

Switch-disconnector, DMV, 400 A, 3 pole, Stop Function optional, Without rotary handle and drive shaft



Part no. **DMV-400N/3**  
**1814411**

| <b>General specifications</b>            |  |   |
|--|--|---|
| Product name                             |  | Eaton DMV Switch-disconnector   |
| Part no.                                 |  | DMV-400N/3  |
| EAN                                      |  | 8711426213388   |
| Product Length/Depth                     |  | 206 millimetre  |
| Product height                           |  | 75 millimetre   |
| Product width                            |  | 185 millimetre  |
| Product weight                           |  | 1.788 kilogram  |
| Certifications                           |  | IEC/EN 60204<br>EAC<br>CE<br>IEC/EN 60947-3<br>IEC/EN 60947<br>VDE 0660<br>Lloyds<br>KEMA<br>RoHS |
| Product Tradename                        |  | DMV   |
| Product Type                             |  | Switch-disconnector   |
| Product Sub Type                         |  | None  |
| Catalog Notes                            |  | Current for a time of 0.3 seconds<br>visible contacts<br>Without rotary handle and drive shaft    |
| <b>Features &amp; Functions</b>          |  |   |
| Features                                 |  | Version as emergency stop installation  |
| Functions                                |  | Optional Stop Function  |
| Number of poles                          |  | Three-pole  |
| <b>General information</b>               |  |   |
| Accessories                              |  | Auxiliary contact fitted by user.<br>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                     |  | 10,000 Operations   |
| Mounting method                          |  | Surface mounting  |
| Mounting position                        |  | As required   |
| Overvoltage category                     |  | III   |
| Pollution degree                         |  | 3   |
| Product Category                         |  | Main switch<br>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   |
| <b>Climatic environmental conditions</b> |  |   |
| Ambient operating temperature - min      |  | -25 °C  |
| Ambient operating temperature - max      |  | 55 °C   |
| Ambient storage temperature - min        |  | -30 °C  |
| Ambient storage temperature - max        |  | 80 °C   |
| <b>Terminal capacities</b>               |  |   |
| Terminal capacity                        |  | 240 mm <sup>2</sup> , Flat conductor connection with busbars                                      |
| Screw size                               |  | M10 x 20, Terminal screw  |

|  |  |   |
|--|--|---|
| Tightening torque  |  | 28 Nm, Screw terminals  |
| <b>Electrical rating</b>   |  |   |
| 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 operational current (Ie) at AC-21, 400 V, 415 V                            |  | 400 A   |
| 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 current (Ie) at AC-23A, 690 V                                  |  | 140 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  |
| Rated operational voltage (Ue) at AC - max                                       |  | 690 V   |
| Rated uninterrupted current (Iu)   |  | 400 A   |
| Uninterrupted current  |  | Rated uninterrupted current Iu is specified for max. cross-section.                   |
| <b>Short-circuit rating</b>  |  |   |
| Breaking current   |  | 33 kA (at In = 250)<br>40 kA (at In = 500)  |
| Let-through energy   |  | Max. 380 kA <sup>2</sup> s (at In = 250)<br>Max. 1700 kA <sup>2</sup> s (at In = 500) |
| Rated conditional short-circuit current (Iq)                                     |  | 50 kA at In = 500<br>100 kA   |
| Rated short-time withstand current (Icw)   |  | 12 kA<br>12 kA, Contacts, 1 second  |
| Short-circuit protection rating  |  | 500/250, Fuse, Contacts   |
| <b>Contacts</b>  |  |   |
| Number of auxiliary contacts (change-over contacts)                              |  | 0   |
| Number of auxiliary contacts (normally closed contacts)                          |  | 0   |
| Number of auxiliary contacts (normally open contacts)                            |  | 0   |
| <b>Design verification</b>   |  |   |
| Equipment heat dissipation, current-dependent Pvid                               |  | 11.4 W  |
| Heat dissipation capacity Pdis   |  | 0 W   |
| Heat dissipation per pole, current-dependent Pvid                                |  | 9 W   |
| Rated operational current for specified heat dissipation (In)                    |  | 400 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  |    | No                         |
| Version as maintenance-/service switch  |    | No                         |
| 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 Iu  | A  | 400                        |
| Rated permanent current at AC-23, 400 V   | A  | 333                        |
| Rated permanent current at AC-21, 400 V   | A  | 400                        |
| Rated operation power at AC-3, 400 V  | kW | 0                          |
| Rated short-time withstand current Icw  | kA | 12                         |
| Rated operation power at AC-23, 400 V   | kW | 180                        |
| Switching power at 400 V  | kW | 180                        |
| Conditioned rated short-circuit current Iq  | 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  |    | No                         |
| 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 | 185                        |
| Height  | mm | 75                         |
| Depth   | mm | 206                        |
| Width in number of modular spacings   |    |                            |

