal screw  Max. tightening torque  Nam  1e  A  20  24  24  20  21  24  21  21  21  21  21  21  21  21	Contacts		Quantity	3
Contacts  DC-13, Control switches L/R = 50 ms  Rated operational current  Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability  Fault pr	240 V			
BCC-13, Control switches L/R = 50 ms  Rated operational current  Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability  Fault probability	Rated operational current	Ie	Α	5
Rated operational current  Voltage per contact pair in series  Control circuit reliability at 24 V DC, 10 mA  Fault probability  Terminal capacities  Solid or stranded  Flexible with ferrules to DIN 46228  Flexible with ferrules to DIN 46228  Terminal screw  Max. tightening torque  Nax. tightening torque  Notes  A 20  24  24  210 -5, < 1 fault in 100000 operations  mm² 1x (1 - 6) 2x (1 - 6) 2x (1 - 6)  1x (0.75 - 4) 2x (0.75 - 4) 2x (0.75 - 4) 2x (0.75 - 4)  Notes  B10d values as per EN ISO 13849-1, table C1	Contacts		Quantity	5
Voltage per contact pair in series  Voltage per contact pair in series  Voltage per contact pair in series  Fault probability	DC-13, Control switches L/R = 50 ms			
Control circuit reliability at 24 V DC, 10 mA  Fault probability  Fault in 100000 operations     1 x (1 - 6)	Rated operational current	I <sub>e</sub>	Α	20
Terminal capacities  Solid or stranded	Voltage per contact pair in series		V	24
Solid or stranded         mm²         1 x (1 - 6) 2 x (1 - 6)           Flexible with ferrules to DIN 46228         mm²         1 x (0.75 - 4) 2 x (0.75 - 4)           Terminal screw         M4           Max. tightening torque         Nm         1.6           Technical safety parameters:           Notes         B10 <sub>d</sub> values as per EN ISO 13849-1, table C1	Control circuit reliability at 24 V DC, 10 mA		H <sub>F</sub>	$< 10^{-5}, < 1$ fault in 100000 operations
Flexible with ferrules to DIN 46228  mm² 1 x (0.75 - 4) 2 x (0.75 - 4)  Terminal screw  M4  Max. tightening torque  Nm 1.6  Technical safety parameters:  Notes  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1	Terminal capacities			
Terminal screw  M4  Max. tightening torque  Nm  1.6  Technical safety parameters:  Notes  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1	Solid or stranded		mm <sup>2</sup>	
Max. tightening torque  Nm 1.6  Technical safety parameters:  Notes  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1	Flexible with ferrules to DIN 46228		mm <sup>2</sup>	
Technical safety parameters:  Notes  B10 <sub>d</sub> values as per EN ISO 13849-1, table C1	Terminal screw			M4
Notes B10 <sub>d</sub> values as per EN ISO 13849-1, table C1			Nm	1.6
	Technical safety parameters:			
Dating data for approved types				$\mathrm{B10_{d}}$ values as per EN ISO 13849-1, table C1
	Rating data for approved types			
Terminal capacity	Terminal capacity			
Terminal screw M4	Terminal screw			M4

# Design verification as per IEC/EN 61439

echnical data for design verification			
Rated operational current for specified heat dissipation	In	Α	32
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	1.1
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	50
C/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			Please enquire
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 b observed.
10.12 Electromagnetic compatibility	Is the panel builder's responsibility. The specifications for the switchgear must b observed.
10.13 Mechanical function	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

### **Technical data ETIM 6.0**

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss8.1-27-37-14-03 [AKF060010])

Version as main switch		No
Version as maintenance-/service switch		No
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current lu	Α	32
Rated permanent current at AC-21, 400 V	Α	32
Rated operation power at AC-3, 400 V	kW	11
Rated short-time withstand current lcw	kA	0.65
Rated operation power at AC-23, 400 V	kW	15
Switching power at 400 V	kW	15
Conditioned rated short-circuit current Iq	kA	1
Number of poles		0
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
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		No
Device construction		Built-in device fixed built-in technique
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting center		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		Yes
Colour control element		Black
Type of control element		-
Interlockable		No
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP00

## **Additional product information (links)**

IL03801006Z (AWA1150-1686) Cam switches: service distribution board

IL03801006Z (AWA1150-1686) Cam switches: service distribution board

ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL03801006Z2016\_09.pdf