



Changeover switch, 4p, Ie=12A, FS 1-2, 90°, maintained, 48x48 mm, flush mounting

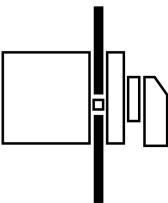
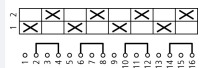


Powering Business Worldwide™

Part no. T0-4-8223/E  
 Article no. 050712  
 Catalog No. CT04-8223-DOKBQ



### Delivery programme

Product range			Changeover switches
Part group reference			T0
			with black thumb grip and front plate Without 0 (Off) position
Main circuits Poles			4
Degree of Protection			Front IP65
Design			flush mounting
			
Contact sequence			
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	6.5
Rated uninterrupted current	I <sub>u</sub>	A	20

### Approvals

Product Standards	UL 508; CSA-C22.2 No. 14-05; 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
Specially designed for North America	Yes, in combination with "+NA" (105864)
Degree of Protection	IEC: IP65; UL/CSA Type 1, 3R, 12

## General

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		°C	
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

Mechanical variables			
Main circuits Poles			4
Electrical characteristics			
Rated operational voltage	$U_e$	V AC	690
Rated uninterrupted current	$I_u$	A	20
Note on rated uninterrupted current $I_u$			Rated uninterrupted current $I_u$ is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		$\times I_e$	2
AB 40 % DF		$\times I_e$	1.6
AB 60 % DF		$\times I_e$	1.3
Short-circuit rating			
Fuse		A gG/gL	20
Rated short-time withstand current (1 s current)	$I_{cw}$	$A_{rms}$	320
Note on rated short-time withstand current $I_{cw}$			Current for a time of 1 second

## Switching capacity

cos $\varphi$ rated making capacity as per IEC 60947-3		A	130
Rated breaking capacity cos $\varphi$ to IEC 60947-3		A	
230 V		A	100
400/415 V		A	110
500 V		A	80
690 V		A	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	$\times 10^6$	> 0.4
Maximum operating frequency	Operations/h		1200
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	3
230 V Star-delta	P	kW	4
400 V 415 V	P	kW	4
400 V Star-delta	P	kW	5.5
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	$I_e$	A	11.5
230 V star-delta	$I_e$	A	14.8

400V 415 V	I <sub>e</sub>	A	11.5
400 V star-delta	I <sub>e</sub>	A	11.3
500 V	I <sub>e</sub>	A	9
500 V star-delta	I <sub>e</sub>	A	12.1
690 V	I <sub>e</sub>	A	4.9
690 V star-delta	I <sub>e</sub>	A	6.5
AC-15			
Rated operational current control switch			
230 V	I <sub>e</sub>	A	6
400 V 415 V	I <sub>e</sub>	A	4
500 V	I <sub>e</sub>	A	2
AC-21A			
Rated operational current switch			
440 V	I <sub>e</sub>	A	20
AC-23A			
Motor rating AC-23A, 50 - 60 Hz			
230 V	P	kW	
400 V 415 V	P	kW	3.5
500 V	P	kW	7.5
690 V	P	kW	6.5
Rated operational current motor load switch			
230 V	I <sub>e</sub>	A	13.3
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current			
	I <sub>e</sub>	A	10
Voltage per contact pair in series			
		V	60
DC-21A			
Rated operational current			
	I <sub>e</sub>	A	1
Contacts			
		Quantity	1
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current			
	I <sub>e</sub>	A	10
Contacts			
		Quantity	1
48 V			
Rated operational current			
	I <sub>e</sub>	A	10
Contacts			
		Quantity	2
60 V			
Rated operational current			
	I <sub>e</sub>	A	10
Contacts			
		Quantity	3
120 V			
Rated operational current			
	I <sub>e</sub>	A	5
Contacts			
		Quantity	3
240 V			
Rated operational current			
	I <sub>e</sub>	A	5
Contacts			
		Quantity	5
DC-13, Control switches L/R = 50 ms			
Rated operational current			
	I <sub>e</sub>	A	10
Voltage per contact pair in series			
		V	32
Control circuit reliability at 24 V DC, 10 mA			
	Fault probability	H <sub>F</sub>	< 10 <sup>-5</sup> , < 1 fault in 100000 operations

## Terminal capacities

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
Max. tightening torque	Nm	1

### Technical safety parameters:

Notes		B10 <sub>d</sub> values as per EN ISO 13849-1, table C1
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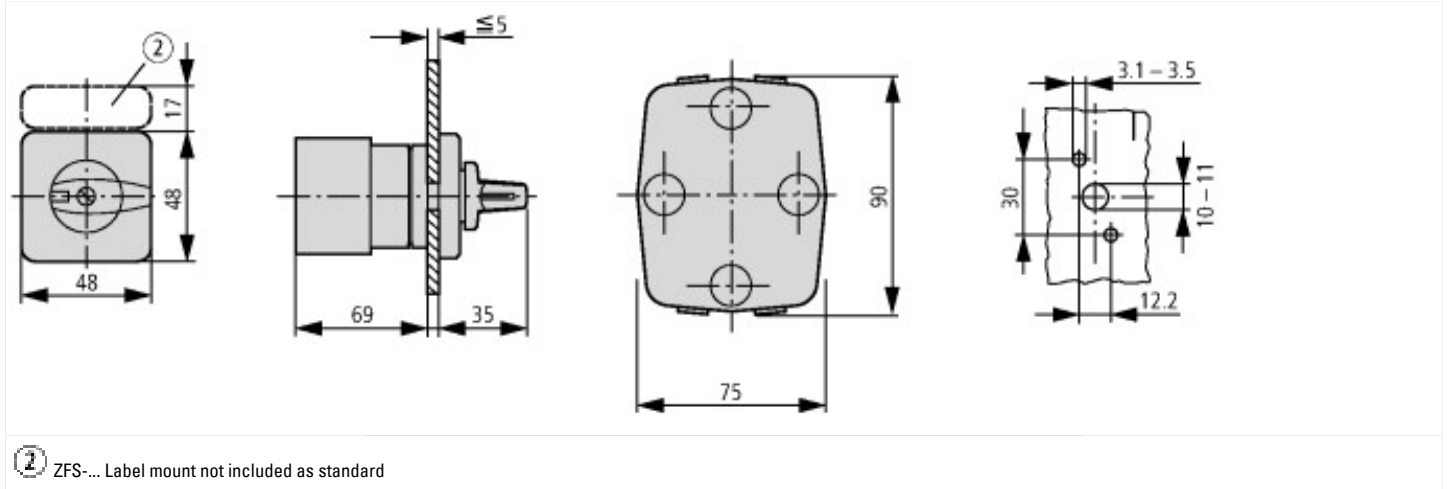
### Technical data ETIM 5.0

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@ss8-27-37-14-05 [AKF062009])

Model		Reverser
Number of poles		4
With 0 (off) position		No
Rated permanent current I <sub>u</sub>	A	20
Rated operation power at AC-3, 400 V	kW	4
Degree of protection (IP), front side		IP65
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		No
Suitable for front mounting 4-hole		Yes
Suitable for distribution board installation		No
Suitable for intermediate mounting		No
Complete device in housing		No
Type of control element		Toggle
Connection type main current circuit		Screw connection

### Dimensions



### Additional product information (links)

#### IL03801020Z (AWA1150-0586) Cam switch: Mounting

IL03801020Z (AWA1150-0586) Cam switch: Mounting	<a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801020Z2013_02.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801020Z2013_02.pdf</a>
Form for ordering non-standard front plates	<a href="http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=4.87">http://ecat.moeller.net/flip-cat/?edition=HPLEN&amp;startpage=4.87</a>
Display flip catalog page.	<a href="http://ecat.moeller.net/flip-cat/?edition=K115A&amp;startpage=43">http://ecat.moeller.net/flip-cat/?edition=K115A&amp;startpage=43</a>
Technical overview cam switch, switch-disconnector	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.2">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.2</a>
System overview cam switch T	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.4">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.4</a>
System overview switch-disconnector P	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.6">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.6</a>
Key to part numbers Cam switch	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8</a>
Key to part numbers Switch-disconnector	<a href="http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8">http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&amp;startpage=4.8</a>
UL/CSA: Rating data for approved types	<a href="http://ecat.moeller.net/flip-cat/?edition=HPLTF&amp;startpage=4.98">http://ecat.moeller.net/flip-cat/?edition=HPLTF&amp;startpage=4.98</a>