

**Auxiliary contact module, 4 pole, Ith= 16 A, 2 N/O, 2 NC, Microswitch,  
Front fixing, Screw terminals, DILA, DILM7 - DILM38**

**Part no.** DILA-XHIR22

**139580**

**EL Number**

**4110223**

**(Norway)**

| <b>General specifications</b>   |  |
|---------------------------------|--|
| Product name                    | Eaton Moeller® series DILA Accessory Auxiliary contact module  |
| Part no.                        | DILA-XHIR22  |
| EAN                             | 4015081363582  |
| Product Length/Depth            | 45 millimetre  |
| Product height                  | 42 millimetre  |
| Product width                   | 36 millimetre  |
| Product weight                  | 0.05 kilogram  |
| Certifications                  | CSA Class No.: 3211-03<br>IEC/EN 60947<br>UL<br>CSA<br>UL File No.: E29184<br>CE<br>VDE 0660<br>UL Category Control No.: NKCR<br>CSA-C22.2 No. 14-05<br>UL 508<br>CSA File No.: 012528<br>IEC/EN 60947-4-1   |
| Product Tradename               | DILA   |
| Product Type                    | Accessory  |
| Product Sub Type                | Auxiliary contact module   |
| Catalog Notes                   | All auxiliary N/C contacts (81/82 N/C microswitches as well) can be used as a mirror contact as defined in IEC/EN 60947-4-1 Appendix F (not NC late-break) Conventional 63/64 N/O and 71/72 N/C auxiliary contacts with interlocked opposing contacts, in accordance with IEC/EN 60947-5-1 Appendix L, inside the auxiliary contact modules and for the integrated auxiliary contacts in DILM 7 - DILM32 units (not microswitches)<br>Rated operational current: Switch-on and switch-off conditions based on DC-13, time constant as specified.<br>Version E combinations correspond to EN 50011 and are to be preferred. |
| <b>Features &amp; Functions</b> |  |
| Features                        | Interlocked opposing contacts within an auxiliary contact module (according to IEC 60947-5-1 Annex L)  |
| Functions                       | For electronic applications<br>For standard applications   |
| Fitted with:                    | Switching elements according to EN 50005<br>Interlocked opposing contacts  |
| Number of poles                 | Four-pole  |
| Electric connection type        | Screw connection   |
| <b>General information</b>      |  |
| Degree of protection            | IP20   |
| Shock resistance                | 5 g, N/C auxiliary contact, Basic unit with auxiliary contact module, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms<br>7 g, N/O auxiliary contact, Basic unit with auxiliary contact module, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms   |
| Lifespan, electrical            | 1,300,000 Operations (at 230 V, AC-15, 3 A)<br>1,300,000 Operations (at DC-12, 24 V / 50 mA)   |
| Lifespan, mechanical            | 10,000,000 Operations (DC operated)<br>10,000,000 Operations (AC operated)   |
| Model                           | Top mounting   |
| Mounting method                 | Front fastening  |
| Operating frequency             | 9000 Operations/h  |
| Overvoltage category            | III  |
| Pollution degree                | 3  |
| Protection                      | Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)   |

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| Rated impulse withstand voltage (Uimp)  |  | 6000 V AC   |
| Type  |  | Front mounting auxiliary contact  |
| <b>Climatic environmental conditions</b>  |  |   |
| Ambient operating temperature - min   |  | -25 °C  |
| Ambient operating temperature - max   |  | 60 °C   |
| Ambient operating temperature (enclosed) - min                                    |  | 25 °C   |
| Ambient operating temperature (enclosed) - max                                    |  | 40 °C   |
| Ambient storage temperature - min   |  | 40 °C   |
| Ambient storage temperature - max   |  | 80 °C   |
| Climatic proofing   |  | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30  |
| <b>Terminal capacities</b>  |  |   |
| Terminal capacity (flexible with ferrule)   |  | 2 x (0.75 - 1.5) mm <sup>2</sup> , Screw terminals<br>1 x (0.75 - 1.5) mm <sup>2</sup> , Screw terminals  |
| Terminal capacity (solid)   |  | 2 x (0.75 - 2.5) mm <sup>2</sup> , Screw terminals<br>1 x (0.75 - 2.5) mm <sup>2</sup> , Screw terminals  |
| Terminal capacity (solid/stranded AWG)  |  | 18 - 14, Screw terminals  |
| Screw size  |  | M3.5, Terminal screw  |
| Screwdriver size  |  | 0.8 x 5.5/1 x 6 mm, Terminal screw, Standard screwdriver<br>2, Terminal screw, Pozidriv screwdriver   |
| Tightening torque   |  | 1.2 Nm, Screw terminals   |
| <b>Electrical rating</b>  |  |   |
| Conventional thermal current I <sub>th</sub> at 60°C (3-pole, open)               |  | 16 A  |
| Conventional thermal current I <sub>th</sub> of auxiliary contacts (1-pole, open) |  | 0.5 A   |
| Rated operational current (I <sub>e</sub> )                                       |  | 0.25 A at 220 V, DC L/R ≤ 50 ms (with 3 contacts in series)<br>2.5 A at 24 V, DC L/R ≤ 50 ms (with 3 contacts in series)<br>0.1 A at AC-12, 240 V<br>0.3 A at DC-12, 60 V<br>10 A at 60 V, DC L/R ≤ 15 ms (with 2 contacts in series)<br>5 A at 220 V, DC L/R ≤ 15 ms (with 3 contacts in series)<br>1 A at 60 V, DC L/R ≤ 50 ms (with 3 contacts in series)<br>0.5 A at 110 V, DC L/R ≤ 50 ms (with 3 contacts in series)<br>3 A at 110 V, DC L/R ≤ 15 ms (with 1 contact in series)<br>1 A at 220 V, DC L/R ≤ 15 ms (with 1 contact in series)<br>6 A at 110 V, DC L/R ≤ 15 ms (with 3 contacts in series)<br>0.5 A at DC-12, 24 V<br>10 A at 24 V, DC L/R ≤ 15 ms (with 1 contact in series)<br>6 A at 60 V, DC L/R ≤ 15 ms (with 1 contact in series) |
| Rated operational current (I <sub>e</sub> ) - min                                 |  | 1 A   |
| Rated operational current (I <sub>e</sub> ) at AC-15, 220 V, 230 V, 240 V         |  | 4 A   |
| Rated operational current (I <sub>e</sub> ) at AC-15, 380 V, 400 V, 415 V         |  | 4 A   |
| Rated operational current (I <sub>e</sub> ) at AC-15, 500 V                       |  | 1.5 A   |
| Rated operational current (I <sub>e</sub> ) at DC-13, 24 V                        |  | 2.5 A   |
| Rated operational current (I <sub>e</sub> ) at DC-13, 60 V                        |  | 1 A   |
| Rated operational current (I <sub>e</sub> ) at DC-13, 110 V                       |  | 0.5 A   |
| Rated operational current (I <sub>e</sub> ) at DC-13, 220 V, 230 V                |  | 0.25 A  |
| Rated operational voltage (U <sub>e</sub> ) - min                                 |  | 3 V   |
| Rated operational voltage (U <sub>e</sub> ) at DC - max                           |  | 60 V  |
| Rated insulation voltage (U <sub>i</sub> )  |  | 690 V   |
| Rated operational voltage (U <sub>e</sub> ) at AC - max                           |  | 500 V   |
| Short-circuit protection rating   |  | Max. 10 A gG/gL, Fuse, Without welding, Auxiliary contacts  |
| Short-circuit protection rating without welding                                   |  | 1.6 A gG/gL, Max. Fuse, Electrical specifications for microswitch auxiliary contacts 53-54 and 81-82<br>10 A gG/gL, 500 V, Max. Fuse, Contacts  |
| Safe isolation  |  | 400 V AC, Between auxiliary contacts, According to EN 61140<br>400 V AC, Between coil and auxiliary contacts, According to EN 61140   |
| Switching capacity (auxiliary contacts, general use)                              |  | 0.1 A, 250 V DC, (UL/CSA)   |
| <b>Communication</b>  |  |   |
| Connection type   |  | Screw connection  |
| <b>Contacts</b>   |  |   |
| Code number   |  | 33 in combination with DILA(C)-22<br>42 in combination with DILA(C)-31<br>51E in combination with DILA(C)-40  |

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| Control circuit reliability  |  |  | $\lambda < 10^{-8}$ (1 failure at 100,000,000 operations for $U_{\#} = 24$ V DC, $U_{min} = 17$ V, $I_{min} = 5.4$ mA)<br>$\lambda < 5.3 \times 10^{-8}$ (1 failure at 19,000,000 operations for $U_{\#} = 24$ V DC, $U_{min} = 17$ V, $I_{min} = 1$ mA) |
| Number of contacts (change-over contacts)  |  |  | 0  |
| Number of contacts (normally closed contacts)                                    |  |  | 2  |
| Number of contacts (normally open contacts)                                      |  |  | 2  |
| <b>Design verification</b>   |  |  |  |
| Equipment heat dissipation, current-dependent $P_{vid}$                          |  |  | 0 W  |
| Heat dissipation capacity $P_{diss}$   |  |  | 0 W  |
| Heat dissipation per pole, current-dependent $P_{vid}$                           |  |  | 0.16 W   |
| Rated operational current for specified heat dissipation ( $I_n$ )               |  |  | 4 A  |
| Static heat dissipation, non-current-dependent $P_{vs}$                          |  |  | 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.   |
| 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

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| 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 (ecl@ss13-27-37-13-02 [AKN342018]) |  |   |                  |
| Number of contacts as change-over contact  |  |   | 0                |
| Number of contacts as normally open contact  |  |   | 2                |
| Number of contacts as normally closed contact  |  |   | 2                |
| Number of fault-signal switches  |  |   | 0                |
| Rated operation current $I_e$ at AC-15, 230 V  |  | A | 4                |
| Type of electric connection  |  |   | Screw connection |
| Model  |  |   | Clip-on          |
| Mounting method  |  |   | Front fastening  |
| Lamp holder  |  |   | None             |