Switch-disconnector, 3 pole, 1000 A, Without rotary handle and drive shaft, surface mounting

Powering Business Worldwide

## Part no. <br> Article no. <br> DMV-1000N/3 <br> 1814445

Delivery programme


## Technical data

General

Standards

Certifications
Ambient temperature
Operation
Storage
Overvoltage category/pollution degree
Rated impulse withstand voltage
Rated insulation voltage
Mounting position
Protection against direct contact when actuated from front (EN 50274)
Contacts
Mechanical variables

IEC/EN 60947, VDE 0660, IEC/EN 60204,
Switch-disconnector according to IEC/EN 60947-3
CE, RoHs, KEMA, GOST-R, Lloyds
$-25-+55$
$-30-+80$
III/3
12
1000
As required
Finger and back-of-hand proof

| Number of poles |  |  | 3 pole |
| :---: | :---: | :---: | :---: |
| Auxiliary contacts |  |  |  |
|  |  | N/O | 0 |
|  |  | N/C | 0 |
| Electrical characteristics |  |  |  |
| Rated operational voltage | $\mathrm{U}_{\mathrm{e}}$ | $V$ AC | 690 |
| Rated uninterrupted current | $I_{u}$ | A | 1000 |
| Note on rated uninterrupted current ! ${ }_{\mathrm{u}}$ |  |  | Rated uninterrupted current lu is specified for max. cross-section. |
| Short-circuit rating |  |  |  |
| fuse |  |  | 1000/630 |
| Rated conditional short-circuit current | $1 q$ | kA | $\begin{aligned} & \ln =1000: 50 \\ & \ln =630: 100 \end{aligned}$ |
| Breaking current |  | kA | $\begin{aligned} & \ln =1000: 70 \\ & \ln =630: 65 \end{aligned}$ |
| max. let-through energy |  | $k A^{2} s$ | $\begin{aligned} & \text { In }=1000: 4200 \\ & \text { In }=630: 3200 \end{aligned}$ |
| Rated short-time withstand current (1 s current) | $\mathrm{I}_{\mathrm{cw}}$ | $A_{\text {rms }}$ | 36000 |
| Note on rated short-time withstand current Icw |  |  | Current for a time of 0.3 seconds |
| Switching capacity |  |  |  |
| Rated breaking capacity $\cos \varphi$ to IEC 60947-3 |  | A |  |
| 400/415 V |  | A | 6072 |
| 500 V |  | A | 4600 |
| 690 V |  | A | 3496 |
| Safe isolation to EN 61140 |  |  |  |
| Current heat loss per contact at $\mathrm{l}_{\mathrm{e}}$ |  | W | 44.75 |
| Lifespan, mechanical |  |  | 5000 |
| AC |  |  |  |
| AC-21A |  |  |  |
| Rated operational current switch |  |  |  |
| 400 V 415 V | $\mathrm{I}_{\mathrm{e}}$ | A | 1000 |
| 500 V | $\mathrm{I}_{\mathrm{e}}$ | A | 1000 |
| 690 V | $\mathrm{I}_{\mathrm{e}}$ | A | 1000 |
| AC-22A |  |  |  |
| Rated operational current switch |  |  |  |
| 400 V 415 V | $\mathrm{I}_{\mathrm{e}}$ | A | 1000 |
| 500 V | $\mathrm{I}_{\mathrm{e}}$ | A | 1000 |
| 690 V | $\mathrm{I}_{\mathrm{e}}$ | A | 1000 |
| AC-23A |  |  |  |
| Rated operational current switch |  |  |  |
| 400 V 415 V | $\mathrm{I}_{\mathrm{e}}$ | A | 759 |
| 500 V | $\mathrm{I}_{\mathrm{e}}$ | A | 575 |
| 690 V | $\mathrm{I}_{\mathrm{e}}$ | A | 437 |
| Motor rating AC-23A, $50-60 \mathrm{~Hz}$ | P | kW |  |
| 400 V 415 V | P | kW | 425 |
| 500 V | P | kW | 425 |
| 690 V | P | kW | 425 |
| Terminal capacities |  |  |  |
| Flat conductor connection with busbars |  | $\mathrm{mm}^{2}$ | 600 |
| Terminal screw |  |  | M12 x 35 |
| Max. tightening torque |  | Nm | 28 |
| Technical safety parameters: |  |  |  |
| Notes |  |  | B10 ${ }_{\mathrm{d}}$ values as per EN ISO 13849-1, table C1 |

## Design verification as per IEC/EN 61439

Technical data for design verification

| Heat dissipation per pole, current-dependent | $\mathrm{P}_{\text {vid }}$ | W | 44.75 |
| :---: | :---: | :---: | :---: |
| Equipment heat dissipation, current-dependent | $\mathrm{P}_{\text {vid }}$ | W | 0 |
| Static heat dissipation, non-current-dependent | $\mathrm{P}_{\mathrm{vs}}$ | W | 0 |
| Heat dissipation capacity | $\mathrm{P}_{\text {diss }}$ | W | 0 |
| Operating ambient temperature min. |  | ${ }^{\circ} \mathrm{C}$ | -25 |
| Operating ambient temperature max. |  | ${ }^{\circ} \mathrm{C}$ | 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 6.0

Low-voltage industrial components (EG000017) / Switch disconnector (ECOO0216)
Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss8.1-27-37-14-03 [AKF060010])

| 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 | V | 690 |
| Max. rated operation voltage Ue AC | V | $690-690$ |
| Rated operating voltage | A | 1000 |
| Rated permanent current lu | A | 1000 |
| Rated permanent current at AC-21, 400 V | kW | 0 |
| Rated operation power at AC-3, 400 V | kA | 36 |
| Rated short-time withstand current Icw | kW | 425 |
| Rated operation power at AC-23, 400 V | kW | 375 |
| Switching power at 400 V | kA | 100 |
| Conditioned rated short-circuit current Iq |  | 3 |
| Number of poles |  | 0 |
| Number of auxiliary contacts as normally closed contact | 0 |  |
| Number of auxiliary contacts as normally open contact |  |  |

Motor drive integrated ..... No
Voltage release optional ..... NoSuitable for ground mountingSuitable for front mounting 4-hole
Device construction
Complete device in housingSuitable for front mounting centerNo
Suitable for distribution board installation ..... Yes
Suitable for intermediate mounting ..... No
Colour control element
Type of control elementInterlockableNoType of electrical connection of main circuitDegree of protection (IP), front side

Screw connection
IP20

## Dimensions



## Additional product information (links)

## IL008008Z Switch-disconnectors

IL008008Z Switch-disconnectors

