



**Auxiliary contact module, 2 pole, I<sub>th</sub>= 16 A, 2 NC, Front fixing, Screw terminals, DILM7 - DILM38**



**Part no.** DILM32-XHI02  
**Catalog No.** 277375  
**Alternate Catalog No.** XTCEXFCC02  
**EL-Nummer (Norway)** 4130433

**Delivery program**

|   |                 |   |  |   |
|---|-----------------|---|--|---|
| Accessories                                   |                 |   |  | Auxiliary contact modules   |
| Description                                   |                 |   |  | with interlocked opposing contacts  |
| Function                                      |                 |   |  | for standard applications   |
| Number of poles                               |                 |   |  | 2 pole  |
| Connection technique                          |                 |   |  | Screw terminals   |
| <b>Rated operational current</b>              |                 |   |  |   |
| Conventional free air thermal current, 1 pole |                 |   |  |   |
| Open  |                 |   |  |   |
| at 60 °C                                      | I <sub>th</sub> | A |  | 16  |
| AC-15   |                 |   |  |   |
| 220 V 230 V 240 V                             | I <sub>e</sub>  | A |  | 4   |
| 380 V 400 V 415 V                             | I <sub>e</sub>  | A |  | 4   |
| <b>Contacts</b>                               |                 |   |  |   |
| N/C = Normally closed                         |                 |   |  | 2 NC  |
| Mounting type                                 |                 |   |  | Front fixing  |
| Contact sequence                              |                 |   |  |   |
| For use with                                  |                 |   |  | DILM(C)7-10...<br>DILM(C)9-10...<br>DILM(C)12-10...<br>DILM(C)15-10...<br>DILM(C)17-10...<br>DILM(C)25-10...<br>DILM(C)32-10...<br>DILM38-10...<br>DILMP20...<br>DILMP32-10...<br>DILMP45-10...<br>DILL...<br>DILMF8-10...<br>DILMF11-10...<br>DILMF14-10...<br>DILMF17-10...<br>DILMF25-10...<br>DILMF32-10... |
| Type  |                 |   |  | Front mounting auxiliary contact  |
| Instructions                                  |                 |   |  | Interlocked opposing contacts according to IEC/EN 60947-5-1 appendix L, inside the auxiliary contact modules, also for the integrated auxiliary contacts of the DILM 7 - DILM32<br>Auxiliary contacts used as mirror contacts according to IEC/EN 60947-4-1 Appendix F (not N/C late open)                      |

**Technical data**

|                                       |            |                   |  |                                 |
|---------------------------------------|------------|-------------------|--|---------------------------------|
| <b>General</b>                        |            |                   |  |                                 |
| Standards                             |            |                   |  | IEC/EN 60947, VDE 0660, UL, CSA |
| Component lifespan                    |            |                   |  |                                 |
| at U <sub>e</sub> = 230 V, AC-15, 3 A | Operations | x 10 <sup>6</sup> |  | 1.3                             |

|   |  |                 |  |
|---|--|-----------------|--|
| Climatic proofing   |  |                 | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
| Ambient temperature   |  |                 |  |
| Open  |  | °C              | -25 - +60  |
| Enclosed  |  | °C              | - 25 - 40  |
| Ambient temperature, storage  |  | °C              | - 40 - 80  |
| Mechanical shock resistance (IEC/EN 60068-2-27)                       |  |                 |  |
| Half-sinusoidal shock, 10 ms  |  |                 |  |
| Basic unit with auxiliary contact module                              |  | g               |  |
| N/O contact   |  | g               | 7  |
| N/C contact   |  | g               | 5  |
| Degree of Protection  |  |                 | IP20   |
| Protection against direct contact when actuated from front (EN 50274) |  |                 | Finger and back-of-hand proof  |
| Weight  |  | kg              | 0.038  |
| Terminal capacities   |  | mm <sup>2</sup> |  |
| 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)<br>2 x (0.75 - 2.5)   |
| Solid or stranded   |  | AWG             | 18 – 14  |
| Pozidriv screwdriver  |  | Size            | 2  |
| Standard screwdriver  |  | mm              | 0.8 x 5.5<br>1 x 6   |
| 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) |           |      | DILM7 - DILM38  |
| Rated impulse withstand voltage   | $U_{imp}$ | V AC | 6000  |
| Overvoltage category/pollution degree   |           |      | III/3   |
| Rated insulation voltage  | $U_i$     | V AC | 690   |
| Rated operational voltage   | $U_e$     | V AC | 500   |
| Safe isolation to EN 61140  |           |      |   |
| between coil and auxiliary contacts   |           | V AC | 400   |
| between the auxiliary contacts  |           | V AC | 400   |
| Rated operational current   |           | A    |   |
| Conventional free air thermal current, 1 pole   |           |      |   |
| at 60 °C  | $I_{th}$  | A    | 16  |
| AC-15   |           |      |   |
| 220 V 230 V 240 V   | $I_e$     | A    | 4   |
| 380 V 400 V 415 V   | $I_e$     | A    | 4   |
| 500 V   | $I_e$     | A    | 1.5   |
| DC current  |           |      |   |
|   |           |      | Switch-on and switch-off conditions based on DC-13, time constant as specified. |
| DC L/R $\leq$ 15 ms   |           |      |   |
| Contacts in series:   |           | A    |   |
| 1   | 24 V      | A    | 10  |
| 1   | 60 V      | A    | 6   |
| 1   | 110 V     | A    | 3   |
| 1   | 220 V     | A    | 1   |
| DC-13 (6xP)   |           |      |   |
| 24 V  | $I_e$     | A    | 2.5   |
| 60 V  | $I_e$     | A    | 1   |
| 110 V   | $I_e$     | A    | 0.5   |
| 220 V   | $I_e$     | A    | 0.25  |

|  |                        |  |  |
|--|------------------------|--|--|
| Control circuit reliability                                    | Failure rate $\lambda$ | <math>10^{-8}</math>, <math>< 1</math> failure at 100 million operations<br>(at $U_e = 24\text{ V DC}$ , $U_{\min} = 17\text{ V}$ , $I_{\min} = 5.4\text{ mA}$ ) |  |
| Short-circuit rating without welding                           |                        |  |  |
| Short-circuit protection maximum fuse                          |                        |  |  |
| 500 V  | A gG/gL                | 10   |  |
| Current heat loss at $I_{th}$                                  |                        |  |  |
| AC operated  | W                      | 2.6  |  |
| DC operated  | W                      | 2.6  |  |
| Current heat loss per auxiliary circuit at $I_a$ (AC-15/230 V) | CO                     | 0.16   |  |

### Rating data for approved types

|                    |   |     |      |
|--------------------|---|-----|------|
| Auxiliary contacts |   |     |      |
| Pilot Duty         |   |     |      |
| AC operated        |   |     | A600 |
| DC operated        |   |     | P300 |
| General Use        |   |     |      |
| AC                 | V | 600 |      |
| AC                 | A | 10  |      |
| DC                 | V | 250 |      |
| DC                 | A | 1   |      |

### Design verification as per IEC/EN 61439

|  |            |    |  |
|--|------------|----|--|
| Technical data for design verification   |            |    |  |
| Rated operational current for specified heat dissipation   | $I_n$      | A  | 4  |
| Heat dissipation per pole, current-dependent   | $P_{vid}$  | W  | 0.16   |
| Equipment heat dissipation, current-dependent  | $P_{vid}$  | W  | 0  |
| Static heat dissipation, non-current-dependent   | $P_{vs}$   | W  | 0  |
| Heat dissipation capacity  | $P_{diss}$ | 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 switchgear must be observed.                                   |
| 10.12 Electromagnetic compatibility  |            |    | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |

## Technical data ETIM 7.0

Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)

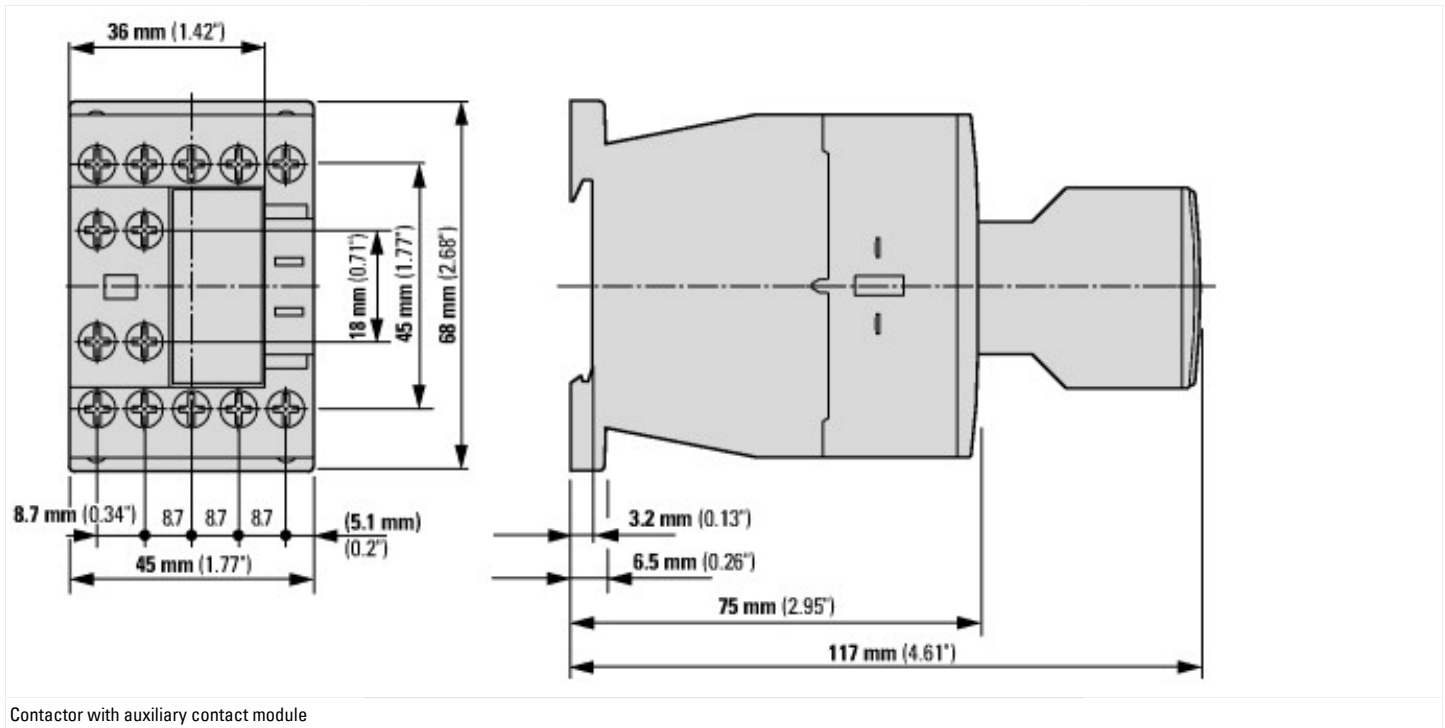
Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ecI@ss10.0.1-27-37-13-02 [AKN342013])

|  |   |                  |
|--|---|------------------|
| Number of contacts as change-over contact              |   | 0                |
| Number of contacts as normally open contact            |   | 0                |
| Number of contacts as normally closed contact          |   | 2                |
| 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  |   | Top mounting     |
| Mounting method  |   | Front fastening  |
| Lamp holder  |   | None             |

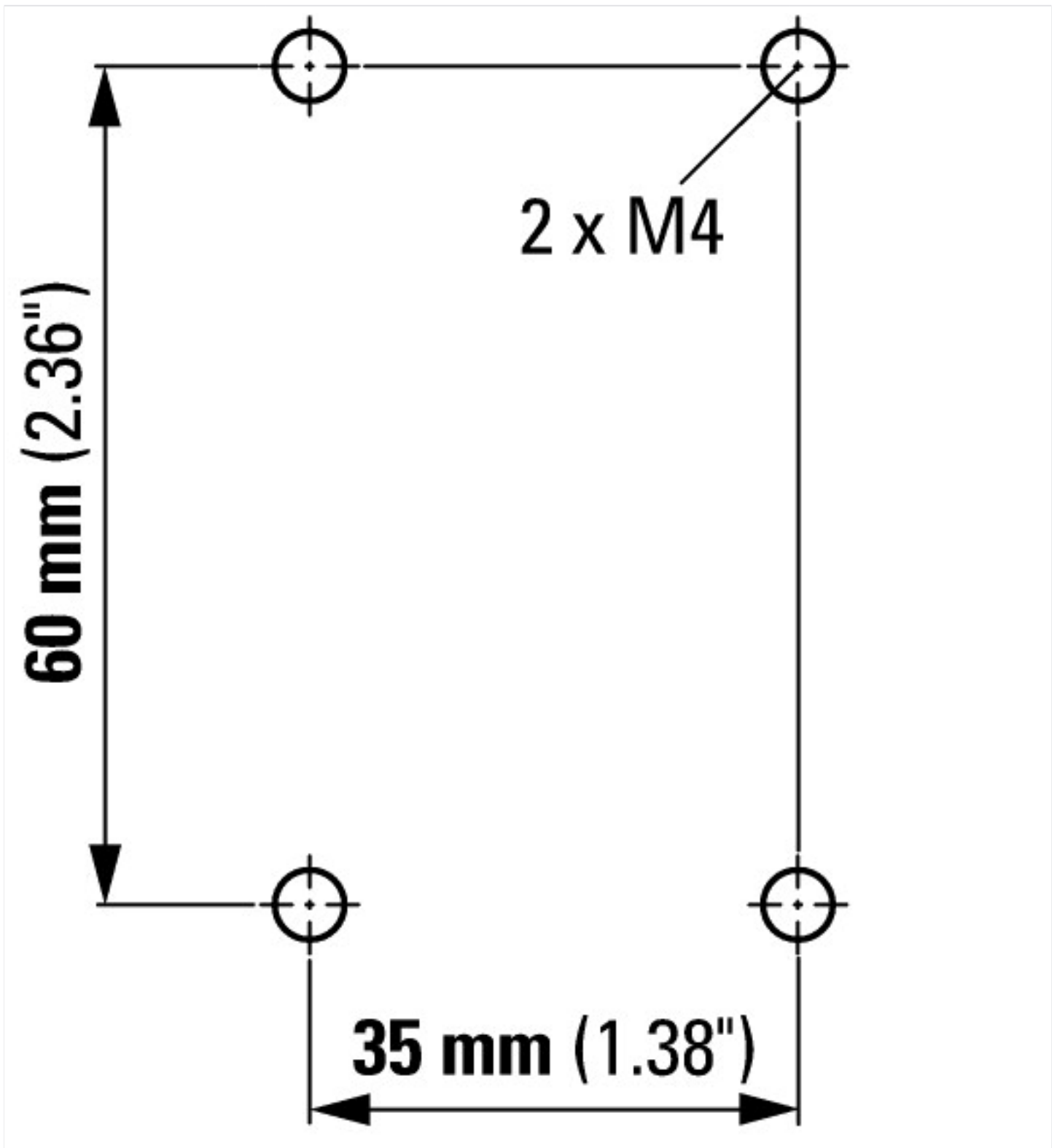
## Approvals

|                                      |  |   |
|--------------------------------------|--|---|
| 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.                        |  | 3211-03   |
| North America Certification          |  | UL listed, CSA certified                                  |
| Specially designed for North America |  | No  |

## Dimensions



Contactor with auxiliary contact module



### Additional product information (links)

|  |   |
|--|---|
| Motor starters and "Special Purpose Ratings" for the North American market                     | <a href="http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf">http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf</a> |
| Switchgear of Power Factor Correction Systems  | <a href="http://www.moeller.net/binary/ver_techpapers/ver934en.pdf">http://www.moeller.net/binary/ver_techpapers/ver934en.pdf</a>   |
| X-Start - Modern Switching Installations Efficiently Fitted and Wired Securely                 | <a href="http://www.moeller.net/binary/ver_techpapers/ver938en.pdf">http://www.moeller.net/binary/ver_techpapers/ver938en.pdf</a>   |
| Mirror Contacts for Highly-Reliable Information Relating to Safety-Related Control Functions   | <a href="http://www.moeller.net/binary/ver_techpapers/ver944en.pdf">http://www.moeller.net/binary/ver_techpapers/ver944en.pdf</a>   |
| Effect of the Cabel Capacitance of Long Control Cables on the Actuation of Contactors          | <a href="http://www.moeller.net/binary/ver_techpapers/ver949en.pdf">http://www.moeller.net/binary/ver_techpapers/ver949en.pdf</a>   |
| Switchgear for Luminaires  | <a href="http://www.moeller.net/binary/ver_techpapers/ver955en.pdf">http://www.moeller.net/binary/ver_techpapers/ver955en.pdf</a>   |
| Standard Compliant and Functionally Safe Engineering Design with Mechanical Auxiliary Contacts | <a href="http://www.moeller.net/binary/ver_techpapers/ver956en.pdf">http://www.moeller.net/binary/ver_techpapers/ver956en.pdf</a>   |
| The Interaction of Contactors with PLCs  | <a href="http://www.moeller.net/binary/ver_techpapers/ver957en.pdf">http://www.moeller.net/binary/ver_techpapers/ver957en.pdf</a>   |
| Busbar Component Adapters for modern Industrial control panels                                 | <a href="http://www.moeller.net/binary/ver_techpapers/ver960en.pdf">http://www.moeller.net/binary/ver_techpapers/ver960en.pdf</a>   |

