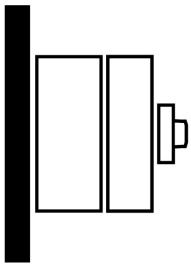
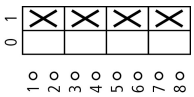
Switch-disconnector, 4 pole, 400 A, Without rotary handle and drive shaft, surface mounting

Part no. DMV-400N/4
Article no. 1814413

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			4 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	180
Rated uninterrupted current	I_u	A	400

Technical data

General

Standards			IEC/EN 60947, VDE 0660, IEC/EN 60204, Switch-disconnector according to IEC/EN 60947-3
Certifications			CE, RoHs, KEMA, GOST-R, 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	8
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			4 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	400
Note on rated uninterrupted current I_u			Rated uninterrupted current Iu is specified for max. cross-section.
Short-circuit rating			
fuse			500/250
Rated conditional short-circuit current	Iq	kA	In = 500: 50 In = 250: 100
Breaking current		kA	In = 500: 40 In = 250: 33
max. let-through energy		kA^2s	In = 500: 1700 In = 250: 380
Rated short-time withstand current (1 s current)	I_{cw}	A_{rms}	12000
Note on rated short-time withstand current Icw			Current for a time of 0.3 seconds

Switching capacity

Rated breaking capacity cos φ to IEC 60947-3		A	
400/415 V		A	2664
500 V		A	2032
690 V		A	1120
Safe isolation to EN 61140			
Current heat loss per contact at I_e		W	9
Lifespan, mechanical	Operations		10000
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	I_e	A	400
500 V	I_e	A	400
690 V	I_e	A	400
AC-22A			
Rated operational current switch			
400 V 415 V	I_e	A	400
500 V	I_e	A	400
690 V	I_e	A	315
AC-23A			
Rated operational current switch			
400 V 415 V	I_e	A	333
500 V	I_e	A	254
690 V	I_e	A	140
Motor rating AC-23A, 50 - 60 Hz	P	kW	
400 V 415 V	P	kW	180
500 V	P	kW	180
690 V	P	kW	132

Terminal capacities

Flat conductor connection with busbars		mm^2	240
Terminal screw			M10 x 20
Max. tightening torque		Nm	20

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	400

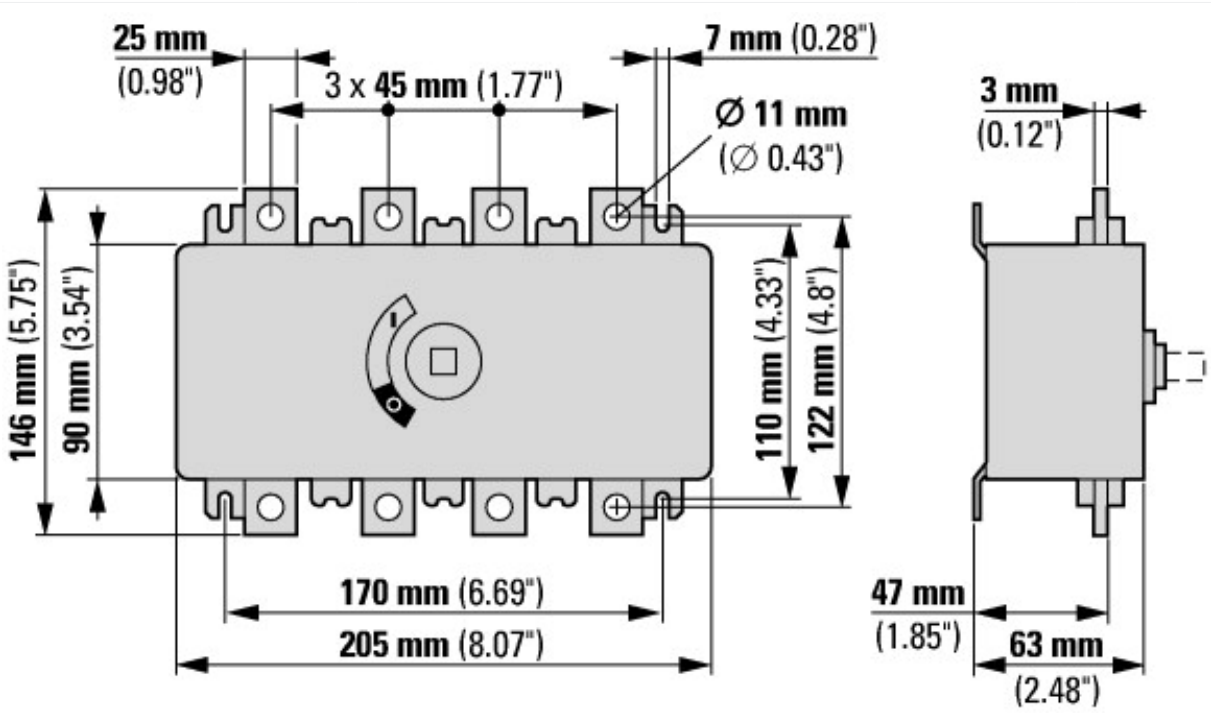
Heat dissipation per pole, current-dependent	P_{vid}	W	9
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	0
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
IEC/EN 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			No
Version as maintenance-/service switch			No
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	400
Rated permanent current at AC-21, 400 V		A	400
Rated operation power at AC-3, 400 V		kW	0
Rated short-time withstand current Icw		kA	12
Rated operation power at AC-23, 400 V		kW	180
Switching power at 400 V		kW	180
Conditioned rated short-circuit current Iq		kA	100
Number of poles			4
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	No
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