DATASHEET - DMV-160N/4+TC

Switch-disconnector, DMV, 160 A, 4 pole, Stop Function optional, Without rotary handle and drive shaft, Tunnel terminal



Part no.

DMV-160N/4+TC 1814176

General specifications	
Product name	Eaton DMV Switch-disconnector
Part no.	DMV-160N/4+TC
EAN	8711426853928
Product Length/Depth	170 millimetre
Product height	70 millimetre
Product width	130 millimetre
Product weight	1.18 kilogram
Certifications	RoHS Lloyds IEC/EN 60204 VDE 0660 EAC CE KEMA IEC/EN 60947 IEC/EN 60947-3
Product Tradename	DMV
Product Type	Switch-disconnector
Product Sub Type	None
Catalog Notes	Current for a time of 0.2 seconds 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	Four-pole
General information	
Accessories	Auxiliary contact fitted by user. Connection materials included with supplied equipment.
Actuator color	Other
Actuator type	Other
Connection type	Tunnel terminal
Degree of protection	NEMA Other
Degree of protection (front side)	IP20
Lifespan, mechanical	10,000 Operations
Mounting method	Surface mounting
Mounting position	As required
Overvoltage category	III III
Pollution degree	3
Product Category	Main switch Switch-disconnector
Rated impulse withstand voltage (Uimp)	8000 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	0° 08

Terminal capacity 6 - 70 mm², flexible with ferrules to DIN 46228 Tightening torque 7 Nm, Screw terminals	
Tightening torque	
Electrical rating	
Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3) 1232 A	
Rated breaking capacity at 500 V (cos phi to IEC 60947-3) 848 A	
Rated insulation voltage (Ui)	
Rated operational current (Ie) at AC-21, 400 V, 415 V	
Rated operational current (Ie) at AC-21, 500 V	
Rated operational current (Ie) at AC-21, 690 V 125 A	
Rated operational current (Ie) at AC-22, 380 V, 400 V, 415 V 160 A	
Rated operational current (Ie) at AC-22, 500 V	
Rated operational current (Ie) at AC-22, 690 V 125 A	
Rated operational current (Ie) at AC-23A, 400 V, 415 V 154 A	
Rated operational current (Ie) at AC-23A, 500 V 106 A	
Rated operational power at AC-23A, 400 V, 50 Hz 90 kW	
Rated operational power at AC-23A, 500 V, 50 Hz 75 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)	
Uninterrupted current lu is specified for max. cross-section and the section of t	ion.
Short-circuit rating	
Breaking current 50 kA (at In = 160) 14.5 kA (at In = 100)	
Let-through energy Max. 67 kA ² s (at ln = 100) Max. 600 kA ² s (at ln = 160)	
Rated conditional short-circuit current (Iq) 50 kA at In = 160 100 kA	
Rated short-time withstand current (Icw) 8 kA, Contacts, 1 second 8 kA 8 kA	
Short-circuit protection rating 160/100, 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)	
Design verification	
Equipment heat dissipation, current-dependent Pvid 0W	
Heat dissipation capacity Pdiss 0 W	
Heat dissipation per pole, current-dependent Pvid 3.9 W	
Rated operational current for specified heat dissipation (In) 160 A	
Static heat dissipation, non-current-dependent Pvs 0W	
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 by the entire switchgear needs to be e	ited.
10.2.6 Mechanical impact Does not apply, since the entire switchgear needs to be evaluated by the entire switchgear nee	ited.
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 by the entire	ited.
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 by the entire	ited.
10.6 Incorporation of switching devices and components Does not apply, since the entire switchgear needs to be evaluated by the entire switchgear needs to be evaluate	ited.
10.7 Internal electrical circuits and connections	
10.8 Connections for external conductors 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 tec [AKF060018])	hnology / Off-load sv	witch, circuit breaker, control switch / Switch disconnector (ecl@ss13-27-37-14-03
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 lu	А	160
Rated permanent current at AC-23, 400 V	А	154
Rated permanent current at AC-21, 400 V	А	160
Rated operation power at AC-3, 400 V	kW	0
Rated short-time withstand current lcw	kA	8
Rated operation power at AC-23, 400 V	kW	90
Switching power at 400 V	kW	90
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	130
Height	mm	70
Depth	mm	170
Width in number of modular spacings		