DATASHEET - DMV-1000N/1

Switch-disconnector, DMV, 1000 A, 3P + N (solid), Stop Function optional, Without rotary handle and drive shaft

Part no. DMV-1000N/1
1814446

General specifications

Product name	Eaton DMV Switch-disconnector
Part no.	DMV-1000N/1
EAN	8711426533554
Product Length/Depth	310 millimetre
Product height	110 millimetre
Product width	250 millimetre
Product weight	4.927 kilogram
Certifications	Lloyds IEC/EN 60947-3 RoHS IEC/EN 60947 VDE 0660 KEMA CE IEC/EN 60204 EAC
Product Tradename	DMV
Product Type	Switch-disconnector
Product Sub Type	None
Catalog Notes	Without rotary handle and drive shaft visible contacts Current for a time of 0.3 seconds

Features & Functions

Features	Version as main switch Version as maintenance-/service switch Version as emergency stop installation
Functions	Optional Stop Function
Number of poles	Three-pole + N

General information

Accessories	Connection materials included with supplied equipment. Auxiliary contact fitted by user.
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	Switch-disconnector Main switch
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	Distribution board installation Ground mounting

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	600 mm^2, Flat conductor connection with busbars
Screw size	M12 x 35, Terminal screw
Tightening torque	28 Nm, Screw terminals

Electrical rating

Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3)	6072 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	1000 A
Rated operational current (Ie) at AC-21, 500 V	1000 A
Rated operational current (Ie) at AC-21, 690 V	1000 A
Rated operational current (Ie) at AC-22, 380 V, 400 V, 415 V	1000 A
Rated operational current (Ie) at AC-22, 500 V	1000 A
Rated operational current (Ie) at AC-22, 690 V	1000 A
Rated operational current (Ie) at AC-23A, 400 V, 415 V	759 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	425 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)	1000 A
Uninterrupted current	Rated uninterrupted current Iu is specified for max. cross-section.

Short-circuit rating

Breaking current	70 kA (at In = 1000) 65 kA (at In = 630)
Let-through energy	Max. 4200 kA^2s (at In = 1000) Max. 3200 kA^2s (at In = 630)
Rated conditional short-circuit current (Iq)	100 kA 50 kA at In = 1000
Rated short-time withstand current (Icw)	36 kA 36 kA, Contacts, 1 second
Short-circuit protection rating	1000/630, Fuse, Contacts

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	33.5 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	44.75 W
Rated operational current for specified heat dissipation (In)	1000 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 disconnector (low voltage) (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@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	1000
Rated permanent current at AC-23, 400 V	A	759
Rated permanent current at AC-21, 400 V	A	1000
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	425
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		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	110
Depth	mm	310

Width in number of modular spacings				

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