



Eaton 1814412

Eaton DMV Switch-disconnector, DMV, 400 A, 3P + N (solid), Stop Function optional, Without rotary handle and drive shaft

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PRODUCT NAME	Eaton DMV Switch-disconnector
CATALOG NUMBER	1814412
PRODUCT LENGTH/DEPTH	63 mm
PRODUCT HEIGHT	146 mm
PRODUCT WIDTH	205 mm
PRODUCT WEIGHT	1.875 kg
CERTIFICATIONS	IEC/EN 60947-3 VDE 0660 IEC/EN 60204 CE EAC KEMA Lloyds RoHS IEC/EN 60947



Powering Business Worldwide

PRODUCT CATEGORY

- Main switch
- Switch-disconnector

FEATURES Version as emergency stop installation

ACTUATOR COLOR Other

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.

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

DECLARATIONS OF CONFORMITY [eaton-switch-disconnector-declaration-of-conformity-uk251110en.pdf](#)

□□□ [eaton-rotary-switches-on-off-switch-p3-main-switch-wiring-diagram-002.eps](#)

□□ [eaton-rotary-switches-dmv-switch-disconnector-dimensions-016.eps](#)

	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.
POLLUTION DEGREE	3
RATED IMPULSE WITHSTAND VOLTAGE (UIMP)	8000 V
RATED PERMANENT CURRENT AT AC-21, 400 V	400 A
RATED PERMANENT CURRENT AT AC-23, 400 V	333 A
RATED UNINTERRUPTED CURRENT (IU)	400 A
STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS	0 W
SWITCHING POWER AT 400 V	180 kW
ACCESSORIES	• Auxiliary contact fitted by user. • Connection materials included with supplied equipment.
DEVICE CONSTRUCTION	Complete device in housing
RATED SHORT-TIME	12 kA

WITHSTAND CURRENT (ICW)	12 kA, Contacts, 1 second
ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT	Screw connection
MOUNTING POSITION	As required
ACTUATOR TYPE	Other
AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT OPERATING TEMPERATURE - MIN	-25 °C
AMBIENT STORAGE TEMPERATURE - MAX	80 °C
AMBIENT STORAGE TEMPERATURE - MIN	-30 °C
EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID	10.8 W
HEAT DISSIPATION CAPACITY PDISS	0 W
HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID	9 W
NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS)	0
NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS)	0
RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ)	50 kA at In = 500 100 kA
OVERVOLTAGE CATEGORY	III
BREAKING CURRENT	33 kA (at In = 250) 40 kA (at In = 500)
DEGREE OF PROTECTION (FRONT SIDE)	IP20
NUMBER OF POLES	Three-pole + N
MOUNTING METHOD	Surface mounting
DEGREE OF PROTECTION	NEMA Other
SUITABLE FOR	Ground mounting
FUNCTIONS	Optional Stop Function
NUMBER OF SWITCHES	1
SCREW SIZE	M10 x 20, Terminal screw
LIFESPAN, MECHANICAL	10,000 Operations
LET-THROUGH ENERGY	Max. 1700 kA²s (at In = 500) Max. 380 kA²s (at In = 250)

TERMINAL CAPACITY	240 mm², Flat conductor connection with busbars
SAFETY PARAMETER (EN ISO 13849-1)	B10d values as per EN ISO 13849-1, table C.1
NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS)	0
RATED BREAKING CAPACITY AT 400/415 V (COS PHI TO IEC 60947-3)	2664 A
RATED BREAKING CAPACITY AT 500 V (COS PHI TO IEC 60947-3)	2032 A
RATED BREAKING CAPACITY AT 660/690 V (COS PHI TO IEC 60947-3)	1120 A
RATED INSULATION VOLTAGE (UI)	1000 V
RATED OPERATING VOLTAGE (UE) - MAX	690 V
RATED OPERATING VOLTAGE (UE) - MIN	690 V
RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX	690 V
RATED OPERATIONAL CURRENT (IE) AT AC-21, 400 V, 415 V	400 A
SHORT-CIRCUIT PROTECTION RATING	500/250, Fuse, Contacts
RATED OPERATIONAL CURRENT (IE) AT AC-21, 500 V	400 A
RATED OPERATIONAL CURRENT (IE) AT AC-21, 690 V	400 A
RATED OPERATIONAL CURRENT (IE) AT AC-22, 380 V, 400 V, 415 V	400 A
RATED OPERATIONAL CURRENT (IE) AT AC-22, 500 V	400 A
RATED OPERATIONAL CURRENT (IE) AT AC-22, 690 V	315 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 400 V, 415 V	333 A
RATED OPERATIONAL CURRENT (IE) AT AC-23A, 500 V	254 A
RATED OPERATIONAL	140 A

CURRENT (IE) AT AC-23A, 690 V	
RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN)	400 A
RATED OPERATIONAL POWER AT AC-23A, 400 V, 50 HZ	180 kW
RATED OPERATIONAL POWER AT AC-23A, 500 V, 50 HZ	180 kW
RATED OPERATIONAL POWER AT AC-23A, 690 V, 50 HZ	132 kW
RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ	0 kW
TIGHTENING TORQUE	28 Nm, Screw terminals
UNINTERRUPTED CURRENT	Rated uninterrupted current Iu is specified for max. cross-section.
HOUSING MATERIAL	Plastic
