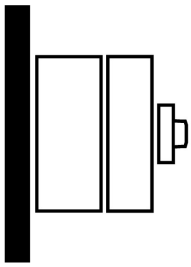
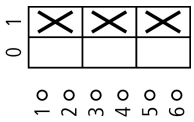


Switch-disconnector, 3 pole, 1250 A, Without rotary handle and drive shaft, surface mounting

Part no. DMV-1250N/3
Article no. 1814590

Powering Business Worldwide

Delivery program

Product range			Switch-disconnector Main switch maintenance switch
Part group reference			DMV
Stop Function			optional
			Without rotary handle and drive shaft
Notes			visible contacts
Information about equipment supplied			auxiliary contact fitted by user. including connection materials
Number of poles			3 pole
Auxiliary contacts			
		N/O	0
		N/C	0
Degree of Protection			IP00 IP20 with terminal cover
Design			surface mounting
			
Contact sequence			
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	750
Rated uninterrupted current	I_u	A	1250

Technical data

General

Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204, Switch-disconnector according to IEC/EN 60947-3
Certifications			CE, RoHs, KEMA, EAC, Lloyds
Ambient temperature			
Operation	ϑ	°C	-25 - +55
Storage	ϑ	°C	-30 - +80
Overvoltage category/pollution degree			III/3
Rated impulse withstand voltage	U_{imp}	kV	12
Rated insulation voltage	U_i	V	1000
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			3 pole
Auxiliary contacts			
		N/O	0
		N/C	0
Electrical characteristics			
Rated operational voltage	U_e	V AC	690
Rated uninterrupted current	I_u	A	1250
Note on rated uninterrupted current $!_u$			Rated uninterrupted current Iu is specified for max. cross-section.
Rated short-time withstand current (1 s current)	I_{cw}	A_{rms}	50000
Note on rated short-time withstand current Icw			Current for a time of 1 second
Heat dissipation per pole, current-dependent	P_{vid}	W	27.5

Switching capacity

Rated breaking capacity cos φ to IEC 60947-3		A	
400/415 V		A	10000
500 V		A	7272
690 V		A	5040
Safe isolation to EN 61140			
Current heat loss per contact at I_e		W	27.5
Lifespan, mechanical	Operations		5000
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	I_e	A	1250
500 V	I_e	A	1250
690 V	I_e	A	1250
AC-22A			
Rated operational current switch			
400 V 415 V	I_e	A	1250
500 V	I_e	A	1250
690 V	I_e	A	1250
AC-23A			
Rated operational current switch			
400 V 415 V	I_e	A	1250
500 V	I_e	A	909
690 V	I_e	A	630
Motor rating AC-23A, 50 - 60 Hz	P	kW	
400 V 415 V	P	kW	750
500 V	P	kW	630
690 V	P	kW	630

Terminal capacities

Flat conductor connection with busbars		mm^2	800
Terminal screw			M16 x 50
Max. tightening torque		Nm	60

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	1250
Heat dissipation per pole, current-dependent	P_{vid}	W	27.5
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	55
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 6.0

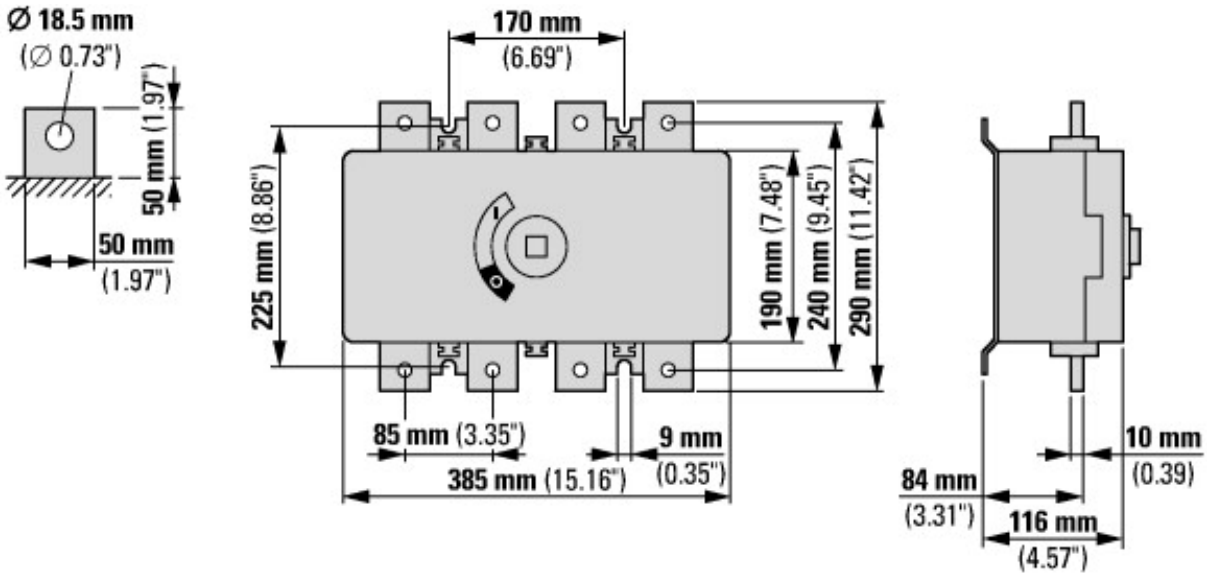
Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

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	1250
Rated permanent current at AC-21, 400 V	A	1250
Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current Icw	kA	50
Rated operation power at AC-23, 400 V	kW	750
Switching power at 400 V	kW	710
Conditioned rated short-circuit current Iq	kA	0
Number of poles		3
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
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		Yes
Suitable for intermediate mounting		No
Colour control element		-
Type of control element		-
Interlockable		No
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP20

Dimensions



Additional product information (links)

IL008008Z Switch-disconnectors	
IL008008Z Switch-disconnectors	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL008008ZU2016_11.pdf

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