

Main switch, 3 pole + 1 N/O + 1 N/C, 63 A, Emergency-Stop function, surface mounting, UL/CSA $\,$

Powering Business Worldwide*

Part no. P3-63/I4/SVB/HI11-NA Article no. 255901

Delivery program		
Product range		Main switch maintenance switch Repair switch
Part group reference		P3
Stop Function		Emergency switching off function
		With red rotary handle and yellow locking ring
Notes		UL/CSA
Information about equipment supplied		Auxiliary contact or neutral conductor fitted by user.
Number of poles		3 pole
Auxiliary contacts		
\\	N/0	1
7	N/C	1
Degree of Protection		IP65
		totally insulated
Design		surface mounting
Contact sequence		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Function		ION O

Technical data

Rated uninterrupted current

Motor rating AC-23A, 50 - 60 Hz

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			
Enclosed	c	°C	-25 - +40

kW

Α

Р

OFF

30

63

Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	U _{imp}	V AC	6000
Mechanical shock resistance	iiip	g	15
Mounting position		9	As required
Protection against direct contact when actuated from front (EN 50274)			Finger and back-of-hand proof
Contacts			,
Mechanical variables			
Number of poles			3 pole
Auxiliary contacts			
		N/0	1
		N/C	1
Electrical characteristics			
Rated operational voltage	U _e	V AC	690
Rated uninterrupted current	I _u	Α	63
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 _e	2
AB 40 % DF		x l _e	1.6
AB 60 % DF		x l _e	1.3
Short-circuit rating		e	
Fuse		A gG/gL	20
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	1260
Note on rated short-time withstand current lcw	'CW	rms	Current for a time of 1 second
Rated conditional short-circuit current	la	kA	4
Switching capacity	Iq	KA	1
cos φ rated making capacity as per IEC 60947-3		Α	800
Rated breaking capacity cos φ to IEC 60947-3		Α	
230 V		Α	640
400/415 V		Α	600
500 V		Α	590
690 V		Α	340
Safe isolation to EN 61140			
between the contacts		V AC	440
Current heat loss per contact at I _e		W	4.5
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	X 10	1200
AC	Орегицопадп		1200
AC-3			
Rating, motor load switch	P	kW	
220 V 230 V	P	kW	15
400 V 415 V	P	kW	30
500 V	P	kW	30
690 V	P	kW	30
Rated operational current motor load switch			
230 V	l _e	Α	51
400V 415 V	I _e	A	55
500 V	l _e	A	44
690 V			22.1
	l _e	А	22.1
AC-21A			
Rated operational current switch		Δ.	
440 V	le	Α	63
AC-23A	D	114	
Motor rating AC-23A, 50 - 60 Hz	P	kW	

230 V	P	kW	18.5
400 V 415 V	P	kW	30
500 V	Р	kW	45
690 V	Р	kW	55
Rated operational current motor load switch			
230 V	l _e	Α	63
400 V 415 V	I _e	Α	63
500 V	I _e	Α	63
690 V	I _e	Α	63
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	Α	63
Voltage per contact pair in series		٧	60
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	I _e	Α	50
Contacts		Quantity	1
48 V			
Rated operational current	I _e	Α	50
Contacts		Quantity	2
60 V			
Rated operational current	I _e	A	50
Contacts	Ü	Quantity	
120 V		Luamary	_
Rated operational current	I _e	Α	25
Contacts	-6	Quantity	
Control circuit reliability at 24 V DC, 10 mA	Fault	H _F	
	probability	''F	$< 10^{-5}, < 1$ fault in 100000 operations
Terminal capacities			
Solid or stranded		mm ²	1 x (2,5 - 35) 2 x (2,5 - 10)
Flexible with ferrules to DIN 46228		mm ²	1 x (1.5 - 25)
		111111	2 x (1.5 - 6)
Terminal screw			M5
Max. tightening torque		Nm	3
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.	- 6		•••
Main conducting paths			
General use	I _U	A	60
Auxiliary contacts	'U		
Auxiliary colleacts			
Ganaral Usa	l	۸	10
General Use	lu	A	10 A coo
General Use Pilot Duty	l _U	A	10 A 600 P 600
	I _U	A	A 600
Pilot Duty	lu	A	A 600
Pilot Duty Switching capacity	lu	A	A 600
Pilot Duty Switching capacity Maximum motor rating	lu	HP	A 600
Pilot Duty Switching capacity Maximum motor rating Single-phase	lu		A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC	lu	НР	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC	lu	HP HP	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC	lu	HP HP	A 600 P 600
Pilot Duty Switching capacity Maximum motor rating Single-phase 120 V AC 200 V AC 240 V AC Three-phase	lu	HP HP	A 600 P 600

600 V AC	HP	50
Short Circuit Current Rating	SCCR	
Basic Rating	kA	10
max. Fuse	Α	150
Terminal capacity		
Solid or flexible conductor with ferrule	AWG	14 - 2
Terminal screw		M5
Tightening torque	lb-in	26.5

Design verification as per IEC/EN 61439

Design vermeation as per 120/214 01405			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	63
Heat dissipation per pole, current-dependent	P _{vid}	W	4.5
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])

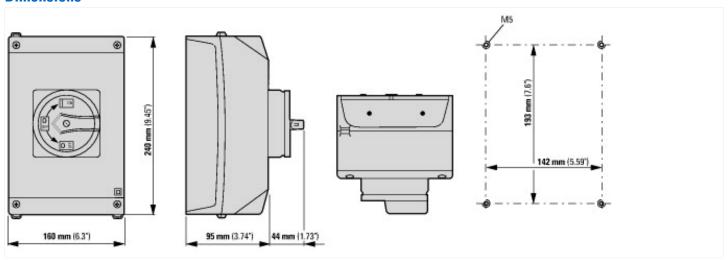
[AKI 0000 TO])	
Version as main switch	Yes
Version as maintenance-/service switch	Yes
Version as safety switch	No
Version as emergency stop installation	Yes
Version as reversing switch	No

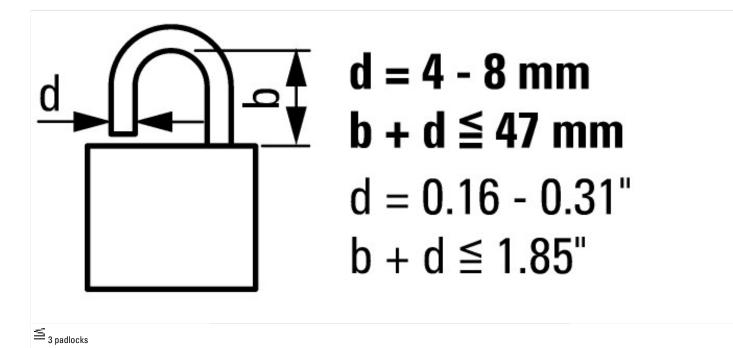
Name of the control of the c	Many maked an area tion welfange III- AC	V	con
Rated permanent current lu AC 21,400 V A 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	Max. rated operation voltage Ue AC		690
Rated permanent current at AC-21,400 V Rated operation power at AC-3,400 V Rated short-time withstand current lcw Rated operation power at AC-23,400 V Rated operation power at AC-23,400 V Routed operation power at ACD-23,400 V Routed of ouxiliary contacts as normally closed contact Routed of ouxiliary contacts as normally closed contact Routed of ouxiliary contacts as normally closed contact Routed of ouxiliary contacts as normally open contact Routed of ouxiliary contacts as change-over contact Routed of ouxiliary contacts as change-over contact Routed of routing at a CD-24 Routed Part of	Rated operating voltage	V	690 - 690
Rated operation power at AC-3, 400 V kW 30 Rated short-time withstand current low kA 1.26 Rated operation power at AC-23, 400 V kW 30 Switching power at 400 V kW 30 Conditioned rated short-circuit current Iq kW 4 Number of poles KW 3 Number of auxiliary contacts as normally closed contact KW 1 Number of auxiliary contacts as normally open contact 1 1 Mottor drive optional KW No Motor drive integrated KW No Voltage release optional KW No Device construction KW Yes Suitable for ground mounting KW No Suitable for front mounting 4-hole KW No Suitable for front mounting 1 4-hole KW No Suitable for front mounting center KW No Suitable for intermediate mounting KW No Suitable for intermediate mounting KW No Colour control element KW	Rated permanent current lu	Α	63
Rated short-time withstand current Icw Rated operation power at AC-23, 400 V WW 30 Conditioned rated short-circuit current Iq WW 30 Conditioned rated short-circuit current Iq WW 30 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 normally open contact Number of auxiliary contacts as shange-over contact Number of auxiliary contacts as shange-over contact Notor drive optional Motor drive pitional Notor drive integrated Notor drive integrated evice in housing Notor drive integrated evice in housin	Rated permanent current at AC-21, 400 V	Α	63
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 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 normally closed contact Number of auxiliary contacts as normally	Rated operation power at AC-3, 400 V	kW	30
Switching power at 400 VKW30Conditioned rated short-circuit current IqKA4Number of poles33Number of auxiliary contacts as normally closed contactI1Number of auxiliary contacts as normally open contactI0Number of auxiliary contacts as change-over contactI0Motor drive optionalNoNoMotor drive integratedNoNoVoltage release optionalYesComplete device in housingSuitable for ground mountingYesNoSuitable for front mounting 4-holeNoNoSuitable for distribution board installationNoNoSuitable for intermediate mountingNoNoSuitable for intermediate mountingNoNoColour control elementNoNoType of control elementPedNoType of control elementPedNoType of electrical connection of main circuitYes	Rated short-time withstand current lcw	kA	1.26
Conditioned rated short-circuit current Iq KA 4 Number of poles 3 3 Number of auxiliary contacts as normally closed contact 1 1 Number of auxiliary contacts as normally open contact 9 1 Number of auxiliary contacts as change-over contact 9 1 Motor drive optional No No Motor drive integrated No No Voltage release optional No Complete device in housing Suitable for ground mounting Yes No Suitable for ground mounting 4-hole No No Suitable for front mounting 4-hole No No Suitable for front mounting enter No No Suitable for distribution board installation No No Suitable for intermediate mounting No No Colour control element No No Type of control element <td< td=""><td>Rated operation power at AC-23, 400 V</td><td>kW</td><td>30</td></td<>	Rated operation power at AC-23, 400 V	kW	30
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 No No Motor drive optional No No No No Outage 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 distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of control element Type of electrical connection of main circuit Type of electrical connection of main circui	Switching power at 400 V	kW	30
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 Motor drive optional Motor drive integrated No 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 Colour control element Type of control element Type of electrical connection of main circuit Number of auxiliary contacts as normally open contact 1 1 1 0 1 0 0 0 No No Complete device in housing Yes No No Suitable for intermediate mounting No No Suitable for intermediate mounting Colour control element Type of electrical connection of main circuit	Conditioned rated short-circuit current Iq	kA	4
Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact Number of auxiliary contacts as change-over contact No Motor drive optional No No No Voltage release optional No Device construction Suitable for ground mounting Suitable for front mounting 4-hole Suitable for front mounting center Suitable for firont mounting center Suitable for intermediate mounting Suitable for often the mounting center Suitable for font mounting center Suitable for font mounting center Suitable for intermediate mounting Suitable for intermediate mounting Type of control element Type of control element Type of electrical connection of main circuit No Screw connection	Number of poles		3
Number of auxiliary contacts as change-over contact Motor drive optional Motor 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 intermediate mounting Suitable for intermediate mounting Suitable for oftont mounting Suitable for front mounting center Suitable for front mounting center Suitable for fortnet mounting center Suitable for ofter mounting center Suitable for other mediate mounting Suitable for intermediate mounting Suitable for front mounting center No Door coupling rotary drive Yes Type of electrical connection of main circuit	Number of auxiliary contacts as normally closed contact		1
Motor drive optional Motor drive integrated 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 front mounting center Suitable for intermediate mounting Suitable for front mounting 4-hole Suitable for front mounting 4-hole No Suitable for front mounting	Number of auxiliary contacts as normally open contact		1
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 front mounting center Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit No No No Red Type of electrical connection of main circuit No Screw connection	Number of auxiliary contacts as change-over contact		0
Voltage release optional Device construction Complete device in housing Yes Suitable for ground mounting 4-hole Suitable for front mounting 4-hole No Suitable for front mounting center No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Interlockable Type of electrical connection of main circuit No Screw connection	Motor drive 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 Colour control element Type of control element Type of electrical connection of main circuit Complete device in housing Complete device in housing Yes No Red No Door coupling rotary drive Yes Screw connection	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 Suitable for intermediate mounting No Sorew control element Suitable for distribution board installation No Suitable for distribution board installation No Suitable for distribution board installation No Suitable for front mounting center No Suitable for fr	Voltage release optional		No
Suitable for front mounting 4-hole Suitable for front mounting center No Suitable for distribution board installation Suitable for intermediate mounting Colour control element Type of control element Type of electrical connection of main circuit No Screw connection	Device construction		Complete device in housing
Suitable for front mounting center No Suitable for distribution board installation No Suitable for intermediate mounting No Colour control element Type of control element Interlockable Type of electrical connection of main circuit No Screw connection	Suitable for ground mounting		Yes
Suitable for distribution board installation Suitable for intermediate mounting No Colour control element Type of control element Interlockable Type of electrical connection of main circuit No Red Door coupling rotary drive Yes Type of electrical connection of main circuit Screw connection	Suitable for front mounting 4-hole		No
Suitable for intermediate mounting No Colour control element Type of control element Interlockable Type of electrical connection of main circuit Screw connection	Suitable for front mounting center		No
Colour control element Type of control element Door coupling rotary drive Interlockable Type of electrical connection of main circuit Red Door coupling rotary drive Yes Screw connection	Suitable for distribution board installation		No
Type of control element Door coupling rotary drive Interlockable Yes Type of electrical connection of main circuit Screw connection	Suitable for intermediate mounting		No
Interlockable Yes Type of electrical connection of main circuit Screw connection	Colour control element		Red
Type of electrical connection of main circuit Screw connection	Type of control element		Door coupling rotary drive
	Interlockable		Yes
Degree of protection (IP), front side	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
Specially designed for North America	Yes, with additional labeling according to UL on the enclosure
Suitable for	Branch circuits, suitable as motor disconnect
Degree of Protection	IEC: IP65; UL/CSA Type 1, 12

Dimensions





Additional product information (links)

IL03801010Z (AWA1150-1982) Cam switches: switch-disconnectors	
IL03801010Z (AWA1150-1982) Cam switches: switch-disconnectors	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03801010Z2016_07.pdf
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