Specifications

Photo is representative

Eaton 198538

Eaton Moeller® series Rapid Link - Reversing starter, 6.6 A, Sensor input 2, 400/480 V AC, AS-Interface®, S-7.A.E. for 62 modules, HAN Q5, with manual override switch

| General specifications | |
|-------------------------|--|
| PRODUCT NAME | Eaton Rapid Link Reversing starter |
| CATALOG NUMBER | 198538 |
| EAN | 4015081964130 |
| PRODUCT LENGTH/DEPTH | 120 mm |
| PRODUCT HEIGHT | 270 mm |
| PRODUCT WIDTH | 220 mm |
| PRODUCT WEIGHT | 1.8 kg |
| CERTIFICATIONS | CCC UL approval IEC/EN 60947-4-2 CE UL 60947-4-2 RoHS UL 60947-4-2 |
| CATALOG NOTES | Assigned motor rating: for normal internally and externally ventilated 4 pole, three-phase asynchronous motors with 1500 rpm at 50 Hz or 1800 min at 60 Hz |
| MODEL CODE | RAMO5-W204A32-512RS1 |



| Features & Functions | |
|----------------------|---|
| FEATURES | Parameterization: Fieldbus |
| | Parameterization: Keypad Diagnostics and reset on device and via AS-Interface |
| | Parameterization: drivesConnect mobile (App) Parameterization: drivesConnect |
| FITTED WITH: | Short-circuit release Key switch position HAND Key switch position AUTO Key switch position OFF/RESET Manual override switch Thermistor monitoring PTC Thermo-click Electronic motor protection Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation |
| FUNCTIONS | Temperature compensated overload protection External reset possible For actuation of motors with mechanical brake |

| General | |
|---|---|
| CLASS | CLASS 10 A |
| DEGREE OF PROTECTION | NEMA 12 IP65 |
| ELECTROMAGNETIC COMPATIBILITY | Class A |
| LIFESPAN, ELECTRICAL | 10,000,000 Operations (at AC-3) |
| LIFESPAN, MECHANICAL | 10,000,000 Operations (at AC-3) |
| MODEL | Reversing starter |
| OVERLOAD RELEASE CURRENT SETTING - MIN | 0.3 A |
| OVERLOAD RELEASE CURRENT SETTING - MAX | 6.6 A |
| OVERVOLTAGE CATEGORY | III |
| PRODUCT CATEGORY | Motor starter |
| PROTOCOL | AS-Interface profile cable: S-7.4 for 62 modules ASI |
| RATED IMPULSE WITHSTAND VOLTAGE (UIMP) | 4000 V |
| SYSTEM CONFIGURATION TYPE | Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage |
| ТҮРЕ | Reversing starter |
| VOLTAGE TYPE | DC |

| Ambient conditions, mechanical | |
|--------------------------------|--|
| MOUNTING POSITION | Vertical |
| SHOCK RESISTANCE | 15 g, Mechanical, According to IEC/EN 60068-2-27, 11 ms, Half- sinusoidal shock 11 ms, 1000 shocks per shaft |
| VIBRATION | Resistance: 10 - 150 Hz, Oscillation frequency Resistance: 57 Hz, Amplitude transition frequency on acceleration Resistance: 6 Hz, Amplitude 0.15 mm Resistance: According to IEC/EN 60068-2-6 |

| Climatic environmental conditions | |
|--|---|
| ALTITUDE | Above 1000 m with 1 % performance reduction per 100 m Max. 2000 m Max. 1000 m |
| AMBIENT OPERATING TEMPERATURE - MIN | -10 °C |
| AMBIENT OPERATING TEMPERATURE - MAX | 55 °C |
| AMBIENT STORAGE TEMPERATURE - MIN | -40 °C |
| AMBIENT STORAGE TEMPERATURE - MAX | 70 °C |
| CLIMATIC PROOFING | < 95 %, no condensation In accordance with IEC/EN 50178 |

| Main circuit | |
|---|---|
| CURRENT LIMITATION | Adjustable, motor, main circuit 0.3 - 6.6 A, motor, main circuit |
| INPUT CURRENT | 6.6 A (at 150 % Overload) |
| MAINS SWITCH-ON FREQUENCY | Maximum of one time every 60 seconds |
| MAINS VOLTAGE TOLERANCE | 380 - 480 V (-15 %/+10 %, at 50/60 Hz) |
| OFF-DELAY | 20 - 35 ms |
| ON-DELAY | 20 - 35 ms |
| OUTPUT FREQUENCY | 50/60 Hz |
| OVERLOAD CYCLE | AC-53a |
| RATED FREQUENCY - MIN | 47 Hz |
| RATED FREQUENCY - MAX | 63 Hz |
| RATED OPERATIONAL CURRENT (IE) | 6.6 A |
| RATED OPERATIONAL CURRENT (IE) AT 150% OVERLOAD | 6.6 A |
| RATED OPERATIONAL CURRENT (IE) AT AC-3, 380 V, 400 V, 415 V | 6.6 A |
| RATED OPERATIONAL POWER AT 380/400 V, 50 HZ - MIN | 0.09 kW |
| RATED OPERATIONAL POWER AT 380/400 V, 50 HZ - MAX | 3 kW |
| RATED OPERATIONAL POWER AT AC-3, 220/230 V, 50 HZ | 0 kW |
| RATED OPERATIONAL POWER AT AC-3, 380/400 V, 50 HZ | 3 kW |
| RATED OPERATIONAL VOLTAGE | 480 V AC, 3-phase 400 V AC, 3-phase |
| SUPPLY FREQUENCY | 50/60 Hz, fLN, Main circuit |
| SYSTEM CONFIGURATION TYPE | Phase-earthed AC supply systems are not permitted. Center-point earthed star network (TN-S network) AC voltage |
| | |

Motor rating

ASSIGNED MOTOR
POWER AT 460/480 V, 60 3 HP
HZ, 3-PHASE

| Braking function | |
|------------------|---|
| BRAKING CURRENT | ≤ 0.6 A (max. 6 A for 120 ms), Actuator for external motor brake |
| BRAKING VOLTAGE | 400/480 V AC -15 % / +10 %, Actuator for external motor brake |

| Short-circuit rating | |
|--|--|
| RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ) | 10 kA |
| RATED CONDITIONAL SHORT-CIRCUIT CURRENT (IQ), TYPE 2, 380 V, 400 V, 415 V | 0 A |
| SHORT-CIRCUIT PROTECTION (EXTERNAL OUTPUT CIRCUITS) | Type 1 coordination via the power bus' feeder unit, Main circuit |

| Control circuit | |
|--|--|
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MIN | 0 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 50 HZ - MAX | 0 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MIN | 0 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT AC, 60 HZ - MAX | 0 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MIN | 0 V |
| RATED CONTROL SUPPLY VOLTAGE (US) AT DC - MAX | 0 V |
| RATED CONTROL VOLTAGE (UC) | 24 V DC (-15 %/+20 %, external via AS-Interface® plug) 400/480 V AC (external |

| Communication | |
|---------------|--|
| CONNECTION | Connections pluggable in power section |
| INTERFACES | Specification: S-7.A.E. (AS-Interface®) Number of slave addresses: 62 (AS-Interface®) Max. total power consumption from AS-Interface® power supply unit (30 V): 190 mA |

| Contacts | |
|---|---|
| NUMBER OF AUXILIARY CONTACTS (NORMALLY CLOSED CONTACTS) | 0 |
| NUMBER OF AUXILIARY CONTACTS (NORMALLY OPEN CONTACTS) | 0 |

brake 50/60 Hz)

| Cable | |
|--------------|--|
| CABLE LENGTH | 10 m, Radio interference level, maximum motor cable length |

| Design verification | | Resources | |
|---|--|--|--|
| 10.2.2 CORROSION RESISTANCE | Meets the product standard's requirements. | eaton-rapid-link-firm update-rasp4-ap0402 en-us.pdf eaton-powerxl-da1-d db1-de1-rapidlink5- firmware-update- ap040214-en-us.pdf eaton-rapid-link- generation-change-ra to-rasp5-ap040197-e us.pdf eaton-powerxl-da1-d de1-internal-motor- protection-ap040016 us.pdf eaton-rapid-link- generation-change-ra to-ramo5-ap040198-ra us.pdf eaton-powerxl-dx-cor stick-3-ap040190-en- us.pdf eaton-rapid-link- generation-change-ra to-ramo4-ap040081-ra us.pdf eaton-rapid-link- generation-change-ra to-ramo4-ap040081-ra us.pdf eaton-rapid-link- generation-change-ra to-ramo4-ap040081-ra us.pdf eaton-rapid-link-5-ras profinet-communicat ap040215-en-us.pdf eaton-rapid-link- generation-change-ra to-rasp5-ap040196-e us.pdf eaton-rapid-link-5- | eaton-rapid-link-firmware- update-rasp4-ap040219- |
| 10.2.3.1 VERIFICATION OF THERMAL STABILITY OF ENCLOSURES | Meets the product standard's requirements. | | eaton-powerxl-da1-dc1- |
| 10.2.3.2 VERIFICATION OF RESISTANCE OF INSULATING MATERIALS | Meets the product standard's requirements. | | firmware-update- ap040214-en-us.pdf |
| TO NORMAL HEAT 10.2.3.3 RESIST. OF INSUL. MAT. TO | | | generation-change-rasp4- to-rasp5-ap040197-en- |
| ABNORMAL HEAT/FIRE BY INTERNAL ELECT. EFFECTS | Meets the product standard's requirements. | | eaton-rapid-link- generation-change-ra-sp- |
| 10.2.4 RESISTANCE TO ULTRA-VIOLET (UV) RADIATION | Meets the product standard's requirements. | | us.pdf |
| 10.2.5 LIFTING | Does not apply, since the entire switchgear needs to be evaluated. | | de1-internal-motor- protection-ap040016-en- |
| 10.2.6 MECHANICAL IMPACT | Does not apply, since the entire switchgear needs to be evaluated. | | generation-change-ramo4- to-ramo5-ap040198-en- |
| 10.2.7 INSCRIPTIONS | Meets the product standard's requirements. | | us.pdf eaton-powerxl-dx-com- |
| 10.3 DEGREE OF PROTECTION OF ASSEMBLIES | Does not apply, since the entire switchgear needs to be evaluated. | | stick-3-ap040190-en- us.pdf |
| 10.4 CLEARANCES AND CREEPAGE DISTANCES | Meets the product standard's requirements. | | eaton-rapid-link- generation-change-ra-mo- to-ramo4-ap040081-en- |
| 10.5 PROTECTION AGAINST ELECTRIC SHOCK | Does not apply, since the entire switchgear needs to be evaluated. | | eaton-rapid-link-5-rasp5- |
| 10.6 INCORPORATION OF SWITCHING DEVICES AND COMPONENTS | Does not apply, since the entire switchgear needs to be evaluated. | | ap040215-en-us.pdf eaton-rapid-link- |
| 10.7 INTERNAL ELECTRICAL CIRCUITS AND CONNECTIONS | ls the panel builder's responsibility. | | generation-change-ra-sp- to-rasp5-ap040196-en- us.pdf |
| 10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS | ls the panel builder's responsibility. | | configuration-rockwell-plc- |
| 10.9.2 POWER- FREQUENCY ELECTRIC STRENGTH | ls the panel builder's responsibility. | | Electromagnetic |
| 10.9.3 IMPULSE WITHSTAND VOLTAGE | Is the panel builder's responsibility. | BROCHURES | eaton-rapid-link-5- brochure-br040014en-en- |
| 10.9.4 TESTING OF ENCLOSURES MADE OF | Is the panel builder's responsibility. | | <u>us.pdf</u> |

| INSULATING MATERIAL | | | |
|-------------------------------------|--|--|--|
| 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. | | |

| | eaton-powerxl-variable- frequency-drives-material- handling-brochure- br040017en-en-us.pdf |
|---|---|
| CATALOGUES | Product Range Catalog Drives Engineering eaton-rapid-link-5-drive- system-catalog- |
| | ca040002en-en-us |
| | DA-DC-00004525.pdf |
| DECLARATIONS OF | DA-DC-00004184.pdf |
| CONFORMITY | DA-DC-00003964.pdf |
| | DA-DC-00004523.pdf |
| DRAWINGS | eaton-bus-adapter- rapidlink-reversing-starter- dimensions-003.eps |
| DRAWINGS | eaton-bus-adapter- rapidlink-reversing-starter- dimensions-002.eps |
| ECAD MODEL | ETN.RAMO5-W204A32- 512RS1.edz |
| INSTALLATION INSTRUCTIONS | <u>IL034084ZU</u> |
| INSTALLATION VIDEOS | Rapid Link 5 |
| MANUALS AND USER GUIDES | eaton-rapid-link-5- mn034004en-us.pdf |
| MCAD MODEL | ramo5_v10.stp ramo5_v10.dwg |
| SOFTWARE, FIRMWARE, AND APPLICATIONS | eaton-rapidlink5-firmware- release-note-mz034006en- us.pdf |

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



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