

# DATASHEET - DILEM-10(415V50HZ,480V60HZ)

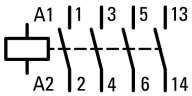


**Contactor, 415 V 50 Hz, 480 V 60 Hz, 3 pole, 380 V 400 V, 4 kW, Contacts N/O  
= Normally open= 1 N/O, Screw terminals, AC operation**



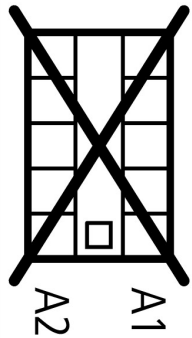
**Part no. DILEM-10(415V50HZ,480V60HZ)**  
**Catalog No. 051789**  
**Alternate Catalog XTMC9A10C**  
**No.**

## Delivery program

|                                                           |                |    |                                                                                                                                                                                                                                                        |
|-----------------------------------------------------------|----------------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product range                                             |                |    | Contactors                                                                                                                                                                                                                                             |
| Application                                               |                |    | Mini Contactors for Motors and Resistive Loads                                                                                                                                                                                                         |
| Subrange                                                  |                |    | DILEM contactors                                                                                                                                                                                                                                       |
| Utilization category                                      |                |    | AC-1: Non-inductive or slightly inductive loads, resistance furnaces<br>AC-3/AC-3e: Normal AC induction motors: Starting, switching off while running<br>AC-4: Normal AC induction motors: starting, plugging, reversing, inching                      |
| Notes                                                     |                |    |  <p>Also suitable for motors with efficiency class IE3.<br/>IE3-ready devices are identified by the logo on their packaging.<br/>Also tested according to AC-3e.</p> |
| Connection technique                                      |                |    | Screw terminals                                                                                                                                                                                                                                        |
| Description                                               |                |    | With auxiliary contact                                                                                                                                                                                                                                 |
| Number of poles                                           |                |    | 3 pole                                                                                                                                                                                                                                                 |
| <b>Rated operational current</b>                          |                |    |                                                                                                                                                                                                                                                        |
| AC-3                                                      |                |    |                                                                                                                                                                                                                                                        |
| 380 V 400 V                                               | $I_e$          | A  | 9                                                                                                                                                                                                                                                      |
| AC-1                                                      |                |    |                                                                                                                                                                                                                                                        |
| Conventional free air thermal current, 3 pole, 50 - 60 Hz |                |    |                                                                                                                                                                                                                                                        |
| Open                                                      |                |    |                                                                                                                                                                                                                                                        |
| at 40 °C                                                  | $I_{th} = I_e$ | A  | 22                                                                                                                                                                                                                                                     |
| <b>Max. rating for three-phase motors, 50 - 60 Hz</b>     |                |    |                                                                                                                                                                                                                                                        |
| AC-3                                                      |                |    |                                                                                                                                                                                                                                                        |
| 220 V 230 V                                               | P              | kW | 2.2                                                                                                                                                                                                                                                    |
| 380 V 400 V                                               | P              | kW | 4                                                                                                                                                                                                                                                      |
| 660 V 690 V                                               | P              | kW | 4                                                                                                                                                                                                                                                      |
| AC-4                                                      |                |    |                                                                                                                                                                                                                                                        |
| 220 V 230 V                                               | P              | kW | 1.5                                                                                                                                                                                                                                                    |
| 380 V 400 V                                               | P              | kW | 3                                                                                                                                                                                                                                                      |
| 660 V 690 V                                               | P              | kW | 3                                                                                                                                                                                                                                                      |
| <b>Contacts</b>                                           |                |    |                                                                                                                                                                                                                                                        |
| N/O = Normally open                                       |                |    | 1 N/O                                                                                                                                                                                                                                                  |
| Contact sequence                                          |                |    |                                                                                                                                                                    |
| For use with                                              |                |    | ...DILEM<br>...DILE                                                                                                                                                                                                                                    |
| Actuating voltage                                         |                |    | 415 V 50 Hz, 480 V 60 Hz                                                                                                                                                                                                                               |
| Voltage AC/DC                                             |                |    | AC operation                                                                                                                                                                                                                                           |

## Technical data

|                                     |            |               |                                 |
|-------------------------------------|------------|---------------|---------------------------------|
| Standards                           |            |               | IEC/EN 60947, VDE 0660, CSA, UL |
| Lifespan, mechanical; Coil 50/60 Hz | Operations | $\times 10^6$ | 7                               |
| Lifespan, mechanical                | Operations | $\times 10^6$ | 10                              |

|                                                                       |                  |                                                                                    |       |
|-----------------------------------------------------------------------|------------------|------------------------------------------------------------------------------------|-------|
| Maximum operating frequency                                           |                  |                                                                                    |       |
| Mechanical                                                            | Ops./h           | 9000                                                                               |       |
| electrical (Contactors without overload relay)                        | Operations/h     | Page 05/070                                                                        |       |
| 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                                                                          |       |
| Storage                                                               | °C               |                                                                                    |       |
| Min. ambient temperature, storage                                     | °C               | - 40                                                                               |       |
| Ambient temperature, storage max.                                     | °C               | + 80                                                                               |       |
| Mounting position                                                     |                  | As required, except vertical with terminals A1/A2 at the bottom                    |       |
| Mounting position                                                     |                  |  |       |
| Mechanical shock resistance (IEC/EN 60068-2-27)                       |                  |                                                                                    |       |
| Half-sinusoidal shock, 10 ms                                          |                  |                                                                                    |       |
| Basic unit without auxiliary contact module                           |                  |                                                                                    |       |
| Main contacts, make contacts                                          | g                | 10                                                                                 |       |
| Main contacts Make/break contacts                                     | g                |                                                                                    |       |
| Make                                                                  | g                | 8                                                                                  |       |
| Basic unit with auxiliary contact module                              |                  |                                                                                    |       |
| Main contacts make contact                                            | g                |                                                                                    |       |
| Make                                                                  | g                | 10                                                                                 |       |
| Auxiliary contacts Make/break contacts                                | g                | 20 / 20                                                                            |       |
| Degree of Protection                                                  |                  | IP20                                                                               |       |
| Protection against direct contact when actuated from front (EN 50274) |                  | Finger and back-of-hand proof                                                      |       |
| Altitude                                                              | m                | Max. 2000                                                                          |       |
| Weight                                                                | kg               | 0.17                                                                               |       |
| Terminal capacity of auxiliary and main contacts                      |                  |                                                                                    |       |
| 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              | 18 - 14                                                                            |       |
| Stripping length                                                      | mm               | 8                                                                                  |       |
| 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                                                                                |       |
| <b>Main conducting paths</b>                                          |                  |                                                                                    |       |
| 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                                                                               | 690   |
| Safe isolation to EN 61140                                            |                  |                                                                                    |       |
| between coil and contacts                                             |                  | V AC                                                                               | 300   |
| between the contacts                                                  |                  | V AC                                                                               | 300   |

|                                         |       |   |     |
|-----------------------------------------|-------|---|-----|
| Making capacity (cos φ to IEC/EN 60947) |       | A | 110 |
| Breaking capacity                       |       |   |     |
| 220 V 230 V                             |       | A | 90  |
| 380 V 400 V                             |       | A | 90  |
| 500 V                                   |       | A | 64  |
| 660 V 690 V                             |       | A | 42  |
| Short-circuit protection maximum fuse   |       |   |     |
| Type "2", 500 V                         | gL/gG | A | 10  |
| Type "1", 500 V                         | gL/gG | A | 20  |

## AC

|                                                           |                |     |                                                                                       |
|-----------------------------------------------------------|----------------|-----|---------------------------------------------------------------------------------------|
| AC-1                                                      |                |     |                                                                                       |
| Rated operational current                                 |                |     |                                                                                       |
| Conventional free air thermal current, 3 pole, 50 - 60 Hz |                |     |                                                                                       |
| Open                                                      |                |     |                                                                                       |
| at 40 °C                                                  | $I_{th} = I_e$ | A   | 22                                                                                    |
| at 50 °C                                                  | $I_{th} = I_e$ | A   | 20                                                                                    |
| at 55 °C                                                  | $I_{th} = I_e$ | A   | 19                                                                                    |
| enclosed                                                  | $I_{th}$       | A   | 16                                                                                    |
| Notes                                                     |                |     | At maximum permissible ambient air temperature.                                       |
| Conventional free air thermal current, 1 pole             |                |     |                                                                                       |
| Notes                                                     |                |     | At maximum permissible ambient air temperature.                                       |
| open                                                      | $I_{th}$       | A   | 50                                                                                    |
| enclosed                                                  | $I_{th}$       | A   | 40                                                                                    |
| AC-3                                                      |                |     |                                                                                       |
| Rated operational current                                 |                |     |                                                                                       |
| Open, 3-pole: 50 – 60 Hz                                  |                |     |                                                                                       |
| Notes                                                     |                |     | At maximum permissible ambient temperature (open.)<br>Also tested according to AC-3e. |
| 220 V 230 V                                               | $I_e$          | A   | 9                                                                                     |
| 240 V                                                     | $I_e$          | A   | 9                                                                                     |
| 380 V 400 V                                               | $I_e$          | A   | 9                                                                                     |
| 415 V                                                     | $I_e$          | A   | 9                                                                                     |
| 440V                                                      | $I_e$          | A   | 9                                                                                     |
| 500 V                                                     | $I_e$          | A   | 6.4                                                                                   |
| 660 V 690 V                                               | $I_e$          | A   | 4.8                                                                                   |
| Motor rating                                              | P              | kWh |                                                                                       |
| 220 V 230 V                                               | P              | kW  | 2.2                                                                                   |
| 240V                                                      | P              | kW  | 2.5                                                                                   |
| 380 V 400 V                                               | P              | kW  | 4                                                                                     |
| 415 V                                                     | P              | kW  | 4.3                                                                                   |
| 440 V                                                     | P              | kW  | 4.6                                                                                   |
| 500 V                                                     | P              | kW  | 4                                                                                     |
| 660 V 690 V                                               | P              | kW  | 4                                                                                     |
| AC-4                                                      |                |     |                                                                                       |
| Rated operational current                                 |                |     |                                                                                       |
| Open, 3-pole: 50 – 60 Hz                                  |                |     |                                                                                       |
| Notes                                                     |                |     | At maximum permissible ambient air temperature.                                       |
| 220 V 230 V                                               | $I_e$          | A   | 6.6                                                                                   |
| 240 V                                                     | $I_e$          | A   | 6.6                                                                                   |
| 380 V 400 V                                               | $I_e$          | A   | 6.6                                                                                   |
| 415 V                                                     | $I_e$          | A   | 6.6                                                                                   |
| 440 V                                                     | $I_e$          | A   | 6.6                                                                                   |
| 500 V                                                     | $I_e$          | A   | 5                                                                                     |
| 660 V 690 V                                               | $I_e$          | A   | 3.4                                                                                   |

|              |   |     |     |
|--------------|---|-----|-----|
| Motor rating | P | kWh |     |
| 220 V 230 V  | P | kW  | 1.5 |
| 240 V        | P | kW  | 1.8 |
| 380 V 400 V  | P | kW  | 3   |
| 415 V        | P | kW  | 3.1 |
| 440 V        | P | kW  | 3.3 |
| 500 V        | P | kW  | 3   |
| 660 V 690 V  | P | kW  | 3   |

DC

|                                |                |   |    |
|--------------------------------|----------------|---|----|
| Rated operational current open |                |   |    |
| DC-1                           |                |   |    |
| 12 V                           | I <sub>e</sub> | A | 20 |
| 24 V                           | I <sub>e</sub> | A | 20 |
| 60 V                           | I <sub>e</sub> | A | 20 |
| 110 V                          | I <sub>e</sub> | A | 20 |
| 220 V                          | I <sub>e</sub> | A | 20 |

Magnet systems

|                                                                      |         |                  |           |
|----------------------------------------------------------------------|---------|------------------|-----------|
| Voltage tolerance                                                    |         |                  |           |
| AC operated                                                          |         |                  |           |
| Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz         | Pick-up | x U <sub>c</sub> | 0.8 - 1.1 |
| Dual-frequency coil 50/60 Hz                                         | Pick-up | x U <sub>c</sub> |           |
| Voltage tolerance Dual-frequency coil 50/60 Hz, max. pick-up voltage |         | x U <sub>c</sub> | 1.1       |
| Power consumption                                                    |         |                  |           |
| AC operation                                                         |         |                  |           |
| Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz         | Pick-up | VA               | 25        |
| Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz         | Pick-up | W                | 22        |
| Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz         | Sealing | VA               | 4.6       |
| Single-voltage coil 50 Hz and dual-voltage coil 50 Hz, 60 Hz         | Sealing | W                | 1.8       |
| Duty factor                                                          |         | % DF             | 100       |
| Switching times at 100 % U <sub>c</sub>                              |         |                  |           |
| Make contact                                                         |         | ms               |           |
| Closing delay                                                        |         | ms               |           |
| Closing delay min.                                                   |         | ms               | 14        |
| Closing delay max.                                                   |         | ms               | 21        |
| Opening delay                                                        |         | ms               |           |
| Opening delay min.                                                   |         | ms               | 8         |
| Opening delay max.                                                   |         | ms               | 18        |
| Closing delay with top mounting auxiliary contact                    |         | ms               | 45        |
| Reversing contactors                                                 |         |                  |           |
| Changeover time at 110 % U <sub>c</sub>                              |         |                  |           |
| Changeover time min.                                                 |         | ms               | 16        |
| Changeover time max.                                                 |         | ms               | 21        |
| Arcing time at 690 V AC                                              |         | ms               | 12        |

Current heat losses (3- or 4-pole)

|                                 |  |    |      |
|---------------------------------|--|----|------|
| at I <sub>th</sub> , 50 °C      |  | W  | 5.9  |
| at I <sub>e</sub> to AC-3/400 V |  | W  | 1.2  |
| Impedance per pole              |  | mΩ | 9.18 |

Auxiliary contacts

|                                                                                            |                  |      |       |
|--------------------------------------------------------------------------------------------|------------------|------|-------|
| Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module |                  |      | 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                                   |                 |                   |                                                                                                                                                  |
| AC-15                                                       |                 |                   |                                                                                                                                                  |
| 220 V 240 V                                                 | I <sub>e</sub>  | A                 | 6                                                                                                                                                |
| 380 V 415 V                                                 | I <sub>e</sub>  | A                 | 3                                                                                                                                                |
| 500 V                                                       | I <sub>e</sub>  | A                 | 1.5                                                                                                                                              |
| DC L/R ≤ 15 ms                                              |                 |                   |                                                                                                                                                  |
| Contacts in series:                                         |                 | A                 |                                                                                                                                                  |
| 1                                                           | 24 V            | A                 | 2.5                                                                                                                                              |
| 2                                                           | 60 V            | A                 | 2.5                                                                                                                                              |
| 3                                                           | 100 V           | A                 | 1.5                                                                                                                                              |
| 3                                                           | 220 V           | A                 | 0.5                                                                                                                                              |
| Conv. thermal current                                       | I <sub>th</sub> | A                 | 10                                                                                                                                               |
| 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) |
| Component lifespan at U <sub>e</sub> = 240 V                |                 |                   |                                                                                                                                                  |
| AC-15                                                       | Operations      | x 10 <sup>6</sup> | 0.2                                                                                                                                              |
| DC current                                                  |                 |                   |                                                                                                                                                  |
| L/R = 50 ms: 2 contacts in series at I <sub>e</sub> = 0.5 A | Operations      | x 10 <sup>6</sup> | 0.15                                                                                                                                             |
| Notes                                                       |                 |                   | Switch-on and switch-off conditions based on DC-13, time constant as specified                                                                   |
| Short-circuit rating without welding                        |                 |                   |                                                                                                                                                  |
| Maximum overcurrent protective device                       |                 |                   |                                                                                                                                                  |
| Short-circuit protection only                               |                 |                   | PKZM0-4                                                                                                                                          |
| Short-circuit protection maximum fuse                       |                 |                   |                                                                                                                                                  |
| 500 V                                                       |                 | A gG/gL           | 6                                                                                                                                                |
| 500 V                                                       |                 | A fast            | 10                                                                                                                                               |
| Current heat loss at a load of I <sub>th</sub> per contact  |                 | W                 | 1.1                                                                                                                                              |

### Rating data for approved types

|                              |  |      |      |
|------------------------------|--|------|------|
| Switching capacity           |  |      |      |
| Maximum motor rating         |  |      |      |
| Three-phase                  |  |      |      |
| 200 V<br>208 V               |  | HP   | 2    |
| 230 V<br>240 V               |  | HP   | 3    |
| 460 V<br>480 V               |  | HP   | 5    |
| 575 V<br>600 V               |  | HP   | 5    |
| Single-phase                 |  |      |      |
| 115 V<br>120 V               |  | HP   | 0.5  |
| 230 V<br>240 V               |  | HP   | 1.5  |
| General use                  |  | A    | 15   |
| 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  |
| Short Circuit Current Rating |  | SCCR |      |
| Basic Rating                 |  |      |      |

|           |    |    |
|-----------|----|----|
| SCCR      | kA | 5  |
| max. Fuse | A  | 45 |

## Design verification as per IEC/EN 61439

|                                                                                                                        |                   |    |                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------|-------------------|----|----------------------------------------------------------------------------------------------------------------------------------|
| Technical data for design verification                                                                                 |                   |    |                                                                                                                                  |
| Rated operational current for specified heat dissipation                                                               | I <sub>n</sub>    | A  | 9                                                                                                                                |
| Heat dissipation per pole, current-dependent                                                                           | P <sub>vid</sub>  | W  | 0.4                                                                                                                              |
| Equipment heat dissipation, current-dependent                                                                          | P <sub>vid</sub>  | W  | 1.2                                                                                                                              |
| Static heat dissipation, non-current-dependent                                                                         | P <sub>vs</sub>   | W  | 1.8                                                                                                                              |
| 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.                         |

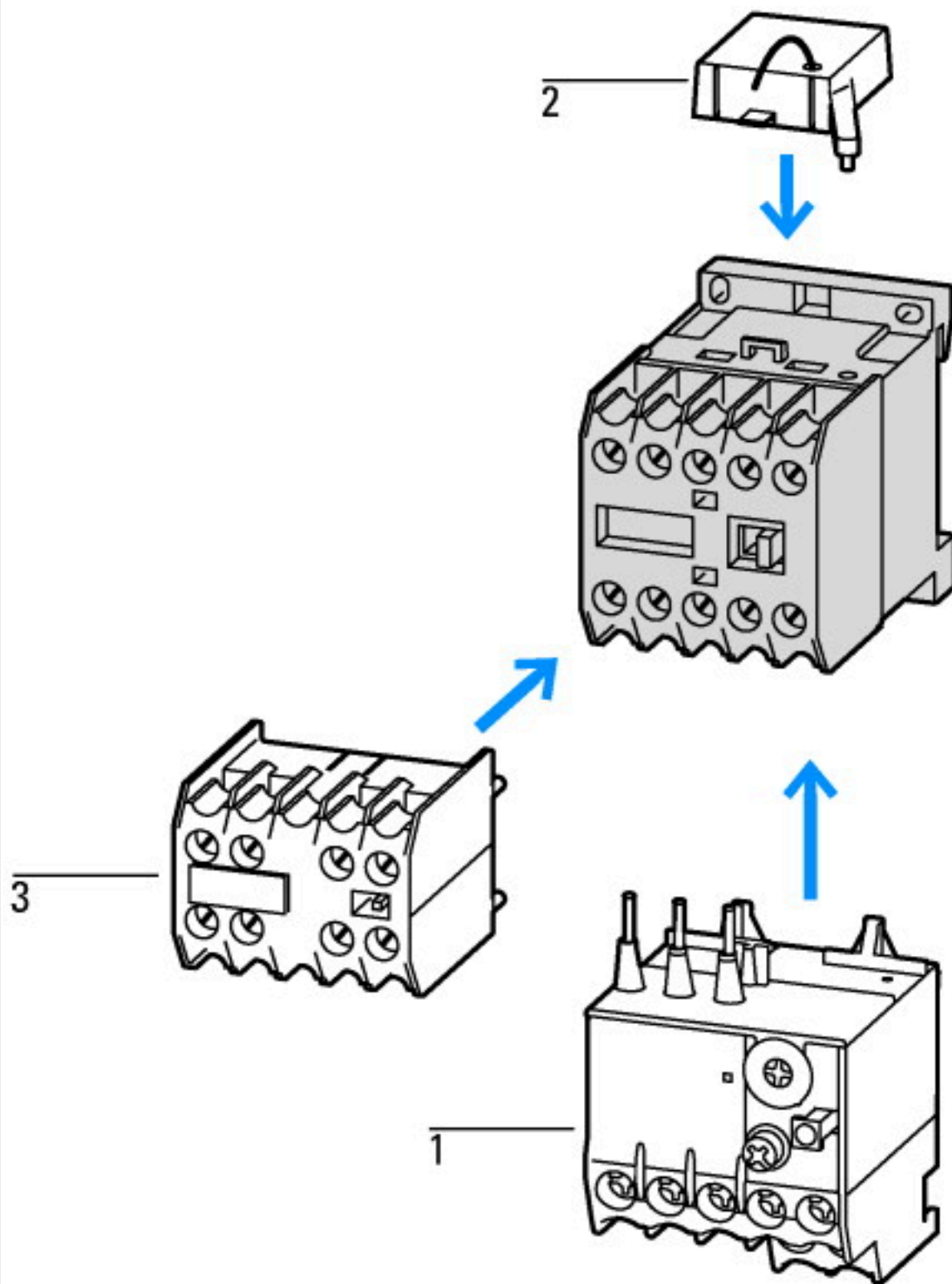
## Technical data ETIM 7.0

|                                                                                                                                                                                       |    |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|-----------|
| Low-voltage industrial components (EG000017) / Power contactor, AC switching (EC000066)                                                                                               |    |           |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Power contactor, AC switching (ecl@ss10.0.1-27-37-10-03 [AAB718015]) |    |           |
| Rated control supply voltage Us at AC 50HZ                                                                                                                                            | V  | 415 - 415 |
| Rated control supply voltage Us at AC 60HZ                                                                                                                                            | V  | 480 - 480 |
| Rated control supply voltage Us at DC                                                                                                                                                 | V  | 0 - 0     |
| Voltage type for actuating                                                                                                                                                            |    | AC        |
| Rated operation current Ie at AC-1, 400 V                                                                                                                                             | A  | 22        |
| Rated operation current Ie at AC-3, 400 V                                                                                                                                             | A  | 9         |
| Rated operation power at AC-3, 400 V                                                                                                                                                  | kW | 4         |
| Rated operation current Ie at AC-4, 400 V                                                                                                                                             | A  | 6.6       |
| Rated operation power at AC-4, 400 V                                                                                                                                                  | kW | 3         |
| Rated operation power NEMA                                                                                                                                                            | kW | 3.7       |
| Modular version                                                                                                                                                                       |    | No        |
| Number of auxiliary contacts as normally open contact                                                                                                                                 |    | 1         |

|                                                         |  |  |                  |
|---------------------------------------------------------|--|--|------------------|
| Number of auxiliary contacts as normally closed contact |  |  | 0                |
| Type of electrical connection of main circuit           |  |  | Screw connection |
| Number of normally closed contacts as main contact      |  |  | 0                |
| Number of main contacts as normally open contact        |  |  | 3                |

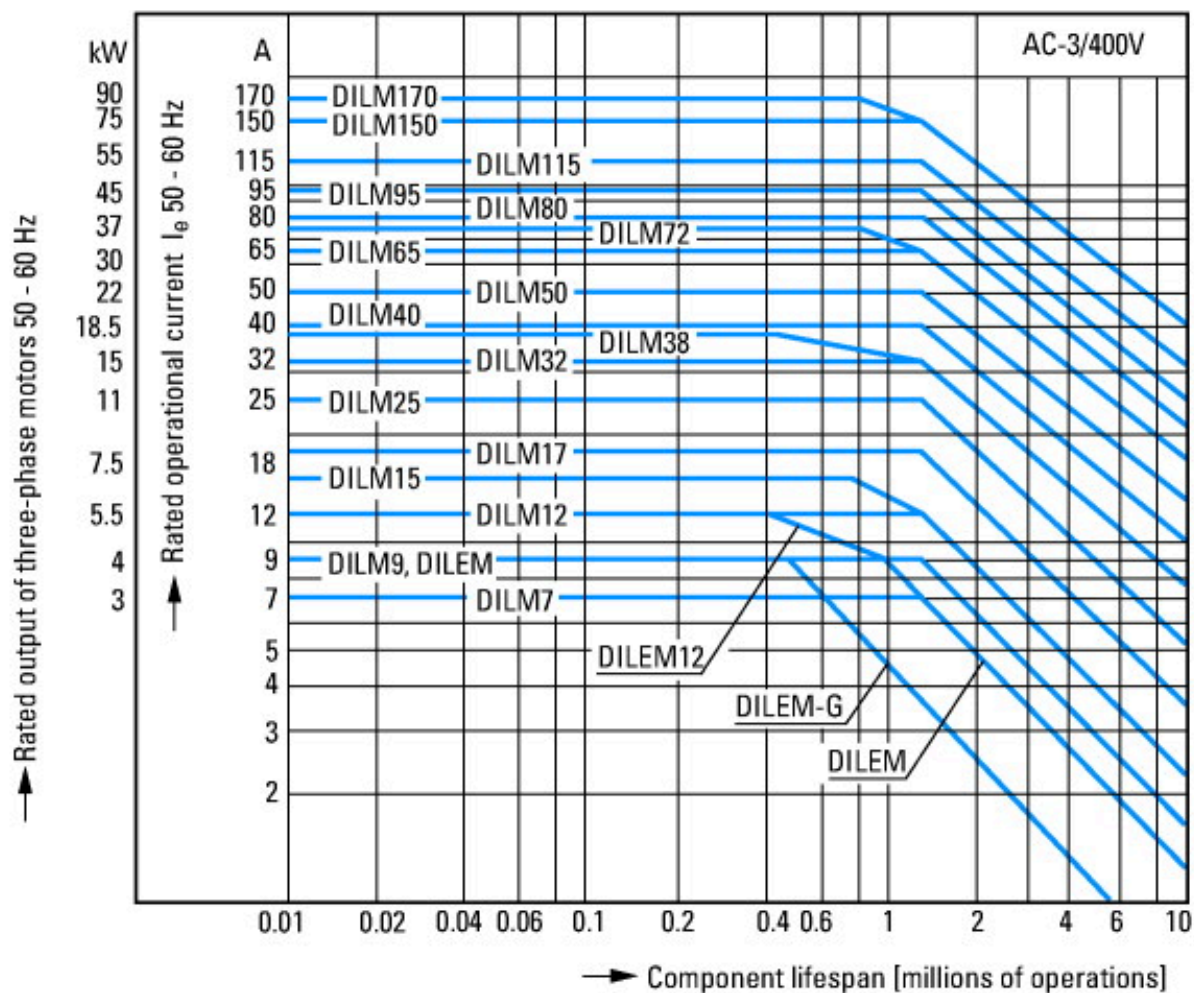
Approvals

|                                      |  |  |                                                           |
|--------------------------------------|--|--|-----------------------------------------------------------|
| Product Standards                    |  |  | IEC/EN 60947-4-1; UL 508; CSA-C22.2 No. 14-05; CE marking |
| UL File No.                          |  |  | E29096                                                    |
| UL Category Control No.              |  |  | NLDX                                                      |
| CSA File No.                         |  |  | 012528                                                    |
| CSA Class No.                        |  |  | 3211-04                                                   |
| North America Certification          |  |  | UL listed, CSA certified                                  |
| Specially designed for North America |  |  | No                                                        |



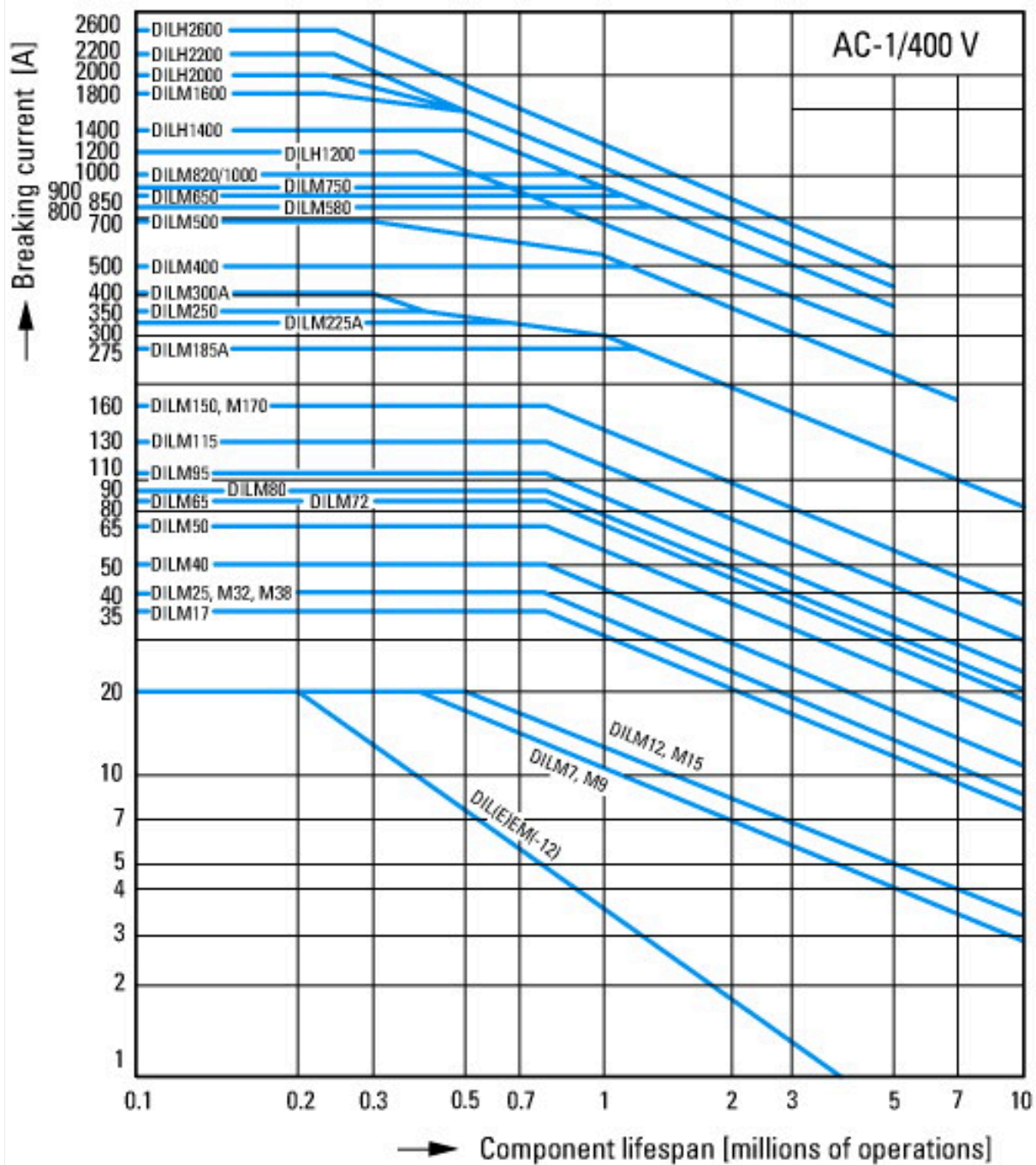
- 1: Overload relay
  - 2: Suppressor
  - 3: Auxiliary contact modules
- Enclosure totally insulated



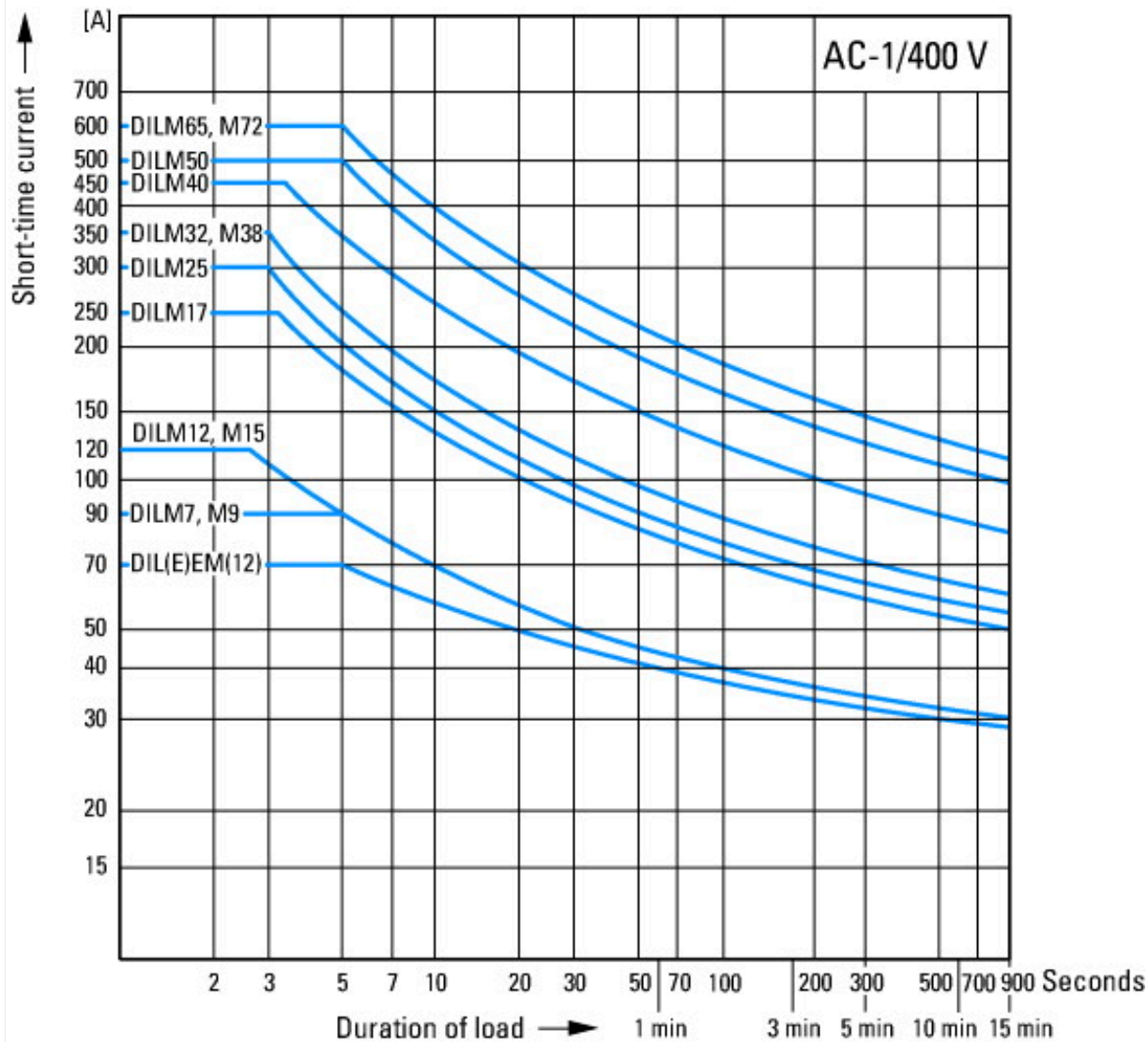


Squirrel-cage motor  
 Operating characteristics  
 Starting: from rest  
 Stopping: after attaining full running speed  
 Electrical characteristics  
 Make: up to 6 x rated motor current  
 Break: up to 1 x rated motor current  
 Utilization category  
 100 % AC-3  
 Typical applications  
 Compressors  
 Lifts  
 Mixers  
 Pumps  
 Escalators  
 Agitators  
 Fans  
 Conveyor belts  
 Centrifuges  
 Hinged flaps  
 Bucket-elevators  
 Air conditioning system  
 General drives in manufacturing and processing machines

Extreme switching duty  
 Squirrel-cage motor  
 Operating characteristics  
 Inching, plugging, reversing  
 Electrical characteristics  
 Make: up to 6 x rated motor current  
 Break: up to 6 x rated motor current  
 Utilization category  
 100 % AC-4  
 Typical applications  
 Printing presses  
 Wire-drawing machines  
 Centrifuges  
 Special drives for manufacturing and processing machines

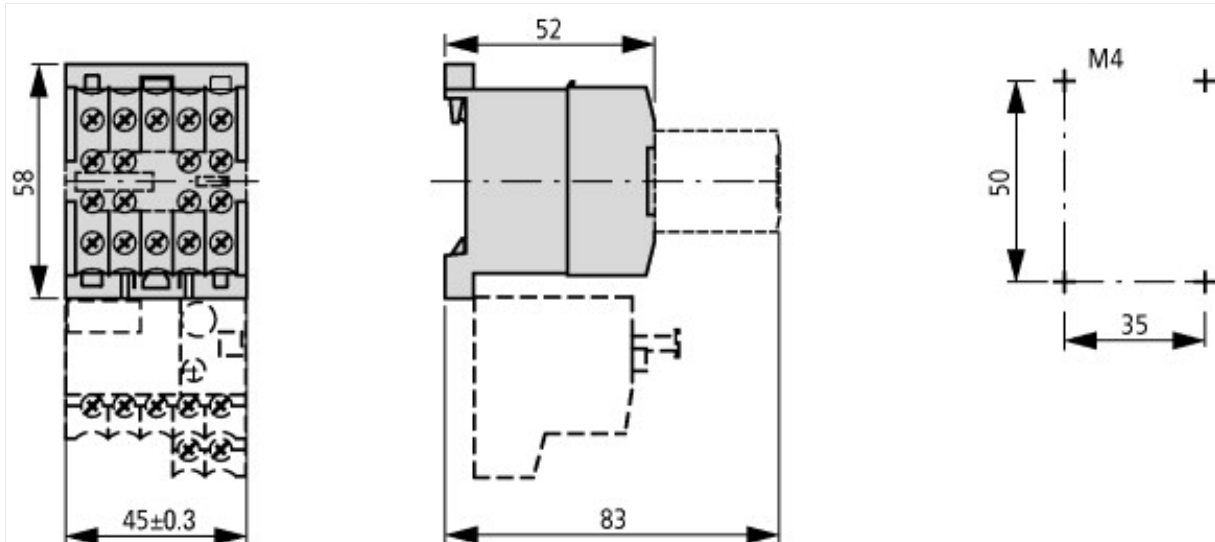


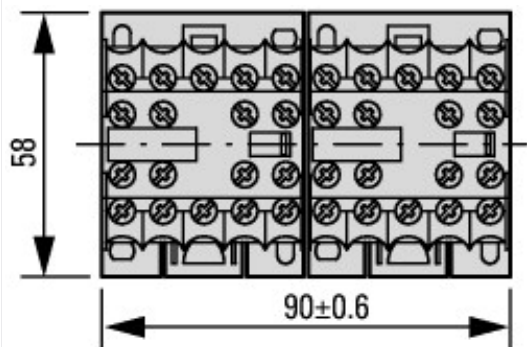
Switching duty for non-motor loads, 3-pole, 4-pole  
 Operating characteristics  
 Non-inductive or slightly inductive loads  
 Electrical characteristics  
 Make: 1 x rated current  
 Break: 1 x rated current  
 Utilization category  
 100 % AC-1  
 Typical applications  
 Electric heat



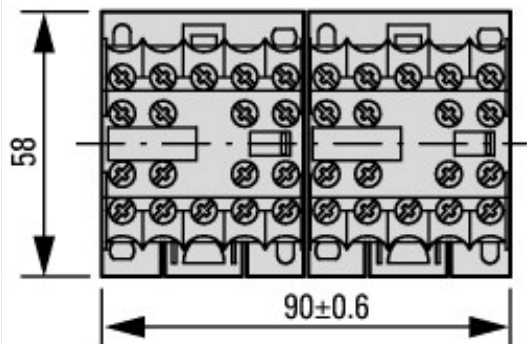
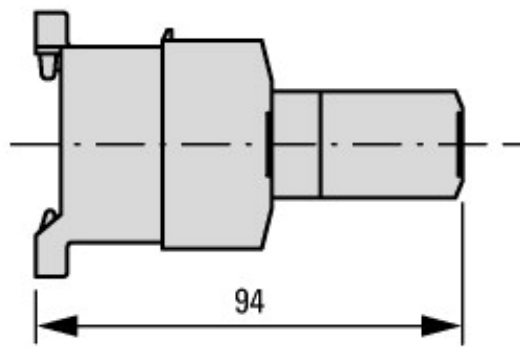
Short-time loading, 3-pole  
Time interval between two loading cycles: 15 minutes

## Dimensions

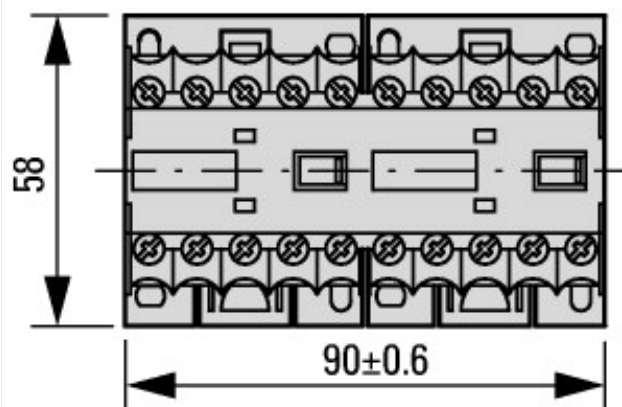
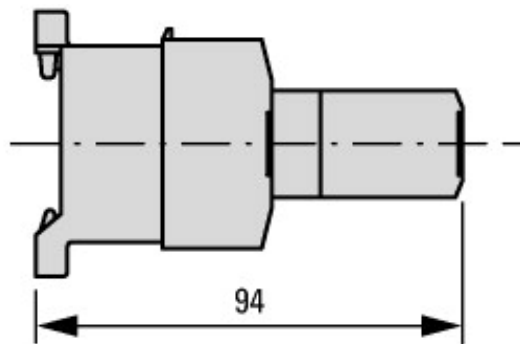




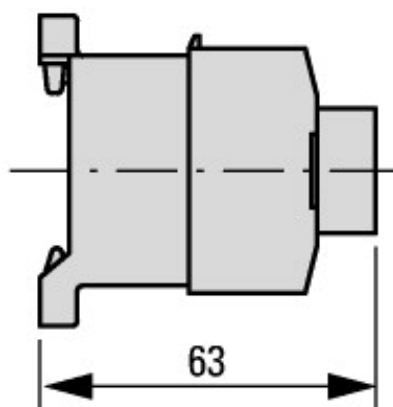
2DILE-... + MVDILE + ...DILE  
2DILE-...-G + MVDILE + ...DILE



2DILE-... + MVDILE + ...DILE  
2DILE-...-G + MVDILE + ...DILE



2DILE-... + MVDILE  
2DILE-...-G + MVDILE



## Additional product information (links)

### IL03407009Z (AWA2100-0882) Mini contactor relay

IL03407009Z (AWA2100-0882) Mini contactor relay

[https://es-assets.eaton.com/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03407009Z2020\\_05.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407009Z2020_05.pdf)