

Specifications



Photo is representative



Eaton 278336

Eaton Moeller® series SDAINL Star-delta contactor combination, 380 V 400 V: 11 kW, 230 V 50 Hz, 240 V 60 Hz, AC operation

General specifications

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| PRODUCT NAME | Eaton Moeller series star-delta contactor combination |
| CATALOG NUMBER | 278336 |
| MODEL CODE | SDAINLM22(230V50HZ,240V60HZ) |
| EAN | 4015082783365 |
| PRODUCT LENGTH/DEPTH | 117 mm |
| PRODUCT HEIGHT | 82 mm |
| PRODUCT WIDTH | 158 mm |
| PRODUCT WEIGHT | 1.03 kg |
| CERTIFICATIONS | CE |
| GLOBAL CATALOG | 278336 |

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Product specifications

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| USED WITH | ETR4-51 |
| ELECTRICAL CONNECTION TYPE FOR AUXILIARY- AND CONTROL-CURRENT CIRCUIT | Screw connection |
| NUMBER OF POLES | Three-pole |
| 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 |

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| | 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. |
| 10.9.2 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. |
| FREQUENCY RATING | 50-60 Hz |
| POLLUTION DEGREE | 3 |
| UTILIZATION CATEGORY | AC-3: Normal AC induction motors: starting, switch off during running |
| CONNECTION | Screw terminals |
| 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 | 4.1 W |
| HEAT DISSIPATION CAPACITY PDISS | 0 W |
| HEAT DISSIPATION PER | 1.37 W |

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| POLE, CURRENT-DEPENDENT PVID | |
| APPLICATION | Star-delta motor starting for contactor combinations |
| PRODUCT CATEGORY | Contactor combinations |
| ELECTRICAL CONNECTION TYPE OF MAIN CIRCUIT | Screw connection |
| VOLTAGE TYPE | AC |
| DEGREE OF PROTECTION | IP20 NEMA Other |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS) | 0 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS) | 3 |
| NUMBER OF CONTACTS (NORMALLY CLOSED) AS MAIN CONTACT | 0 |
| NUMBER OF MAIN CONTACTS (NORMALLY OPEN CONTACT) | 9 |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX | 230 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN | 230 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX | 240 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN | 240 V |
| OVERVOLTAGE CATEGORY | III |
| DUTY FACTOR | 100 % |
| CHANGEOVER TIME | 20 s, max. |
| INTERFERENCE IMMUNITY | According to EN 60947-1 |
| FUNCTIONS | Star-delta contactor |
| 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 |

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| RATED OPERATIONAL CURRENT (IE) AT AC-1, 380 V, 400 V, 415 V | 22 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V | 22 A |
| RATED OPERATIONAL CURRENT FOR SPECIFIED HEAT DISSIPATION (IN) | 12.76 A |
| RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ | 11 kW |
| RATED OPERATIONAL POWER (NEMA) | 0 kW |
| STATIC HEAT DISSIPATION, NON-CURRENT-DEPENDENT PVS | 4.8 W |
| SUITABLE FOR | Also motors with efficiency class IE3 |
| RATED OPERATIONAL POWER AT AC-3, 500 V, 50 HZ | 11 kW |
| RATED OPERATIONAL POWER AT AC-3, 690 V, 50 HZ | 11 kW |
| ACTUATING VOLTAGE | 230 V 50 Hz, 240 V 60 Hz |
| NUMBER OF AUXILIARY CONTACTS (CHANGE-OVER CONTACTS) | 0 |
| VOLTAGE TYPE OF OPERATING VOLTAGE | AC |
| OPERATING VOLTAGE AT AC, 50 HZ - MIN | 24 V |
| OPERATING VOLTAGE AT AC, 50 HZ - MAX | 690 V |
| OPERATING VOLTAGE AT AC, 60 HZ - MIN | 24 V |
| OPERATING VOLTAGE AT AC, 60 HZ - MAX | 690 V |
| OPERATING VOLTAGE AT DC - MIN | 0 V |
| OPERATING VOLTAGE AT DC - MAX | 0 V |

Resources

CATALOGS [eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf](#)

DECLARATIONS OF CONFORMITY [eaton-star-delta-contactor-combination-declaration-of-conformity-eu250763en.pdf](#)

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|---------------------------|---|
| | eaton-star-delta-contactor-combination-declaration-of-conformity-uk251246en.pdf |
| | eaton-star-delta-starters-star-delta-sdainl-contactor-combination-dimensions-002.eps |
| DRAWINGS | eaton-general-ie-ready-dilm-contactor-standards.eps eaton-star-delta-starters-star-delta-sdainl-contactor-combination-3d-drawing.eps |
| ECAD MODEL | ETN.SDAINLM22(230V50HZ,240V60HZ).edz |
| INSTALLATION INSTRUCTIONS | IL03407030Z IL03407043Z |
| MCAD MODEL | sdainl_bg2.stp sdainl_bg2 sdainl_bg1 sdainl_bg1.stp |
| SYSTEM OVERVIEW | eaton-star-delta-starters-star-delta-sdainl-contactor-combination-explosion-drawing.eps |
| WIRING DIAGRAMS | eaton-contactors-contact-sdainl-combination-wiring-diagram-002.eps |

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|------------------------|
| PROJECT NAME: |
| PROJECT NUMBER: |
| PREPARED BY: |
| DATE: |



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