

Switch-disconnector, DMV, 160 A, 3 pole, Stop Function optional, Without rotary handle and drive shaft, Tunnel terminal



Part no. **DMV-160N/3+TC**
1814175

General specifications		
Product name		Eaton DMV Switch-disconnector
Part no.		DMV-160N/3+TC
EAN		8711426848597
Product Length/Depth		180 millimetre
Product height		80 millimetre
Product width		210 millimetre
Product weight		0.91 kilogram
Certifications		EAC IEC/EN 60947 RoHS IEC/EN 60947-3 CE Lloyds IEC/EN 60204 VDE 0660 KEMA
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 main switch Version as maintenance-/service switch 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
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
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		80 °C

Terminal capacities		
Terminal capacity		6 - 70 mm ² , flexible with ferrules to DIN 46228
Tightening torque		7 Nm, Screw terminals
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)		1000 V
Rated operational current (Ie) at AC-21, 400 V, 415 V		160 A
Rated operational current (Ie) at AC-21, 500 V		160 A
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		160 A
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)		160 A
Uninterrupted current		Rated uninterrupted current Iu is specified for max. cross-section.
Short-circuit rating		
Breaking current		14.5 kA (at In = 100) 50 kA (at In = 160)
Let-through energy		Max. 600 kA ² s (at In = 160) Max. 67 kA ² s (at In = 100)
Rated conditional short-circuit current (Iq)		50 kA at In = 160 100 kA
Rated short-time withstand current (Icw)		8 kA 8 kA, Contacts, 1 second
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)		0
Design verification		
Equipment heat dissipation, current-dependent Pvid		0 W
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		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			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 U _e AC	V		690
Rated operating voltage	V		690 - 690
Rated permanent current I _u	A		160
Rated permanent current at AC-23, 400 V	A		154
Rated permanent current at AC-21, 400 V	A		160
Rated operation power at AC-3, 400 V	kW		0
Rated short-time withstand current I _{cw}	kA		8
Rated operation power at AC-23, 400 V	kW		90
Switching power at 400 V	kW		90
Conditioned rated short-circuit current I _q	kA		100
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		210
Height	mm		80
Depth	mm		180
Width in number of modular spacings			