

**Switch-disconnector, DMV, 1600 A, 3 pole, Stop Function optional,
Without rotary handle and drive shaft**



**Part no. DMV-1600N/3
1814595**

| General specifications | | |
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| Product name | | Eaton DMV Switch-disconnector |
| Part no. | | DMV-1600N/3 |
| EAN | | 8711426743489 |
| Product Length/Depth | | 500 millimetre |
| Product height | | 250 millimetre |
| Product width | | 250 millimetre |
| Product weight | | 12.7 kilogram |
| Certifications | | VDE 0660 CE EAC RoHS IEC/EN 60947 KEMA IEC/EN 60204 Lloyds IEC/EN 60947-3 |
| Product Tradename | | DMV |
| Product Type | | Switch-disconnector |
| Product Sub Type | | None |
| Catalog Notes | | Rated Short-time Withstand Current (Icw) for a time of 1 second 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 | | Three-pole |
| General information | | |
| 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 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 | | |

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| Terminal capacity | | 1000 mm ² , Flat conductor connection with busbars |
| Screw size | | M12 x 50 (2 x), Terminal screw |
| Tightening torque | | 40 Nm, Screw terminals |
| Electrical rating | | |
| Rated breaking capacity at 400/415 V (cos phi to IEC 60947-3) | | 10000 A |
| Rated breaking capacity at 500 V (cos phi to IEC 60947-3) | | 7272 A |
| Rated breaking capacity at 660/690 V (cos phi to IEC 60947-3) | | 4050 A |
| Rated insulation voltage (Ui) | | 1000 V |
| Rated operational current (Ie) at AC-21, 400 V, 415 V | | 1600 A |
| Rated operational current (Ie) at AC-21, 500 V | | 1600 A |
| Rated operational current (Ie) at AC-21, 690 V | | 1600 A |
| Rated operational current (Ie) at AC-22, 380 V, 400 V, 415 V | | 1600 A |
| Rated operational current (Ie) at AC-22, 500 V | | 1600 A |
| Rated operational current (Ie) at AC-22, 690 V | | 1600 A |
| Rated operational current (Ie) at AC-23A, 400 V, 415 V | | 1250 A |
| Rated operational current (Ie) at AC-23A, 500 V | | 909 A |
| Rated operational current (Ie) at AC-23A, 690 V | | 630 A |
| Rated operational power at AC-23A, 400 V, 50 Hz | | 750 kW |
| Rated operational power at AC-23A, 500 V, 50 Hz | | 630 kW |
| Rated operational power at AC-23A, 690 V, 50 Hz | | 630 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) | | 1600 A |
| Uninterrupted current | | Rated uninterrupted current Iu is specified for max. cross-section. |
| Short-circuit rating | | |
| Rated conditional short-circuit current (Iq) | | 0 kA |
| Rated short-time withstand current (Icw) | | 50 kA, Contacts, 1 second 50 kA |
| 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 | | 44.9 W |
| Heat dissipation capacity Pdis | | 0 W |
| Heat dissipation per pole, current-dependent Pvid | | 44.75 W |
| Rated operational current for specified heat dissipation (In) | | 1600 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. |

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| 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 (ec@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 Ue AC | V | | 690 |
| Rated operating voltage | V | | 690 - 690 |
| Rated permanent current Iu | A | | 1600 |
| Rated permanent current at AC-23, 400 V | A | | 1250 |
| Rated permanent current at AC-21, 400 V | A | | 1600 |
| Rated operation power at AC-3, 400 V | kW | | 0 |
| Rated short-time withstand current Icw | kA | | 50 |
| Rated operation power at AC-23, 400 V | kW | | 750 |
| Switching power at 400 V | kW | | 710 |
| Conditioned rated short-circuit current Iq | kA | | 0 |
| 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 | | 250 |
| Height | mm | | 250 |
| Depth | mm | | 500 |
| Width in number of modular spacings | | | |