



**Auxiliary contact module, 4 pole, Ith= 16 A, 3 N/O, 1 NC, Front fixing, Screw terminals, DILM40 - DILM170**

**Part no. DILM150-XHI31**

**277949**

**EL Number  
(Norway)**

**4130498**

| General specifications                 |  |
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| Product name                           | Eaton Moeller® series DILM auxiliary contact module  |
| Part no.                               | DILM150-XHI31  |
| EAN                                    | 4015082779498  |
| Product Length/Depth                   | 39 millimetre  |
| Product height                         | 46 millimetre  |
| Product width                          | 45 millimetre  |
| Product weight                         | 0.055 kilogram   |
| Certifications                         | UL Category Control No.: NKCR<br>VDE 0660<br>CSA File No.: 012528<br>IEC/EN 60947-4-1<br>UL 508<br>UL<br>UL File No.: E29184<br>IEC/EN 60947<br>CSA<br>CSA Class No.: 3211-03<br>CE<br>CSA-C22.2 No. 14-05   |
| Product Tradename                      | DILM   |
| Product Type                           | Accessory  |
| Product Sub Type                       | Auxiliary contact module   |
| Catalog Notes                          | Auxiliary contacts used as mirror contacts (according to IEC/EN 60947-4-1 Appendix F (not N/C late open))<br>Interlocked opposing contacts according to IEC/EN 60947-5-1 Appendix L, inside the auxiliary contact module<br>Rated operational current: Switch-on and switch-off conditions based on DC-13, time constant as specified. |
| Features & Functions                   |  |
| Features                               | Interlocked opposing contacts within an auxiliary contact module (according to IEC 60947-5-1 Annex L)  |
| Functions                              | For standard applications  |
| Fitted with:                           | Interlocked opposing contacts  |
| Number of poles                        | Four-pole  |
| Electric connection type               | Screw connection   |
| General information                    |  |
| Degree of protection                   | IP20   |
| Lifespan, electrical                   | 1,300,000 Operations (at 230 V, AC-15, 3 A)  |
| Model                                  | Top mounting   |
| Mounting method                        | Front fastening  |
| Overvoltage category                   | III  |
| Pollution degree                       | 3  |
| Protection                             | Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274)   |
| Rated impulse withstand voltage (Uimp) | 6000 V AC  |
| Type                                   | Front mounting auxiliary contact   |
| Ambient conditions, mechanical         |  |
| Shock resistance                       | 5 g, N/C auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms<br>7 g, N/O auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms   |
| Climatic environmental conditions      |  |
| Ambient operating temperature - min    | -25 °C   |
| Ambient operating temperature - max    | 60 °C  |

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| 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, cyclic, to IEC 60068-2-30<br>Damp heat, constant, to IEC 60068-2-78  |
| <b>Terminal capacities</b>   |  |   |
| Terminal capacity (flexible with ferrule)  |  | 2 x (0.75 - 2.5) mm <sup>2</sup><br>1 x (0.75 - 2.5) mm <sup>2</sup>  |
| Terminal capacity (solid)  |  | 2 x (0.75 - 2.5) mm <sup>2</sup><br>1 x (0.75 - 2.5) mm <sup>2</sup>  |
| Terminal capacity (solid/stranded AWG)   |  | 18 - 14   |
| Screwdriver size   |  | 2, Terminal screw, Pozidriv screwdriver<br>0.8 x 5.5/1 x 6 mm, Terminal screw, Standard screwdriver   |
| Tightening torque  |  | 1.2 Nm, Screw terminals   |
| <b>Electrical rating</b>   |  |   |
| Rated operational current (Ie)   |  | 6 A at 60 V, DC L/R ≤ 15 ms (with 1 contact in series)<br>10 A at 24 V, DC L/R ≤ 15 ms (with 1 contact 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) |
| Rated operational current (Ie) at AC-15, 220 V, 230 V, 240 V                     |  | 6 A   |
| Rated operational current (Ie) at AC-15, 380 V, 400 V, 415 V                     |  | 4 A   |
| Rated operational current (Ie) at AC-15, 500 V                                   |  | 1.5 A   |
| Rated insulation voltage (Ui)  |  | 690 V   |
| Rated operational voltage (Ue) at AC - max                                       |  | 500 V   |
| <b>Short-circuit rating</b>  |  |   |
| Short-circuit protection rating  |  | Max. 16 A gG/gL, Fuse, Without welding, Auxiliary contacts  |
| Short-circuit protection rating without welding                                  |  | 16 A gG/gL, 500 V, Max. Fuse, Contacts  |
| <b>Conventional thermal current Ith</b>  |  |   |
| Conventional thermal current Ith at 60°C (3-pole, open)                          |  | 16 A  |
| <b>Switching capacity</b>  |  |   |
| Switching capacity (auxiliary contacts, general use)                             |  | 1 A, 250 V DC, (UL/CSA)<br>15 A, 600 V AC, (UL/CSA)   |
| Switching capacity (auxiliary contacts, pilot duty)                              |  | A600, AC operated (UL/CSA)<br>P300, DC operated (UL/CSA)  |
| <b>Communication</b>   |  |   |
| Connection type  |  | Screw connection  |
| <b>Contacts</b>  |  |   |
| Control circuit reliability  |  | $\lambda < 5 \times 10^{-7}$ (1 failure at 2,000,000 operations for U# = 24 V DC, Umin = 17 V, Imin = 5.4 mA)   |
| Number of contacts (change-over contacts)  |  | 0   |
| Number of contacts (normally closed contacts)                                    |  | 1   |
| Number of contacts (normally open contacts)                                      |  | 3   |
| <b>Safety</b>  |  |   |
| Safe isolation   |  | 440 V AC, Between coil and auxiliary contacts, According to EN 61140<br>440 V AC, Between auxiliary contacts, According to EN 61140   |
| <b>Design verification</b>   |  |   |
| Equipment heat dissipation, current-dependent Pvid                               |  | 0 W   |
| Heat dissipation capacity Pdis   |  | 0 W   |
| Heat dissipation per pole, current-dependent Pvid                                |  | 0.23 W  |
| Rated operational current for specified heat dissipation (In)                    |  | 4 A   |
| Static heat dissipation, non-current-dependent Pvs                               |  | 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.  |

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| 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<br>(ecI@ss13-27-37-13-02 [AKN342018]) |  |   |                  |
| Number of contacts as change-over contact   |  |   | 0                |
| Number of contacts as normally open contact   |  |   | 3                |
| Number of contacts as normally closed contact   |  |   | 1                |
| Number of fault-signal switches   |  |   | 0                |
| Rated operation current I <sub>e</sub> at AC-15, 230 V  |  | A | 6                |
| Type of electric connection   |  |   | Screw connection |
| Model   |  |   | Clip-on          |
| Mounting method   |  |   | Front fastening  |
| Lamp holder   |  |   | None             |