



Similar to illustration

**Auxiliary contact module, 2 pole, I<sub>th</sub>= 10 A, 1 N/OE, 1 NCL, Side mounted, Screw terminals, DILM250 - DILH2600**



**Part no.** DILM820-XHI11V-SI  
**Catalog No.** 208283  
**Alternate Catalog No.** XTCEXSBLR11  
**EL-Nummer (Norway)** 4134093

## Delivery program

|                                               |                 |   |                                           |
|-----------------------------------------------|-----------------|---|-------------------------------------------|
| Accessories                                   |                 |   | Auxiliary contact modules                 |
| 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 | 10                                        |
| AC-15                                         |                 |   |                                           |
| 220 V 230 V 240 V                             | I <sub>e</sub>  | A | 6                                         |
| 380 V 400 V 415 V                             | I <sub>e</sub>  | A | 4                                         |
| 380 V 400 V 500 V                             | I <sub>e</sub>  | A | 1.5                                       |
| <b>Contacts</b>                               |                 |   |                                           |
| N/OE: NO early-make                           |                 |   | 1 N/OE                                    |
| NC <sub>L</sub> =NC late-break                |                 |   | 1 NC <sub>L</sub>                         |
| Mounting type                                 |                 |   | Side mounted                              |
| Contact sequence                              |                 |   |                                           |
| For use with                                  |                 |   | DILM250 - DILH2600<br>DILDC300 - DILDC600 |
| Type                                          |                 |   | Side-mounting auxiliary contacts          |

## 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                | -40 - +60                                                                      |
| Enclosed                                                              |            | °C                | - 25 - 40                                                                      |
| Ambient temperature, storage                                          |            | °C                | - 40 - 80                                                                      |
| Degree of Protection                                                  |            |                   | IP20                                                                           |
| Protection against direct contact when actuated from front (EN 50274) |            |                   | Finger and back-of-hand proof                                                  |
| Weight                                                                |            | kg                | 0.04                                                                           |
| 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)     |                  |         | no                                                                                                                                               |
| N/C contact (not late-break contact) suitable as a mirror contact (to IEC/EN 60947-4-1 Annex F) |                  |         | DILM250 - DILH2600                                                                                                                               |
| 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    | 440                                                                                                                                              |
| between the auxiliary contacts                                                                  |                  | V AC    | 440                                                                                                                                              |
| Between auxiliary contacts and main contacts                                                    |                  | V AC    | 440                                                                                                                                              |
| Rated operational current                                                                       |                  | A       |                                                                                                                                                  |
| Conventional free air thermal current, 1 pole                                                   |                  |         |                                                                                                                                                  |
| at 60 °C                                                                                        | I <sub>th</sub>  | A       | 10                                                                                                                                               |
| AC-15                                                                                           |                  |         |                                                                                                                                                  |
| 220 V 230 V 240 V                                                                               | I <sub>e</sub>   | A       | 6                                                                                                                                                |
| 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                                                                                                                                                |
| 60 V                                                                                            | I <sub>e</sub>   | A       | 1.5                                                                                                                                              |
| 110 V                                                                                           | I <sub>e</sub>   | A       | 0.8                                                                                                                                              |
| 220 V                                                                                           | I <sub>e</sub>   | A       | 0.3                                                                                                                                              |
| 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                                                            |                  |         |                                                                                                                                                  |
| Maximum overcurrent protective device                                                           |                  |         |                                                                                                                                                  |
| Short-circuit protection only                                                                   |                  |         | FAZ-C4/1                                                                                                                                         |
| Short-circuit protection maximum fuse                                                           |                  |         |                                                                                                                                                  |
| 500 V                                                                                           |                  | A gG/gL | 16                                                                                                                                               |
| Rated conditional short-circuit current 500 V                                                   | I <sub>q</sub>   | 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          |  | A | 15   |
| 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 <sub>n</sub>    | A  | 6                                                                                                                                |
| Heat dissipation per pole, current-dependent                                                                           | P <sub>vid</sub>  | W  | 0.11                                                                                                                             |
| Equipment heat dissipation, current-dependent                                                                          | P <sub>vid</sub>  | W  | 0.25                                                                                                                             |
| 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 | -40                                                                                                                              |
| 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

|                                                                                                                                                                                                                |  |   |                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|------------------|
| 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                                                                                                                                                                    |  |   | 1                |
| 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           |  | 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                                                        |

## 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 Cable 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>                                                                               |