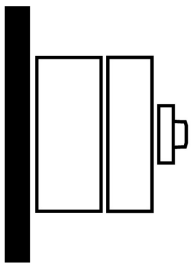
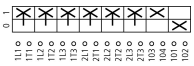
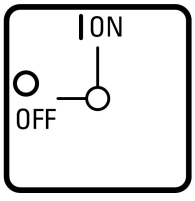


Main switch, 6 pole + 1 N/O + 1 N/C, 315 A, Emergency-Stop function, 90 °, Lockable in the 0 (Off) position, surface mounting

Part no. T8-3-8342/I48/SVB/HI11
Article no. 201450

Delivery programme

Product range			Main switch maintenance switch Repair switch
Part group reference			T8
Emergency STOP			Emergency switching off function
			With red rotary handle and yellow locking ring
Information about equipment supplied			with KS4-CI and K150/1/BR: Ingress protection IP64
Number of poles			6 pole
Auxiliary contacts			
		N/O	1
		N/C	1
Locking facility			Lockable in the 0 (Off) position
Degree of Protection			IP65
			totally insulated
Design			surface mounting
			
Contact sequence			
Switching angle		°	90
Function			
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	132
Rated uninterrupted current	I_u	A	315
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			
Enclosed		°C	-25 - +40
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	U_{imp}	V AC	8000
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/O	1
		N/C	1
Electrical characteristics			
Rated operational voltage	U_e	V AC	690
Rated uninterrupted current	I_u	A	315
Note on rated uninterrupted current I_u			Rated uninterrupted current Iu is specified for max. cross-section. Open = 315, enclosed= 275 A
Load rating with intermittent operation, class 12			
AB 25 % DF		x I_e	2
AB 40 % DF		x I_e	1.6
AB 60 % DF		x I_e	1.3
Short-circuit rating			
Fuse		A gG/gL	315
Rated short-time withstand current (1 s current)	I_{cw}	A_{rms}	4200
Note on rated short-time withstand current Icw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	5

Switching capacity

cos φ rated making capacity as per IEC 60947-3		A	2390
Rated breaking capacity cos φ to IEC 60947-3		A	
230 V		A	1910
400/415 V		A	1800
500 V		A	1200
690 V		A	420
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I_e		W	11
Current heat loss per auxiliary circuit at I_e (AC-15/230 V)		CO	0.2
Lifespan, mechanical	Operations	x 10^6	> 0.1
Maximum operating frequency	Operations/h		50
AC			
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	37
230 V Star-delta	P	kW	37
400 V 415 V	P	kW	55
400 V Star-delta	P	kW	55
500 V	P	kW	37
500 V Star-delta	P	kW	37
690 V	P	kW	37
690 V Star-delta	P	kW	37
Rated operational current motor load switch			
230 V	I_e	A	126
400V 415 V	I_e	A	105

690 V	I_e	A	42
AC-21A			
Rated operational current switch			
440 V	I_e	A	315
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	P	kW	
230 V	P	kW	75
400 V 415 V	P	kW	132
500 V	P	kW	132
690 V	P	kW	37
Rated operational current motor load switch			
230 V	I_e	A	239
400 V 415 V	I_e	A	245
690 V	I_e	A	42
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I_e	A	315
Voltage per contact pair in series		V	42
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I_e	A	250
Contacts		Quantity	1
48 V			
Rated operational current	I_e	A	250
Contacts		Quantity	2
60 V			
Rated operational current	I_e	A	125
Contacts		Quantity	3
120 V			
Rated operational current	I_e	A	50
Contacts		Quantity	3
DC-13, Control switches L/R = 50 ms			
Rated operational current	I_e	A	250
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	150
Flexible with ferrules to DIN 46228		mm^2	120
Flat conductor connection with busbars		mm^2	1 x (25 x 5) 2 x (20 x 3)
Terminal screw			M12
Max. tightening torque		Nm	25

Technical safety parameters:

Notes			$B10_d$ values as per EN ISO 13849-1, table C1

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	315
Heat dissipation per pole, current-dependent	P_{vid}	W	11
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	40
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	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

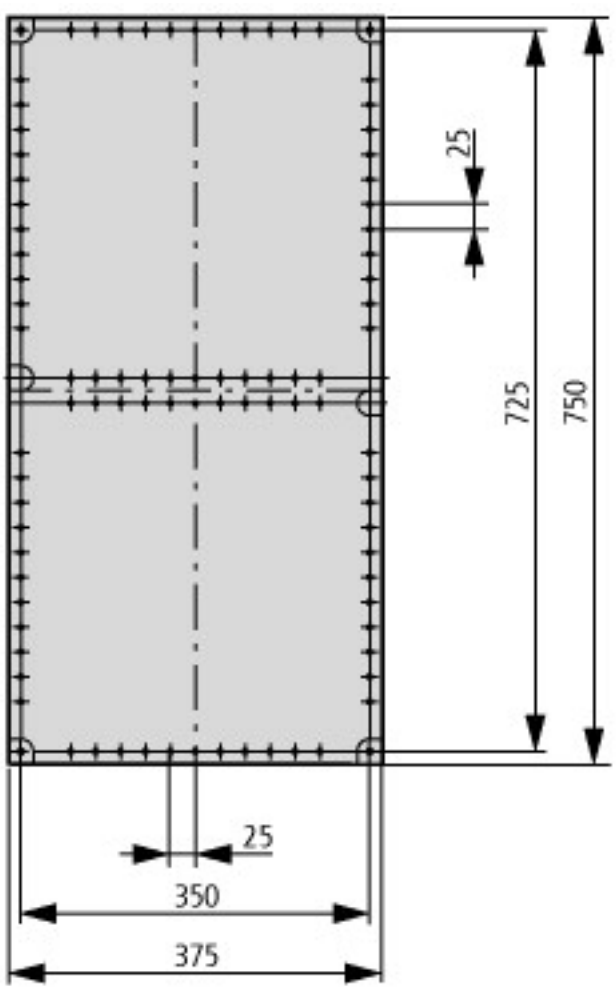
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

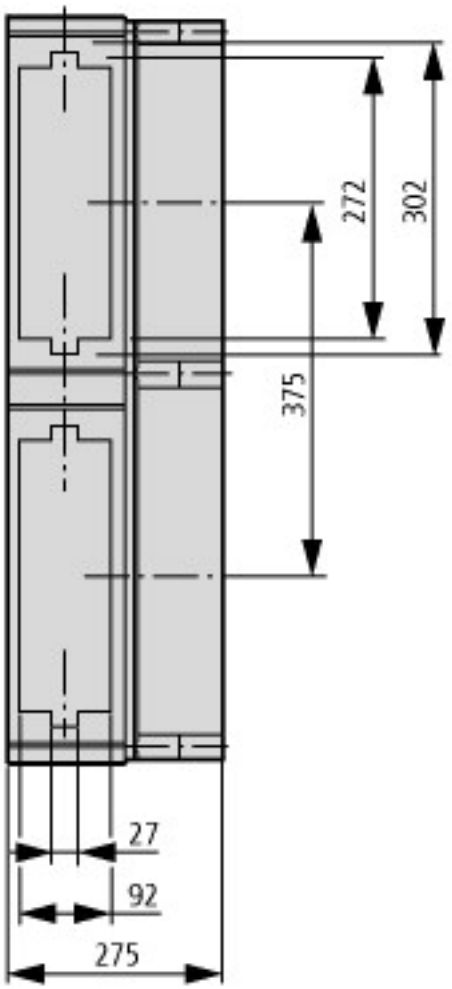
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss8.1-27-37-14-03 [AKF060010])

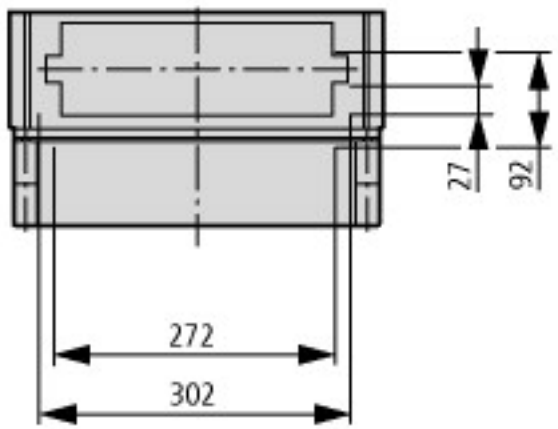
Version as main switch		Yes
Version as maintenance-/service switch		Yes
Version as safety switch		No
Version as emergency stop installation		Yes
Version as reversing switch		No
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690
Rated permanent current Iu	A	315
Rated permanent current at AC-21, 400 V	A	315
Rated operation power at AC-3, 400 V	kW	55
Rated short-time withstand current Icw	kA	4.2
Rated operation power at AC-23, 400 V	kW	132
Switching power at 400 V	kW	132
Conditioned rated short-circuit current Iq	kA	5
Number of poles		6
Number of auxiliary contacts as normally closed contact		1
Number of auxiliary contacts as normally open contact		1
Number of auxiliary contacts as change-over contact		0
Motor drive optional		No
Motor drive integrated		No
Voltage release optional		No
Device construction		Complete device in housing
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	No
Colour control element	Red
Type of control element	Door coupling rotary drive
Interlockable	Yes
Type of electrical connection of main circuit	-
Degree of protection (IP), front side	IP65

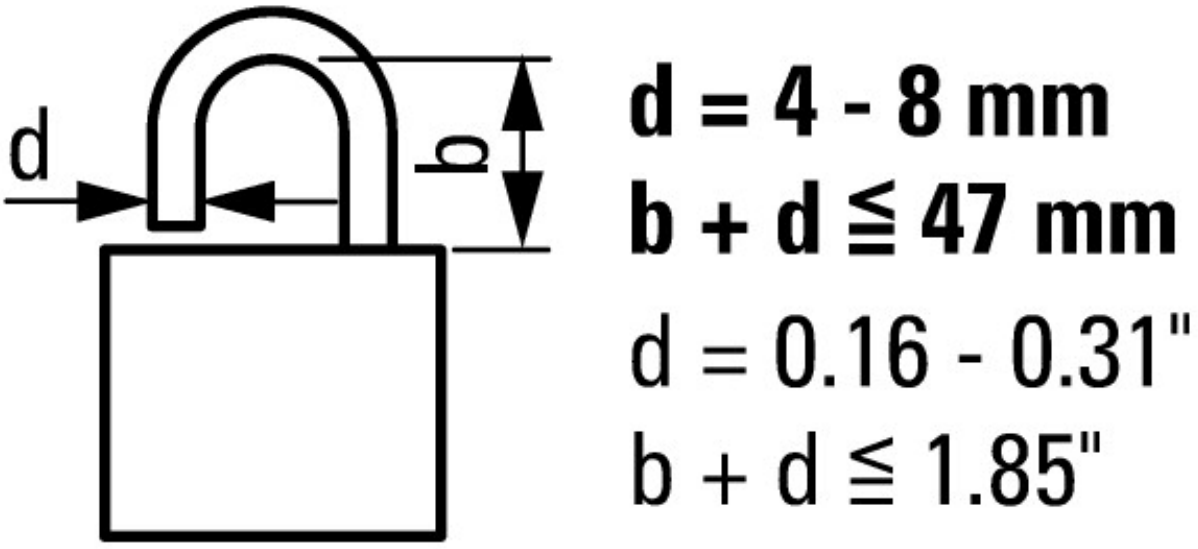
Dimensions







The CI48 enclosure has a top cover height of 275 mm!



3 padlocks

Additional product information (links)

IL03801017Z (AWA1150-1606) Rotary switch: Main switch	
IL03801017Z (AWA1150-1606) Rotary switch: Main switch	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801017Z2015_07.pdf
Display flip catalog page.	http://ecat.moeller.net/flip-cat/?edition=K115A&startpage=130
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

© 12/2015 by Eaton Industries GmbH