DATASHEET - DMV-630N/3

Switch-disconnector, DMV, 630 A, 3 pole, Stop Function optional, Without rotary handle and drive shaft



rotary handle a	nd drive shaft	Powering P
Part no.	DMV-630N/3 1814442	Powering B
General specifications		
Product name		Eaton DMV Switch-disconnector
Part no.		DMV-630N/3
EAN		8711426211995
Product Length/Depth		305 millimetre
Product height		107 millimetre
Product width		256 millimetre
Product weight		4.61 kilogram
Certifications		IEC/EN 60204 EAC IEC/EN 60947 Lloyds RoHS IEC/EN 60947-3 VDE 0660 CE KEMA
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
Features & Functions		
Features		Version as emergency stop installation
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
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 Terminal capacities		80 °C

Terminal capacities

Terminal capacity

Screw size

01/20/2024

Eaton 1814442 ED2023 V1.0 EN

400 mm², Flat conductor connection with busbars

M10 x 20, Terminal screw

Tightening torque	28 Nm, Screw terminals
Electrical rating	
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 (le) at AC-22, 380 V, 400 V, 415 V	630 A
Rated operational current (le) 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 lu is specified for max. cross-section.
Short-circuit rating	
Breaking current	70 kA (at In = 1000)
Let-through energy	65 kA (at In = 630) Max. 3200 kA ² s (at In = 630)
	Max. 4200 kA ² s (at In = 1000)
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
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	14 W
Heat dissipation capacity Pdiss	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 disconnector (low voltage) (EC000216)

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