

**Switch-disconnector, DMV, 250 A, 4 pole, STOP function, with grey knob,
With metal shaft for a control panel depth of 400 mm, 9 mm connection
hole**



Part no. **DMV-250/4/M4/P-G**
Catalog No. **6099273**

Delivery program

Product range		Switch-disconnector Main switch maintenance switch	
Part group reference		DMV	
Stop Function		STOP function	
Information about equipment supplied		with grey knob auxiliary contact fitted by user.	
Notes		With metal shaft for a control panel depth of 400 mm	
Number of poles		4 pole	
Auxiliary contacts			
	N/O	0	
	N/C	0	
Notes		1 padlock, # 5 mm	
Locking facility		Lockable in the 0 (Off) position	
Degree of Protection		Front IP65	
Design		rear mounting	
Switching angle	°	90	
Motor rating AC-23A, 50 - 60 Hz			
400 V	P	kW	147
Rated uninterrupted current	I _u	A	250
Note on rated uninterrupted current I _u			Rated uninterrupted current I _u is specified for max. cross-section.
Connection technique			9 mm connection hole

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	8
Rated insulation voltage	U _i	V	1000
Mounting position			As required

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	250

Note on rated uninterrupted current I_u			Rated uninterrupted current I_u is specified for max. cross-section.
Short-circuit rating			
fuse			500/250
Rated conditional short-circuit current	I_q	kA	$I_n = 500: 50$ $I_n = 250: 100$
Breaking current		kA	$I_n = 500: 40$ $I_n = 250: 33$
max. let-through energy		kA ² s	$I_n = 500: 1700$ $I_n = 250: 380$
Rated short-time withstand current (1 s current)	I_{cw}	A _{rms}	12000
Note on rated short-time withstand current I_{cw}			Current for a time of 0.3 seconds
Heat dissipation per pole, current-dependent	P_{vid}	W	4.5

Switching capacity

Rated breaking capacity cos φ to IEC 60947-3		A	
400/415 V		A	2000
500 V		A	1760
690 V		A	1120
Safe isolation to EN 61140			
Current heat loss per contact at I_e		W	3.75
Lifespan, mechanical		Operations	10000
AC			
AC-21A			
Rated operational current switch			
400 V 415 V	I_e	A	250
500 V	I_e	A	250
690 V	I_e	A	250
AC-22A			
Rated operational current switch			
400 V 415 V	I_e	A	250
500 V	I_e	A	250
690 V	I_e	A	250
AC-23A			
Rated operational current switch			
400 V 415 V	I_e	A	250
500 V	I_e	A	220
690 V	I_e	A	140
Motor rating AC-23A, 50 - 60 Hz	P	kW	
400 V 415 V	P	kW	147
500 V	P	kW	160
690 V	P	kW	132

Terminal capacities

Flat conductor connection with busbars		mm ²	120
Terminal screw			M8 x 20
Tightening torque for terminal screw		Nm	14

Technical safety parameters:

Notes		B10 _d values as per EN ISO 13849-1, table C1
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Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	250
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	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 8.0

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])

Version as main switch		Yes
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 Iu	A	250
Rated permanent current at AC-23, 400 V	A	250
Rated permanent current at AC-21, 400 V	A	250
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	250
Switching power at 400 V	kW	250
Conditioned rated short-circuit current Iq	kA	50
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		Built-in device fixed built-in technique
Suitable for floor mounting		Yes
Suitable for front mounting 4-hole		No
Suitable for front mounting centre		No
Suitable for distribution board installation		No
Suitable for intermediate mounting		Yes
Colour control element		Grey
Type of control element		Short thumb-grip
Interlockable		Yes
Type of electrical connection of main circuit		Screw connection
Degree of protection (IP), front side		IP65
Degree of protection (NEMA)		12