



**Auxiliary contact module, 4 pole, I<sub>th</sub>= 16 A, 2 N/O, 2 NC, Front fixing, Screw terminals, DILM7 - DILM38**

**Part no.** DILM32-XHI22  
**Catalog No.** 277377  
**Alternate Catalog No.** XTCEXFCC22  
**EL-Nummer (Norway)** 4130435

## Delivery program

|                                               |                 |   |                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------|-----------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accessories                                   |                 |   | Auxiliary contact modules                                                                                                                                                                                                                                                                                       |
| Description                                   |                 |   | with interlocked opposing contacts                                                                                                                                                                                                                                                                              |
| Function                                      |                 |   | for standard applications                                                                                                                                                                                                                                                                                       |
| Number of poles                               |                 |   | 4 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/O = Normally open                           |                 |   | 2 N/O                                                                                                                                                                                                                                                                                                           |
| 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

|                                       |            |                   |                                                                                |
|---------------------------------------|------------|-------------------|--------------------------------------------------------------------------------|
| 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              | 0.048                                |
| 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 <sub>imp</sub> | V AC | 6000                                                                                                                                             |
| Overvoltage category/pollution degree                                                           |                  |      | III/3                                                                                                                                            |
| Rated insulation voltage                                                                        | U <sub>i</sub>   | V AC | 690                                                                                                                                              |
| Rated operational voltage                                                                       | U <sub>e</sub>   | 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 <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                                                                                                                                                |
| 500 V                                                                                           | I <sub>e</sub>   | A    | 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:                                                                             |                  | 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 <sub>e</sub>   | A    | 2.5                                                                                                                                              |
| 60 V                                                                                            | I <sub>e</sub>   | A    | 1                                                                                                                                                |
| 110 V                                                                                           | I <sub>e</sub>   | A    | 0.5                                                                                                                                              |
| 220 V                                                                                           | I <sub>e</sub>   | A    | 0.25                                                                                                                                             |
| Control circuit reliability                                                                     | Failure rate     | λ    | <10 <sup>-8</sup> , < one failure at 100 million operations<br>(at U <sub>e</sub> = 24 V DC, U <sub>min</sub> = 17 V, I <sub>min</sub> = 5.4 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 $I_o$ (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.                                   |
| 10.13 Mechanical function                                                                                              |            |    | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

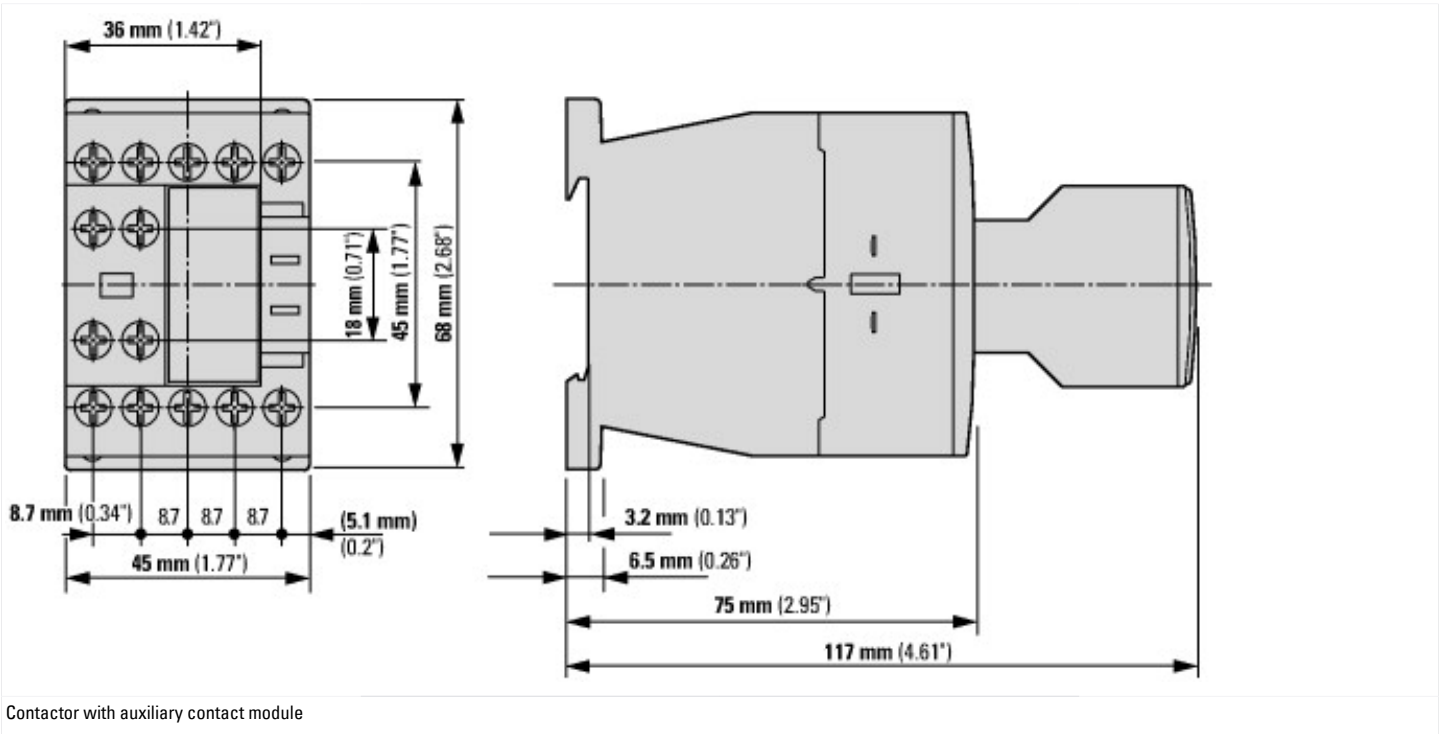
Technical data ETIM 7.0

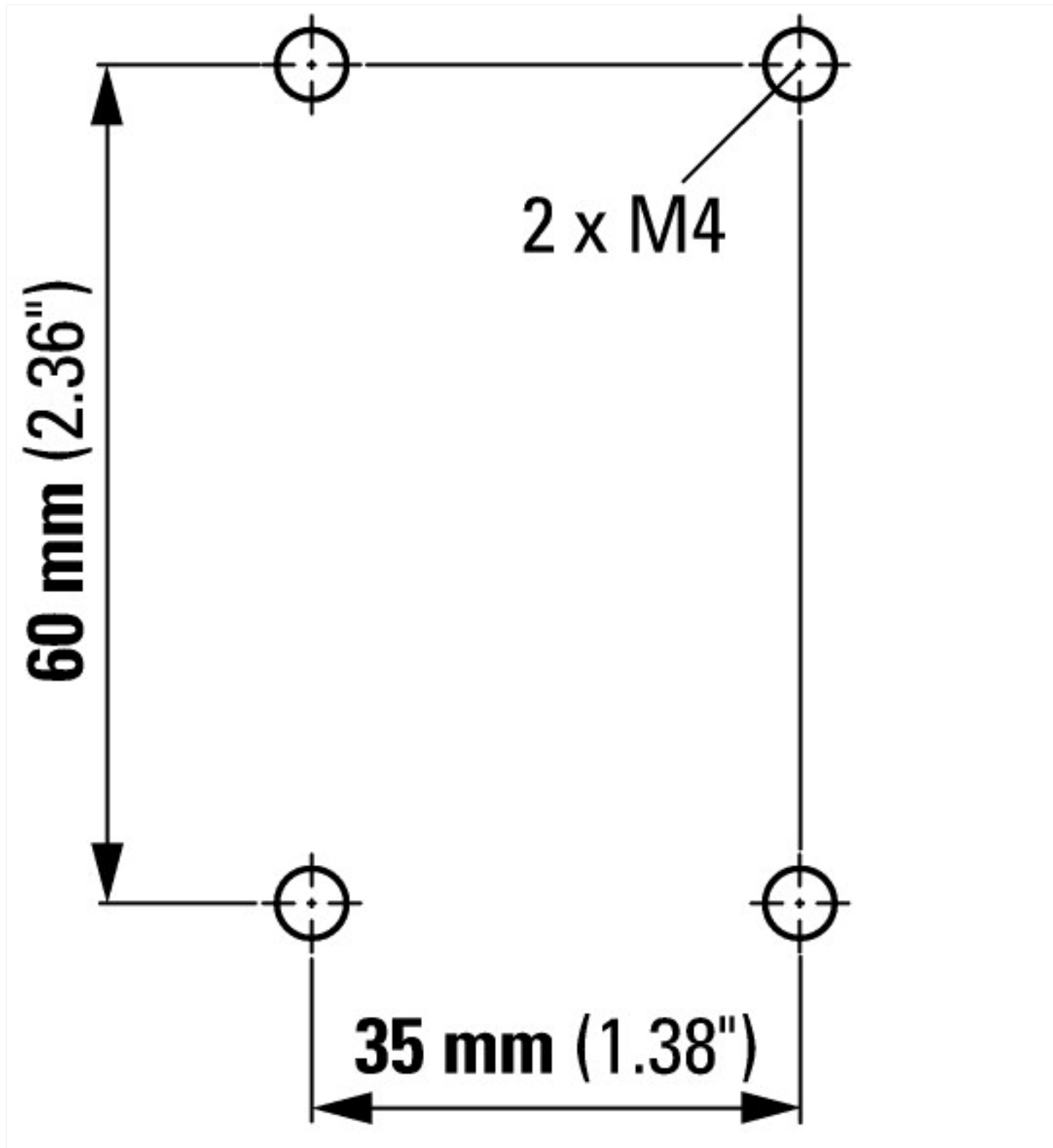
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------|
| Low-voltage 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 (ec1@ss10.0.1-27-37-13-02 [AKN342013]) |   |                  |
| 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 Ie 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





### Additional product information (links)

| IL03407013Z (AWA2100-2126) Contactors                                                        |                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IL03407013Z (AWA2100-2126) Contactors                                                        | <a href="https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407013Z2020_05.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407013Z2020_05.pdf</a>                               |
| 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> |