

**Switch-disconnector, DMV, 1600 A, 3 pole, Stop Function optional,
Without rotary handle and drive shaft**



**Part no. DMV-1600N/3
1814595**

General specifications		
Product name		Eaton DMV Switch-disconnector
Part no.		DMV-1600N/3
EAN		8711426743489
Product Length/Depth		500 millimetre
Product height		250 millimetre
Product width		250 millimetre
Product weight		12.7 kilogram
Certifications		VDE 0660 CE EAC RoHS IEC/EN 60947 KEMA IEC/EN 60204 Lloyds IEC/EN 60947-3
Product Tradename		DMV
Product Type		Switch-disconnector
Product Sub Type		None
Catalog Notes		Rated Short-time Withstand Current (Icw) for a time of 1 second visible contacts Without rotary handle and drive shaft
Features & Functions		
Features		Version as maintenance-/service switch Version as emergency stop installation Version as main switch
Functions		Optional Stop Function
Number of poles		Three-pole
General information		
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 Distribution board installation
Climatic environmental conditions		
Ambient operating temperature - min		-25 °C
Ambient operating temperature - max		55 °C
Ambient storage temperature - min		-30 °C
Ambient storage temperature - max		80 °C
Terminal capacities		

Terminal capacity	1000 mm ² , Flat conductor connection with busbars
Screw size	M12 x 50 (2 x), Terminal screw
Tightening torque	40 Nm, Screw terminals
Electrical rating	
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	10000 A
Rated breaking capacity at 500 V (cos phi to IEC 60947-3)	7272 A
Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3)	4050 A
Rated insulation voltage (Ui)	1000 V
Rated operational current (Ie) at AC-21, 400 V, 415 V	1600 A
Rated operational current (Ie) at AC-21, 500 V	1600 A
Rated operational current (Ie) at AC-21, 690 V	1600 A
Rated operational current (Ie) at AC-22, 380 V, 400 V, 415 V	1600 A
Rated operational current (Ie) at AC-22, 500 V	1600 A
Rated operational current (Ie) at AC-22, 690 V	1600 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V	1250 A
Rated operational current (Ie) at AC-23A, 500 V	909 A
Rated operational current (Ie) at AC-23A, 690 V	630 A
Rated operational power at AC-23A, 400 V, 50 Hz	750 kW
Rated operational power at AC-23A, 500 V, 50 Hz	630 kW
Rated operational power at AC-23A, 690 V, 50 Hz	630 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)	1600 A
Uninterrupted current	Rated uninterrupted current Iu is specified for max. cross-section.
Short-circuit rating	
Rated conditional short-circuit current (Iq)	0 kA
Rated short-time withstand current (Icw)	50 kA, Contacts, 1 second 50 kA
Contacts	
Number of auxiliary contacts (change-over contacts)	0
Number of auxiliary contacts (normally closed contacts)	0
Number of auxiliary contacts (normally open contacts)	0
Design verification	
Equipment heat dissipation, current-dependent Pvid	44.9 W
Heat dissipation capacity Pdis	0 W
Heat dissipation per pole, current-dependent Pvid	44.75 W
Rated operational current for specified heat dissipation (In)	1600 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 (ec@ss13-27-37-14-03 [AKF060018])			
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
Number of switches			1
Max. rated operation voltage Ue AC	V		690
Rated operating voltage	V		690 - 690
Rated permanent current Iu	A		1600
Rated permanent current at AC-23, 400 V	A		1250
Rated permanent current at AC-21, 400 V	A		1600
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 floor mounting			Yes
Suitable for front mounting 4-hole			No
Suitable for front mounting centre			No
Suitable for distribution board installation			Yes
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		500
Width in number of modular spacings			