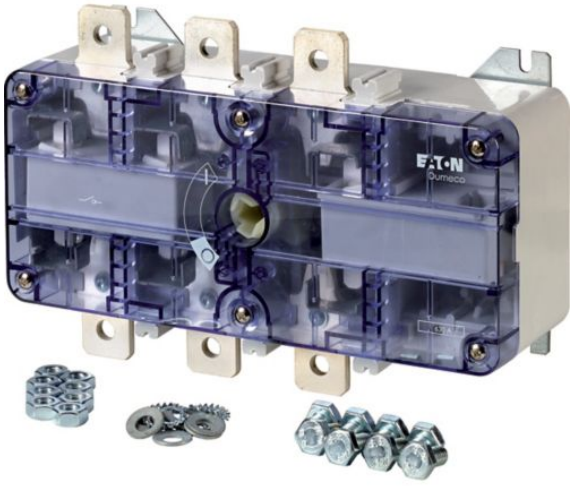
Specifications



Eaton 1814442

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

General specifications	
PRODUCT NAME	Eaton DMV Switch-disconnector
CATALOG NUMBER	1814442
MODEL CODE	DMV-630N/3
EAN	8711426211995
PRODUCT LENGTH/DEPTH	96 mm
PRODUCT HEIGHT	192 mm
PRODUCT WIDTH	292 mm
PRODUCT WEIGHT	4.61 kg
CERTIFICATIONS	RoHS CE Lloyds VDE 0660 IEC/EN 60204 KEMA IEC/EN 60947 IEC/EN 60947-3 EAC

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Features & Functions

FEATURES	Version as emergency stop installation
FUNCTIONS	Optional Stop Function
NUMBER OF POLES	Three-pole

General

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	80 °C

Terminal capacities

TERMINAL CAPACITY	400 mm², Flat conductor connection with busbars
SCREW SIZE	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 (IE) AT AC-22, 380 V, 400 V, 415 V	630 A
RATED OPERATIONAL CURRENT (IE) 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 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. 3200 kA²s (at In = 630) Max. 4200 kA²s (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.

Resources

CATALOGUES	eaton-industrial-switch-disconnectors-catalogue-ca008011en-en-gb.pdf
DECLARATIONS OF CONFORMITY	DA-DC-00004902.pdf DA-DC-00004929.pdf
DRAWINGS	eaton-rotary-switches-dmv-switch-disconnector-dimensions-017.eps eaton-rotary-switches-dmv-switch-disconnector-dimensions-009.eps eaton-general-switch-t0-main-switch-symbol.eps
ECAD MODEL	DA-CE-ETN.DMV-630N_3
INSTALLATION INSTRUCTIONS	IL008008ZU
MCAD MODEL	DA-CD-dmv630n_1814444_1 DA-CS-dmv630n_1814444_1
WIRING DIAGRAMS	eaton-rotary-switches-on-off-switch-p3-main-switch-wiring-diagram.eps eaton-rotary-switches-t0-on-off-switch-wiring-diagram-068.eps

PROJECT NAME:	
PROJECT NUMBER:	
PREPARED BY:	
DATE:	

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