

## Main switch, 4 pole, 32 A, Emergency-Stop function, 90 °, flush mounting

Powering Business Worldwide\*

Part no. T3-2-8324/EA/SVB Article no. 008771

De	livery	progr	am

Delivery program			
Product range			Main switch maintenance switch Repair switch
Part group reference			T3
Stop Function			Emergency switching off function
			With red rotary handle and yellow locking ring
Number of poles			4 pole
Degree of Protection			Front IP65
Design			flush mounting
Contact sequence			0 1 1 0 X 2 0 X 3 0 X 5 0 X 7 0 X
Switching angle		0	90
Function			OFF O
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	15
Rated uninterrupted current	Iu	Α	32
Number of contact units		contact unit(s)	2

#### Technical data General

delleral			
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
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	$U_{imp}$	V AC	6000

Mounting position			
			As required
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Contacts			
Mechanical variables			
Number of poles			4 pole
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 !u			Rated uninterrupted current lu is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x l <sub>e</sub>	2
AB 40 % DF		x l <sub>e</sub>	1.6
AB 60 % DF		x l <sub>e</sub>	1.3
Short-circuit rating		u	
Fuse		A gG/gL	35
Rated short-time withstand current (1 s current)	I <sub>cw</sub>	A <sub>rms</sub>	650
, ,	1CW	Arms	
Note on rated short-time withstand current lcw  Rated conditional short-circuit current	la	kΛ	Current for a time of 1 second
Switching capacity	Iq	kA	1
cos φ rated making capacity as per IEC 60947-3		Α	320
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		Α	260
400/415 V		A	260
500 V		Α	240
690 V		A	170
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I <sub>e</sub>		W	1.1
Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)		CO	1.1
Lifespan, mechanical	Operations	x 10 <sup>6</sup>	> 0.5
	·	X 10	
Maximum operating frequency	Operations/h		1200
AC-3			
	Р	LAA	
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		kW	11
400 V Star-delta 500 V	P P	kW	15 15
500 V Star-delta	P	kW	18.5
	-		
690 V	Р	kW	11
690 V Star-delta	Р	kW	22
Rated operational current motor load switch		^	22.7
230 V	l <sub>e</sub>	A	23.7
230 V star-delta	l <sub>e</sub>	Α	32
400V 415 V	l <sub>e</sub>	Α	23.7
400 V star-delta	l <sub>e</sub>	Α	32
500 V	l <sub>e</sub>	Α	23.7
500 V star-delta	Ie	Α	32
690 V	l <sub>e</sub>	Α	14.7
690 V star-delta	le	Α	25.5
AC-21A			

440 V	I <sub>e</sub>	Α	32
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	7.5
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 <sub>e</sub>	Α	32
400 V 415 V		A	32
	l <sub>e</sub>		
500 V	I <sub>e</sub>	Α	26.4
690 V	l <sub>e</sub>	Α	17
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	l <sub>e</sub>	Α	25
Voltage per contact pair in series		V	60
DC-21A	I <sub>e</sub>	Α	
Rated operational current	I <sub>e</sub>	Α	1
Contacts	G	Quantity	
		Quantity	'
DC-23A, motor load switch L/R = 15 ms			
24 V			or.
Rated operational current	l <sub>e</sub>	Α	25
Contacts		Quantity	1
48 V			
Rated operational current	I <sub>e</sub>	Α	25
Contacts		Quantity	2
60 V			
Rated operational current	I <sub>e</sub>	Α	25
Contacts		Quantity	3
120 V			
Rated operational current	I <sub>e</sub>	Α	12
Contacts	G	Quantity	
240 V		quantity	
		Δ.	
Rated operational current	le	A	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current	I <sub>e</sub>	Α	20
Voltage per contact pair in series		V	24
Control circuit reliability at 24 V DC, 10 mA	Fault	H <sub>F</sub>	< 10 <sup>-5</sup> , < 1 fault in 100000 operations
Terminal canacities	probability		
Terminal capacities Solid or stranded		2	1 x (1 - 6)
Some of Stranger		mm <sup>2</sup>	2 x (1 - 6)
Flexible with ferrules to DIN 46228		mm <sup>2</sup>	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
Rating data for approved types			
Contacts			
Rated operational voltage	U <sub>e</sub>	V AC	600
Rated uninterrupted current max.			
Main conducting paths			
General use	lu	Α	25
Auxiliary contacts			

General Use	I <sub>U</sub>	Α	10
Pilot Duty			A 600 P 600
Switching capacity			
Maximum motor rating			
Single-phase			
120 V AC		HP	1.5
200 V AC		HP	3
240 V AC		HP	3
Three-phase			
200 V AC		HP	3
240 V AC		HP	3
480 V AC		HP	7.5
600 V AC		HP	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	17.6

# Design verification as per IEC/EN 61439

besign vernication as per illo/liv 01433			
Technical 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
EC/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 6.0**

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

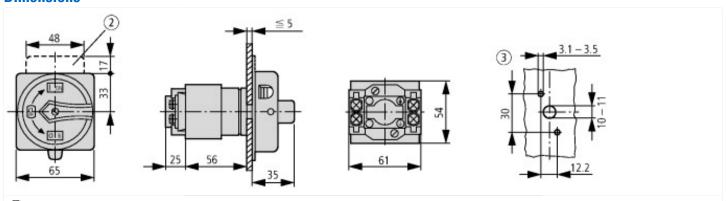
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss8.1-27-37-14-03 [AKF060010])

Version as main switch			Yes
Version as maintenance-/service switch			Yes
Version as safety switch			No
Version as emergency stop installation			Yes
Version as reversing switch			No
Max. rated operation voltage Ue AC	V		690
Rated operating voltage	V		690 - 690
Rated permanent current lu	А		32
Rated permanent current at AC-21, 400 V	А		32
Rated operation power at AC-3, 400 V	kW	V	11
Rated short-time withstand current lcw	kA		0.65
Rated operation power at AC-23, 400 V	kW	V	15
Switching power at 400 V	kW	V	15
Conditioned rated short-circuit current Iq	kA		1
Number of poles			4
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			No
Suitable for front mounting 4-hole			No
Suitable for front mounting center			Yes
Suitable for distribution board installation			No
Suitable for intermediate mounting			No
Colour control element			Red
Type of control element			Door coupling rotary drive
Interlockable			Yes
Type of electrical connection of main circuit			Screw connection
Degree of protection (IP), front side			IP65

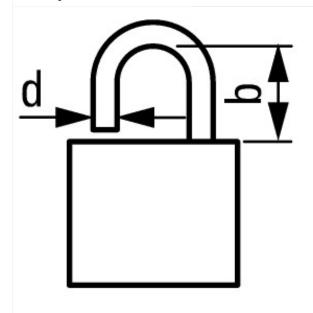
## **Approvals**

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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**



- ZFS-... Label mount not included as standard
- 3 Drilling dimensions door



d = 4 - 8 mm  $b + d \le 47 \text{ mm}$  d = 0.16 - 0.31 d = 0.85

≦ 3 padlocks

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

IL03801020Z (AWA1150-0586) Cam switches: flush mounting				
IL03801020Z (AWA1150-0586) Cam switches: flush mounting	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801020Z2016_07.pdf			
Display flip catalog page.	http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=40			
Technical overview cam switch, switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.2			
System overview cam switch T	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.4			
System overview switch-disconnector P	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.6			
Key to part numbers Cam switch	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8			
Key to part numbers Switch-disconnector	http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8			
Switches for ATEX	http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html			