### **DATASHEET - DILM1000-XHI11-SA**



Auxiliary contact module, Type: Side-mounting auxiliary contacts, 2 pole, Ith= 10 A, 1 N/O, 1 NC, Side mounted, Screw terminals

Powering Business Worldwide\*

Part no. DILM1000-XHI11-SA Catalog No. 278427

XTCEXSCN11

No.

**EL-Nummer** 4130491

Alternate Catalog

(Norway)

Delivery program

| Delivery program                              |                 |   |                                                                                                                                                                                                                     |
|-----------------------------------------------|-----------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accessories                                   |                 |   | Auxiliary contact modules                                                                                                                                                                                           |
| Description                                   |                 |   | with interlocked opposing contacts                                                                                                                                                                                  |
| Function                                      |                 |   | for standard applications                                                                                                                                                                                           |
| Number of poles                               |                 |   | 2 pole                                                                                                                                                                                                              |
| Connection technique                          |                 |   | Screw terminals                                                                                                                                                                                                     |
| Rated operational current                     |                 |   |                                                                                                                                                                                                                     |
| Conventional free air thermal current, 1 pole |                 |   |                                                                                                                                                                                                                     |
| Open                                          |                 |   |                                                                                                                                                                                                                     |
| at 60 °C                                      | I <sub>th</sub> | Α | 10                                                                                                                                                                                                                  |
| AC-15                                         |                 |   |                                                                                                                                                                                                                     |
| 220 V 230 V 240 V                             | I <sub>e</sub>  | Α | 4                                                                                                                                                                                                                   |
| 380 V 400 V 415 V                             | I <sub>e</sub>  | Α | 4                                                                                                                                                                                                                   |
| 380 V 400 V 500 V                             | l <sub>e</sub>  | Α | 4                                                                                                                                                                                                                   |
| Contacts                                      |                 |   |                                                                                                                                                                                                                     |
| N/O = Normally open                           |                 |   | 1 N/O                                                                                                                                                                                                               |
| N/C = Normally closed                         |                 |   | 1 NC                                                                                                                                                                                                                |
| Mounting type                                 |                 |   | Side mounted                                                                                                                                                                                                        |
| Contact sequence                              |                 |   | 53 • †8 61 • ZZ<br>54 • £8 62 • LZ                                                                                                                                                                                  |
| For use with                                  |                 |   | DILM40 - DILM225A<br>DILMP63 - DILMP200<br>DILMF40 - DILMF95                                                                                                                                                        |
| Туре                                          |                 |   | Side-mounting auxiliary contacts                                                                                                                                                                                    |
| Instructions                                  |                 |   | Interlocked opposing contacts according to IEC/EN 60947-5-1 Appendix L, inside the auxiliary contact module Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open) |

#### Technical data General

|            |                   | IEC/EN 60947, VDE 0660, UL, CSA                                                |
|------------|-------------------|--------------------------------------------------------------------------------|
|            |                   |                                                                                |
| Operations | x 10 <sup>6</sup> | 1.3                                                                            |
|            |                   | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
|            |                   |                                                                                |
|            | °C                | -25 - +60                                                                      |
|            | °C                | - 25 - 40                                                                      |
|            | °C                | - 40 - 80                                                                      |
|            |                   | IP20                                                                           |
|            |                   | Finger and back-of-hand proof                                                  |
|            | kg                | 0.041                                                                          |
|            | Operations        | °C °C                                                                          |

| Terminal capacities                                                                                  |                  | $\text{mm}^2$   |                                                                                                                |
|------------------------------------------------------------------------------------------------------|------------------|-----------------|----------------------------------------------------------------------------------------------------------------|
| Screw terminals                                                                                      |                  |                 |                                                                                                                |
| Solid                                                                                                |                  | mm <sup>2</sup> | 1 x (0.75 - 2.5)<br>2 x (0.75 - 2.5)                                                                           |
| Flexible with ferrule                                                                                |                  | mm <sup>2</sup> | 1 x (0.75 - 2.5)                                                                                               |
| Solid or stranded                                                                                    |                  | AWG             | 2 x (0.75 - 2.5)<br>18 – 14                                                                                    |
| Pozidriv screwdriver                                                                                 |                  | Size            | 2                                                                                                              |
| Standard screwdriver                                                                                 |                  | mm              | 0.8 x 5.5                                                                                                      |
| Standard Sciewaniver                                                                                 |                  |                 | 1x6                                                                                                            |
| Max. tightening torque                                                                               |                  | Nm              | 1.2                                                                                                            |
| Contacts Interlocked opposing contacts within an auxiliary contact module (to IEC 60947-5-1 Annex L) |                  |                 | Yes                                                                                                            |
| N/C contact (not late-break contact) suitable as a mirror contact (to IEC/EN 60947-4-1 Annex F)      |                  |                 | DILM40 - DILM225A                                                                                              |
| Rated impulse withstand voltage                                                                      | U <sub>imp</sub> | V AC            | 6000                                                                                                           |
| Overvoltage category/pollution degree                                                                | · imp            |                 | 111/3                                                                                                          |
| Rated insulation voltage                                                                             | Ui               | V AC            | 690                                                                                                            |
| Rated operational voltage                                                                            | U <sub>e</sub>   | V AC            | 500                                                                                                            |
| Safe isolation to EN 61140                                                                           | - 6              |                 |                                                                                                                |
| between coil and auxiliary contacts                                                                  |                  | V AC            | 440                                                                                                            |
| between the auxiliary contacts                                                                       |                  | V AC            | 440                                                                                                            |
| Between auxiliary contacts and main contacts                                                         |                  | V AC            | 440                                                                                                            |
| Rated operational current                                                                            |                  | A               | T-10                                                                                                           |
| Conventional free air thermal current, 1 pole                                                        |                  | A               |                                                                                                                |
| at 60 °C                                                                                             | I <sub>th</sub>  | Α               | 10                                                                                                             |
| AC-15                                                                                                | 'th              | Α               |                                                                                                                |
|                                                                                                      |                  | ^               |                                                                                                                |
| 220 V 230 V 240 V                                                                                    | l <sub>e</sub>   | A               | 4                                                                                                              |
| 380 V 400 V 415 V                                                                                    | l <sub>e</sub>   | Α               | 4                                                                                                              |
| 500 V                                                                                                | l <sub>e</sub>   | Α               | 1.5                                                                                                            |
| DC current                                                                                           |                  |                 |                                                                                                                |
|                                                                                                      |                  |                 | Switch-on and switch-off conditions based on DC-13, time constant as specified.                                |
| DC L/R ≦ 15 ms                                                                                       |                  |                 |                                                                                                                |
| Contacts in series:                                                                                  |                  | Α               |                                                                                                                |
| 1                                                                                                    | 24 V             | A               | 10                                                                                                             |
| 1                                                                                                    | 60 V             | A               | 6                                                                                                              |
| 1                                                                                                    | 110 V            | Α               | 3                                                                                                              |
| 1                                                                                                    | 220 V            | Α               | 1                                                                                                              |
| DC-13 (6xP)                                                                                          |                  |                 | _                                                                                                              |
| 24 V                                                                                                 | l <sub>e</sub>   | Α               | 2                                                                                                              |
| 60 V                                                                                                 | l <sub>e</sub>   | Α               | 1.5                                                                                                            |
| 110 V                                                                                                | l <sub>e</sub>   | Α               | 0.8                                                                                                            |
| 220 V                                                                                                | l <sub>e</sub>   | Α               | 0.3                                                                                                            |
| Control circuit reliability                                                                          | Failure rate     | λ               | $<\!10^{-8},<$ one failure at 100 million operations (at U $_{\!e}=24$ V DC, $U_{min}=17$ V, $I_{min}=5.4$ mA) |
| Short-circuit rating without welding                                                                 |                  |                 |                                                                                                                |
| Short-circuit protection maximum fuse                                                                |                  |                 |                                                                                                                |
| 500 V                                                                                                |                  | A gG/gL         | 16                                                                                                             |
| Rated conditional short-circuit current 500 V                                                        | Iq               | kA              | 1                                                                                                              |
| Current heat loss at I <sub>th</sub>                                                                 |                  |                 |                                                                                                                |
| AC operated                                                                                          |                  | W               | 0.69                                                                                                           |
| DC operated                                                                                          |                  | W               | 0.69                                                                                                           |
| Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V)                              |                  | CO              | 0.11                                                                                                           |
| Rating data for approved types                                                                       |                  |                 |                                                                                                                |
| Auxiliary contacts                                                                                   |                  |                 |                                                                                                                |
| Pilot Duty                                                                                           |                  |                 |                                                                                                                |
|                                                                                                      |                  |                 |                                                                                                                |

| AC operated |   | A600 |
|-------------|---|------|
| DC operated |   | P300 |
| General Use |   |      |
| AC          | V | 600  |
| AC          | А | 15   |
| DC          | V | 250  |
| DC          | А | 1    |

# Design verification as per IEC/EN 61439

| 2001gii 1011110411011 40 poi 120, 211 01 100                                                                                             |                   |    |                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------|-------------------|----|----------------------------------------------------------------------------------------------------------------------------------|
| Technical data for design verification                                                                                                   |                   |    |                                                                                                                                  |
| Rated operational current for specified heat dissipation                                                                                 | In                | Α  | 4                                                                                                                                |
| Heat dissipation per pole, current-dependent                                                                                             | P <sub>vid</sub>  | W  | 0.11                                                                                                                             |
| 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 | 60                                                                                                                               |
| 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 switch<br>gear must be observed. $\label{eq:constraint}$       |
| 10.12 Electromagnetic compatibility                                                                                                      |                   |    | Is the panel builder's responsibility. The specifications for the switch<br>gear must be observed. $\label{eq:constraint}$       |
| 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) / Auxiliary contact block (EC000041) |
|-----------------------------------------------------------------------------------|
|                                                                                   |

Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (eci@ss10.0.1-27-37-13-02 [AKN342013])

| (ecl@ss10.0.1-27-37-13-02 [AKN342013])        |  |   |                  |
|-----------------------------------------------|--|---|------------------|
| Number of contacts as change-over contact     |  |   | 0                |
| Number of contacts as normally open contact   |  |   | 1                |
| Number of contacts as normally closed contact |  |   | 1                |
| Number of fault-signal switches               |  |   | 0                |
| Rated operation current le at AC-15, 230 V    |  | Α | 6                |
| Type of electric connection                   |  |   | Screw connection |

| Model           | Top mounting  |
|-----------------|---------------|
| Mounting method | Side mounting |
| Lamp holder     | None          |

# Approvals

| Product Standards                    | IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking |
|--------------------------------------|-----------------------------------------------------------|
| UL File No.                          | E29184                                                    |
| UL Category Control No.              | NKCR                                                      |
| CSA File No.                         | 012528                                                    |
| CSA Class No.                        | 3211-04                                                   |
| North America Certification          | UL listed, CSA certified                                  |
| Specially designed for North America | No                                                        |

# Assets (links)

**Declaration of CE Conformity** 00003252

**Instruction Leaflets** 

IL03407034Z2018\_05