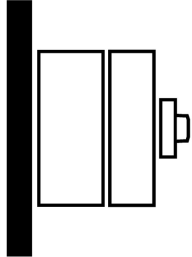
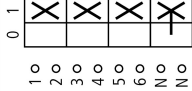


**Switch-disconnector, DMV, 1250 A, 3P + N (solid), Stop Function optional, Without rotary handle and drive shaft**



**Part no. DMV-1250N/1**  
**Catalog No. 1814591**

**Delivery program**

|   |       |     |  |
|---|-------|-----|--|
| Product range                             |       |     | Switch-disconnector<br>Main switch<br>maintenance switch                             |
| Part group reference                      |       |     | DMV  |
| Stop Function                             |       |     | optional   |
|   |       |     | Without rotary handle and drive shaft  |
| <b>Notes</b>                              |       |     | visible contacts   |
| Information about equipment supplied      |       |     | auxiliary contact fitted by user.<br>including connection materials                  |
| Number of poles                           |       |     | 3P + N (solid)   |
| <b>Auxiliary contacts</b>                 |       |     |  |
|   |       | N/O | 0  |
|   |       | N/C | 0  |
| Degree of Protection                      |       |     | IP00<br>IP20 with terminal cover   |
| Design                                    |       |     | surface mounting   |
|   |       |     |  |
| Contact sequence                          |       |     |  |
| <b>Motor rating AC-23A, 50 - 60 Hz</b>    |       |     |  |
| 400 V                                     | P     | kW  | 750  |
| Rated uninterrupted current               | $I_u$ | A   | 1250   |
| Note on rated uninterrupted current $I_u$ |       |     | Rated uninterrupted current $I_u$ is specified for max. cross-section.               |

**Technical data**

|                                       |           |    |   |
|---------------------------------------|-----------|----|---|
| <b>General</b>                        |           |    |   |
| Standards                             |           |    | IEC/EN 60947, VDE 0660, IEC/EN 60204<br>Switch-disconnector according to IEC/EN 60947-3 |
| Certifications                        |           |    | CE, RoHs, KEMA, EAC, Lloyds   |
| Ambient temperature                   |           |    |   |
| Operation                             | $\theta$  | °C | -25 - +55   |
| Storage                               | $\theta$  | °C | -30 - +80   |
| Overvoltage category/pollution degree |           |    | III/3   |
| Rated impulse withstand voltage       | $U_{imp}$ | kV | 12  |
| Rated insulation voltage              | $U_i$     | V  | 1000  |
| Mounting position                     |           |    | As required   |
| <b>Contacts</b>                       |           |    |   |
| Mechanical variables                  |           |    |   |

|   |           |           |  |
|---|-----------|-----------|--|
| Number of poles                                     |           |           | 3P + N (solid)   |
| Auxiliary contacts                                  |           |           |  |
|   |           | N/O       | 0  |
|   |           | N/C       | 0  |
| <b>Electrical characteristics</b>                   |           |           |  |
| Rated operational voltage                           | $U_e$     | V AC      | 690  |
| Rated uninterrupted current                         | $I_u$     | A         | 1250   |
| Note on rated uninterrupted current $I_u$           |           |           | Rated uninterrupted current $I_u$ is specified for max. cross-section. |
| Rated short-time withstand current (1 s current)    | $I_{cw}$  | $A_{rms}$ | 50000  |
| Note on rated short-time withstand current $I_{cw}$ |           |           | Current for a time of 1 second   |
| Heat dissipation per pole, current-dependent        | $P_{vid}$ | W         | 27.5   |

### Switching capacity

|  |            |    |       |
|--|------------|----|-------|
| Rated breaking capacity $\cos \phi$ to IEC 60947-3 |            | A  |       |
| 400/415 V  |            | A  | 10000 |
| 500 V  |            | A  | 7272  |
| 690 V  |            | A  | 5040  |
| Safe isolation to EN 61140                         |            |    |       |
| Current heat loss per contact at $I_e$             |            | W  | 27.5  |
| Lifespan, mechanical                               | Operations |    | 5000  |
| <b>AC</b>  |            |    |       |
| <b>AC-21A</b>                                      |            |    |       |
| Rated operational current switch                   |            |    |       |
| 400 V 415 V  | $I_e$      | A  | 1250  |
| 500 V  | $I_e$      | A  | 1250  |
| 690 V  | $I_e$      | A  | 1250  |
| <b>AC-22A</b>                                      |            |    |       |
| Rated operational current switch                   |            |    |       |
| 400 V 415 V  | $I_e$      | A  | 1250  |
| 500 V  | $I_e$      | A  | 1250  |
| 690 V  | $I_e$      | A  | 1250  |
| <b>AC-23A</b>                                      |            |    |       |
| Rated operational current switch                   |            |    |       |
| 400 V 415 V  | $I_e$      | A  | 1250  |
| 500 V  | $I_e$      | A  | 909   |
| 690 V  | $I_e$      | A  | 630   |
| Motor rating AC-23A, 50 - 60 Hz                    |            |    |       |
| 400 V 415 V  | P          | kW | 750   |
| 500 V  | P          | kW | 630   |
| 690 V  | P          | kW | 630   |

### Terminal capacities

|  |  |               |          |
|--|--|---------------|----------|
| Flat conductor connection with busbars |  | $\text{mm}^2$ | 800      |
| Terminal screw                         |  |               | M16 x 50 |
| Tightening torque for terminal screw   |  | Nm            | 60       |

### Technical safety parameters:

|              |  |  |   |
|--------------|--|--|---|
| <b>Notes</b> |  |  | B10 <sub>d</sub> values as per EN ISO 13849-1, table C1 |
|--------------|--|--|---|

## Design verification as per IEC/EN 61439

|  |            |    |      |
|--|------------|----|------|
| <b>Technical data for design verification</b>            |            |    |      |
| Rated operational current for specified heat dissipation | $I_n$      | A  | 1250 |
| Heat dissipation per pole, current-dependent             | $P_{vid}$  | W  | 27.5 |
| Equipment heat dissipation, current-dependent            | $P_{vid}$  | W  | 0    |
| Static heat dissipation, non-current-dependent           | $P_{vs}$   | W  | 0    |
| Heat dissipation capacity                                | $P_{diss}$ | W  | 0    |
| Operating ambient temperature min.                       |            | °C | -25  |

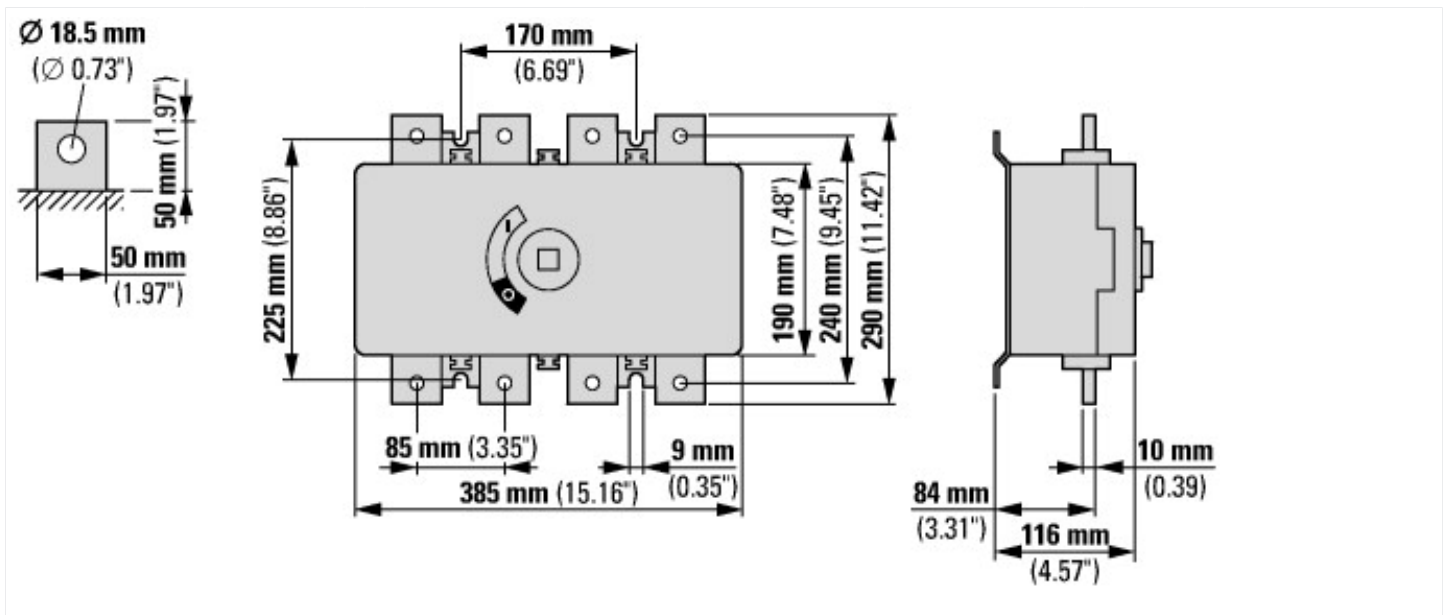
|  |    |  |
|--|----|--|
| Operating ambient temperature max.   | °C | 55   |
| IEC/EN 61439 design verification   |    |  |
| 10.2 Strength of materials and parts   |    |  |
| 10.2.2 Corrosion resistance  |    | Meets the product standard's requirements.   |
| 10.2.3.1 Verification of thermal stability 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 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric 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 Insulation properties   |    |  |
| 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 7.0

|   |    |           |
|---|----|-----------|
| Low-voltage industrial components (EG000017) / Switch disconnecter (EC000216)   |    |           |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnecter (ecI@ss10.0.1-27-37-14-03 [AKF060013]) |    |           |
| 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  | 1250      |
| Rated permanent current at AC-23, 400 V   | A  | 1250      |
| Rated permanent current at AC-21, 400 V   | A  | 1250      |
| 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 ground 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           |
| Degree of protection (IP), front side         |  | IP20                       |
| Degree of protection (NEMA)                   |  | Other                      |

## Dimensions



## Additional product information (links)

### IL008008Z Switch-disconnectors

IL008008Z Switch-disconnectors

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL008008ZU2018\\_05.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL008008ZU2018_05.pdf)