



**Contactor, 3 pole, 380 V 400 V 75 kW, RAC 120: 100 - 120 V 50/60 Hz, AC operation, Screw terminals**

**Part no.** DILM150(RAC120)  
**Catalog No.** 239587  
**Alternate Catalog No.** XTCE150G00A  
**EL-Nummer (Norway)** 4110249

## 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>AC-3/AC-3e: Normal AC induction motors: Starting, switching off while running<br>AC-4: Normal AC induction motors: starting, plugging, reversing, inching |
|                                                           |                |    |                                                                                                                                                                                                                                   |
| Notes                                                     |                |    | Also 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.)<br>Also tested according to AC-3e.                                                                                                                                             |
| 380 V 400 V                                               | $I_e$          | A  | 150                                                                                                                                                                                                                               |
| AC-1                                                      |                |    |                                                                                                                                                                                                                                   |
| Conventional free air thermal current, 3 pole, 50 - 60 Hz |                |    |                                                                                                                                                                                                                                   |
| Open                                                      |                |    |                                                                                                                                                                                                                                   |
| at 40 °C                                                  | $I_{th} = I_e$ | A  | 190                                                                                                                                                                                                                               |
| enclosed                                                  | $I_{th}$       | A  | 144                                                                                                                                                                                                                               |
| Conventional free air thermal current, 1 pole             |                |    |                                                                                                                                                                                                                                   |
| open                                                      | $I_{th}$       | A  | 400                                                                                                                                                                                                                               |
| enclosed                                                  | $I_{th}$       | A  | 360                                                                                                                                                                                                                               |
| <b>Max. rating for three-phase motors, 50 - 60 Hz</b>     |                |    |                                                                                                                                                                                                                                   |
| AC-3                                                      |                |    |                                                                                                                                                                                                                                   |
| 220 V 230 V                                               | P              | kW | 48                                                                                                                                                                                                                                |
| 380 V 400 V                                               | P              | kW | 75                                                                                                                                                                                                                                |
| 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                                          |                |    |                                                                                                                                                                                                                                   |
| <b>Instructions</b>                                       |                |    | Contacts to EN 50 012.<br>integrated suppressor circuit in actuating electronics                                                                                                                                                  |
| Can be combined with auxiliary contact                    |                |    | DILM150-XHI(V)...<br>DILM1000-XHI(V)...                                                                                                                                                                                           |
| Actuating voltage                                         |                |    | RAC 120: 100 - 120 V 50/60 Hz                                                                                                                                                                                                     |
| Voltage AC/DC                                             |                |    | AC operation                                                                                                                                                                                                                      |
| Connection to SmartWire-DT                                |                |    | no                                                                                                                                                                                                                                |
| Frame size                                                |                |    | 4                                                                                                                                                                                                                                 |

## Technical data

### General

|                                                                       |                                     |                 |                                                                                    |
|-----------------------------------------------------------------------|-------------------------------------|-----------------|------------------------------------------------------------------------------------|
| Standards                                                             |                                     |                 | IEC/EN 60947, VDE 0660, UL, CSA                                                    |
| Lifespan, mechanical                                                  |                                     |                 |                                                                                    |
| AC operated                                                           | Operations                          | $\times 10^6$   | 5.7                                                                                |
| Operating frequency, mechanical                                       |                                     |                 |                                                                                    |
| AC operated                                                           | Operations/h                        |                 | 3600                                                                               |
| 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              | 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        | $U_{imp}$   | 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 | 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    | 1200  |
| 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                                                  | $I_{th} = I_e$ | A | 190                                                                                   |
| at 50 °C                                                  | $I_{th} = I_e$ | A | 180                                                                                   |
| at 55 °C                                                  | $I_{th} = I_e$ | A | 170                                                                                   |
| at 60 °C                                                  | $I_{th} = I_e$ | A | 160                                                                                   |
| enclosed                                                  | $I_{th}$       | A | 144                                                                                   |
| Conventional free air thermal current, 1 pole             |                |   |                                                                                       |
| open                                                      | $I_{th}$       | A | 400                                                                                   |
| enclosed                                                  | $I_{th}$       | A | 360                                                                                   |
| AC-3                                                      |                |   |                                                                                       |
| Rated operational current                                 |                |   |                                                                                       |
| Open, 3-pole: 50 – 60 Hz                                  |                |   |                                                                                       |
| Notes                                                     |                |   | At maximum permissible ambient temperature (open.)<br>Also tested according to AC-3e. |
| 220 V 230 V                                               | $I_e$          | A | 150                                                                                   |
| 240 V                                                     | $I_e$          | A | 150                                                                                   |
| 380 V 400 V                                               | $I_e$          | A | 150                                                                                   |
| 415 V                                                     | $I_e$          | A | 150                                                                                   |
| 440V                                                      | $I_e$          | A | 150                                                                                   |
| 500 V                                                     | $I_e$          | A | 150                                                                                   |

|                          |                |     |     |
|--------------------------|----------------|-----|-----|
| 660 V 690 V              | I <sub>e</sub> | A   | 100 |
| Motor rating             | P              | kWh |     |
| 220 V 230 V              | P              | kW  | 48  |
| 240V                     | P              | kW  | 52  |
| 380 V 400 V              | P              | kW  | 75  |
| 415 V                    | P              | kW  | 91  |
| 440 V                    | P              | kW  | 95  |
| 500 V                    | P              | kW  | 110 |
| 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  | 36.5 |
| Current heat loss at I <sub>e</sub> to AC-3/400 V |  | W  | 32.1 |
| 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<br>208 V                                            | HP   | 50              |  |
| 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    | 900             |  |
| FLA 480V 60Hz 3phase                                      | A    | 150             |  |
| 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  | 150                                                                                                                              |
| Heat dissipation per pole, current-dependent                                                                           | P <sub>vid</sub>  | W  | 10.7                                                                                                                             |
| Equipment heat dissipation, current-dependent                                                                          | P <sub>vid</sub>  | W  | 32.1                                                                                                                             |
| 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 7.0

|                                                                                                                                                                                       |    |  |           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|--|-----------|
| Low-voltage industrial components (EG000017) / Power contactor, AC switching (EC000066)                                                                                               |    |  |           |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Contactor (LV) / Power contactor, AC switching (ecl@ss10.0.1-27-37-10-03 [AAB718015]) |    |  |           |
| Rated control supply voltage Us at AC 50HZ                                                                                                                                            | V  |  | 100 - 120 |
| Rated control supply voltage Us at AC 60HZ                                                                                                                                            | V  |  | 100 - 120 |
| Rated control supply voltage Us at DC                                                                                                                                                 | V  |  | 0 - 0     |
| Voltage type for actuating                                                                                                                                                            |    |  | AC        |
| Rated operation current Ie at AC-1, 400 V                                                                                                                                             | A  |  | 190       |
| Rated operation current Ie at AC-3, 400 V                                                                                                                                             | A  |  | 150       |
| Rated operation power at AC-3, 400 V                                                                                                                                                  | kW |  | 75        |
| Rated operation current Ie at AC-4, 400 V                                                                                                                                             | A  |  | 65        |

|                                                         |  |    |                  |
|---------------------------------------------------------|--|----|------------------|
| Rated operation power at AC-4, 400 V                    |  | kW | 33               |
| Rated operation power NEMA                              |  | kW | 93               |
| 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                                                                       |



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

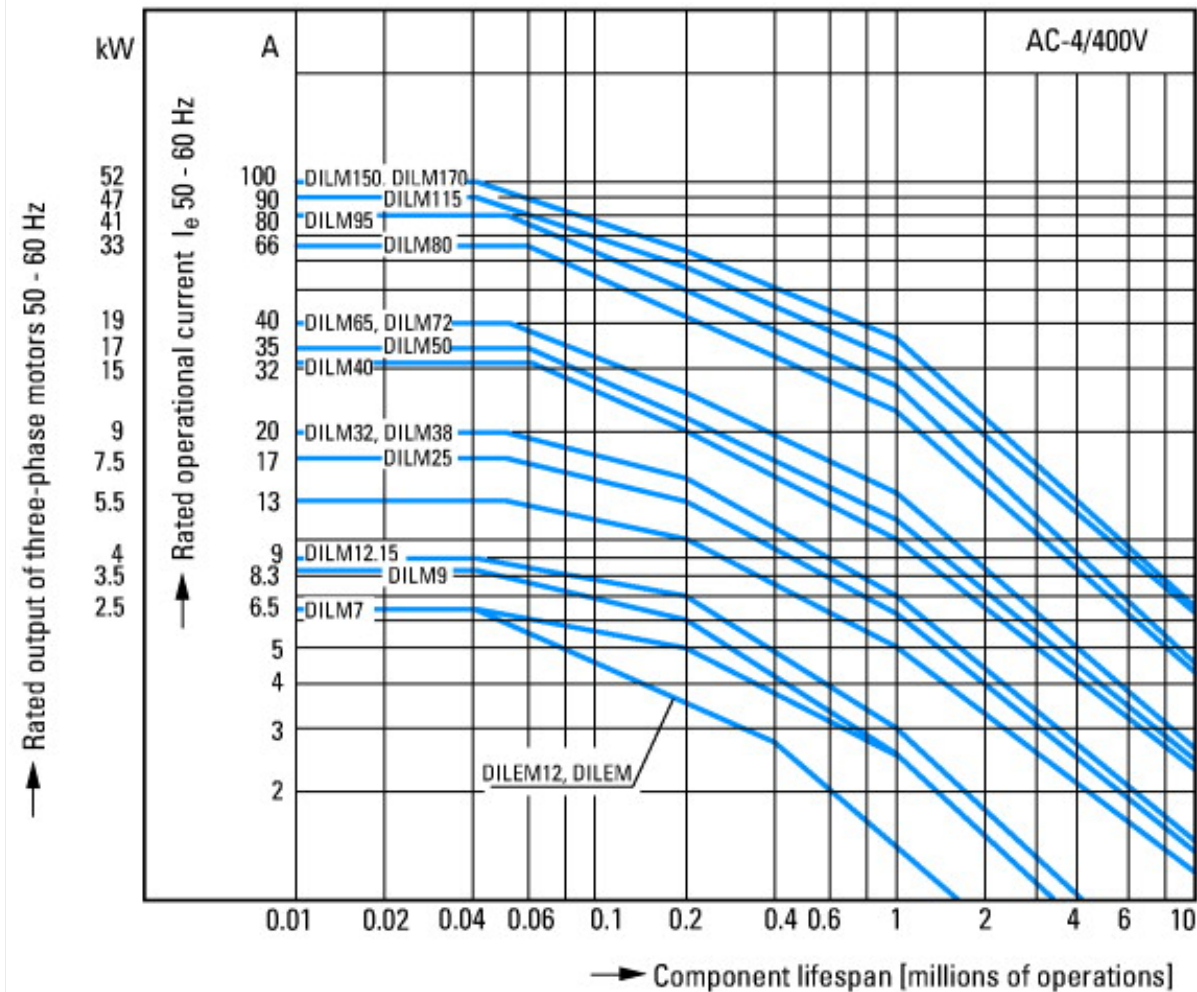


on the side: 2 x DILM820-XHI11(V)-SI; 2 x DILM820-XHI11-SA



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="https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407039Z2020_04.pdf">https://es-assets.eaton.com/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407039Z2020_04.pdf</a>                               |
| 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> |