

Main switch, 6 pole + 2 N/O, 20 A, Emergency-Stop function, 90 °, flush mounting



Part no. T0-4-15700/EA/SVB Article no. 008235

Delivery program		
Product range		Main switch
. Toddot fange		maintenance switch
		Repair switch
Part group reference		ТО
Stop Function		Emergency switching off function
		With red rotary handle and yellow locking ring
Number of poles		6 pole
Auxiliary contacts		
Turkinary contacts	N/O	
rl .	N/0	2
ì		
	N/C	0
4		
1		
Degree of Protection		Front IP65
Design		flush mounting
		-
Contact sequence		0 1
		10
		20
		30 🗸
		
		40
		5 0 -
		60
		70
		80 \
		90 🗸
		10 0
		11 0
		12 0 - X
		13 0
		14 0
		23 o X
		24 0
Switching angle	0	90
Function		
		ION
		OFF OFF
		l J
Motor rating AC-23A, 50 - 60 Hz		

400 V	P	kW	5.5
Rated uninterrupted current	I _u	Α	20
Number of contact units		contact unit(s)	4

Technical data

General

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			
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			
Number of poles			6 pole
Auxiliary contacts			
		N/0	2
		N/C	0
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 lu is specified for max. cross-section.
Load rating with intermittent operation, class 12			
AB 25 % DF		x I _e	2
AB 40 % DF		x l _e	1.6
AB 60 % DF		x I _e	1.3
Short-circuit rating		, and	
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 lcw		11113	Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	6
Switching capacity	- 1		
cos φ rated making capacity as per IEC 60947-3		Α	130
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		Α	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		1200
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	3
230 V Star-delta	P	kW	5.5

	_		
400 V 415 V	Р	kW	5.5
400 V Star-delta	Р	kW	7.5
500 V	Р	kW	5.5
500 V Star-delta	Р	kW	7.5
690 V	Р	kW	4
690 V Star-delta	Р	kW	5.5
Rated operational current motor load switch			
230 V	l _e	Α	11.5
230 V star-delta	l _e	Α	20
400V 415 V	l _e	Α	11.5
400 V star-delta	l _e	Α	20
500 V	l _e	Α	9
500 V star-delta	Ie	Α	15.6
690 V	I _e	Α	4.9
690 V star-delta	l _e	Α	8.5
AC-21A			
Rated operational current switch			
440 V	I _e	Α	20
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	3
400 V 415 V	P	kW	5.5
500 V	P	kW	7.5
690 V	P	kW	5.5
Rated operational current motor load switch			
230 V	I _e	Α	13.3
400 V 415 V	l _e	Α	13.3
500 V		A	13.3
690 V	l _e		7.6
	I _e	A	1.0
DC			
DC-1, Load-break switches L/R = 1 ms		A	10
Rated operational current	I _e		
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	I _e	Α	10
Contacts		Quantity	2
60 V			
Rated operational current	Ie	Α	10
Contacts		Quantity	3
120 V			
Rated operational current	l _e	Α	5
Contacts		Quantity	3
240 V			
Rated operational current	I _e	Α	5
Contacts		Quantity	5
DC-13, Control switches L/R = 50 ms			

Rated operational current	l _e	Α	10
Voltage per contact pair in series		V	32
Control circuit reliability at 24 V DC, 10 mA	Fault	H _F	< 10 ⁻⁵ , < 1 fault in 100000 operations
	probability		(10°, C) Tudak iii 100000 oporationio
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
Max. tightening torque		Nm	1
Technical safety parameters:			
Notes			B10 _d values as per EN ISO 13849-1, table C1
Rating data for approved types			
Contacts			
Rated operational voltage	U _e	V AC	600
Rated uninterrupted current max.			
Main conducting paths			
General use	I _U	Α	16
Auxiliary contacts			
General Use	IU	Α	10
Pilot Duty			A 600
			P 600
Switching capacity			
Maximum motor rating			
Single-phase			
120 V AC		HP	0.5
200 V AC		HP	1
240 V AC		HP	1.5
Three-phase			
200 V AC		HP	3
240 V AC		HP	3
480 V AC		HP	7.5
600 V AC		HP	7.5
Short Circuit Current Rating		SCCR	
Basic Rating		kA	5
max. Fuse		Α	50
High fault rating		kA	10
max. Fuse		Α	20, Class J
Terminal capacity			
Solid or flexible conductor with ferrule		AWG	18 - 14
Terminal screw			M3.5
Tightening torque		lb-in	8.8
O O : 1: :			

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	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	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 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])

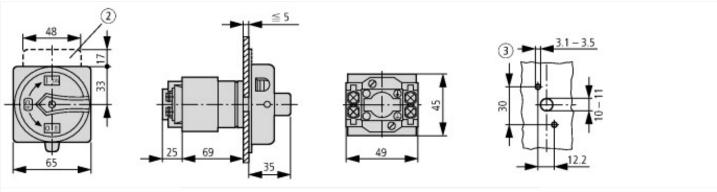
Version as maintenance-/service switch Version as maintenance-/service switch Version as remergency stop installation Version	[AKFU60U1U])		
Version as safety switch Version as emergency stop installation Yes Version as reversing switch Version as reversing switch Vorsion as reversion as reversion as reversion as reversion as normally closed contact Vorsion as reversion as reversion as normally closed contact Vorsion as reversion as reversion as normally closed contact Vorsion as reversion as reversion as reversion as	Version as main switch		Yes
Version as emergency stop installation Version as reversing switch Max. rated operation voltage Ue AC Rated operation youtage Rated operation youtage Rated operation current lu Rated permanent current lu Rated permanent current at AC-21, 400 V Rated permanent current at AC-23, 400 V Rated permanent current lu Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-3, 400 V Rated operation power at AC-23, 400 V Rated operation power at AC-23, 400 V Routed short-ine withstand current low Routed short-	Version as maintenance-/service switch		Yes
Version as reversing switch Max. rated operating voltage Ue AC Rated operating voltage Rated permanent current lu Rated permanent current at AC-21,400 V Rated operating nower at AC-3,400 V Rated operation power at AC-3,400 V R	Version as safety switch		No
Max. rated operation voltage Ue AC V 690 Rated operating voltage V 690 Rated permanent current Iu A 20 Rated permanent current at AC-21,400 V A 20 Rated short-time withstand current Icw KW 5 Rated short-time withstand current Icw WW 5 Switching power at 400 V WW 5 Conditioned rated short-circuit current Iq WW 5 Number of poles WW 6 6 Number of auxiliary contacts as normally closed contact WW 6 6 Number of auxiliary contacts as normally open contact WW 6 6 Motor drive integrated WW 7 8 Motor drive integrated WW 8 9 Voltage release optional WW 9 9 Suitable for ground mounting WW 8 9 Suitable for front mounting 4-hole WW 9 9 Suitable for front mounting enter WW 9 9 Suitable	Version as emergency stop installation		Yes
Rated operating voltage Rated permanent current lu Rated permanent current lu Rated permanent current a AC-21, 400 V Rated permanent current at AC-21, 400 V Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rated operation power at AC-23, 400 V Rothing power at 400 V Rothing of auxiliary contacts a normally closed contact Rothing of auxiliary contacts as normally closed contact Rothing of auxiliary contacts as normally open contact Rothing of auxiliary contacts as change-over contact Rothor drive optional Roth of rive integrated Voltage release optional Rothing of ground mounting Rothing for ground mounting Rothing for ground mounting 4-hole Suitable for front mounting 4-hole Suitable for distribution board installation Rothing for intermediate mounting Rothing for intermediate mounting Rothing for ground mounting Rothing for ground mounting Rothing for ground mounting center Rothin	Version as reversing switch		No
Rated permanent current lu A 20 Rated permanent current at AC-21, 400 V A 20 Rated operation power at AC-3, 400 V kW 5.5 Rated short-time withstand current lcw kW 5.5 Rated operation power at AC-23, 400 V kW 5.5 Switching power at 400 V kW 5.5 Conditioned rated short-circuit current lq kW 5.5 Number of poles kM 6 Number of auxiliary contacts as normally closed contact p 6 Number of auxiliary contacts as change-over contact p 6 Motor drive optional p 6 Motor drive integrated p 6 Voltage release optional p p Suitable for ground mounting p p built-in device fixed built-in technique Suitable for front mounting 4-hole p p p p Suitable for distribution board installation p p p p Suitable for intermediate mounting p p p p p	Max. rated operation voltage Ue AC	V	690
Rated permanent current at AC-21,400 V Rated operation power at AC-3,400 V Rated short-time withstand current low Rated operation power at AC-23,400 V Rated operation power at AC-23,400 V Rated operation power at AC-23,400 V Rothing power at 400 V Rothing operation power at AC-23,400 V Rothing operation power at 400 V Rothing operation power at 400 V Rothing power at 400 V Rothing power at 400 V Rothing operation power at 400 V Rothing power 400 V Rothing power at 400 V Rothing power at 400 V Rothing powe	Rated operating voltage	V	690 - 690
Rated operation power at AC-3, 400 V Rated short-time withstand current lcw Rated operation power at AC-23, 400 V Rowting power at 400 V	Rated permanent current lu	Α	20
Rated short-time withstand current low	Rated permanent current at AC-21, 400 V	Α	20
Rated operation power at AC-23, 400 V Switching power at 400 V Conditioned rated short-circuit current Iq Number of poles Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Notor drive optional Motor drive integrated Voltage release optional Device construction Suitable for ground mounting Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for first mounting center Suitable for distribution board installation Suitable for intermediate mounting Suitable for intermediate mounting	Rated operation power at AC-3, 400 V	kW	5.5
Switching power at 400 V Conditioned rated short-circuit current Iq Number of poles Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Notor drive optional Notor drive optional Notor drive integrated Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting Suitable for intermediate mounting	Rated short-time withstand current lcw	kA	0.32
Conditioned rated short-circuit current Iq kA 6 Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Notor drive optional Notor drive optional Notor drive integrated No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole Suitable for front mounting center Suitable for intermediate mounting Suitable for intermediate mounting Suitable for intermediate mounting	Rated operation power at AC-23, 400 V	kW	5.5
Number of poles Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Notor drive optional Notor drive integrated Notor drive inte	Switching power at 400 V	kW	5.5
Number of auxiliary contacts as normally closed contact Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional Motor drive integrated No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting Suitable for intermediate mounting No Suitable for intermediate mounting No No No No No No No No No N	Conditioned rated short-circuit current Iq	kA	6
Number of auxiliary contacts as normally open contact Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting Suitable for intermediate mounting No Suitable for intermediate mounting No Suitable for intermediate mounting No No Suitable for intermediate mounting	Number of poles		6
Number of auxiliary contacts as change-over contact Motor drive optional Motor drive integrated No Voltage release optional No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting No O O O O O O O O O O O O O	Number of auxiliary contacts as normally closed contact		0
Motor drive optional Motor drive integrated No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for distribution board installation Suitable for intermediate mounting Suitable for intermediate mounting No No	Number of auxiliary contacts as normally open contact		2
Motor drive integrated No Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting No No No Suitable for intermediate mounting No No No No No No No No No N	Number of auxiliary contacts as change-over contact		0
Voltage release optional Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting No No Suitable for intermediate mounting No No No No No No No No No N	Motor drive optional		No
Device construction Suitable for ground mounting No Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting No Suitable for intermediate mounting No	Motor drive integrated		No
Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting No No	Voltage release optional		No
Suitable for front mounting 4-hole Suitable for front mounting center Suitable for distribution board installation Suitable for intermediate mounting No	Device construction		Built-in device fixed built-in technique
Suitable for front mounting center Yes Suitable for distribution board installation No Suitable for intermediate mounting No	Suitable for ground mounting		No
Suitable for distribution board installation No Suitable for intermediate mounting No	Suitable for front mounting 4-hole		No
Suitable for intermediate mounting No	Suitable for front mounting center		Yes
·	Suitable for distribution board installation		No
Colour control element Red	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

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
Suitable for	Branch circuits, suitable as motor disconnect
Degree of Protection	IEC: IP65; UL/CSA Type 1, 12

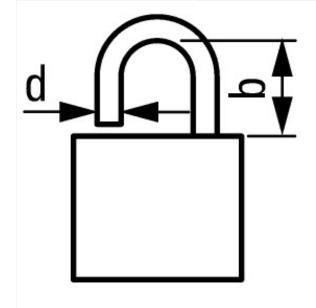
Dimensions



(2) ZFS-... Label mount not included as standard



₹ 3 padlocks



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

Additional product information (links)

IL03801020Z (AWA1150-0586) Cam switches: flush mounting IL03801020Z (AWA1150-0586) Cam switches: ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801020Z2016_07.pdf flush mounting Display flip catalog page. http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=41 Technical overview cam switch, switch-disconnector 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