

# Specifications

## Eaton 139556

Eaton Moeller® series DILM Contactor, 380 V 400 V 160 kW, 2 N/O, 2 NC, RA 250: 110 - 250 V 40 - 60 Hz/110 - 350 V DC, AC and DC operation, Screw connection

### General specifications

|                             |                                                                                                                                                                                                                                                                                                                                              |
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| <b>PRODUCT NAME</b>         | Eaton Moeller® series DILM Contactor                                                                                                                                                                                                                                                                                                         |
| <b>CATALOG NUMBER</b>       | 139556                                                                                                                                                                                                                                                                                                                                       |
| <b>MODEL CODE</b>           | DILM300A/22(RA250)                                                                                                                                                                                                                                                                                                                           |
| <b>EAN</b>                  | 4015081363346                                                                                                                                                                                                                                                                                                                                |
| <b>PRODUCT LENGTH/DEPTH</b> | 208 mm                                                                                                                                                                                                                                                                                                                                       |
| <b>PRODUCT HEIGHT</b>       | 189 mm                                                                                                                                                                                                                                                                                                                                       |
| <b>PRODUCT WIDTH</b>        | 140 mm                                                                                                                                                                                                                                                                                                                                       |
| <b>PRODUCT WEIGHT</b>       | 7.1 kg                                                                                                                                                                                                                                                                                                                                       |
| <b>CERTIFICATIONS</b>       | VDE 0660<br>UL File No.: E29096<br>UL Category Control No.: NLDX<br>UL 60947-4-1<br>IEC/EN 60947-4-1<br>CSA Class No.: 3211-04<br>UL/CSA<br>CSA File No. 1017510<br>North America (UL listed, CSA certified)<br>EN 45545: Fire protection on railway vehicles<br>IEC 61373: Vibration and shock, tested for category 1 class B<br>CE marking |
| <b>CATALOG NOTES</b>        | <ul style="list-style-type: none"><li>• Contacts according to EN 50012</li><li>• EN 45545 - Fire protection on railway vehicles: Fire protection class of all plastics according to UL94: V-0 / plastic weight in total: 1.872 kg</li><li>• Conventional</li></ul>                                                                           |

## AC-1/Conventional thermal current Ith

**CONVENTIONAL  
THERMAL CURRENT ITH  
(1-POLE, ENCLOSED)** 788 A

**CONVENTIONAL  
THERMAL CURRENT ITH  
(3-POLE, ENCLOSED)** 315 A

**CONVENTIONAL  
THERMAL CURRENT ITH  
AT 40°C (3-POLE, OPEN)** 490 A

**CONVENTIONAL  
THERMAL CURRENT ITH  
AT 50°C (3-POLE, OPEN)** 438 A

**CONVENTIONAL  
THERMAL CURRENT ITH  
AT 55°C (3-POLE, OPEN)** 418 A

**CONVENTIONAL  
THERMAL CURRENT ITH  
AT 60°C (3-POLE, OPEN)** 400 A

**CONVENTIONAL  
THERMAL CURRENT ITH  
OF MAIN CONTACTS (1-  
POLE, OPEN)** 1000 A

## Contacts

**NUMBER OF AUXILIARY  
CONTACTS (NORMALLY  
CLOSED CONTACTS)** 2

**NUMBER OF AUXILIARY  
CONTACTS (NORMALLY  
OPEN CONTACTS)** 2

**NUMBER OF CONTACTS  
(NORMALLY CLOSED  
CONTACTS)** 2

**NUMBER OF CONTACTS  
(NORMALLY OPEN  
CONTACTS)** 2

thermal current Ith  
of main contacts (1-  
pole, open) at 60°

## Climatic environmental conditions

**ALTITUDE** Max. 2000 m

**AMBIENT OPERATING  
TEMPERATURE - MAX** 60 °C

**AMBIENT STORAGE  
TEMPERATURE - MAX** 80 °C

**AMBIENT OPERATING  
TEMPERATURE - MIN** -40 °C

**AMBIENT OPERATING  
TEMPERATURE  
(ENCLOSED) - MAX** 40 °C

**AMBIENT OPERATING  
TEMPERATURE  
(ENCLOSED) - MIN** -40 °C

**AMBIENT STORAGE  
TEMPERATURE - MIN** -40 °C

**CLIMATIC PROOFING** Damp heat, cyclic, to IEC  
60068-2-30  
Damp heat, constant, to  
IEC 60068-2-78

## Design verification

**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.

**10.2.2 CORROSION** Meets the product

|                                                                                         |                                                                    |
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| <b>RESISTANCE</b>                                                                       | standard's requirements.                                           |
| <b>10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES</b>                         | Meets the product standard's requirements.                         |
| <b>10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS TO NORMAL HEAT</b>       | Meets the product standard's requirements.                         |
| <b>10.2.3.3 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS</b> | Meets the product standard's requirements.                         |
| <b>10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION</b>                                 | Meets the product standard's requirements.                         |
| <b>10.2.5 LIFTING</b>                                                                   | Does not apply, since the entire switchgear needs to be evaluated. |
| <b>10.2.6 MECHANICAL IMPACT</b>                                                         | Does not apply, since the entire switchgear needs to be evaluated. |
| <b>10.2.7 INSCRIPTIONS</b>                                                              | Meets the product standard's requirements.                         |
| <b>10.3 DEGREE OF PROTECTION OF ASSEMBLIES</b>                                          | Does not apply, since the entire switchgear needs to be evaluated. |
| <b>10.4 CLEARANCES AND CREEPAGE DISTANCES</b>                                           | Meets the product standard's requirements.                         |
| <b>10.5 PROTECTION AGAINST ELECTRIC SHOCK</b>                                           | Does not apply, since the entire switchgear needs to be evaluated. |
| <b>10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS</b>                           | Does not apply, since the entire switchgear needs to be evaluated. |
| <b>10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS</b>                                | Is the panel builder's responsibility.                             |
| <b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>                                         | Is the panel builder's responsibility.                             |
| <b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>                                         | Is the panel builder's responsibility.                             |
| <b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>                                                 | Is the panel builder's responsibility.                             |
| <b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>                         | Is the panel builder's responsibility.                             |
| <b>EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID</b>                               | 21 W                                                               |
| <b>HEAT DISSIPATION</b>                                                                 | 0 W                                                                |

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**CAPACITY PDISS**

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|-------------------------------------------------------------------|-----|
| <b>HEAT DISSIPATION PER<br/>POLE, CURRENT-<br/>DEPENDENT PVID</b> | 7 W |
|-------------------------------------------------------------------|-----|

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| <b>RATED OPERATIONAL<br/>CURRENT FOR SPECIFIED<br/>HEAT DISSIPATION (IN)</b> | 300 A |
|------------------------------------------------------------------------------|-------|

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| <b>STATIC HEAT<br/>DISSIPATION, NON-<br/>CURRENT-DEPENDENT<br/>PVS</b> | 5.5 W |
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## Electrical rating

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| <b>INRUSH CURRENT</b>                                              | Max. 30 x I <sub>e</sub> (peak)                                                                                                                        |
| <b>RATED BREAKING CAPACITY AT 1000 V</b>                           | 950 A                                                                                                                                                  |
| <b>RATED BREAKING CAPACITY AT 220/230 V</b>                        | 3000 A                                                                                                                                                 |
| <b>RATED BREAKING CAPACITY AT 380/400 V</b>                        | 3000 A                                                                                                                                                 |
| <b>RATED BREAKING CAPACITY AT 500 V</b>                            | 3000 A                                                                                                                                                 |
| <b>RATED BREAKING CAPACITY AT 660/690 V</b>                        | 3000 A                                                                                                                                                 |
| <b>RATED INSULATION VOLTAGE (UI)</b>                               | 1000 V                                                                                                                                                 |
| <b>RATED MAKING CAPACITY (COS PHI TO IEC/EN 60947)</b>             | 3000 A                                                                                                                                                 |
| <b>RATED OPERATIONAL CURRENT (IE)</b>                              | 177 A at 690 V (Individual compensation, three-phase capacitors, open)<br>307 A at up to 525 V (Individual compensation, three-phase capacitors, open) |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 1000 V</b>              | 95 A                                                                                                                                                   |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 220 V, 230 V, 240 V</b> | 300 A                                                                                                                                                  |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V</b> | 300 A                                                                                                                                                  |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 440 V</b>               | 300 A                                                                                                                                                  |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 500 V</b>               | 300 A                                                                                                                                                  |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-3, 660 V, 690 V</b>        | 185 A                                                                                                                                                  |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-4, 1000 V</b>              | 76 A                                                                                                                                                   |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-4, 220 V, 230 V, 240 V</b> | 240 A                                                                                                                                                  |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-4, 440 V</b>               | 240 A                                                                                                                                                  |

## General information

|                                               |                                                                                                                                                                        |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ACCESSORIES</b>                            | Fitting options auxiliary contacts: on the side: 2 x DILM820-XHI11(V)-SI; 2 x DILM820-XHI11-SA                                                                         |
| <b>APPLICATION</b>                            | Contactors for Motors                                                                                                                                                  |
| <b>CONNECTION</b>                             | Screw terminals                                                                                                                                                        |
| <b>DEGREE OF PROTECTION</b>                   | IP00                                                                                                                                                                   |
| <b>ELECTROMAGNETIC COMPATIBILITY</b>          | Designed for operation in industrial environments. Its use in residential environments may cause radio-frequency interference, requiring additional noise suppression. |
| <b>FITTED WITH:</b>                           | Suppressor circuit in actuating electronics                                                                                                                            |
| <b>LIFESPAN, ELECTRICAL</b>                   | 100,000 Operations (at Condensor operation)                                                                                                                            |
| <b>LIFESPAN, MECHANICAL</b>                   | 10,000,000 Operations (DC operated)<br>10,000,000 Operations (AC operated)                                                                                             |
| <b>OPERATING FREQUENCY</b>                    | 3000 mechanical Operations/h (DC operated)<br>200 Operations/h<br>3000 mechanical Operations/h (AC operated)                                                           |
| <b>OVERVOLTAGE CATEGORY</b>                   | III                                                                                                                                                                    |
| <b>POLLUTION DEGREE</b>                       | 3                                                                                                                                                                      |
| <b>PRODUCT CATEGORY</b>                       | Contactors                                                                                                                                                             |
| <b>PROTECTION</b>                             | Finger and back-of-hand proof with terminal shroud or terminal block, Protection against direct contact when actuated from front (EN 50274)                            |
| <b>RATED IMPULSE WITHSTAND VOLTAGE (UIMP)</b> | 8000 V AC                                                                                                                                                              |
| <b>RESISTANCE</b>                             | 500 mΩ (Admissible transitional contact resistance - of the external control circuit device when actuating A11)                                                        |
| <b>SHOCK RESISTANCE</b>                       | 10 g, N/O main contact, Mechanical, according to                                                                                                                       |

|                                                             |                                                    |
|-------------------------------------------------------------|----------------------------------------------------|
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-4, 500 V</b>        | 240 A                                              |
| <b>RATED OPERATIONAL CURRENT (IE) AT AC-4, 660 V, 690 V</b> | 150 A                                              |
| <b>RATED OPERATIONAL POWER AT AC-3, 1000 V, 50 HZ</b>       | 132 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-3, 240 V, 50 HZ</b>        | 100 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ</b>    | 160 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-3, 415 V, 50 HZ</b>        | 175 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-3, 440 V, 50 HZ</b>        | 185 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ</b>        | 210 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ</b>        | 170 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-4, 1000 V, 50 HZ</b>       | 108 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-4, 220/230 V, 50 HZ</b>    | 75 kW                                              |
| <b>RATED OPERATIONAL POWER AT AC-4, 240 V, 50 HZ</b>        | 82 kW                                              |
| <b>RATED OPERATIONAL POWER AT AC-4, 415 V, 50 HZ</b>        | 142 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-4, 440 V, 50 HZ</b>        | 150 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-4, 500 V, 50 HZ</b>        | 170 kW                                             |
| <b>RATED OPERATIONAL POWER AT AC-4, 660/690 V, 50 HZ</b>    | 137 kW                                             |
| <b>RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX</b>           | 1000 V                                             |
| <b>SAFE ISOLATION</b>                                       | 1000 V AC, Between coil and contacts, According to |

|                             |                                                                                                                                                                                                                                                               |
|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             | IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms<br>10 g, N/O auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms<br>8 g, N/C auxiliary contact, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 10 ms |
| <b>SIGNAL LEVEL</b>         | 5 V - 15 V, PLC signal level (A3 - A4) to IEC/EN 61131-2 (type 2), Magnet systems                                                                                                                                                                             |
| <b>UTILIZATION CATEGORY</b> | AC-1: Non-inductive or slightly inductive loads, resistance furnaces<br>AC-3: Normal AC induction motors: starting, switch off during running<br>AC-4: Normal AC induction motors: starting, plugging, reversing, inching                                     |
| <b>VOLTAGE TYPE</b>         | AC/DC                                                                                                                                                                                                                                                         |

|                                                                  | EN 61140                                                               |
|------------------------------------------------------------------|------------------------------------------------------------------------|
| <b>SPECIAL PURPOSE<br/>RATING OF DEFINITE<br/>PURPOSE RATING</b> | 2160 A, LRA 480 V 60 Hz 3-ph, 100,000 cycles acc. to UL 1995, (UL/CSA) |
|                                                                  | 1800 A, LRA 600 V 60 Hz 3-ph, 100,000 cycles acc. to UL 1995, (UL/CSA) |
|                                                                  | 300 A, FLA 600 V 60 Hz 3-ph, 100,000 cycles acc. to UL 1995, (UL/CSA)  |
|                                                                  | 360 A, FLA 480 V 60 Hz 3-ph, 100,000 cycles acc. to UL 1995, (UL/CSA)  |
|                                                                  |                                                                        |

## Magnet system

### BEHAVIOR IN MARGINAL AND TRANSITIONAL CONDITIONS

Sealing - Pick-up phase ( $0.7 \times U_c \text{ min} - 1.15 \times U_c \text{ max}$ ): Contactor switches on with certainty  
 Sealing - Voltage drops ( $0.2 - 0.6 \times U_c \text{ min}$ ) > 12 ms: Drop-out of the contactor  
 Sealing - Voltage drops ( $0.6 - 0.7 \times U_c \text{ min}$ ): Contactor remains switched on  
 Sealing - Voltage interruptions  $0 - 0.2 \times U_c \text{ min}$  > 10 ms: Drop-out of the contactor  
 Sealing - Excess voltage ( $1.15 - 1.3 \times U_c \text{ max}$ ): Contactor remains switched on  
 Sealing - Pick-up phase ( $0 - 0.7 \times U_c \text{ min}$ ): Contactor does not switch on  
 Sealing - Voltage drops ( $0.2 - 0.6 \times U_c \text{ min} \leq 12 \text{ ms}$ ): Time is bridged successfully  
 Sealing - Voltage interruptions ( $0 - 0.2 \times U_c \text{ min} \leq 10 \text{ ms}$ ): Time is bridged successfully

### DROP-OUT VOLTAGE

AC operated:  $0.2 \times U_S \text{ max} - 0.6 \times U_S \text{ min}$ , AC operated  
 $0.2 \times U_S \text{ max} - 0.6 \times U_S \text{ min}$ , DC operated

### DUTY FACTOR

100 %

### PICK-UP VOLTAGE

$0.7 - 1.15 \text{ V AC} \times U_S$   
 $0.7 - 1.15 \text{ V DC} \times U_S$

### POWER CONSUMPTION

110 kW  
 Control transformer with  $u_k \leq 6\%$

### POWER CONSUMPTION, PICK-UP, 50 HZ

240 VA, Pull-in power, Coil in a cold state and  $1.0 \times U_S$

### POWER CONSUMPTION, PICK-UP, 60 HZ

240 VA, Pull-in power, Coil in a cold state and  $1.0 \times U_S$

### POWER CONSUMPTION, SEALING, 50 HZ

5.5 W, Coil in a cold state and  $1.0 \times U_S$   
 10.5 VA, Coil in a cold state and  $1.0 \times U_S$

### POWER CONSUMPTION, SEALING, 60 HZ

10.5 VA, Coil in a cold state and  $1.0 \times U_S$   
 5.5 W, Coil in a cold state and  $1.0 \times U_S$

## Motor rating

### ASSIGNED MOTOR

**POWER AT 200/208 V, 60 HZ, 3-PHASE** 100 HP

### ASSIGNED MOTOR

**POWER AT 230/240 V, 60 HZ, 3-PHASE** 125 HP

### ASSIGNED MOTOR

**POWER AT 460/480 V, 60 HZ, 3-PHASE** 250 HP

### ASSIGNED MOTOR

**POWER AT 575/600 V, 60 HZ, 3-PHASE** 300 HP

|                                                                                     |        |
|-------------------------------------------------------------------------------------|--------|
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT AC, 50<br/>HZ - MAX</b>                 | 250 V  |
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT AC, 50<br/>HZ - MIN</b>                 | 110 V  |
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT AC, 60<br/>HZ - MAX</b>                 | 250 V  |
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT AC, 60<br/>HZ - MIN</b>                 | 110 V  |
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT DC -<br/>MAX</b>                        | 250 V  |
| <b>RATED CONTROL SUPPLY<br/>VOLTAGE (US) AT DC -<br/>MIN</b>                        | 110 V  |
| <b>SWITCHING TIME (AC<br/>OPERATED, MAKE<br/>CONTACTS, CLOSING<br/>DELAY) - MAX</b> | 100 ms |
| <b>SWITCHING TIME (AC<br/>OPERATED, MAKE<br/>CONTACTS, OPENING<br/>DELAY) - MAX</b> | 110 ms |

## Short-circuit rating

|                                                                        |                                                                                                                                                                                                                                      |
|------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SHORT-CIRCUIT CURRENT RATING (BASIC RATING)</b>                     | 700 A, max. Fuse, SCCR (UL/CSA)<br>600 A, max. CB, SCCR (UL/CSA)<br>18 kA, SCCR (UL/CSA)                                                                                                                                             |
| <b>SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 480 V)</b>              | 250 A, max. CB, SCCR (UL/CSA)<br>18 kA, Fuse, SCCR (UL/CSA)<br><br>700 A, Class L, max. Fuse, SCCR (UL/CSA)<br>65 kA, CB, SCCR (UL/CSA)<br>700 A, Class L/450 A, Class J, max. Fuse, SCCR (UL/CSA)<br>18/100 kA, Fuse, SCCR (UL/CSA) |
| <b>SHORT-CIRCUIT CURRENT RATING (HIGH FAULT AT 600 V)</b>              | 700 A, Class J, max. Fuse, SCCR (UL/CSA)<br>18 kA, CB, SCCR (UL/CSA)<br>18 kA, Fuse, SCCR (UL/CSA)<br><br>600 A, max. CB, SCCR (UL/CSA)<br>700 A, Class L/450 A, Class J, max. Fuse, SCCR (UL/CSA)<br>18/100 kA, Fuse, SCCR (UL/CSA) |
| <b>SHORT-CIRCUIT PROTECTION RATING (TYPE 1 COORDINATION) AT 1000 V</b> | 200 A gG/gL                                                                                                                                                                                                                          |
| <b>SHORT-CIRCUIT PROTECTION RATING (TYPE 1 COORDINATION) AT 400 V</b>  | 500 A gG/gL                                                                                                                                                                                                                          |
| <b>SHORT-CIRCUIT PROTECTION RATING (TYPE 1 COORDINATION) AT 690 V</b>  | 400 A gG/gL                                                                                                                                                                                                                          |
| <b>SHORT-CIRCUIT PROTECTION RATING (TYPE 2 COORDINATION) AT 1000 V</b> | 160 A gG/gL                                                                                                                                                                                                                          |
| <b>SHORT-CIRCUIT PROTECTION RATING (TYPE 2 COORDINATION) AT 400 V</b>  | 400 A gG/gL                                                                                                                                                                                                                          |
| <b>SHORT-CIRCUIT PROTECTION RATING (TYPE 2 COORDINATION) AT 690 V</b>  | 315 A gG/gL                                                                                                                                                                                                                          |

## Switching capacity

|                                                             |                                                          |
|-------------------------------------------------------------|----------------------------------------------------------|
| <b>SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE)</b> | 15 A, 600 V AC, (UL/CSA)<br>1 A, 250 V DC, (UL/CSA)      |
| <b>SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY)</b>  | A600, AC operated (UL/CSA)<br>P300, DC operated (UL/CSA) |
| <b>SWITCHING CAPACITY (MAIN CONTACTS, GENERAL USE)</b>      | 350 A, Maximum motor rating (UL/CSA)                     |

## Terminal capacities

|                                                    |                                                                                                                        |
|----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| <b>SCREW SIZE</b>                                  | M3.5, Terminal screw, Control circuit cables<br>M10, Terminal screw, Main connections                                  |
| <b>SCREWDRIVER SIZE</b>                            | 2, Terminal screw, Control circuit cables, Pozidriv screwdriver                                                        |
| <b>TERMINAL CAPACITY (BUSBAR)</b>                  | 25 mm width, Main connection                                                                                           |
| <b>TERMINAL CAPACITY (COPPER BAND)</b>             | Fixing with flat cable terminal or cable terminal blocks; See terminal capacity for cable terminal blocks              |
| <b>TERMINAL CAPACITY (FLEXIBLE WITH CABLE LUG)</b> | 50 - 240 mm <sup>2</sup>                                                                                               |
| <b>TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)</b>   | 2 x (0.75 - 2.5) mm <sup>2</sup> , Control circuit cables<br>1 x (0.75 - 2.5) mm <sup>2</sup> , Control circuit cables |
| <b>TERMINAL CAPACITY (SOLID)</b>                   | 2 x (0.75 - 2.5) mm <sup>2</sup> , Control circuit cables<br>1 x (0.75 - 2.5) mm <sup>2</sup> , Control circuit cables |
| <b>TERMINAL CAPACITY (SOLID/STRANDED AWG)</b>      | 2/0 - 500 MCM, Main cables<br>18 - 14, Control circuit cables                                                          |
| <b>TERMINAL CAPACITY (STRANDED WITH CABLE LUG)</b> | 70 - 240 mm <sup>2</sup>                                                                                               |
| <b>TIGHTENING TORQUE</b>                           | 24 Nm, Main cable connection screw/bolt<br>1.2 Nm, Screw terminals, Control circuit cables                             |
| <b>WIDTH ACROSS FLATS</b>                          | 16 mm                                                                                                                  |

## Resources

|                            |                                                                                                |
|----------------------------|------------------------------------------------------------------------------------------------|
| BROCHURES                  | <a href="#">eaton-product-brochure-dilmdilh-power-contactors-brochure-br034010en-en-us.pdf</a> |
| CATALOGUES                 | <a href="#">Product Range Catalog Switching and protecting motors</a>                          |
| CHARACTERISTIC CURVE       | <a href="#">eaton-contactors-component-dilm-characteristic-curve-003.eps</a>                   |
|                            | <a href="#">eaton-contactors-component-dilm-characteristic-curve-002.eps</a>                   |
|                            | <a href="#">eaton-contactors-component-dilm-characteristic-curve.eps</a>                       |
|                            | <a href="#">eaton-contactors-short-time-loading-dilm-characteristic-curve-002.eps</a>          |
| DECLARATIONS OF CONFORMITY | <a href="#">eaton-contactor-declaration-of-conformity-eu250619en.pdf</a>                       |
|                            | <a href="#">eaton-contactor-declaration-of-conformity-uk251102en.pdf</a>                       |
| DRAWINGS                   | <a href="#">eaton-contactors-mounting-dilm-dimensions.eps</a>                                  |
|                            | <a href="#">eaton-contactors-mounting-dilm-dimensions-002.eps</a>                              |
|                            | <a href="#">eaton-contactors-dilm-dimensions-007.eps</a>                                       |
|                            | <a href="#">eaton-contactors-mounting-dilm-3d-drawing-002.eps</a>                              |
| ECAD MODEL                 | <a href="#">DA-CE-ETN.DILM300A_22(RA250)</a>                                                   |
| INSTALLATION INSTRUCTIONS  | <a href="#">eaton-contactors-dilm250-to-dilm500-il03406002z.pdf</a>                            |
| MCAD MODEL                 | <a href="#">eaton-iec-contactors-mcad-3d-models-dilm250-300-s22.stp</a>                        |

|                  |                                                                        |
|------------------|------------------------------------------------------------------------|
|                  | <a href="#">eaton-iec-contactors-mcad-drawings-dilm250-300-s22.dwg</a> |
| PEP ECO-PASSPORT | <a href="#">eaton-iec-contactors-pep-eato-00135-v0101-en.pdf</a>       |
| SYSTEM OVERVIEW  | <a href="#">eaton-contactors-system55-dilm-explosion-drawing.eps</a>   |
| WIRING DIAGRAMS  | <a href="#">eaton-contactors-contact-dilm-wiring-diagram-004.eps</a>   |

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



**Eaton Corporation plc** Eaton House  
30 Pembroke Road  
Dublin 4, Ireland  
Eaton.com

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