

Eaton 276372

Eaton Moeller® series DILA Contactor relay,
230 V 50/60 Hz, 3 N/O, 1 NC, Screw
terminals, AC operation

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| PRODUCT NAME | Eaton Moeller® series DILA Control relay |
| CATALOG NUMBER | 276372 |
| PRODUCT LENGTH/DEPTH | 75 mm |
| PRODUCT HEIGHT | 68 mm |
| PRODUCT WIDTH | 45 mm |
| PRODUCT WEIGHT | 0.237 kg |
| COMPLIANCES | CE Marked |
| CERTIFICATIONS | UL 508 IEC 60947-4-1 EN 60947-4-1 CSA Std. C22.2 No. 14-05 VDE VDE 0660 CE CSA CSA Class No.: 3211-03 UL UL Category Control No.: NKCR CSA-C22.2 No. 14-05 IEC/EN 60947 UL File No.: E29184 CSA File No.: 012528 EN 60947-5-1 IEC/EN 60947-4-1 |

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| FEATURES | Positive operating contacts to EN 60947-5-1 appendix L, including auxiliary contact module |
| 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 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 RESIST. OF INSUL. MAT. TO ABNORMAL HEAT/FIRE BY INTERNAL ELECT. 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. |

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| eaton-contactors-dila-dilm7-15-dilmp20-il03407013z.pdf |
| eaton-contactors-module-dilm-dimensions.eps eaton-contactors-frame-dilm-dimensions.eps eaton-contactors-dilm-3d-drawing-007.eps |

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| 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. |
| 10.9.2 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. |
| FITTED WITH: | Positive operation contacts |
| OPERATING FREQUENCY | 9000 Operations/h |
| POLLUTION DEGREE | 3 |
| CLIMATIC PROOFING | Damp heat, constant, to IEC 60068-2-78 Damp heat, cyclic, to IEC 60068-2-30 |
| AMBIENT OPERATING TEMPERATURE - MAX | 60 °C |
| AMBIENT OPERATING TEMPERATURE - MIN | -25 °C |
| AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MAX | 40 °C |
| AMBIENT OPERATING TEMPERATURE (ENCLOSED) - MIN | 25 °C |
| AMBIENT STORAGE TEMPERATURE - MAX | 80 °C |
| AMBIENT STORAGE TEMPERATURE - MIN | 40 °C |
| EQUIPMENT HEAT DISSIPATION, CURRENT-DEPENDENT PVID | 0 W |

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| HEAT DISSIPATION CAPACITY PDISS | 0 W |
| HEAT DISSIPATION PER POLE, CURRENT-DEPENDENT PVID | 0.5 W |
| NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS) | 0 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS) | 1 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS, DELAYED SWITCHING) | 0 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS) | 3 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS, LEADING) | 0 |
| NUMBER OF CONTACTS (NORMALLY CLOSED CONTACTS) | 1 |
| NUMBER OF CONTACTS (NORMALLY OPEN CONTACTS) | 3 |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX | 230 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN | 230 V |
| CONNECTION TO SMARTWIRE-DT | No |
| RATED IMPULSE WITHSTAND VOLTAGE (UIMP) | 6000 V AC |
| CONNECTION | Screw terminals |
| APPLICATION | Contactor relays |
| PRODUCT CATEGORY | DILA relays |
| PROTECTION | Finger and back-of-hand proof, Protection against direct contact when actuated from front (EN 50274) |
| CONVENTIONAL THERMAL CURRENT ITH AT 60°C (3-POLE, OPEN) | 16 A |

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| VOLTAGE TYPE OF OPERATING VOLTAGE | AC/DC |
| RATED SWITCH CURRENT | 16 A |
| OPERATING VOLTAGE AT AC, 50 HZ - MIN | 17 V |
| OPERATING VOLTAGE AT AC, 50 HZ - MAX | 500 V |
| OPERATING VOLTAGE AT AC, 60 HZ - MIN | 17 V |
| OPERATING VOLTAGE AT AC, 60 HZ - MAX | 500 V |
| OPERATING VOLTAGE AT DC - MIN | 24 VDC |
| OPERATING VOLTAGE AT DC - MAX | 220 VDC |
| SCREWDRIVER SIZE | 0.8 x 5.5/1 x 6 mm, Terminal screw, Standard screwdriver 2, Terminal screw, Pozidriv screwdriver |
| VOLTAGE TYPE | AC |
| CODE NUMBER | 31E |
| DEGREE OF PROTECTION | IP20 |
| OVERVOLTAGE CATEGORY | III |
| CONTROL CIRCUIT RELIABILITY | $\lambda < 5 \times 10^{-7}$ (1 failure at 2,000,000 operations for $U_e = 24$ V DC, $U_{min} = 17$ V, $I_{min} = 5.4$ mA) |
| CONNECTION TYPE (AUXILIARY CIRCUIT) | Screw connection |
| DUTY FACTOR | 100 % |
| LIFESPAN, MECHANICAL | 20,000,000 Operations (AC operated) |
| MOUNTING METHOD | DIN rail |
| PICK-UP VOLTAGE | 0.8 - 1.1 V AC x U_c (voltage tolerance - dual frequency coil 50/60 Hz) |
| SAFE ISOLATION | 400 V AC, Between coil and auxiliary contacts, According to EN 61140 400 V AC, Between auxiliary contacts, According to EN 61140 |
| POWER CONSUMPTION, PICK-UP, 60 HZ | 27 VA, AC, Dual-frequency coil at 60 Hz 25 VA, AC, Dual-frequency coil at 60 Hz |

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| SCREW SIZE | M3.5, Terminal screw |
| POWER CONSUMPTION, SEALING, 60 HZ | 3.3 VA, Dual-frequency coil in a cold state and 1.0 x Us |
| | 1.4 W, Dual-frequency coil in a cold state and 1.0 x Us |
| | 4.2 VA, Dual-frequency coil in a cold state and 1.0 x Us |
| RATED OPERATIONAL CURRENT (IE) | 4 A at 60 V, DC L/R \leq 50 ms (with 3 contacts in series) |
| | 1 A at 220 V, DC L/R \leq 50 ms (with 3 contacts in series) |
| | 6 A at 60 V, DC L/R \leq 15 ms (with 1 contact in series) |
| | 10 A at 60 V, DC L/R \leq 15 ms (with 2 contacts in series) |
| | 3 A at 110 V, DC L/R \leq 15 ms (with 1 contact in series) |
| | 4 A at 24 V, DC L/R \leq 50 ms (with 3 contacts in series) |
| | 1 A at 220 V, DC L/R \leq 15 ms (with 1 contact in series) |
| | 2 A at 110 V, DC L/R \leq 50 ms (with 3 contacts in series) |
| | 6 A at 110 V, DC L/R \leq 15 ms (with 3 contacts in series) |
| | 10 A at 24 V, DC L/R \leq 15 ms (with 1 contact in series) |
| | 5 A at 220 V, DC L/R \leq 15 ms (with 3 contacts in series) |
| | 16 A |
| POWER CONSUMPTION, SEALING, 50 HZ | 4.2 VA, Dual-frequency coil in a cold state and 1.0 x Us |
| | 3.3 VA, Dual-frequency coil in a cold state and 1.0 x Us |
| | 1.4 W, Dual-frequency coil in a cold state and 1.0 x Us |
| SWITCHING CAPACITY (AUXILIARY CONTACTS, GENERAL USE) | 1 A, 250 V DC, (UL/CSA) 15 A, 600 V AC, (UL/CSA) |
| SWITCHING CAPACITY (AUXILIARY CONTACTS, PILOT DUTY) | P300, DC operated (UL/CSA) A600, AC operated (UL/CSA) |

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| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX | 230 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN | 230 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX | 0 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN | 0 V |
| RATED INSULATION VOLTAGE (UI) | 690 V |
| RATED OPERATIONAL CURRENT (IE) AT AC-15, 220 V, 230 V, 240 V | 4 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-15, 380 V, 400 V, 415 V | 4 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-15, 500 V | 1.5 A |
| RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) | 15.5 A |
| RATED OPERATIONAL VOLTAGE (UE) AT AC - MAX | 690 V |
| STATIC HEAT DISSIPATION, NON- CURRENT-DEPENDENT PVS | 1.4 W |
| STRIPPING LENGTH (MAIN CABLE) | 10 mm |
| SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MAX | 21 ms |
| SWITCHING TIME (AC OPERATED, MAKE CONTACTS, CLOSING DELAY) - MIN | 15 ms |
| SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING DELAY) - MAX | 18 ms |
| SWITCHING TIME (AC OPERATED, MAKE CONTACTS, OPENING | 9 ms |

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| DELAY) - MIN | |
| TERMINAL CAPACITY (FLEXIBLE WITH FERRULE) | 1 x (0.75 - 2.5) mm ² , Screw terminals |
| | 2 x (0.75 - 2.5) mm ² , Screw terminals |
| SHOCK RESISTANCE | 7 g, N/O auxiliary contact, Basic unit with auxiliary contact module, Mechanical, according to IEC/EN 60068-2-27, Half- sinusoidal shock 10 ms |
| | 5 g, N/C auxiliary contact, Basic unit with auxiliary contact module, Mechanical, according to IEC/EN 60068-2-27, Half- sinusoidal shock 10 ms |
| TERMINAL CAPACITY (SOLID/STRANDED AWG) | 18 - 14, Screw terminals |
| SHORT-CIRCUIT PROTECTION RATING WITHOUT WELDING | 10 A gG/gL, 500 V, Max. Fuse, Contacts |
| TERMINAL CAPACITY (SOLID) | 1 x (0.75 - 4) mm ² , Screw terminals |
| | 2 x (0.75 - 2.5) mm ² , Screw terminals |
| TIGHTENING TORQUE | 1.2 Nm, Screw terminals |
| ACTUATING VOLTAGE | 230 V 50/60 Hz |

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| PROJECT NAME: |
| PROJECT NUMBER: |
| PREPARED BY: |
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