

**Switch-disconnector, DMV, 400 A, 4 pole, Emergency switching off function, With red rotary handle and yellow locking ring, With metal shaft for a control panel depth of 400 mm, 11 mm connection bore**

**Part no.** **DMV-400/4/M4/P-R**  
**Catalog No.** **6094971**

**EL-Nummer  
(Norway)** **1417208**

## Delivery program

Product range		Switch-disconnector Main switch maintenance switch	
Part group reference		DMV	
Stop Function		Emergency switching off function	
Information about equipment supplied		With red rotary handle and yellow locking ring	
Notes		auxiliary contact fitted by user.	
Number of poles		With metal shaft for a control panel depth of 400 mm	
<b>Auxiliary contacts</b>			
	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	
<b>Motor rating AC-23A, 50 - 60 Hz</b>			
400 V	P	kW	180
Rated uninterrupted current	I <sub>u</sub>	A	400
Note on rated uninterrupted current I <sub>u</sub>			Rated uninterrupted current I <sub>u</sub> is specified for max. cross-section.
Connection technique			11 mm connection bore

## 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
Overtoltage category/pollution degree			III/3
Rated impulse withstand voltage	U <sub>imp</sub>	kV	8
Rated insulation voltage	U <sub>i</sub>	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 <sub>e</sub>	V AC	690

Rated uninterrupted current	$I_u$	A	400
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		$kA^2s$	$I_n = 500: 1700$ $I_n = 250: 380$
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	11.5

### Switching capacity

Rated breaking capacity $\cos \varphi$ 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 <sup>2</sup>	240
Terminal screw			M10 x 20
Tightening torque for terminal screw		Nm	28

### Technical safety parameters:

Notes		B10 <sub>d</sub> 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	400
Heat dissipation per pole, current-dependent	$P_{vid}$	W	11.5
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		Yes
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	400
Rated permanent current at AC-23, 400 V	A	333
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	400
Switching power at 400 V	kW	400
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	Red
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