

## Switch-disconnector, DMV, 630 A, 4 pole, Stop Function optional, Without rotary handle and drive shaft

**Part no.**                    **DMV-630N/4**  
**1814444**

<b>General specifications</b>	
Product name	Eaton DMV Switch-disconnector
Part no.	DMV-630N/4
EAN	8711426423442
Product Length/Depth	400 millimetre
Product height	250 millimetre
Product width	250 millimetre
Product weight	4.94 kilogram
Certifications	KEMA IEC/EN 60947-3 IEC/EN 60947 RoHS CE IEC/EN 60204 Lloyds VDE 0660 EAC
Product Tradename	DMV
Product Type	Switch-disconnector
Product Sub Type	None
Catalog Notes	Current for a time of 0.3 seconds visible contacts Without rotary handle and drive shaft
<b>Features &amp; Functions</b>	
Features	Version as emergency stop installation
Functions	Optional Stop Function
Number of poles	Four-pole
<b>General information</b>	
Accessories	Auxiliary contact fitted by user. Connection materials included with supplied equipment.
Actuator color	Other
Actuator type	Other
Degree of protection	NEMA Other
Degree of protection (front side)	IP20
Lifespan, mechanical	5,000 Operations
Mounting method	Surface mounting
Mounting position	As required
Overvoltage category	III
Pollution degree	3
Product Category	Main switch Switch-disconnector
Rated impulse withstand voltage (Uimp)	12000 V
Safety parameter (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
Suitable for	Ground mounting
<b>Climatic environmental conditions</b>	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	55 °C
Ambient storage temperature - min	-30 °C
Ambient storage temperature - max	80 °C
<b>Terminal capacities</b>	
Terminal capacity	400 mm <sup>2</sup> , Flat conductor connection with busbars
Screw size	M10 x 20, Terminal screw

Tightening torque		28 Nm, Screw terminals
<b>Electrical rating</b>		
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)		5040 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)		4600 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)		3496 A
Rated insulation voltage (Ui)		1000 V
Rated operational current (Ie) at AC-21, 400 V, 415 V		630 A
Rated operational current (Ie) at AC-21, 500 V		630 A
Rated operational current (Ie) at AC-21, 690 V		630 A
Rated operational current (Ie) at AC-22, 380 V, 400 V, 415 V		630 A
Rated operational current (Ie) at AC-22, 500 V		630 A
Rated operational current (Ie) at AC-22, 690 V		630 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V		630 A
Rated operational current (Ie) at AC-23A, 500 V		575 A
Rated operational current (Ie) at AC-23A, 690 V		437 A
Rated operational power at AC-23A, 400 V, 50 Hz		375 kW
Rated operational power at AC-23A, 500 V, 50 Hz		425 kW
Rated operational power at AC-23A, 690 V, 50 Hz		425 kW
Rated operational power at AC-3, 380/400 V, 50 Hz		0 kW
Rated operational voltage (Ue) at AC - max		690 V
Rated uninterrupted current (Iu)		630 A
Uninterrupted current		Rated uninterrupted current Iu is specified for max. cross-section.
<b>Short-circuit rating</b>		
Breaking current		70 kA (at In = 1000) 65 kA (at In = 630)
Let-through energy		Max. 4200 kA <sup>2</sup> s (at In = 1000) Max. 3200 kA <sup>2</sup> s (at In = 630)
Rated conditional short-circuit current (Iq)		50 kA at In = 1000 100 kA
Rated short-time withstand current (Icw)		36 kA, Contacts, 1 second 36 kA
Short-circuit protection rating		1000/630, Fuse, Contacts
<b>Contacts</b>		
Number of auxiliary contacts (change-over contacts)		0
Number of auxiliary contacts (normally closed contacts)		0
Number of auxiliary contacts (normally open contacts)		0
<b>Design verification</b>		
Equipment heat dissipation, current-dependent Pvid		14 W
Heat dissipation capacity Pdis		0 W
Heat dissipation per pole, current-dependent Pvid		17.5 W
Rated operational current for specified heat dissipation (In)		630 A
Static heat dissipation, non-current-dependent Pvs		0 W
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.

10.9.2 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 9.0

Low-voltage industrial components (EG000017) / Switch disconnecter (low voltage) (EC000216)			
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecl@ss13-27-37-14-03 [AKF060018])			
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
Number of switches			1
Max. rated operation voltage Ue AC		V	690
Rated operating voltage		V	690 - 690
Rated permanent current Iu		A	630
Rated permanent current at AC-23, 400 V		A	630
Rated permanent current at AC-21, 400 V		A	630
Rated operation power at AC-3, 400 V		kW	0
Rated short-time withstand current Icw		kA	36
Rated operation power at AC-23, 400 V		kW	375
Switching power at 400 V		kW	375
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 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			No
Colour control element			Other
Type of control element			Other
Interlockable			No
Type of electrical connection of main circuit			Screw connection
With pre-assembled cabling			No
Degree of protection (IP), front side			IP20
Degree of protection (NEMA)			Other
Width		mm	250
Height		mm	250
Depth		mm	400
Width in number of modular spacings			

