

**Contactor, 3 pole, 380 V 400 V 37 kW, 24 V 50/60 Hz, AC operation, Screw terminals**

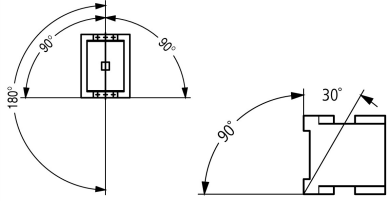
**Part no.** DILM72(24V50/60HZ)  
**Catalog No.** 109197  
**Alternate Catalog No.** XTCE072D00T

## 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                                                                                                                                                                                                                     |
| <b>Rated operational current</b>                          |                                  |    |                                                                                                                                                                                                                            |
| AC-3                                                      |                                  |    |                                                                                                                                                                                                                            |
| Notes                                                     |                                  |    | At maximum permissible ambient temperature (open.)                                                                                                                                                                         |
| 380 V 400 V                                               | I <sub>e</sub>                   | A  | 72                                                                                                                                                                                                                         |
| AC-1                                                      |                                  |    |                                                                                                                                                                                                                            |
| Conventional free air thermal current, 3 pole, 50 - 60 Hz |                                  |    |                                                                                                                                                                                                                            |
| Open                                                      |                                  |    |                                                                                                                                                                                                                            |
| at 40 °C                                                  | I <sub>th</sub> = I <sub>e</sub> | A  | 98                                                                                                                                                                                                                         |
| enclosed                                                  | I <sub>th</sub>                  | A  | 72                                                                                                                                                                                                                         |
| Conventional free air thermal current, 1 pole             |                                  |    |                                                                                                                                                                                                                            |
| open                                                      | I <sub>th</sub>                  | A  | 200                                                                                                                                                                                                                        |
| enclosed                                                  | I <sub>th</sub>                  | A  | 180                                                                                                                                                                                                                        |
| <b>Max. rating for three-phase motors, 50 - 60 Hz</b>     |                                  |    |                                                                                                                                                                                                                            |
| AC-3                                                      |                                  |    |                                                                                                                                                                                                                            |
| 220 V 230 V                                               | P                                | kW | 22                                                                                                                                                                                                                         |
| 380 V 400 V                                               | P                                | kW | 37                                                                                                                                                                                                                         |
| 660 V 690 V                                               | P                                | kW | 35                                                                                                                                                                                                                         |
| AC-4                                                      |                                  |    |                                                                                                                                                                                                                            |
| 220 V 230 V                                               | P                                | kW | 7                                                                                                                                                                                                                          |
| 380 V 400 V                                               | P                                | kW | 12                                                                                                                                                                                                                         |
| 660 V 690 V                                               | P                                | kW | 17                                                                                                                                                                                                                         |
| Contact sequence                                          |                                  |    |                                                                                                                                                                                                                            |
| Can be combined with auxiliary contact                    |                                  |    | DILM150-XHI(V)...<br>DILM1000-XHI(V)...                                                                                                                                                                                    |
| Actuating voltage                                         |                                  |    | 24 V 50/60 Hz                                                                                                                                                                                                              |
| Voltage AC/DC                                             |                                  |    | AC operation                                                                                                                                                                                                               |
| Connection to SmartWire-DT                                |                                  |    | no                                                                                                                                                                                                                         |
| <b>Instructions</b>                                       |                                  |    | Contacts to EN 50 012.<br>Observe electrical lifespan.                                                                                                                                                                     |
| Frame size                                                |                                  |    | 3                                                                                                                                                                                                                          |

## Technical data

|                                 |            |                   |                                 |
|---------------------------------|------------|-------------------|---------------------------------|
| Standards                       |            |                   | IEC/EN 60947, VDE 0660, UL, CSA |
| Lifespan, mechanical            |            |                   |                                 |
| AC operated                     | Operations | x 10 <sup>6</sup> | 10                              |
| Operating frequency, mechanical |            |                   |                                 |

|                                                                       |                                     |                                                                                    |
|-----------------------------------------------------------------------|-------------------------------------|------------------------------------------------------------------------------------|
| AC operated                                                           | Operations/h                        | 5000                                                                               |
| 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                                                      |
| Altitude                                                              | m                                   | Max. 2000                                                                          |
| Weight                                                                |                                     |                                                                                    |
| AC operated                                                           | kg                                  | 0.872                                                                              |
| Screw connector terminals                                             |                                     |                                                                                    |
| Terminal capacity main cable                                          |                                     |                                                                                    |
| Solid                                                                 | mm <sup>2</sup>                     | 1 x (0.75 - 16)<br>2 x (0.75 - 16)                                                 |
| Flexible with ferrule                                                 | mm <sup>2</sup>                     | 1 x (0.75 - 35)<br>2 x (0.75 - 25)                                                 |
| Stranded                                                              | mm <sup>2</sup>                     | 1 x (16 - 50)<br>2 x (16 - 35)                                                     |
| Solid or stranded                                                     | AWG                                 | single 14 - 1, double 14 - 2                                                       |
| Flat conductor                                                        | Lamellenzahl<br>x Breite x<br>Dicke | mm 2 x (6 x 9 x 0.8)                                                               |
| Stripping length                                                      | mm                                  | 14                                                                                 |
| Terminal screw                                                        |                                     | M6                                                                                 |
| Tightening torque                                                     | Nm                                  | 3.3                                                                                |
| Tool                                                                  |                                     |                                                                                    |
| Pozidriv screwdriver                                                  | Size                                | 2                                                                                  |
| Standard screwdriver                                                  | mm                                  | 0.8 x 5.5<br>1 x 6                                                                 |
| 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        | $U_{imp}$   | V AC | 8000  |
| Overvoltage category/pollution degree  |             |      | III/3 |
| Rated insulation voltage               | $U_i$       | V AC | 690   |
| Rated operational voltage              | $U_e$       | V AC | 690   |
| Safe isolation to EN 61140             |             |      |       |
| between coil and contacts              |             | V AC | 440   |
| between the contacts                   |             | V AC | 440   |
| Making capacity (p.f. to IEC/EN 60947) |             |      |       |
|                                        | Up to 690 V | A    | 910   |
| Breaking capacity                      |             |      |       |
| 220 V 230 V                            |             | A    | 650   |
| 380 V 400 V                            |             | A    | 650   |
| 500 V                                  |             | A    | 650   |
| 660 V 690 V                            |             | A    | 370   |
| Short-circuit rating                   |             |      |       |
| Short-circuit protection maximum fuse  |             |      |       |
| Type “2” coordination                  |             |      |       |
| 400 V                                  | gG/gL 500 V | A    | 125   |
| 690 V                                  | gG/gL 690 V | A    | 80    |
| Type “1” coordination                  |             |      |       |
| 400 V                                  | gG/gL 500 V | A    | 250   |
| 690 V                                  | gG/gL 690 V | A    | 100   |

## 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   | 98                                                 |
| at 50 °C                                                  | $I_{th} = I_e$ | A   | 88                                                 |
| at 55 °C                                                  | $I_{th} = I_e$ | A   | 83                                                 |
| at 60 °C                                                  | $I_{th} = I_e$ | A   | 80                                                 |
| enclosed                                                  | $I_{th}$       | A   | 72                                                 |
| Conventional free air thermal current, 1 pole             |                |     |                                                    |
| open                                                      | $I_{th}$       | A   | 200                                                |
| enclosed                                                  | $I_{th}$       | A   | 180                                                |
| AC-3                                                      |                |     |                                                    |
| Rated operational current                                 |                |     |                                                    |
| Open, 3-pole: 50 – 60 Hz                                  |                |     |                                                    |
| Notes                                                     |                |     | At maximum permissible ambient temperature (open.) |
| 220 V 230 V                                               | $I_e$          | A   | 72                                                 |
| 240 V                                                     | $I_e$          | A   | 72                                                 |
| 380 V 400 V                                               | $I_e$          | A   | 72                                                 |
| 415 V                                                     | $I_e$          | A   | 72                                                 |
| 440V                                                      | $I_e$          | A   | 72                                                 |
| 500 V                                                     | $I_e$          | A   | 72                                                 |
| 660 V 690 V                                               | $I_e$          | A   | 37                                                 |
| Motor rating                                              | P              | kWh |                                                    |
| 220 V 230 V                                               | P              | kW  | 22                                                 |
| 240V                                                      | P              | kW  | 25                                                 |

|                                                                        |                |                   |                                                                                    |
|------------------------------------------------------------------------|----------------|-------------------|------------------------------------------------------------------------------------|
| 380 V 400 V                                                            | P              | kW                | 37                                                                                 |
| 415 V                                                                  | P              | kW                | 41                                                                                 |
| 440 V                                                                  | P              | kW                | 44                                                                                 |
| 500 V                                                                  | P              | kW                | 50                                                                                 |
| 660 V 690 V                                                            | P              | kW                | 35                                                                                 |
| AC-4                                                                   |                |                   |                                                                                    |
| Open, 3-pole: 50 – 60 Hz                                               |                |                   |                                                                                    |
| 220 V 230 V                                                            | I <sub>e</sub> | A                 | 25                                                                                 |
| 240 V                                                                  | I <sub>e</sub> | A                 | 25                                                                                 |
| 380 V 400 V                                                            | I <sub>e</sub> | A                 | 25                                                                                 |
| 415 V                                                                  | I <sub>e</sub> | A                 | 25                                                                                 |
| 440 V                                                                  | I <sub>e</sub> | A                 | 25                                                                                 |
| 500 V                                                                  | I <sub>e</sub> | A                 | 25                                                                                 |
| 660 V 690 V                                                            | I <sub>e</sub> | A                 | 20                                                                                 |
| Motor rating                                                           | P              | kWh               |                                                                                    |
| 220 V 230 V                                                            | P              | kW                | 7                                                                                  |
| 240 V                                                                  | P              | kW                | 7.5                                                                                |
| 380 V 400 V                                                            | P              | kW                | 12                                                                                 |
| 415 V                                                                  | P              | kW                | 13                                                                                 |
| 440 V                                                                  | P              | kW                | 14                                                                                 |
| 500 V                                                                  | P              | kW                | 16                                                                                 |
| 660 V 690 V                                                            | P              | kW                | 17                                                                                 |
| DC                                                                     |                |                   |                                                                                    |
| Rated operational current, open                                        |                |                   |                                                                                    |
| DC-1                                                                   |                |                   |                                                                                    |
| 60 V                                                                   | I <sub>e</sub> | A                 | 72                                                                                 |
| 110 V                                                                  | I <sub>e</sub> | A                 | 72                                                                                 |
| 220 V                                                                  | I <sub>e</sub> | A                 | 65                                                                                 |
| Current heat loss                                                      |                |                   |                                                                                    |
| 3 pole, at I <sub>th</sub> (60°)                                       |                | W                 | 25.9                                                                               |
| Current heat loss at I <sub>e</sub> to AC-3/400 V                      |                | W                 | 21                                                                                 |
| Impedance per pole                                                     |                | mΩ                | 1.9                                                                                |
| Magnet systems                                                         |                |                   |                                                                                    |
| Voltage tolerance                                                      |                |                   |                                                                                    |
| AC operated                                                            | Pick-up        | x U <sub>c</sub>  | 0.8 - 1.1                                                                          |
| Drop-out voltage AC operated                                           | Drop-out       | x U <sub>c</sub>  | 0.3 - 0.6                                                                          |
| Power consumption of the coil in a cold state and 1.0 x U <sub>S</sub> |                |                   |                                                                                    |
| 50/60 Hz                                                               | Pick-up        | VA                | 168<br>154                                                                         |
| 50/60 Hz                                                               | Sealing        | VA                | 22<br>14                                                                           |
| 50/60 Hz                                                               | Sealing        | W                 | 4.1                                                                                |
| Duty factor                                                            |                | % DF              | 100                                                                                |
| Changeover time at 100 % U <sub>S</sub> (recommended value)            |                |                   |                                                                                    |
| Main contacts                                                          |                |                   |                                                                                    |
| AC operated                                                            |                |                   |                                                                                    |
| Closing delay                                                          |                | ms                | 12 - 18                                                                            |
| Opening delay                                                          |                | ms                | 8 - 13                                                                             |
| Arcing time                                                            |                | ms                | 10                                                                                 |
| Lifespan, mechanical; Coil 50/60 Hz                                    |                | x 10 <sup>6</sup> | Mechanical lifespan at 50 Hz approx. 30% lower than under → Technical data general |
| 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<br>208 V                                            | HP   | 20              |  |
| 230 V<br>240 V                                            | HP   | 25              |  |
| 460 V<br>480 V                                            | HP   | 50              |  |
| 575 V<br>600 V                                            | HP   | 60              |  |
| Single-phase                                              |      |                 |  |
| 115 V<br>120 V                                            | HP   | 5               |  |
| 230 V<br>240 V                                            | HP   | 15              |  |
| General use                                               | A    | 88              |  |
| Short Circuit Current Rating                              | SCCR |                 |  |
| Basic Rating                                              |      |                 |  |
| SCCR                                                      | kA   | 10              |  |
| max. Fuse                                                 | A    | 250             |  |
| max. CB                                                   | A    | 250             |  |
| 480 V High Fault                                          |      |                 |  |
| SCCR (fuse)                                               | kA   | 30/100          |  |
| max. Fuse                                                 | A    | 250/150 Class J |  |
| SCCR (CB)                                                 | kA   | 65              |  |
| max. CB                                                   | A    | 100             |  |
| 600 V High Fault                                          |      |                 |  |
| SCCR (fuse)                                               | kA   | 30/100          |  |
| max. Fuse                                                 | A    | 250/150 Class J |  |
| SCCR (CB)                                                 | kA   | 30              |  |
| max. CB                                                   | A    | 250             |  |
| Special Purpose Ratings                                   |      |                 |  |
| Electrical Discharge Lamps (Ballast)                      |      |                 |  |
| 480V 60Hz 3phase, 277V 60Hz 1phase                        | A    | 88              |  |
| 600V 60Hz 3phase, 347V 60Hz 1phase                        | A    | 88              |  |
| Incandescent Lamps (Tungsten)                             |      |                 |  |
| 480V 60Hz 3phase, 277V 60Hz 1phase                        | A    | 88              |  |
| 600V 60Hz 3phase, 347V 60Hz 1phase                        | A    | 88              |  |
| Resistance Air Heating                                    |      |                 |  |
| 480V 60Hz 3phase, 277V 60Hz 1phase                        | A    | 88              |  |
| 600V 60Hz 3phase, 347V 60Hz 1phase                        | A    | 88              |  |
| Definite Purpose Ratings (100,000 cycles acc. to UL 1995) |      |                 |  |
| LRA 480V 60Hz 3phase                                      | A    | 432             |  |
| FLA 480V 60Hz 3phase                                      | A    | 72              |  |
| Elevator Control                                          |      |                 |  |
| 200V 60Hz 3phase                                          | HP   | 10              |  |
| 200V 60Hz 3phase                                          | A    | 32.2            |  |
| 240V 60Hz 3phase                                          | HP   | 15              |  |
| 240V 60Hz 3phase                                          | A    | 42              |  |
| 480V 60Hz 3phase                                          | HP   | 30              |  |
| 480V 60Hz 3phase                                          | A    | 40              |  |
| 600V 60Hz 3phase                                          | HP   | 40              |  |
| 600V 60Hz 3phase                                          | A    | 41              |  |

## Design verification as per IEC/EN 61439

|                                                          |                  |   |    |
|----------------------------------------------------------|------------------|---|----|
| Technical data for design verification                   |                  |   |    |
| Rated operational current for specified heat dissipation | I <sub>n</sub>   | A | 72 |
| Heat dissipation per pole, current-dependent             | P <sub>vid</sub> | W | 7  |

|                                                                                                                        |                   |    |                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------|-------------------|----|----------------------------------------------------------------------------------------------------------------------------------|
| Equipment heat dissipation, current-dependent                                                                          | P <sub>vid</sub>  | W  | 21                                                                                                                               |
| Static heat dissipation, non-current-dependent                                                                         | P <sub>vs</sub>   | W  | 4.1                                                                                                                              |
| 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 8.0

|                                                                                                                                                                                       |  |    |                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----|------------------|
| 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@ss10.0.1-27-37-10-03 [AAB718015]) |  |    |                  |
| 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  | 98               |
| Rated operation current I <sub>e</sub> at AC-3, 400 V                                                                                                                                 |  | A  | 72               |
| Rated operation power at AC-3, 400 V                                                                                                                                                  |  | kW | 37               |
| Rated operation current I <sub>e</sub> at AC-4, 400 V                                                                                                                                 |  | A  | 25               |
| Rated operation power at AC-4, 400 V                                                                                                                                                  |  | kW | 12               |
| Rated operation power NEMA                                                                                                                                                            |  | kW | 37               |
| 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 normally open contacts as main contact                                                                                                                                      |  |    | 3                |

Approvals

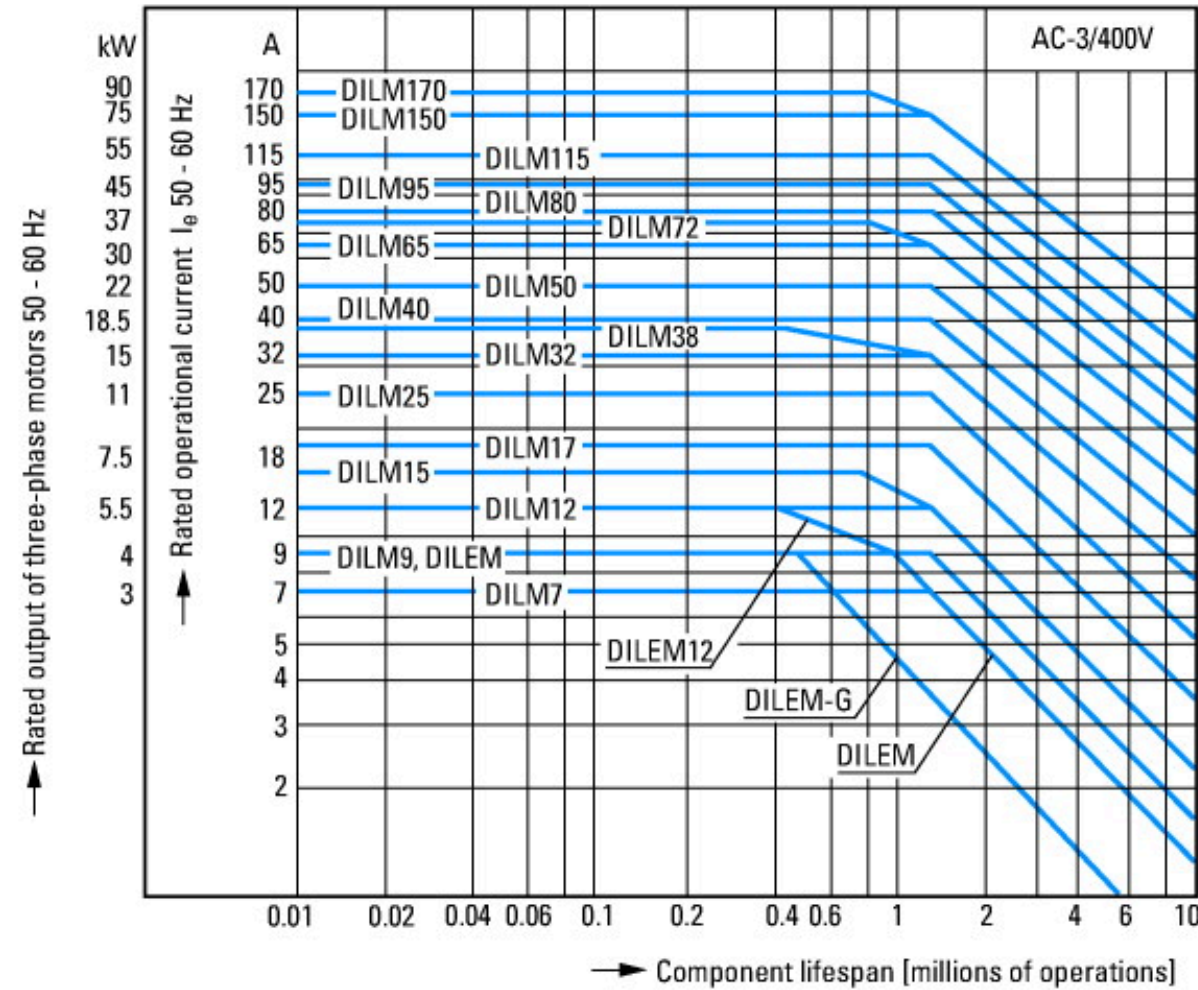
|                   |  |                                                                          |
|-------------------|--|--------------------------------------------------------------------------|
| Product Standards |  | IEC/EN 60947-4-1; UL 60947-4-1; CSA - C22.2 No. 60947-4-1-14; CE marking |
|-------------------|--|--------------------------------------------------------------------------|

|                                      |  |                          |
|--------------------------------------|--|--------------------------|
| 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                       |

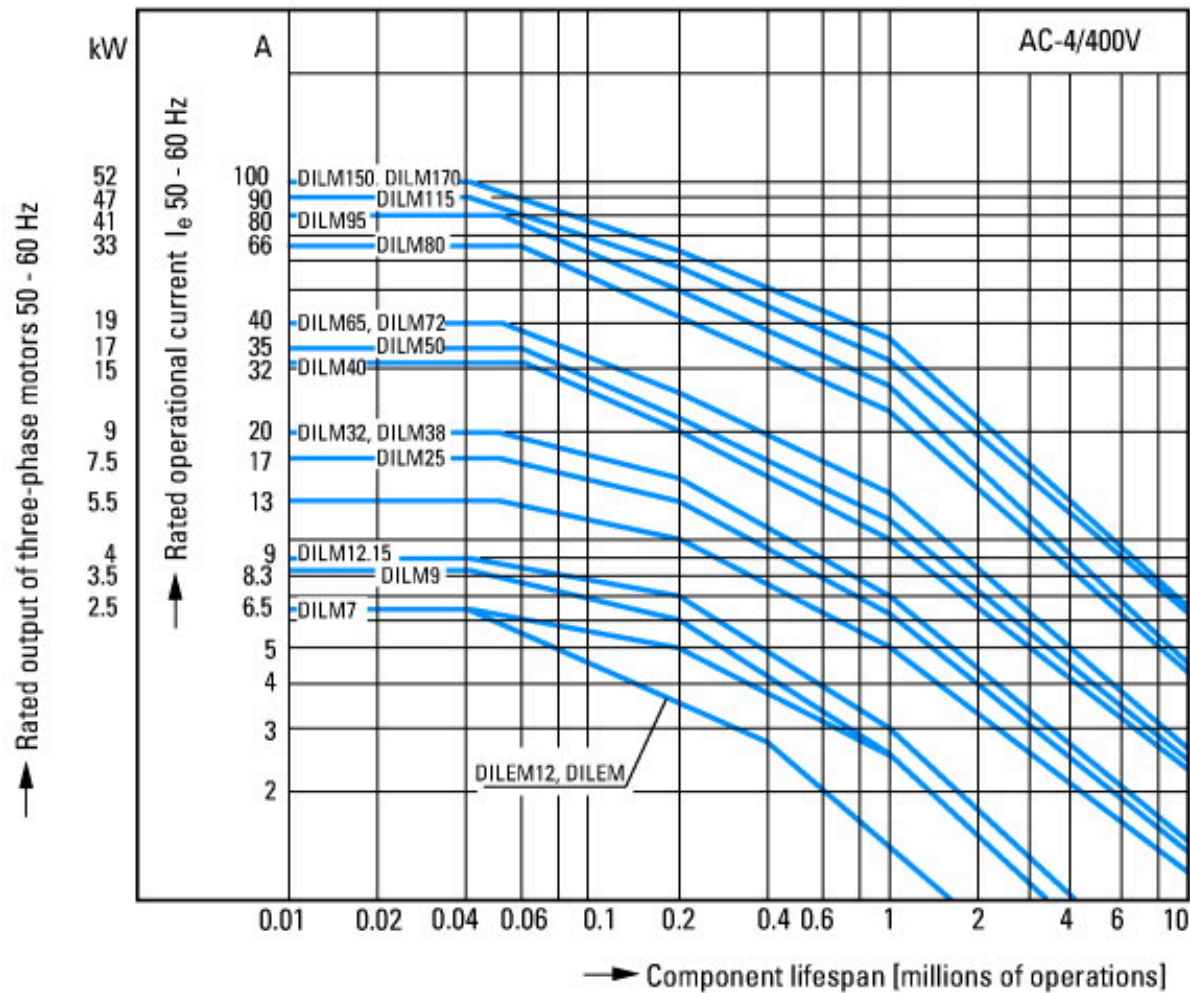
## Characteristics

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

on the side: 2 x DILM1000-XHI(V)11-SI; surface mounting: 1 x DILM150-XHIA11  
on the side: 2 x DILM1000-XHI(V)11-SA; surface mounting: 1 x DILM150-XHI (2 pole)  
on the side: 1 x DILM1000-XHI(V)11-SI; surface mounting: 1 x DILM150-XHIA22  
on the side: 1 x DILM1000-XHI(V)11-SA; surface mounting: 1 x DILM150-XHI (4 pole)

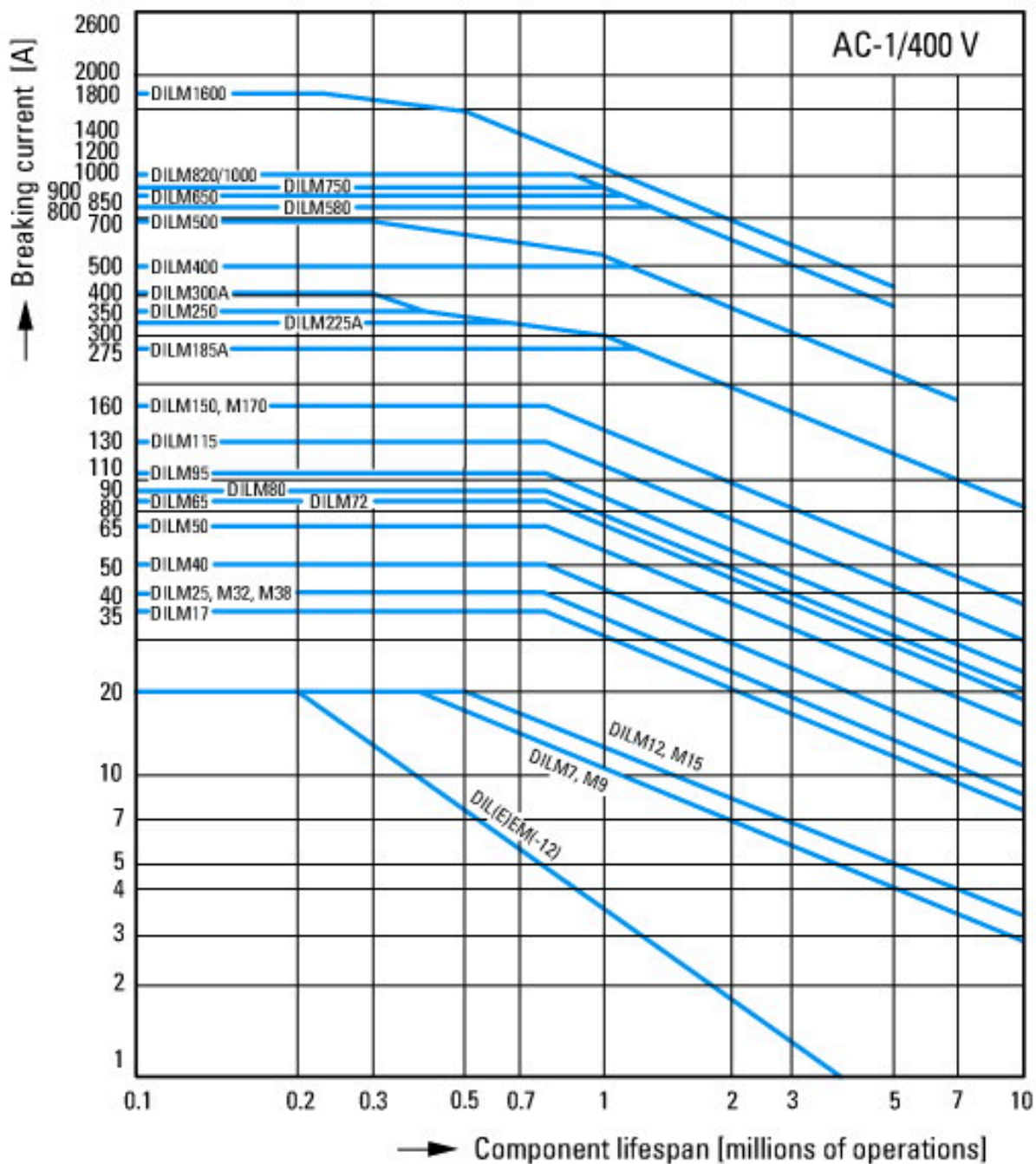


- Squirrel-cage motor
- Operating characteristics
- Starting:from rest
- Stopping:after attaining full running speed
- Electrical characteristics
- Make: up to 6 x rated motor current
- Break: up to 1 x rated motor current
- Utilization category
- 100 % AC-3
- Typical applications
- Compressors
- Lifts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



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

Lateral clearance to earthed parts: 6 mm

DILM40...DILM72  
 DILMC40...DILMC65  
 DILMF40...DILMF65

## Additional product information (links)

IL03407033Z (AWA2100-2247) DILM contactor, basic device

IL03407033Z (AWA2100-2247) DILM contactor, basic device [https://es-assets.eaton.com/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03407033Z2021\\_08.pdf](https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407033Z2021_08.pdf)

|                                                                                                |                                                                                                                                                                                                                 |
|------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor starters and "Special Purpose Ratings" for the North American market                     | <a href="http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf">http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf</a> |
| Switchgear of Power Factor Correction Systems                                                  | <a href="http://www.moeller.net/binary/ver_techpapers/ver934en.pdf">http://www.moeller.net/binary/ver_techpapers/ver934en.pdf</a>                                                                               |
| X-Start - Modern Switching Installations Efficiently Fitted and Wired Securely                 | <a href="http://www.moeller.net/binary/ver_techpapers/ver938en.pdf">http://www.moeller.net/binary/ver_techpapers/ver938en.pdf</a>                                                                               |
| Mirror Contacts for Highly-Reliable Information Relating to Safety-Related Control Functions   | <a href="http://www.moeller.net/binary/ver_techpapers/ver944en.pdf">http://www.moeller.net/binary/ver_techpapers/ver944en.pdf</a>                                                                               |
| Effect of the Cable Capacitance of Long Control Cables on the Actuation of Contactors          | <a href="http://www.moeller.net/binary/ver_techpapers/ver949en.pdf">http://www.moeller.net/binary/ver_techpapers/ver949en.pdf</a>                                                                               |
| Switchgear for Luminaires                                                                      | <a href="http://www.moeller.net/binary/ver_techpapers/ver955en.pdf">http://www.moeller.net/binary/ver_techpapers/ver955en.pdf</a>                                                                               |
| Standard Compliant and Functionally Safe Engineering Design with Mechanical Auxiliary Contacts | <a href="http://www.moeller.net/binary/ver_techpapers/ver956en.pdf">http://www.moeller.net/binary/ver_techpapers/ver956en.pdf</a>                                                                               |
| The Interaction of Contactors with PLCs                                                        | <a href="http://www.moeller.net/binary/ver_techpapers/ver957en.pdf">http://www.moeller.net/binary/ver_techpapers/ver957en.pdf</a>                                                                               |
| Busbar Component Adapters for modern Industrial control panels                                 | <a href="http://www.moeller.net/binary/ver_techpapers/ver960en.pdf">http://www.moeller.net/binary/ver_techpapers/ver960en.pdf</a>                                                                               |