DATASHEET - P3-63/IVS-RT/HI11



On-Off switch, P3, 63 A, service distribution board mounting, 3 pole, 1 N/O, 1 N/C, Emergency switching off function, with red thumb grip and yellow front plate



Part no. P3-63/IVS-RT/HI11 Catalog No. 039243

Delivery program			
Product range			On-Off switch
Part group reference			P3
Stop Function			Emergency switching off function
			with red thumb grip and yellow front plate
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			Front IP30
Design			service distribution board mounting
Contact sequence			0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Front plate no.			FS 908 GE
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	30
Rated uninterrupted current	I _u	Α	63
Note on rated uninterrupted current !u			Rated uninterrupted current I_u is specified for max. cross-section.

Technical data

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		5	As required
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	Iu	Α	63
Note on rated uninterrupted current !u			Rated uninterrupted current I_u 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 I _e	1.3
Short-circuit rating		A . O.	
Fuse		A gG/gL	
Rated short-time withstand current (1 s current)	I _{cw}	A _{rms}	1260
Note on rated short-time withstand current lcw			Current for a time of 1 second
Rated conditional short-circuit current	Iq	kA	4
Switching capacity		٨	000
cos φ rated making capacity as per IEC 60947-3		A	800
Rated breaking capacity cos φ to IEC 60947-3		A	212
230 V		A	640
400/415 V		A	600
500 V		A	590
690 V		Α	340
Safe isolation to EN 61140		V 40	40
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		1200
AC			
AC-3			
Rating, motor load switch	Р	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	Α	55
500 V	l _e	Α	44
690 V	I _e	Α	22.1
AC-21A			
Rated operational current switch			
440 V	I _e	Α	63
AC-23A			
Motor rating AC-23A, 50 - 60 Hz	Р	kW	
230 V	P	kW	18.5
400 V 415 V	P	kW	30
500 V	P	kW	45

690 V	P	kW	55
Rated operational current motor load switch			
230 V	I _e	Α	63
400 V 415 V	l _e	Α	63
500 V	I _e	Α	63
690 V	l _e	A	63
DC			
DC-1, Load-break switches L/R = 1 ms			
Rated operational current	I _e	A	63
	·e	V	60
Voltage per contact pair in series		V	60
DC-23A, motor load switch L/R = 15 ms			
24 V			
Rated operational current	le	Α	50
Contacts		Quantity	1
48 V			
Rated operational current	l _e	Α	50
Contacts		Quantity	2
60 V			
Rated operational current	I _e	Α	50
Contacts		Quantity	2
120 V			
Rated operational current	I _e	Α	25
Contacts		Quantity	3
Control circuit reliability at 24 V DC, 10 mA	Fault	H _F	< 10 ⁻⁵ ,< 1 failure in 100,000 switching operations
	probability		CTO / CTIONAGE IN 1886/000 SWIGHTING OPERATION
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)
			2 x (1.5 - 6)
Terminal screw			M5
Tightening torque for terminal screw		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		V AC	000
	U _e	V AC	600
Rated uninterrupted current max.			
Main conducting paths			
General use		Α	60
Auxiliary contacts			
General Use	I _U	Α	10
Pilot Duty			A 600 P 600
Switching capacity			
Maximum motor rating			
Single-phase			
120 V AC		НР	3
200 V AC		HP	7.5
240 V AC		нР НР	
		TH	10
Three-phase		Пυ	15
200 V AC		HP	15
240 V AC		HP	15
480 V AC		HP	40
600 V AC		HP	50
Short Circuit Current Rating		SCCR	
Basic Rating		kA	10

max. Fuse	А	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 vermountion as per 120/214 01403			
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.	0.00	°C	-25
Operating ambient temperature max.		°C	50
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			Meets the product standard's requirements.
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 7.0

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@ss10.0.1-27-37-14-03 [AKF060013])

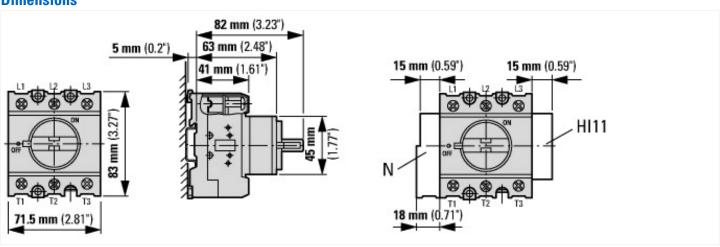
[AKF060013])		
Version as main switch		No
Version as maintenance-/service switch		No
Version as safety switch		No
Version as emergency stop installation		No
Version as reversing switch		No
Number of switches		1
Max. rated operation voltage Ue AC	V	690
Rated operating voltage	V	690 - 690

Rated permanent current lu	Α	63
Rated permanent current at AC-23, 400 V	Α	63
Rated permanent current at AC-21, 400 V	Α	63
Rated operation power at AC-3, 400 V	kW	30
Rated short-time withstand current lcw	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	kA	4
Number of poles		3
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		Built-in device fixed built-in technique
Suitable for ground mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting centre		No
Suitable for distribution board installation		Yes
Suitable for intermediate mounting		No
Colour control element		Red
Type of control element		Toggle
Interlockable		No
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP30
Degree of protection (NEMA)		12

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



Assets (links)

Declaration of CE Conformity

00003104

Instruction Leaflets

IL03802005Z2018_05

Additional product information (links)

•	
IL03802005Z (AWA1150-1981) Switch-disconne	ectors for rear mounting
IL03802005Z (AWA1150-1981) Switch- disconnectors for rear mounting	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03802005Z2018_05.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
Ordering form for SOND switches and SOND front plates(DE_EN)	ftp://ftp.moeller.net/DOCUMENTATION/PDF/MZ008005ZU_Orderform_Customized_Switch.pdf
Ordering form for SOND switches and SOND front plates(DE_EN)	ftp://ftp.moeller.net/DOCUMENTATION/PDF/MZ008006ZU_Orderform_Customized_Switch.pdf