



**Auxiliary contact module, 1 N/O, 1 NC, Front fixing, Screw terminals, DILE(E)M**

**Part no.** 11DILEM  
**Catalog No.** 010080  
**Alternate Catalog No.** XTMCXFD11  
**EL-Nummer (Norway)** 4130386

## Delivery program

|                                  |       |   |                                                                                                                                                                                                                                                                                            |
|----------------------------------|-------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Accessories                      |       |   | Auxiliary contact modules                                                                                                                                                                                                                                                                  |
| Description                      |       |   | with interlocked opposing contacts<br>Switching elements according to EN 50012<br>Switching elements according to EN 50012 are to be preferred.<br>Version E combinations correspond to EN 50011 and are to be preferred.                                                                  |
| Function                         |       |   | for standard applications                                                                                                                                                                                                                                                                  |
| Connection technique             |       |   | Screw terminals                                                                                                                                                                                                                                                                            |
| <b>Rated operational current</b> |       |   |                                                                                                                                                                                                                                                                                            |
| AC-15                            |       |   |                                                                                                                                                                                                                                                                                            |
| 220 V 230 V 240 V                | $I_e$ | A | 4                                                                                                                                                                                                                                                                                          |
| 380 V 400 V 415 V                | $I_e$ | A | 2                                                                                                                                                                                                                                                                                          |
| <b>Contacts</b>                  |       |   |                                                                                                                                                                                                                                                                                            |
| N/O = Normally open              |       |   | 1 N/O                                                                                                                                                                                                                                                                                      |
| N/C = Normally closed            |       |   | 1 NC                                                                                                                                                                                                                                                                                       |
| Mounting type                    |       |   | Front fixing                                                                                                                                                                                                                                                                               |
| Contact sequence                 |       |   |                                                                                                                                                                                                                                                                                            |
| For use with                     |       |   | DILEM-10(-G)(...)<br>DILEM-4(-G)(...)<br>DILEEM-10(-G)(...)<br>DILEM12-10(-G)(...)                                                                                                                                                                                                         |
| <b>Instructions</b>              |       |   | 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 DILER, DILE(E)M<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                                                |
| Lifespan, mechanical                               |              |               |                                                                                |
| AC operated                                        | Operations   | $\times 10^6$ | 10                                                                             |
| DC operated                                        | Operations   | $\times 10^6$ | 20                                                                             |
| Component lifespan at $U_e = 240$ V                |              |               |                                                                                |
| AC-15                                              | Operations   | $\times 10^6$ | 0.2                                                                            |
| DC                                                 |              |               |                                                                                |
| L/R = 50 ms: 2 contacts in series at $I_e = 0.5$ A | Operations   | $\times 10^6$ | 0.15                                                                           |
| Maximum operating frequency                        | Operations/h |               | 9000                                                                           |
| Climatic proofing                                  |              |               | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30 |
| Ambient temperature                                |              |               |                                                                                |
| Open                                               |              | °C            | -25 - +50                                                                      |
| Enclosed                                           |              | °C            | - 25 - 40                                                                      |

|                                                                       |  |                 |                                                                 |
|-----------------------------------------------------------------------|--|-----------------|-----------------------------------------------------------------|
| Ambient temperature, storage                                          |  | °C              | - 40 - 80                                                       |
| Mounting position                                                     |  |                 |                                                                 |
| Mounting position                                                     |  |                 | As required, except vertical with terminals A1/A2 at the bottom |
| Mechanical shock resistance (IEC/EN 60068-2-27)                       |  |                 |                                                                 |
| Half-sinusoidal shock, 10 ms                                          |  |                 |                                                                 |
| Basic unit with auxiliary contact module                              |  | g               |                                                                 |
| N/O contact                                                           |  | g               | 10                                                              |
| N/C contact                                                           |  | g               | 8                                                               |
| Degree of Protection                                                  |  |                 | IP20                                                            |
| Protection against direct contact when actuated from front (EN 50274) |  |                 | Finger and back-of-hand proof                                   |
| Weight                                                                |  | kg              | 0.03                                                            |
| 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 - 1.5)<br>2 x (0.75 - 1.5)                            |
| Solid or stranded                                                     |  | AWG             | Single 18 – 14/Double 18 – 14                                   |
| Terminal screw                                                        |  |                 | M3.5                                                            |
| 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                                                                                                                                              |
| 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    | 600                                                                                                                                              |
| Safe isolation to EN 61140                                                                  |                  |         |                                                                                                                                                  |
| between coil and auxiliary contacts                                                         |                  | V AC    | 300                                                                                                                                              |
| between the auxiliary contacts                                                              |                  | V AC    | 300                                                                                                                                              |
| Rated operational current                                                                   |                  | A       |                                                                                                                                                  |
| Conventional free air thermal current, 1 pole                                               |                  |         |                                                                                                                                                  |
| Notes                                                                                       |                  |         | At maximum permissible ambient air temperature.                                                                                                  |
| Conv. thermal current                                                                       | I <sub>th</sub>  | A       | 10                                                                                                                                               |
| 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       | 2                                                                                                                                                |
| 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       | 2.5                                                                                                                                              |
| 2                                                                                           | 60 V             | A       | 2.5                                                                                                                                              |
| 3                                                                                           | 110 V            | A       | 1.5                                                                                                                                              |
| 3                                                                                           | 220 V            | A       | 0.5                                                                                                                                              |
| 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                                                       |                  |         |                                                                                                                                                  |
| 220 V 230 V 240 V                                                                           |                  | PKZM0   | 4                                                                                                                                                |
| 380 V 400 V 415 V                                                                           |                  | PKZM0   | 4                                                                                                                                                |
| Short-circuit protection maximum fuse                                                       |                  |         |                                                                                                                                                  |
| 500 V                                                                                       |                  | A gG/gL | 6                                                                                                                                                |

|                                                                         |        |      |
|-------------------------------------------------------------------------|--------|------|
| 500 V                                                                   | A fast | 10   |
| Current heat loss at I <sub>th</sub>                                    |        |      |
| AC operated                                                             | W      | 1.5  |
| DC operated                                                             | W      | 1.5  |
| Current heat loss per auxiliary circuit at I <sub>e</sub> (AC-15/230 V) | CO     | 0.24 |

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 |  | 0.5  |

Design verification as per IEC/EN 61439

|                                                                                                                        |                   |    |                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------|-------------------|----|----------------------------------------------------------------------------------------------------------------------------------|
| Technical data for design verification                                                                                 |                   |    |                                                                                                                                  |
| Rated operational current for specified heat dissipation                                                               | I <sub>n</sub>    | A  | 4                                                                                                                                |
| Heat dissipation per pole, current-dependent                                                                           | P <sub>vid</sub>  | W  | 0.24                                                                                                                             |
| Equipment heat dissipation, current-dependent                                                                          | P <sub>vid</sub>  | W  | 0                                                                                                                                |
| 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 | -25                                                                                                                              |
| Operating ambient temperature max.                                                                                     |                   | °C | 50                                                                                                                               |
| 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 8.0

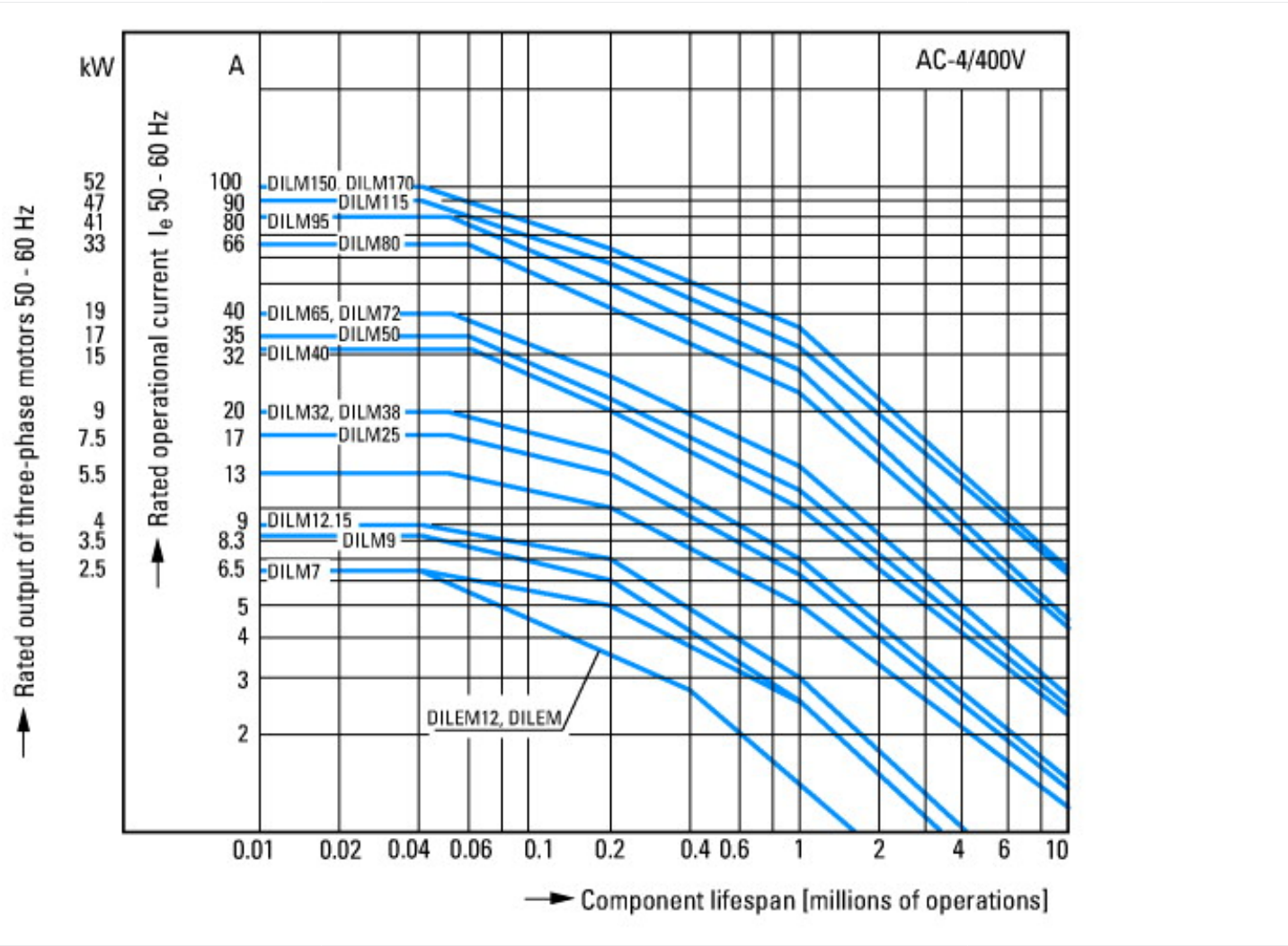
Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)

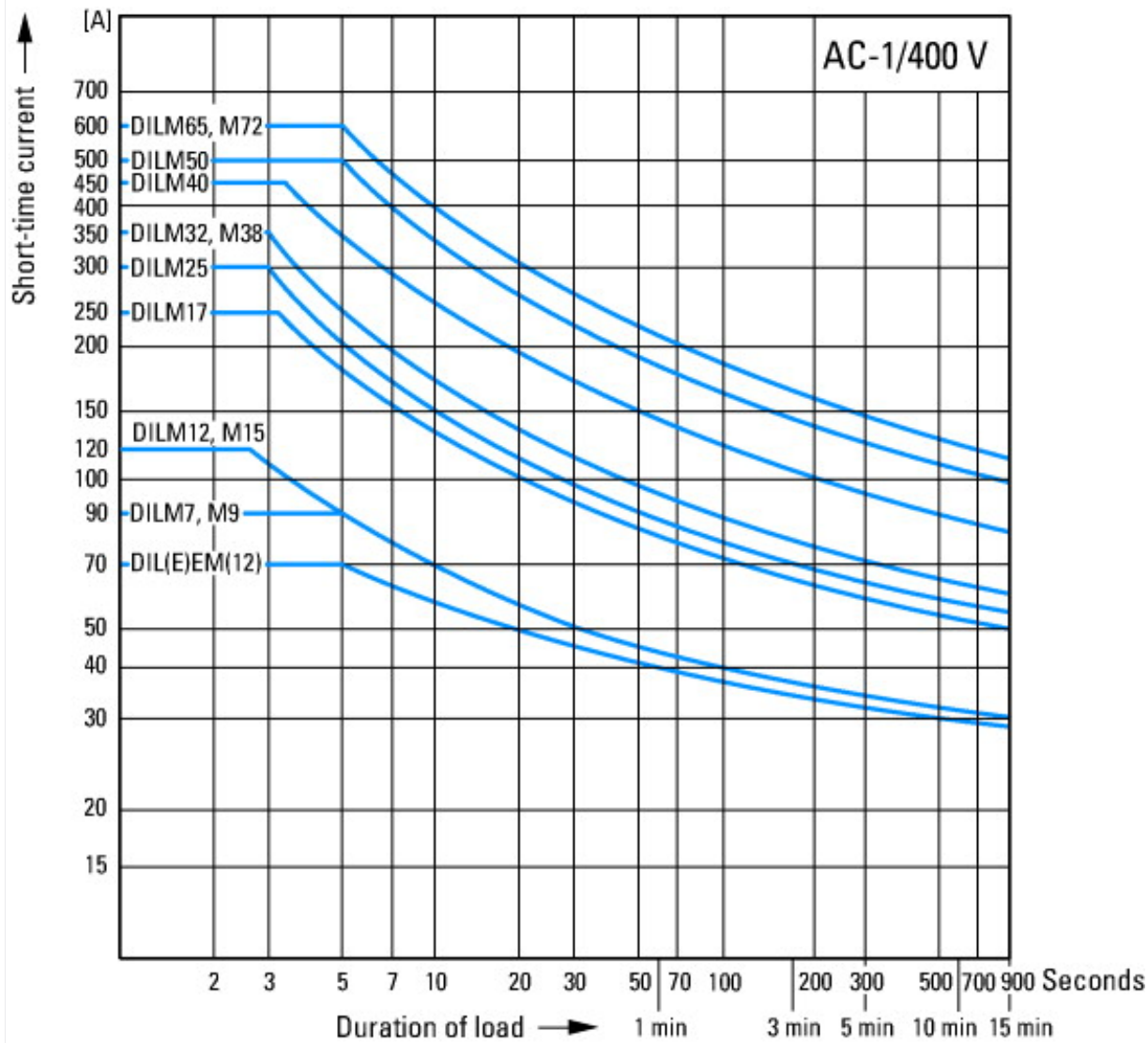
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|-----------------------------------------------|--|---|------------------|
| Number of contacts as change-over contact     |  |   | 0                |
| Number of contacts as normally open contact   |  |   | 1                |
| Number of contacts as normally closed contact |  |   | 1                |
| Number of fault-signal switches               |  |   | 0                |
| Rated operation current Ie at AC-15, 230 V    |  | A | 4                |
| 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                                                        |

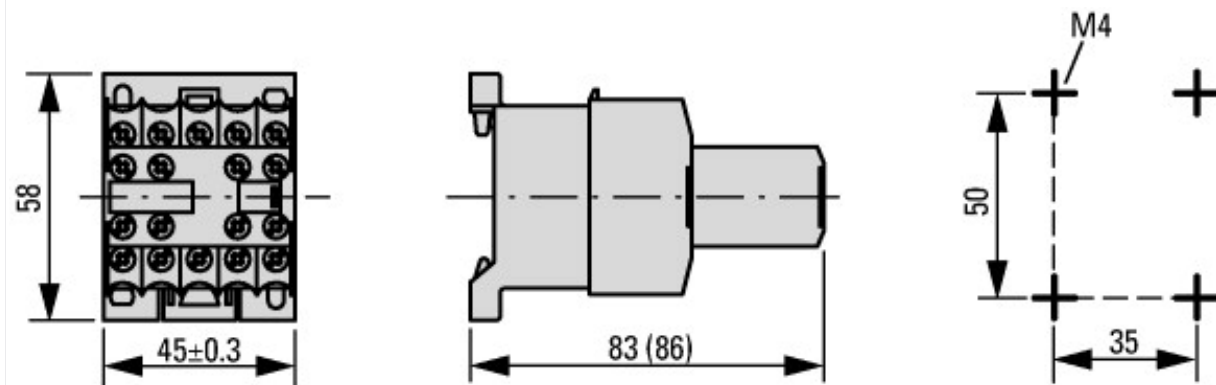
Characteristics





Short-time loading, 3-pole  
Time interval between two loading cycles: 15 minutes

## Dimensions



83 mm: DILE... + ...DILE(M)  
86 mm: DILE...-C... + ...DILE(M)