



Contactor, 3p, 90kW/400V/AC3

Part no. **DILM170(RAC24)**  
 Catalog No. **107010**  
 Eaton Catalog No. **XTCE170G00T**  
 EL-Nummer **4130422**  
 (Norway)

## Delivery program

|                      |  |  |                                                                                                                                                                                                                            |
|----------------------|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product range        |  |  | Contactors                                                                                                                                                                                                                 |
| Application          |  |  | Contactors for Motors                                                                                                                                                                                                      |
| Subrange             |  |  | Contactors up to 170 A, 3 pole                                                                                                                                                                                             |
| Utilization category |  |  | AC-1: Non-inductive or slightly inductive loads, resistance furnaces<br>NAC-3: Normal AC induction motors: starting, switch off during running<br>AC-4: Normal AC induction motors: starting, plugging, reversing, inching |
| Notes                |  |  | Not suitable for motors with efficiency class IE3.                                                                                                                                                                         |
| Connection technique |  |  | Screw terminals                                                                                                                                                                                                            |
| Number of poles      |  |  | 3 pole                                                                                                                                                                                                                     |

## Rated operational current

|                                                           |                |   |     |
|-----------------------------------------------------------|----------------|---|-----|
| AC-3                                                      |                |   |     |
| 380 V 400 V                                               | $I_e$          | A | 170 |
| AC-1                                                      |                |   |     |
| Conventional free air thermal current, 3 pole, 50 - 60 Hz |                |   |     |
| Open                                                      |                |   |     |
| at 40 °C                                                  | $I_{th} = I_e$ | A | 225 |
| enclosed                                                  | $I_{th}$       | A | 166 |
| Conventional free air thermal current, 1 pole             |                |   |     |
| open                                                      | $I_{th}$       | A | 460 |
| enclosed                                                  | $I_{th}$       | A | 415 |

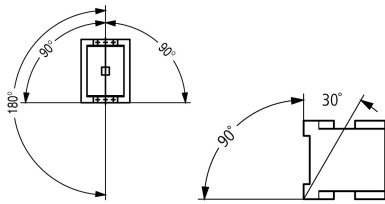
## Max. rating for three-phase motors, 50 - 60 Hz

|             |   |    |    |
|-------------|---|----|----|
| AC-3        |   |    |    |
| 220 V 230 V | P | kW | 52 |
| 380 V 400 V | P | kW | 90 |
| 660 V 690 V | P | kW | 96 |
| AC-4        |   |    |    |
| 220 V 230 V | P | kW | 20 |
| 380 V 400 V | P | kW | 33 |
| 660 V 690 V | P | kW | 48 |

|                                        |  |  |                                                                                                                  |
|----------------------------------------|--|--|------------------------------------------------------------------------------------------------------------------|
| Contact sequence                       |  |  |                                                                                                                  |
| Instructions                           |  |  | Contacts to EN 50 012.<br>integrated suppressor circuit in actuating electronics<br>Observe electrical lifespan. |
| Can be combined with auxiliary contact |  |  | DILM150-XHI(V)..<br>DILM1000-XHI(V)..                                                                            |
| Voltage AC/DC                          |  |  | AC operation                                                                                                     |

## Technical data

|                                 |              |               |                                 |
|---------------------------------|--------------|---------------|---------------------------------|
| Standards                       |              |               | IEC/EN 60947, VDE 0660, UL, CSA |
| Lifespan, mechanical            |              |               |                                 |
| AC operated                     | Operations   | $\times 10^6$ | 10                              |
| Operating frequency, mechanical |              |               |                                 |
| AC operated                     | Operations/h |               | 3000                            |

|                                                                       |                                     |                 |                                                                                    |
|-----------------------------------------------------------------------|-------------------------------------|-----------------|------------------------------------------------------------------------------------|
| Climatic proofing                                                     |                                     |                 | Damp heat, constant, to IEC 60068-2-78<br>Damp heat, cyclic, to IEC 60068-2-30     |
| Ambient temperature                                                   |                                     |                 |                                                                                    |
| Open                                                                  |                                     | °C              | -25 - +60                                                                          |
| Enclosed                                                              |                                     | °C              | - 25 - 40                                                                          |
| Storage                                                               |                                     | °C              | - 40 - 80                                                                          |
| Mounting position                                                     |                                     |                 |  |
| Mechanical shock resistance (IEC/EN 60068-2-27)                       |                                     |                 |                                                                                    |
| Half-sinusoidal shock, 10 ms                                          |                                     |                 |                                                                                    |
| Main contacts                                                         |                                     |                 |                                                                                    |
| N/O contact                                                           |                                     | g               | 10                                                                                 |
| Auxiliary contacts                                                    |                                     |                 |                                                                                    |
| N/O contact                                                           |                                     | g               | 7                                                                                  |
| N/C contact                                                           |                                     | g               | 5                                                                                  |
| Mechanical shock resistance (IEC/EN 60068-2-27) when tabletop-mounted |                                     |                 |                                                                                    |
| Half-sinusoidal shock, 10 ms                                          |                                     |                 |                                                                                    |
| Main contacts                                                         |                                     |                 |                                                                                    |
| N/O contact                                                           |                                     | g               | 10                                                                                 |
| Auxiliary contacts                                                    |                                     |                 |                                                                                    |
| N/O contact                                                           |                                     | g               | 7                                                                                  |
| N/C contact                                                           |                                     | g               | 5                                                                                  |
| Degree of Protection                                                  |                                     |                 | IP00                                                                               |
| Protection against direct contact when actuated from front (EN 50274) |                                     |                 | Finger and back-of-hand proof                                                      |
| Weight                                                                |                                     |                 |                                                                                    |
| AC operated                                                           |                                     | kg              | 2.25                                                                               |
| Screw connector terminals                                             |                                     |                 |                                                                                    |
| Terminal capacity main cable                                          |                                     |                 |                                                                                    |
| Flexible with ferrule                                                 |                                     | mm <sup>2</sup> | 1 x (10 - 95)<br>2 x (10 - 70)                                                     |
| Stranded                                                              |                                     | mm <sup>2</sup> | 1 x (16 - 95)<br>2 x (16 - 70)                                                     |
| Solid or stranded                                                     |                                     | AWG             | single 8...3/0, double 8...2/0                                                     |
| Flat conductor                                                        | Lamellenzahl<br>x Breite x<br>Dicke | mm              | 2 x (6 x 16 x 0.8)                                                                 |
| Stripping length                                                      |                                     | mm              | 24                                                                                 |
| Terminal screw                                                        |                                     |                 | M10                                                                                |
| Tightening torque                                                     |                                     | Nm              | 14                                                                                 |
| Tool                                                                  |                                     |                 |                                                                                    |
| Hexagon socket-head spanner                                           | SW                                  | mm              | 5                                                                                  |
| Terminal capacity control circuit cables                              |                                     |                 |                                                                                    |
| Solid                                                                 |                                     | mm <sup>2</sup> | 1 x (0.75 - 4)<br>2 x (0.75 - 2.5)                                                 |
| Flexible with ferrule                                                 |                                     | mm <sup>2</sup> | 1 x (0.75 - 2.5)<br>2 x (0.75 - 2.5)                                               |
| Solid or stranded                                                     |                                     | AWG             | 18 - 14                                                                            |
| Stripping length                                                      |                                     | mm              | 10                                                                                 |
| Terminal screw                                                        |                                     |                 | M3.5                                                                               |
| Tightening torque                                                     |                                     | Nm              | 1.2                                                                                |
| Tool                                                                  |                                     |                 |                                                                                    |
| Pozidriv screwdriver                                                  |                                     | Size            | 2                                                                                  |
| Standard screwdriver                                                  |                                     | mm              | 0.8 x 5.5<br>1 x 6                                                                 |

## Main conducting paths

|                                        |                  |      |       |
|----------------------------------------|------------------|------|-------|
| Rated impulse withstand voltage        | U <sub>imp</sub> | V AC | 8000  |
| 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 | 690   |
| between the contacts                   |                  | V AC | 690   |
| Making capacity (p.f. to IEC/EN 60947) |                  |      |       |
|                                        | Up to 690 V      | A    | 2100  |
| Breaking capacity                      |                  |      |       |
| 220 V 230 V                            |                  | A    | 1500  |
| 380 V 400 V                            |                  | A    | 1500  |
| 500 V                                  |                  | A    | 1500  |
| 660 V 690 V                            |                  | A    | 1320  |
| Short-circuit rating                   |                  |      |       |
| Short-circuit protection maximum fuse  |                  |      |       |
| Type “2” coordination                  |                  |      |       |
| 400 V                                  | gG/gL 500 V      | A    | 250   |
| 690 V                                  | gG/gL 690 V      | A    | 250   |
| Type “1” coordination                  |                  |      |       |
| 400 V                                  | gG/gL 500 V      | A    | 250   |
| 690 V                                  | gG/gL 690 V      | A    | 250   |

## AC

|                                                           |                                  |     |     |
|-----------------------------------------------------------|----------------------------------|-----|-----|
| AC-1                                                      |                                  |     |     |
| Rated operational current                                 |                                  |     |     |
| Conventional free air thermal current, 3 pole, 50 - 60 Hz |                                  |     |     |
| Open                                                      |                                  |     |     |
| at 40 °C                                                  | I <sub>th</sub> = I <sub>e</sub> | A   | 225 |
| at 50 °C                                                  | I <sub>th</sub> = I <sub>e</sub> | A   | 200 |
| at 55 °C                                                  | I <sub>th</sub> = I <sub>e</sub> | A   | 190 |
| at 60 °C                                                  | I <sub>th</sub> = I <sub>e</sub> | A   | 185 |
| enclosed                                                  | I <sub>th</sub>                  | A   | 166 |
| Conventional free air thermal current, 1 pole             |                                  |     |     |
| open                                                      | I <sub>th</sub>                  | A   | 460 |
| enclosed                                                  | I <sub>th</sub>                  | A   | 415 |
| AC-3                                                      |                                  |     |     |
| Rated operational current                                 |                                  |     |     |
| Open, 3-pole: 50 – 60 Hz                                  |                                  |     |     |
| 220 V 230 V                                               | I <sub>e</sub>                   | A   | 170 |
| 240 V                                                     | I <sub>e</sub>                   | A   | 170 |
| 380 V 400 V                                               | I <sub>e</sub>                   | A   | 170 |
| 415 V                                                     | I <sub>e</sub>                   | A   | 170 |
| 440V                                                      | I <sub>e</sub>                   | A   | 170 |
| 500 V                                                     | I <sub>e</sub>                   | A   | 170 |
| 660 V 690 V                                               | I <sub>e</sub>                   | A   | 100 |
| 380 V 400 V                                               | I <sub>e</sub>                   | A   | 170 |
| Motor rating                                              | P                                | kWh |     |
| 220 V 230 V                                               | P                                | kW  | 52  |
| 240V                                                      | P                                | kW  | 57  |
| 380 V 400 V                                               | P                                | kW  | 90  |
| 415 V                                                     | P                                | kW  | 100 |
| 440 V                                                     | P                                | kW  | 105 |
| 500 V                                                     | P                                | kW  | 120 |

|                          |                |     |    |
|--------------------------|----------------|-----|----|
| 660 V 690 V              | P              | kW  | 96 |
| AC-4                     |                |     |    |
| Open, 3-pole: 50 – 60 Hz |                |     |    |
| 220 V 230 V              | I <sub>e</sub> | A   | 65 |
| 240 V                    | I <sub>e</sub> | A   | 65 |
| 380 V 400 V              | I <sub>e</sub> | A   | 65 |
| 415 V                    | I <sub>e</sub> | A   | 65 |
| 440 V                    | I <sub>e</sub> | A   | 65 |
| 500 V                    | I <sub>e</sub> | A   | 65 |
| 660 V 690 V              | I <sub>e</sub> | A   | 50 |
| Motor rating             | P              | kWh |    |
| 220 V 230 V              | P              | kW  | 20 |
| 240 V                    | P              | kW  | 22 |
| 380 V 400 V              | P              | kW  | 33 |
| 415 V                    | P              | kW  | 39 |
| 440 V                    | P              | kW  | 41 |
| 500 V                    | P              | kW  | 47 |
| 660 V 690 V              | P              | kW  | 48 |

### DC

|                                 |                |   |     |
|---------------------------------|----------------|---|-----|
| Rated operational current, open |                |   |     |
| DC-1                            |                |   |     |
| 60 V                            | I <sub>e</sub> | A | 160 |
| 110 V                           | I <sub>e</sub> | A | 160 |
| 220 V                           | I <sub>e</sub> | A | 90  |

### Current heat loss

|                                                   |  |    |      |
|---------------------------------------------------|--|----|------|
| 3 pole, at I <sub>th</sub> (60°)                  |  | W  | 48.7 |
| Current heat loss at I <sub>e</sub> to AC-3/400 V |  | W  | 41.1 |
| Impedance per pole                                |  | mΩ | 0.6  |

### Magnet systems

|                                                                                            |          |                  |            |
|--------------------------------------------------------------------------------------------|----------|------------------|------------|
| Voltage tolerance                                                                          |          |                  |            |
| AC operated                                                                                | Pick-up  | x U <sub>c</sub> | 0.8 - 1.15 |
| Drop-out voltage AC operated                                                               | Drop-out | x U <sub>c</sub> | 0.25 - 0.6 |
| Power consumption of the coil in a cold state and 1.0 x U <sub>S</sub>                     |          |                  |            |
| 50 Hz                                                                                      | Pick-up  | VA               | 180        |
| 50 Hz                                                                                      | Sealing  | VA               | 3.1        |
| 50 Hz                                                                                      | Sealing  | W                | 2.3        |
| 60 Hz                                                                                      | Pick-up  | VA               | 170        |
| 60 Hz                                                                                      | Sealing  | VA               | 3.1        |
| 60 Hz                                                                                      | Sealing  | W                | 2.3        |
| Duty factor                                                                                |          | % DF             | 100        |
| Changeover time at 100 % U <sub>S</sub> (recommended value)                                |          |                  |            |
| Main contacts                                                                              |          |                  |            |
| AC operated                                                                                |          |                  |            |
| Closing delay                                                                              |          | ms               | 28 - 33    |
| Opening delay                                                                              |          | ms               | 35 - 41    |
| Arcing time                                                                                |          | ms               | 15         |
| Permissible residual current with actuation of A1 - A2 by the electronics (with 0 signal). |          | mA               | ≤ 1        |

### Electromagnetic compatibility (EMC)

|                       |  |  |               |
|-----------------------|--|--|---------------|
| Emitted interference  |  |  | to EN 60947-1 |
| Interference immunity |  |  | to EN 60947-1 |

### Rating data for approved types

|                      |  |    |    |
|----------------------|--|----|----|
| Switching capacity   |  |    |    |
| Maximum motor rating |  |    |    |
| Three-phase          |  |    |    |
| 200 V                |  | HP | 50 |

|                                                           |      |                 |
|-----------------------------------------------------------|------|-----------------|
| 208 V                                                     |      |                 |
| 230 V<br>240 V                                            | HP   | 60              |
| 460 V<br>480 V                                            | HP   | 125             |
| 575 V<br>600 V                                            | HP   | 125             |
| Single-phase                                              |      |                 |
| 115 V<br>120 V                                            | HP   | 10              |
| 230 V<br>240 V                                            | HP   | 30              |
| General use                                               | A    | 225             |
| Short Circuit Current Rating                              | SCCR |                 |
| Basic Rating                                              |      |                 |
| SCCR                                                      | kA   | 10              |
| max. Fuse                                                 | A    | 600             |
| max. CB                                                   | A    | 600             |
| 480 V High Fault                                          |      |                 |
| SCCR (fuse)                                               | kA   | 30/100          |
| max. Fuse                                                 | A    | 300/300 Class J |
| SCCR (CB)                                                 | kA   | 65              |
| max. CB                                                   | A    | 250             |
| 600 V High Fault                                          |      |                 |
| SCCR (fuse)                                               | kA   | 30/100          |
| max. Fuse                                                 | A    | 300/600 Class J |
| SCCR (CB)                                                 | kA   | 30              |
| max. CB                                                   | A    | 350             |
| Special Purpose Ratings                                   |      |                 |
| Electrical Discharge Lamps (Ballast)                      |      |                 |
| 480V 60Hz 3phase, 277V 60Hz 1phase                        | A    | 160             |
| 600V 60Hz 3phase, 347V 60Hz 1phase                        | A    | 160             |
| Incandescent Lamps (Tungsten)                             |      |                 |
| 480V 60Hz 3phase, 277V 60Hz 1phase                        | A    | 160             |
| 600V 60Hz 3phase, 347V 60Hz 1phase                        | A    | 160             |
| Resistance Air Heating                                    |      |                 |
| 480V 60Hz 3phase, 277V 60Hz 1phase                        | A    | 160             |
| 600V 60Hz 3phase, 347V 60Hz 1phase                        | A    | 160             |
| Refrigeration Control (CSA only)                          |      |                 |
| LRA 480V 60Hz 3phase                                      | A    | 540             |
| FLA 480V 60Hz 3phase                                      | A    | 90              |
| LRA 600V 60Hz 3phase                                      | A    | 540             |
| FLA 600V 60Hz 3phase                                      | A    | 90              |
| Definite Purpose Ratings (100,000 cycles acc. to UL 1995) |      |                 |
| LRA 480V 60Hz 3phase                                      | A    | 1020            |
| FLA 480V 60Hz 3phase                                      | A    | 170             |
| Elevator Control                                          |      |                 |
| 200V 60Hz 3phase                                          | HP   | 30              |
| 200V 60Hz 3phase                                          | A    | 92              |
| 240V 60Hz 3phase                                          | HP   | 40              |
| 240V 60Hz 3phase                                          | A    | 104             |
| 480V 60Hz 3phase                                          | HP   | 75              |
| 480V 60Hz 3phase                                          | A    | 96              |
| 600V 60Hz 3phase                                          | HP   | 100             |
| 600V 60Hz 3phase                                          | A    | 99              |

## Design verification as per IEC/EN 61439

|                                                                                                                        |                   |    |                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------|-------------------|----|----------------------------------------------------------------------------------------------------------------------------------|
| Technical data for design verification                                                                                 |                   |    |                                                                                                                                  |
| Rated operational current for specified heat dissipation                                                               | I <sub>n</sub>    | A  | 170                                                                                                                              |
| Heat dissipation per pole, current-dependent                                                                           | P <sub>vid</sub>  | W  | 13.7                                                                                                                             |
| Equipment heat dissipation, current-dependent                                                                          | P <sub>vid</sub>  | W  | 41.1                                                                                                                             |
| Static heat dissipation, non-current-dependent                                                                         | P <sub>vs</sub>   | W  | 2.3                                                                                                                              |
| Heat dissipation capacity                                                                                              | P <sub>diss</sub> | W  | 0                                                                                                                                |
| Operating ambient temperature min.                                                                                     |                   | °C | -25                                                                                                                              |
| Operating ambient temperature max.                                                                                     |                   | °C | 60                                                                                                                               |
| IEC/EN 61439 design verification                                                                                       |                   |    |                                                                                                                                  |
| 10.2 Strength of materials and parts                                                                                   |                   |    |                                                                                                                                  |
| 10.2.2 Corrosion resistance                                                                                            |                   |    | Meets the product standard's requirements.                                                                                       |
| 10.2.3.1 Verification of thermal stability of enclosures                                                               |                   |    | Meets the product standard's requirements.                                                                                       |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat                                             |                   |    | Meets the product standard's requirements.                                                                                       |
| 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects |                   |    | Meets the product standard's requirements.                                                                                       |
| 10.2.4 Resistance to ultra-violet (UV) radiation                                                                       |                   |    | Meets the product standard's requirements.                                                                                       |
| 10.2.5 Lifting                                                                                                         |                   |    | Does not apply, since the entire switchgear needs to be evaluated.                                                               |
| 10.2.6 Mechanical impact                                                                                               |                   |    | Does not apply, since the entire switchgear needs to be evaluated.                                                               |
| 10.2.7 Inscriptions                                                                                                    |                   |    | Meets the product standard's requirements.                                                                                       |
| 10.3 Degree of protection of ASSEMBLIES                                                                                |                   |    | Does not apply, since the entire switchgear needs to be evaluated.                                                               |
| 10.4 Clearances and creepage distances                                                                                 |                   |    | Meets the product standard's requirements.                                                                                       |
| 10.5 Protection against electric shock                                                                                 |                   |    | Does not apply, since the entire switchgear needs to be evaluated.                                                               |
| 10.6 Incorporation of switching devices and components                                                                 |                   |    | Does not apply, since the entire switchgear needs to be evaluated.                                                               |
| 10.7 Internal electrical circuits and connections                                                                      |                   |    | Is the panel builder's responsibility.                                                                                           |
| 10.8 Connections for external conductors                                                                               |                   |    | Is the panel builder's responsibility.                                                                                           |
| 10.9 Insulation properties                                                                                             |                   |    |                                                                                                                                  |
| 10.9.2 Power-frequency electric strength                                                                               |                   |    | Is the panel builder's responsibility.                                                                                           |
| 10.9.3 Impulse withstand voltage                                                                                       |                   |    | Is the panel builder's responsibility.                                                                                           |
| 10.9.4 Testing of enclosures made of insulating material                                                               |                   |    | Is the panel builder's responsibility.                                                                                           |
| 10.10 Temperature rise                                                                                                 |                   |    | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| 10.11 Short-circuit rating                                                                                             |                   |    | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| 10.12 Electromagnetic compatibility                                                                                    |                   |    | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| 10.13 Mechanical function                                                                                              |                   |    | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

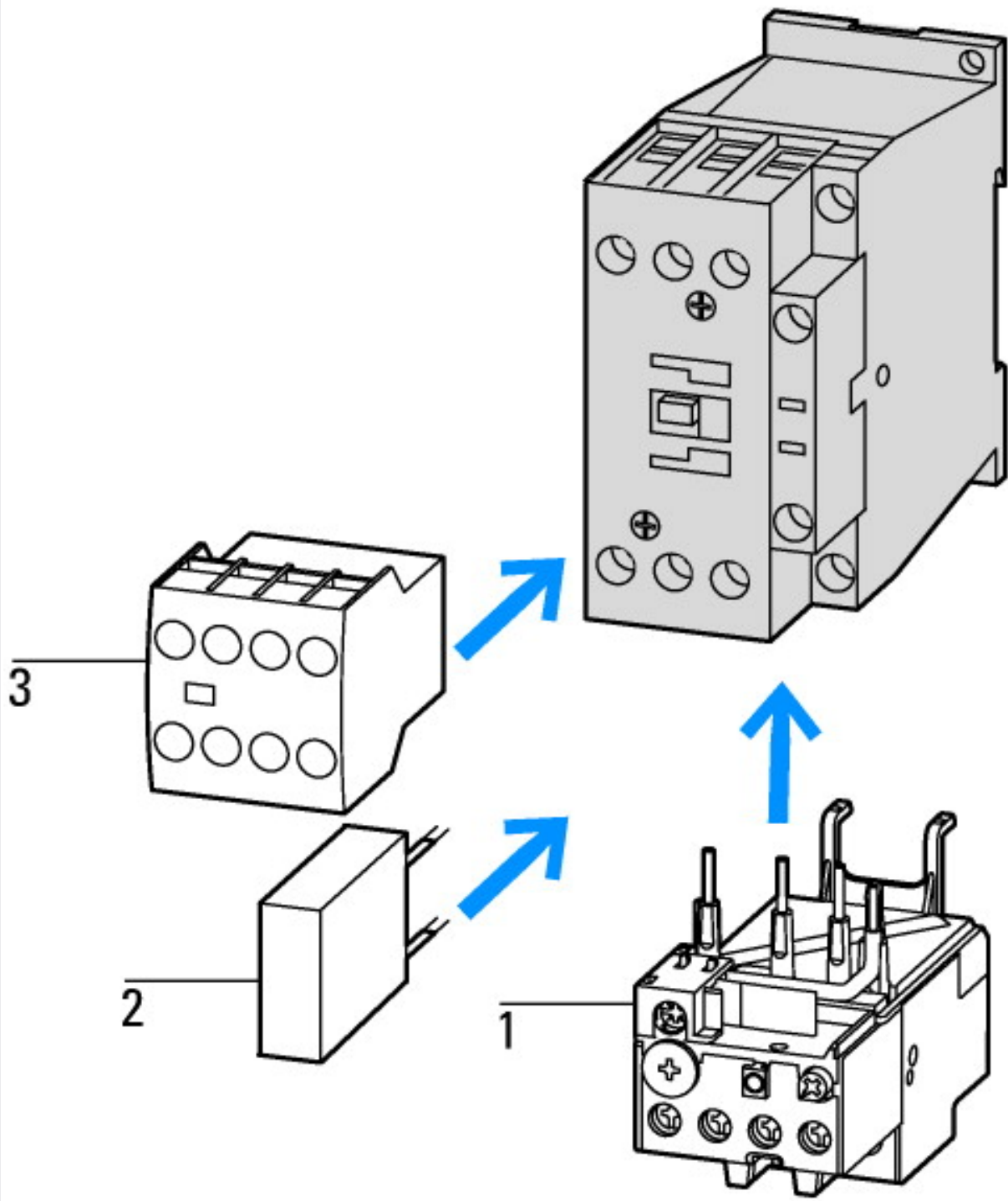
## Technical data ETIM 6.0

|                                                                                                                                                                                    |  |    |                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----|------------------|
| 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 (ecI@ss8.1-27-37-10-03 [AAB718012]) |  |    |                  |
| Rated control supply voltage U <sub>s</sub> at AC 50HZ                                                                                                                             |  | V  | 24 - 24          |
| Rated control supply voltage U <sub>s</sub> at AC 60HZ                                                                                                                             |  | V  | 24 - 24          |
| Rated control supply voltage U <sub>s</sub> at DC                                                                                                                                  |  | V  | 0 - 0            |
| Voltage type for actuating                                                                                                                                                         |  |    | AC               |
| Rated operation current I <sub>e</sub> at AC-1, 400 V                                                                                                                              |  | A  | 225              |
| Rated operation current I <sub>e</sub> at AC-3, 400 V                                                                                                                              |  | A  | 170              |
| Rated operation power at AC-3, 400 V                                                                                                                                               |  | kW | 90               |
| Rated operation current I <sub>e</sub> at AC-4, 400 V                                                                                                                              |  | A  | 65               |
| Rated operation power I <sub>e</sub> at AC-4, 400 V                                                                                                                                |  | kW | 33               |
| Modular version                                                                                                                                                                    |  |    | No               |
| Number of auxiliary contacts as normally open contact                                                                                                                              |  |    | 0                |
| 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                |

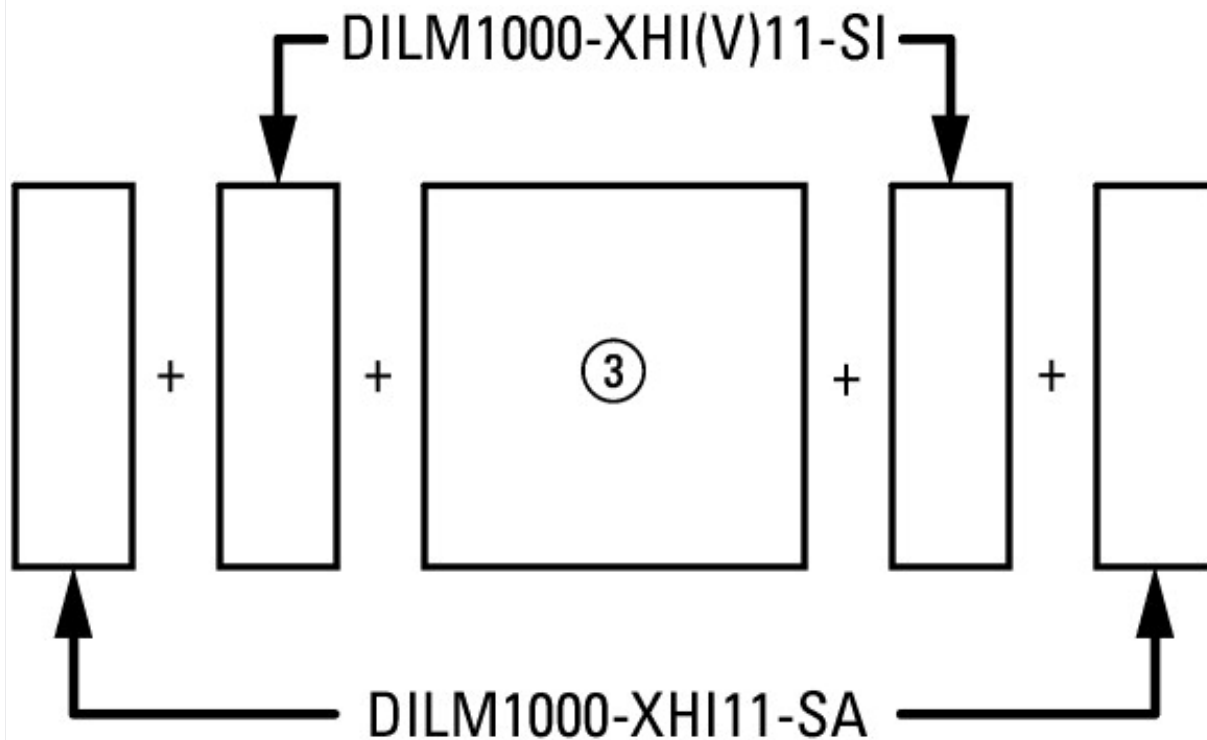
Approvals

|                                      |  |                                                                          |
|--------------------------------------|--|--------------------------------------------------------------------------|
| Product Standards                    |  | IEC/EN 60947-4-1; UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; CE marking |
| UL File No.                          |  | E29096                                                                   |
| UL Category Control No.              |  | NLDX                                                                     |
| CSA File No.                         |  | 012528                                                                   |
| CSA Class No.                        |  | 2411-03, 3211-04                                                         |
| North America Certification          |  | UL listed, CSA certified                                                 |
| Specially designed for North America |  | No                                                                       |

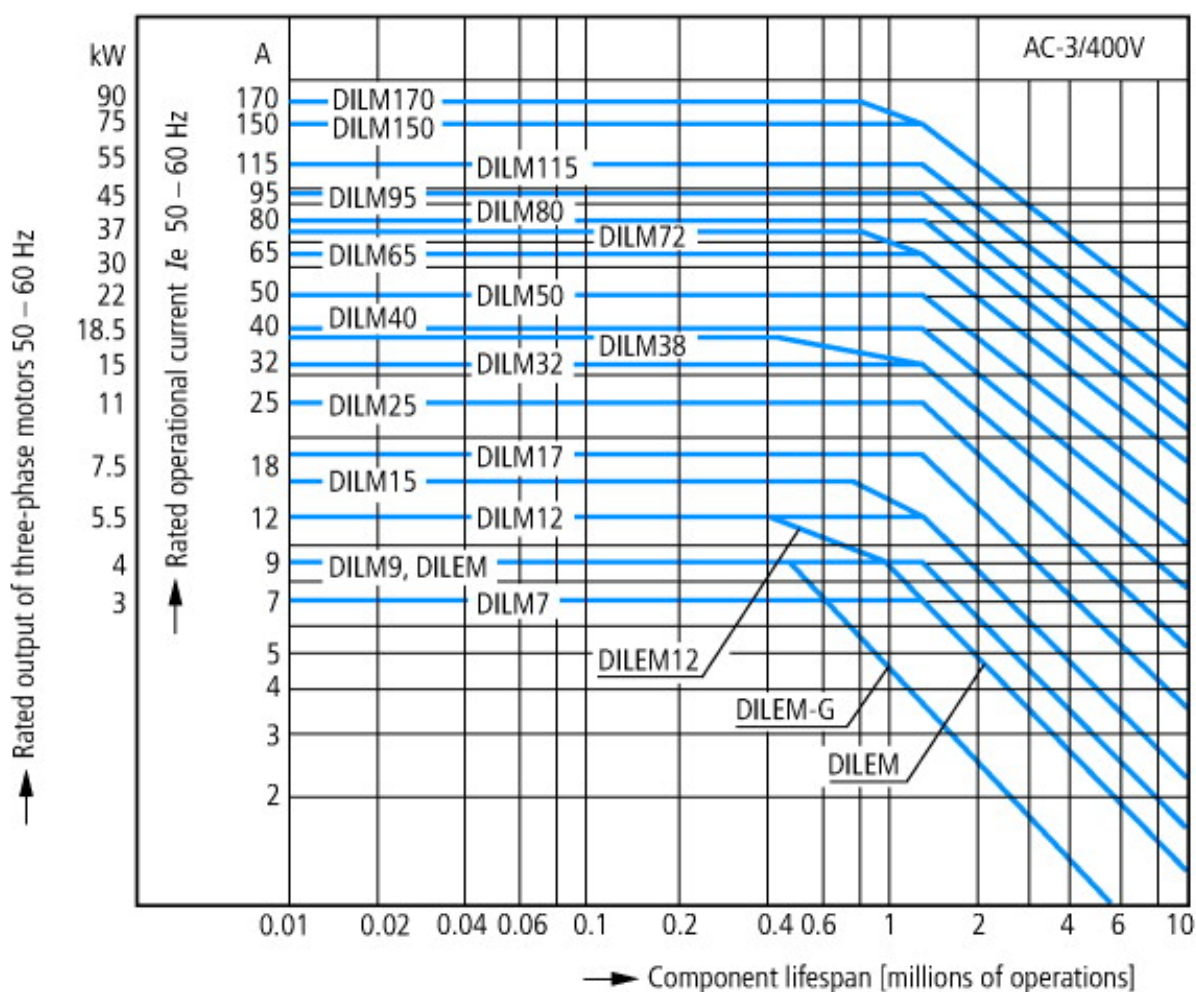
Characteristics



- 1: Overload relay
- 2: Suppressor
- 3: Auxiliary contact modules

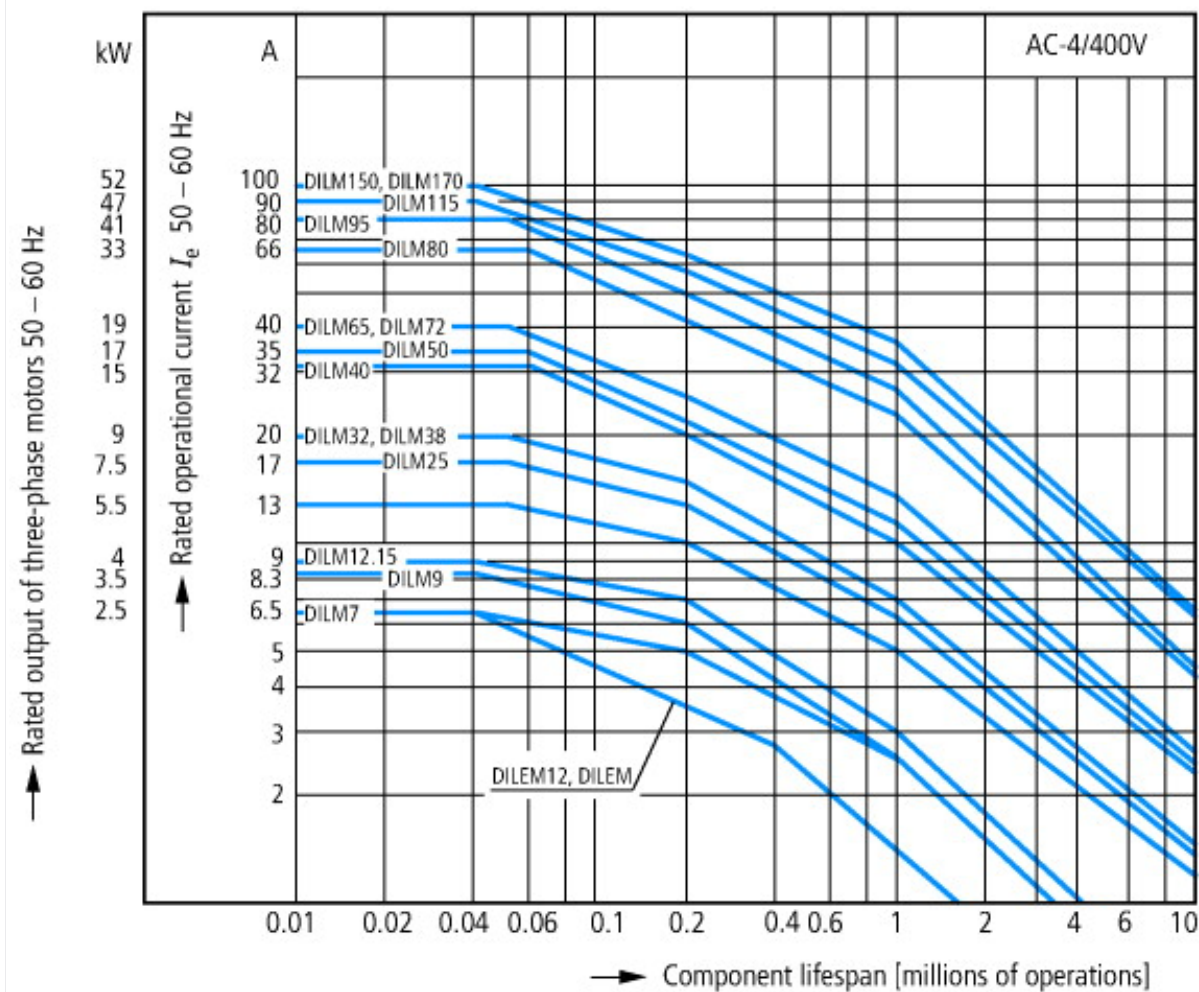


on the side: 2 x DILM820-XHI11(V)-SI; 2 x DILM820-XHI11-SA



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 conditions for non-motor consumers, 3 pole, 4 pole

Operating characteristics

Non inductive and slightly inductive loads

Electrical characteristics

Switch on: 1 x rated operational current

Switch off: 1 x rated operational current

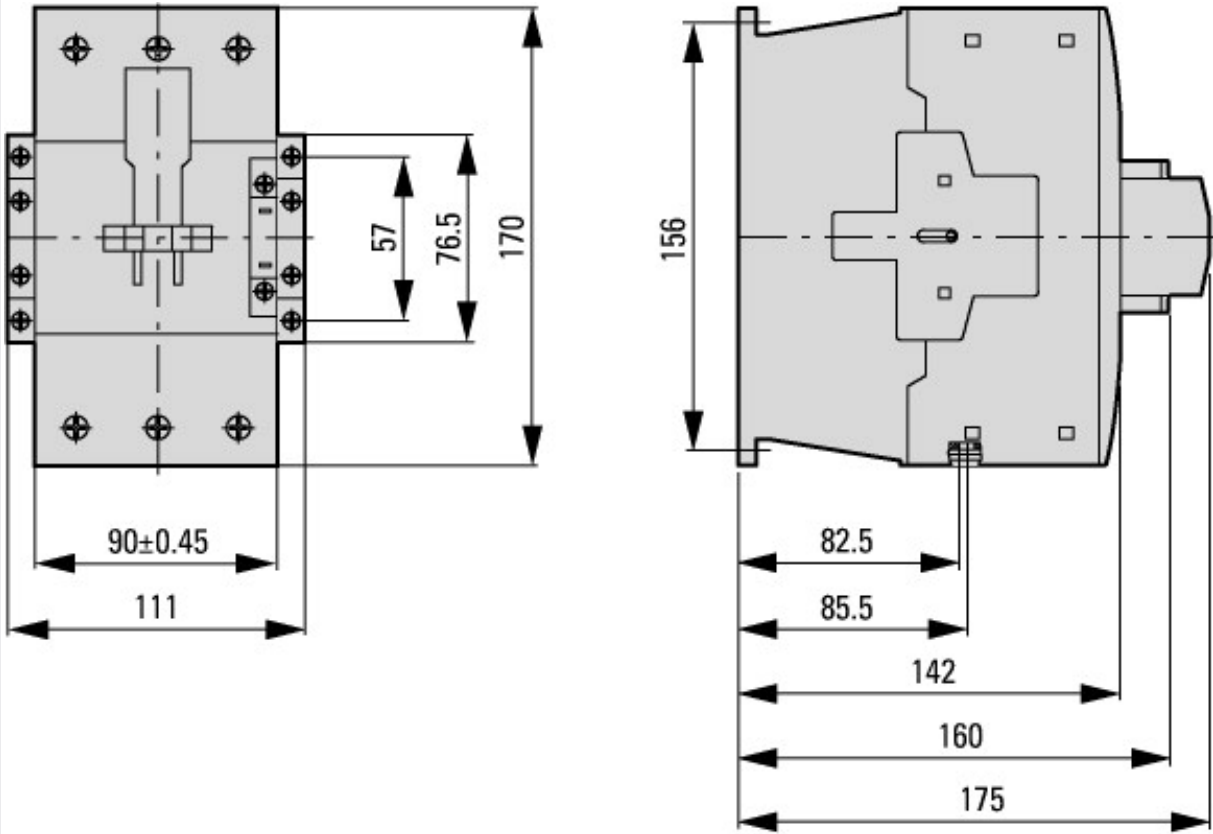
Utilization category

100 % AC-1

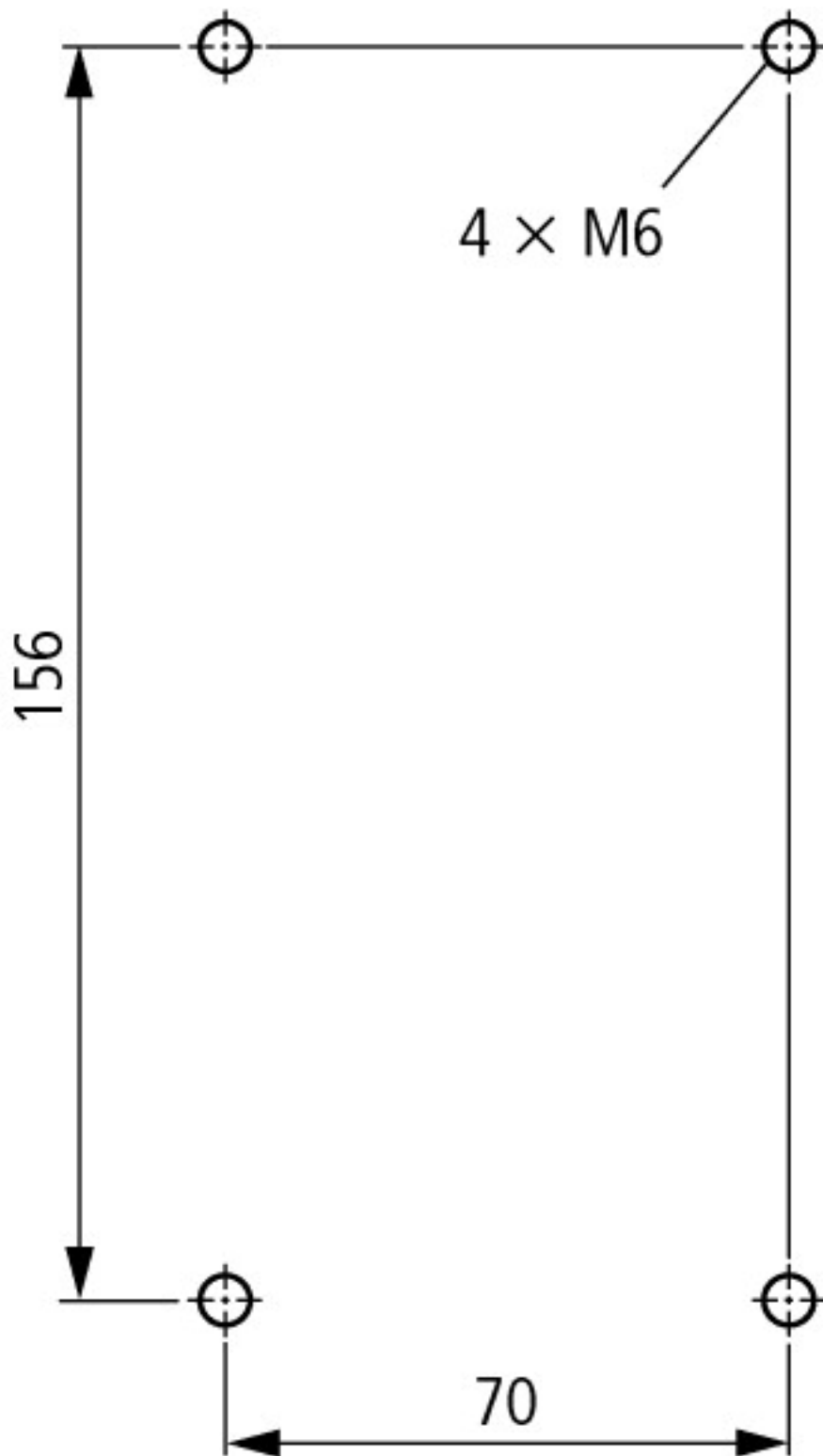
Typical examples of application

Electric heat

Dimensions



Contactor with auxiliary contact module



distance at side to earthed parts: 10 mm

DILM80...DILM170  
DILMC80...DILMC150  
DILMF80...DILMF150

## Additional product information (links)

### IL03407039Z (AWA2100-2286) Contactors

|                                                                                              |                                                                                                                                                                       |
|----------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IL03407039Z (AWA2100-2286) Contactors                                                        | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407039Z2018_05.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407039Z2018_05.pdf</a> |
| Switchgear of Power Factor Correction Systems                                                | <a href="http://www.moeller.net/binary/ver_techpapers/ver934en.pdf">http://www.moeller.net/binary/ver_techpapers/ver934en.pdf</a>                                     |
| X-Start - Modern Switching Installations Efficiently Fitted and Wired Securely               | <a href="http://www.moeller.net/binary/ver_techpapers/ver938en.pdf">http://www.moeller.net/binary/ver_techpapers/ver938en.pdf</a>                                     |
| Mirror Contacts for Highly-Reliable Information Relating to Safety-Related Control Functions | <a href="http://www.moeller.net/binary/ver_techpapers/ver944en.pdf">http://www.moeller.net/binary/ver_techpapers/ver944en.pdf</a>                                     |
| Effect of the Cabel Capacitance of Long Control Cables on the Actuation of Contactors        | <a href="http://www.moeller.net/binary/ver_techpapers/ver949en.pdf">http://www.moeller.net/binary/ver_techpapers/ver949en.pdf</a>                                     |

|                                                                                                |                                                                                                                                   |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Motor starters and "Special Purpose Ratings" for the North American market                     | <a href="http://www.moeller.net/binary/ver_techpapers/ver953en.pdf">http://www.moeller.net/binary/ver_techpapers/ver953en.pdf</a> |
| Switchgear for Luminaires                                                                      | <a href="http://www.moeller.net/binary/ver_techpapers/ver955en.pdf">http://www.moeller.net/binary/ver_techpapers/ver955en.pdf</a> |
| Standard Compliant and Functionally Safe Engineering Design with Mechanical Auxiliary Contacts | <a href="http://www.moeller.net/binary/ver_techpapers/ver956en.pdf">http://www.moeller.net/binary/ver_techpapers/ver956en.pdf</a> |
| The Interaction of Contactors with PLCs                                                        | <a href="http://www.moeller.net/binary/ver_techpapers/ver957en.pdf">http://www.moeller.net/binary/ver_techpapers/ver957en.pdf</a> |
| Busbar Component Adapters for modern Industrial control panels                                 | <a href="http://www.moeller.net/binary/ver_techpapers/ver960en.pdf">http://www.moeller.net/binary/ver_techpapers/ver960en.pdf</a> |