# **DATASHEET - DDC-1250/2-SK**



DC switch disconnector, 1250 A, 2 pole, 1 N/O, 1 N/C, Without rotary handle and drive shaft, rear mounting



Part no. DDC-1250/2-SK Catalog No. DDC-98957

| 110 | INCE   | nro   | APAM  |
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| belivery program  |                |     |  |
|---|----------------|-----|--|
| Product range   |                |     | DC switch-disconnector Main switch maintenance switch  |
| Part group reference  |                |     | DDC  |
| Stop Function   |                |     | optional   |
|   |                |     | Without rotary handle and drive shaft  |
| Information about equipment supplied                                  |                |     | auxiliary contact fitted by user.  |
| Number of poles   |                |     | 2 pole   |
| Auxiliary contacts  |                |     |  |
| 1   |                | N/0 | 1  |
| 7   |                | N/C | 1  |
| Degree of Protection  |                |     | IP20   |
| Design  |                |     | rear mounting  |
|   |                |     |  |
| Rated uninterrupted current   | I <sub>u</sub> | Α   | 1250   |
| Note on rated uninterrupted current $\boldsymbol{!}_{\boldsymbol{u}}$ |                |     | Rated uninterrupted current $\boldsymbol{I}_{\boldsymbol{u}}$ is specified for max. cross-section. |
|   |                |     |  |

# **Technical data**

#### General

| Standards   |                  |                  | IEC/EN 60947, VDE 0660, IEC/EN 60204<br>Switch-disconnector according to IEC/EN 60947-3    |
|---|------------------|------------------|--|
| Certifications  |                  |                  | CE, RoHs   |
| Ambient temperature   |                  |                  |  |
| Operation   | 9                | °C               | -25 - +55  |
| Storage   | 9                | °C               | -30 - +80  |
| Overvoltage category/pollution degree                                 |                  |                  | III/3  |
| Rated impulse withstand voltage                                       | $U_{\text{imp}}$ | kV               | 12   |
| Rated insulation voltage  | Ui               | V                | 1200   |
| Mounting position   |                  |                  | As required  |
| Contacts  |                  |                  |  |
| Mechanical variables  |                  |                  |  |
| Number of poles   |                  |                  | 2 pole   |
| Auxiliary contacts  |                  |                  |  |
|   |                  | N/0              | 1  |
|   |                  | N/C              | 1  |
| Electrical characteristics  |                  |                  |  |
| Rated uninterrupted current   | lu               | Α                | 1250   |
| Note on rated uninterrupted current $\boldsymbol{!}_{\boldsymbol{u}}$ |                  |                  | Rated uninterrupted current $\mathbf{I}_{\mathbf{u}}$ is specified for max. cross-section. |
| Rated short-time withstand current (1 s current)                      | I <sub>cw</sub>  | A <sub>rms</sub> | 25000  |
| Note on rated short-time withstand current lcw                        |                  |                  | Current for a time of 1 second   |

| Rated short-circuit making capacity          | I <sub>cm</sub>  | kA <sub>eff</sub> | 54.5         |
|--|------------------|-------------------|--------------|
| Heat dissipation per pole, current-dependent | P <sub>vid</sub> | W                 | 83           |
| Switching capacity                           |                  |                   |              |
| Lifespan, mechanical                         | Operations       |                   | 5000         |
| DC   |                  |                   |              |
| Utilization category DC21B                   |                  |                   |              |
| Rated operational current switch             |                  |                   |              |
| 480 V  | I <sub>e</sub>   | Α                 | 1250         |
| 600 V  | I <sub>e</sub>   | Α                 | 1250         |
| 1000 V                                       | I <sub>e</sub>   | Α                 | 1250         |
| Terminal capacities                          |                  |                   |              |
| Flat conductor connection with busbars       |                  | $\mathrm{mm}^2$   | 2 x (80 x 5) |
| Terminal screw                               |                  |                   | M12 (2 x)    |
| Tightening torque for terminal screw         |                  | Nm                | 28           |

## **Design verification as per IEC/EN 61439**

| Design vernication as per 166/614 01433  |                   |    |  |
|--|-------------------|----|--|
| Technical data for design verification   |                   |    |  |
| Rated operational current for specified heat dissipation   | In                | Α  | 1250   |
| Heat dissipation per pole, current-dependent   | P <sub>vid</sub>  | W  | 83   |
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub>  | W  | 0  |
| Static heat dissipation, non-current-dependent   | P <sub>vs</sub>   | W  | 0  |
| Heat dissipation capacity  | P <sub>diss</sub> | 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 b observed.                                    |
| 10.12 Electromagnetic compatibility  |                   |    | Is the panel builder's responsibility. The specifications for the switchgear must b observed.                                    |
| 10.13 Mechanical function  |                   |    | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

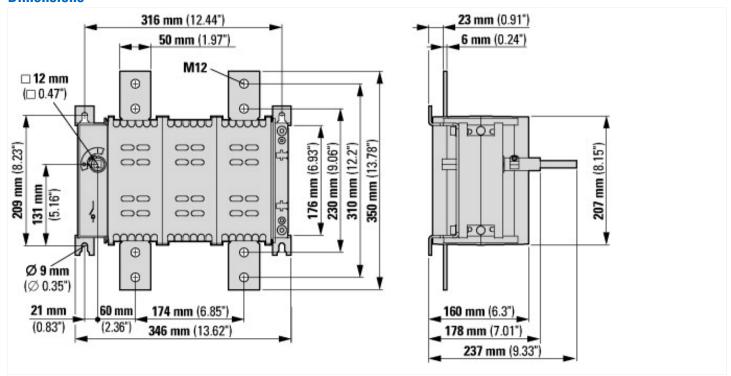
### **Technical data ETIM 7.0**

Low-voltage industrial components (EG000017) / Switch disconnector (EC000216)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Off-load switch, circuit breaker, control switch / Switch disconnector (ecl@ss10.0.1-27-37-14-03

| [AKF060013])  | in teeninology / On | iodu sw | incli, circuit breaker, control switch a switch disconnector (conession.c.) 27 07 14 00 |
|---|---------------------|---------|---|
| Version as main switch                                  |                     |         | Yes   |
| Version as maintenance-/service switch                  |                     |         | Yes   |
| Version as safety switch                                |                     |         | No  |
| Version as emergency stop installation                  |                     |         | No  |
| Version as reversing switch                             |                     |         | No  |
| Number of switches                                      |                     |         | 1   |
| Max. rated operation voltage Ue AC                      | V                   | ,       | 0   |
| Rated operating voltage                                 | V                   | 1       | 1000 - 1000   |
| Rated permanent current lu                              | Α                   | ١       | 1250  |
| Rated permanent current at AC-23, 400 V                 | Α                   | ١       | 0   |
| Rated permanent current at AC-21, 400 V                 | Α                   | ١       | 0   |
| Rated operation power at AC-3, 400 V                    | kV                  | W       | 0   |
| Rated short-time withstand current lcw                  | k#                  | A       | 25  |
| Rated operation power at AC-23, 400 V                   | kV                  | W       | 0   |
| Switching power at 400 V                                | kV                  | W       | 0   |
| Conditioned rated short-circuit current Iq              | k#                  | A       | 0   |
| Number of poles   |                     |         | 2   |
| 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                                     |                     |         | Built-in device fixed built-in technique  |
| Suitable for ground 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                                 |                     |         | None  |
| Interlockable   |                     |         | No  |
| Type of electrical connection of main circuit           |                     |         | Screw connection  |
| Degree of protection (IP), front side                   |                     |         | IP20  |
| Degree of protection (NEMA)                             |                     |         | Other   |
|   |                     |         |   |

#### **Dimensions**



### **Assets (links)**

**Instruction Leaflets** 

IL008015ZU2018\_05

## **Additional product information (links)**

| IL008015ZU Switch disconnector DDC, DC-Switch (Box 3)     |  |  |
|---|--|--|
| IL008015ZU Switch disconnector DDC, DC-<br>Switch (Box 3) | ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL008015ZU2018_05.pdf               |  |
| Technical overview cam switch, switch-disconnector        | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.2                       |  |
| System overview cam switch T                              | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.4                       |  |
| System overview switch-disconnector P                     | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.6                       |  |
| Key to part numbers Cam switch                            | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8                       |  |
| Key to part numbers Switch-disconnector                   | http://de.ecat.moeller.net/flip-cat/?edition=HPLTEv1&startpage=4.8                       |  |
| Switches for ATEX   | http://www.coopercrouse-hinds.eu/en/products/25-ex-safety-and-main-current-switches.html |  |