Speed controllers, 8.5 A, 4 kW, Sensor input 4, 230/277 V AC, AS-Interface \$, S-7.4 for 31 modules, HAN Q4/2, with fan



Part no. RASP5-8402A31-4120001S1 198838

| Product name | Eaton Moeller® series Rapid Link Speed controller |
|-------------------------------|--|
| | |
| Part no. | RASP5-8402A31-4120001S1 |
| AN | 4015081968961 |
| Product Length/Depth | 195 millimetre |
| Product height | 270 millimetre |
| Product width | 220 millimetre |
| Product weight | 3.6 kilogram |
| Certifications | UL 61800-5-1 UL approval IEC/EN 61800-5-1 RoHS CE |
| Product Tradename | Rapid Link |
| Product Type | Speed controller |
| Product Sub Type | None |
| Catalog Notes | 3 fixed speeds and 1 potentiometer speed can be switched over from U/f to (vector) speed control Connection of supply voltage via adapter cable on round or flexible busbar junc Diagnostics and reset on device and via AS-Interface integrated PTC thermistor monitoring and Thermoclick with safe isolation optional: 4 sensor inputs with M12-Y adapter for switchover to creep speed optional: Faster stop if external 24 V fails Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation with AUTO - OFF/RESET - HAND key switches with selector switch REV - OFF - FWD |
| | |
| eatures | Internal and on heat sink, temperature-controlled Fan Parameterization: Fieldbus Parameterization: Keypad Diagnostics and reset on device and via AS-Interface Parameterization: drivesConnect Parameterization: drivesConnect mobile (App) |
| ritted with: | Internal DC link Key switch position HAND PC connection Fan Control unit Key switch position OFF/RESET Key switch position AUTO Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation PTC thermistor monitoring Thermo-click with safe isolation IGBT inverter Selector switch (Positions: REV - OFF - FWD) |
| functions | 1 potentiometer speed For actuation of motors with mechanical brake 3 fixed speeds |
| Degree of protection | NEMA 12 IP65 |
| electromagnetic compatibility | 1st and 2nd environments (according to EN 61800-3) |
| Overvoltage category | III |
| Product category | Speed controller |
| Protocol | AS-Interface profile cable: S-7.4 for 31 modules ASI |
| Radio interference class | C1: for conducted emissions only C2, C3: depending on the motor cable length, the connected load, and ambient conditions. External radio interference suppression filters (optional) may be necessary. |
| | , |

| | Phase-earthed AC supply systems are not permitted. |
|--|--|
| Mounting position | Vertical |
| Shock resistance | 15 g, Mechanical, According to IEC/EN 60068-2-27, 11 ms, Half-sinusoidal shocl |
| Vibration | ms, 1000 shocks per shaft Resistance: 10 - 150 Hz, Oscillation frequency Resistance: 57 Hz, Amplitude transition frequency on acceleration Resistance: According to IEC/EN 60068-2-6 Resistance: 6 Hz, Amplitude 0.15 mm |
| Altitude | Above 1000 m with 1 % performance reduction per 100 m |
| Ambient operating temperature - min | Max. 2000 m -10 °C |
| Ambient operating temperature - max | 40 °C |
| Ambient storage temperature - min | -40 °C |
| Ambient storage temperature - max | 70 °C |
| Climatic proofing | < 95 %, no condensation In accordance with IEC/EN 50178 |
| Current limitation | Adjustable, motor, main circuit 0.8 - 8.5 A, motor, main circuit |
| Delay time Efficiency | < 10 ms, On-delay < 10 ms, Off-delay 98 % (η) |
| Emiciency Heat dissipation at current/speed | 51.6 W at 25% current and 0% speed 53.8 W at 25% current and 50% speed 60.9 W at 50% current and 0% speed 64 W at 50% current and 90% speed 65.4 W at 50% current and 50% speed 85.1 W at 100% current and 50% speed 94 W at 100% current and 50% speed 95.3 W at 100% current and 90% speed |
| Input current ILN at 150% overload | 7.8 A |
| Leakage current at ground IPE - max | 3.5 mA |
| Mains current distortion | 120 % |
| Mains switch-on frequency | Maximum of one time every 60 seconds |
| Mains voltage - max | 480 V |
| Mains voltage - min | 380 V |
| Mains voltage tolerance | 380 - 480 V (-10 %/+10 %, at 50/60 Hz) |
| Operating mode | U/f control BLDC motors Synchronous reluctance motors PM and LSPM motors Sensorless vector control (SLV) |
| Output frequency - max | 500 Hz |
| Output frequency - min Overload current | 0 Hz For 60 s every 600 s At 40 °C |
| Overload current IL at 150% overload | 12.7 A |
| Rated frequency - max | 66 Hz |
| Rated frequency - min | 45 Hz |
| Rated operational current (Ie) | 8.5 A at 150% overload (at an operating frequency of 8 kHz and an ambient air temperature of +40 °C) |
| Rated operational power at 380/400 V, 50 Hz, 3-phase | 4 kW |
| Rated operational voltage | 400 V AC, 3-phase 480 V AC, 3-phase |
| Resolution | 0.1 Hz (Frequency resolution, setpoint value) |
| Starting current - max | 200 %, IH, max. starting current (High Overload), For 2 seconds every 20 second Power section |
| Supply frequency | 50/60 Hz |
| Switching frequency | 8 kHz, 4 - 32 kHz adjustable, fPWM, Power section, Main circuit |
| Assigned motor power at 460/480 V, 60 Hz, 3-phase | 5 HP |

| Case A imax. & As La 120 misk, Actuator for external motor trave Braking various Sy (No) | | |
|---|--|---|
| Adjustable to 100 K (104), DC - Mon increas 202077 V AC - 15 K / + 10 S, Actuator for external motor brake Pasted conditional abort-circuit current (IIc) 10 LA Short-circuit protection (external output circuits) Pype 1 coordination wis the power bus feeder unit, Main circuit 202077 V AC (external wis AS-interface® plug) 202077 V AC (external brake 50/90 Hz) Communication interface Communication interface Pull type: IAAN 04/2 Interfaces Specifications 7.4 ALS-Interface® Number of alies addresses 11 (As-Interface®) Number of alies addresses 12 (As-Interface®) Number of alies addresses addresses 12 (As-Interface®) Number of alies addresses addresses 12 (As-Interface®) Number of alies addresses 12 (As-Interface®) Number of alies addresses 12 (As-Interface®) Number of alies addresses 12 (As-Interface®) Number of a | Braking current | ≤ 0.6 A (max. 6 A for 120 ms), Actuator for external motor brake |
| Rated conditional short-circuit current (lq) Short-circuit protection (external original circuits) Fated control voltage (Uc) Communication interface Asilienterface Plut year HAN 1042 Specifications 57.74 (AS interface) Interfaces Specifications 57.74 (AS interface) Interfaces Specifications 57.74 (AS interface) Interfaces Asilienterface Specifications 57.74 (AS interface) Many and power consumption from AS-interface(D power supply unit (SD V): 190 mA. Cable length Cable leng | Braking torque | |
| Short-circuit protection (external output circuits) Rated control voltage (Uc) 24 V DC. 15 % 29 %, external vira AS - Interface® plug) 220/277 V AC (external brake \$0,000 Hz) Communication interface AS-Interface Plug type: HAN DA/2 Specification: S-7.4 (AS-Interface®) Number of slave addresses: 31 (AS-Interface®) over supply unit (30 V): 190 mA. Cable length C3 25 m, maximum motor cable length C1 25 m, maximum moto | Braking voltage | 230/277 V AC -15 $\%$ / +10 $\%$, Actuator for external motor brake |
| Short-circuit protection (external output circuits) Rated control voltage (Uc) 24 V DC. 15 % 29 %, external vira AS - Interface® plug) 220/277 V AC (external brake \$0,000 Hz) Communication interface AS-Interface Plug type: HAN DA/2 Specification: S-7.4 (AS-Interface®) Number of slave addresses: 31 (AS-Interface®) over supply unit (30 V): 190 mA. Cable length C3 25 m, maximum motor cable length C1 25 m, maximum moto | | |
| Rated control voltage (Uc) 24 V D C + 15 % + 20 %, external via AS-interface ® plug) 230277 V AC (external brake 50/60 Hz) Communication interface AS-Interface Plug type: HAN Q42 Specification: 57 41 AS-interface ®) Number of slave addresses: 31 (AS-interface ®) Number of slave addresses: 32 (AS-interf | Rated conditional short-circuit current (Iq) | 10 kA |
| Communication interface Connection Control Connection Connection Control Con | Short-circuit protection (external output circuits) | Type 1 coordination via the power bus' feeder unit, Main circuit |
| Communication interface Connection Control Connection Connection Control Con | | |
| Commerciation interface Connection Plug yps: HAN 04/2 Interfaces Specifications: S-7 4 kaS-interface®) Number of slave addresses: 31 (AS-interface®) Number of slave addresses: 31 (AS-interface®) Number of slave addresses: 31 (AS-interface®) Max. total power consumption from AS-interface®) Max. total power consumption from AS-interface® power supply unit (30 V): 190 mA Cable length C3 ≤ 25 m, maximum motor cable length C1 ≤ 1 m, maximum motor cable length C1 ≤ 1 m, maximum motor cable length C1 ≤ 1 m, maximum motor cable length C1 ≤ 2 m, maximum motor cable length C1 ≤ 3 m, maximum motor cable length C1 ≤ 4 m, maximum motor cable l | Rated control voltage (Uc) | |
| Prug type: HAN Q4/2 Interfaces Prug type: HAN Q4/2 Interfaces Specification: S.7.4 (AS-Inerface®) Number of 1sive addresses: 31 (AS-Interface®) Number of 1 | | |
| Pug type: HAN 04/2 Interfaces Pug type: HAN 04/2 Interfaces Specification: S.7.4 (AS-Interface®) Number of silve addresses: 31 (AS-Interface®) Number of silve addresses: 32 (AS-Interface®) Number of silve addresses: 32 (AS-Interface®) Number of sil | Communication interface | AS-Interface |
| Interfaces Specification: S-7.4 (AS-Interface®) Number of slave addresses 31 (AS-Interface®) power supply unit (30 V): 190 mA Cable length C3 × 25 m, maximum motor cable length C1 × 1 m, maximum motor cable length C1 × 1 m, maximum motor cable length C1 × 1 m, maximum motor cable length C2 × 5 m, maximum motor cable length C1 × 1 m, maximu | | |
| Number of slave addresses: 31 (AS-Interface®) power supply unit (30 V): 190 mA Max. total power consumption from AS-Interface® power supply unit (30 V): 190 mA Cable length C3 ≤ 5 m, maximum motor cable length C1 ≤ 1 m, maximum motor cable length C2 ≤ 5 m, maximum motor cable length C2 ≤ 5 m, maximum motor cable length C2 ≤ 5 m, maximum motor cable length C3 ≤ 6 m, maximum motor cable length C3 ≤ 6 m, maximum motor cable length C3 ≤ 6 m, maximum motor cable length C4 ≤ 6 m, maximum mo | | |
| C1 < 1 m, maximum motor cable length C2 < 5 m, maximum motor cable length C3 < 5 m, maximum motor cable length C4 < 6 m, maximum motor cable length C4 < 6 m, maximum motor cable length C4 Sequence length C4 Sequence length C4 Sequence length C5 < 6 m, maximum motor cable length C4 Sequence length C5 < 6 m, maximum deverants C5 < 7 m, maximum deverants C6 Meets the product standard's requirements. C9 so not apply, since the entire switchgear needs to be evaluated. C10.2 Protection against electric shock C9 so not apply, since the entire switchgear needs to be evaluated. C10.3 Protection against electric shock C9 so not apply, since the entire switchgear needs to be evaluated. C10.4 Clearances and creepage distances C10.4 Clearances and creepage distances C10.4 Clearances and | | Number of slave addresses: 31 (AS-Interface®) Max. total power consumption from AS-Interface® power supply unit (30 V): 190 |
| C1 < 1 m, maximum motor cable length 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 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-violat (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. 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise The panel builder's responsibility. 10.11 Short-circuit rating 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 | Cable length | C3 < 25 m. maximum matar cahla lanath |
| 10.2.3.1 Verification of thermal stability of enclosures 10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist. of insul. mat. to abnormal heat/lire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.2.7 Inscriptions 10.2.8 Green of protection of assemblies 10.3.0 Begree of protection of assemblies 10.4 Clearances and creepage distances 10.5 Protection against electric shock 10.5 Protection against electric shock 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9 Power-frequency electric strength 10.9 Power-frequency electric strength 10.9 Is the panel builder's responsibility. 10.9.1 Testing of enclosures made of insulating material 10.10 Temperature rise 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.13 Mechanical function 10.14 Mechanical function 10.15 Mechanical function 10.16 Incorporation of switching devices and connections 10.17 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9 Incorporation of switching devices and components 10.9 Incorporation of external conductors 10.16 Incorporation of external conductors 10.17 Internal electrical circuits and connections 10.18 Incorporation of external conductors 10.19 Incorporation of external conductors 10.10 Incorporation of external conductors 10.10 Incorporation of external conductors 10.10 Incorporation of external conductors 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.14 Mechanical function 10.15 Mechanical function 10.16 Mechanical function 10.17 Meternal stability and external electric advices and explain a | Cable length | C1 ≤ 1 m, maximum motor cable length |
| 10.2.3.1 Verification of thermal stability of enclosures 10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.2.8 German of protection of assemblies 10.3.0 Begree of protection of assemblies 10.4 Clearances and creepage distances 10.5 Protection against electric shock 10.5 Protection against electrical circuits and connections 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9 Power-frequency electric strength 10.9 Power-frequency electric strength 10.9 Pasting of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.13 Mechanical function Meets the product standard's requirements. Meets the product standard's requirements. Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated. 10.5 Incorporation of switching devices and components 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Legendary is responsibility. 10.9 Power-frequency electric strength 10.9 Power-frequency electric strength 10.10 Temperature rise 10.10 Temperature rise 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.14 Mechanical function 10.15 Mechanical function 10.16 Meets the product standard's requirements. 10.17 Meets the product standard's requirements. 10.18 Meets the product standard's requirements. 10.19 Meets the product standard's requirements. 10.19 Meets the product standard's requirements. 10.10 Meets | | |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Resist of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.2.7 Inscriptions 10.3 Degree of protection of assemblies 10.4 Clearances and creepage distances 10.5 Protection against electric shock 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9 Power-frequency electric strength 10.9.4 Testing of enclosures made of insulating material 10.9.1 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.13 Mechanical function Meets the product standard's requirements. Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated. Is the panel builder's responsibility. Is the panel builder's responsibility. Is the panel builder's responsibility. 10.5 The panel builder's responsibility. 10.6 The panel builder's responsibility. 10.7 The panel builder's responsibility. 10.8 The panel builder's responsibility. 10.9 The panel builder's responsibility. 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function The device meets the requirements, provided the information in the instruction | 10.2.2 Corrosion resistance | Meets the product standard's requirements. |
| 10.2.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects 10.2.4 Resistance to ultra-violet (UV) radiation 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.3 Degree of protection of assemblies 10.4 Clearances and creepage distances 10.5 Protection against electric shock 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9.2 Power-frequency electric strength 10.9.3 Impulse withstand voltage 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.13 Mechanical function 10.13 Mechanical function 10.14 Mechanical function 10.15 Meets the product standard's requirements. 10.6 meets the product standard's requirements. 10.8 Meets the product standard's requirements. 10.9 Does not apply, since the entire switchgear needs to be evaluated. 10.9 not apply, since the entire switchgear needs to be evaluated. 10.9 Internal electrical circuits and connections 10.8 the panel builder's responsibility. 10.9.2 Power-frequency electric strength 10.14 Electromagnetic compatibility 10.15 Mechanical function 10.16 Incorporation of switching devices and components 10.17 Internal electrical circuits and connections 10.18 the panel builder's responsibility. 10.19 Internal electrical circuits and voltage 10.19 Internal electric strength 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.14 Mechanical function 10.15 Meets the product standard's requirements. 10.16 Meets the entire switchgear must be observed. 10.18 Mechanical function 10.19 Meets the entire switchgear ineeds to be evaluated. 10.29 Meets the product standard's requirements. 10.29 Meets the product standard's requirements. 10.29 Meets the entire switchgear needs to be evaluated. 10.20 Meets the product standard's requirements. 10.20 Meets t | 10.2.3.1 Verification of thermal stability of enclosures | Meets the product standard's requirements. |
| 10.24 Resistance to ultra-violet (UV) radiation Meets the product standard's requirements. 10.25 Lifting Does not apply, since the entire switchgear needs to be evaluated. 10.26 Mechanical impact Does not apply, since the entire switchgear needs to be evaluated. 10.27 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. 10.9.2 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 Is the panel builder's responsibility. 10.11 Short-circuit rating Is the panel builder's responsibility. The specifications for the switchgear must be observed. 10.12 Electromagnetic compatibility 10.13 Mechanical function The device meets the requirements, provided the information in the instruction | 10.2.3.2 Verification of resistance of insulating materials to normal heat | Meets the product standard's requirements. |
| 10.2.5 Lifting Does not apply, since the entire switchgaar needs to be evaluated. 10.2.6 Mechanical impact Does not apply, since the entire switchgaar 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 switchgaar 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 switchgaar needs to be evaluated. 10.6 Incorporation of switching devices and components Does not apply, since the entire switchgaar needs to be evaluated. 10.7 Internal electrical circuits and connections Is the panel builder's responsibility. 10.9.2 Power-frequency electric strength Is the panel builder's responsibility. 10.9.4 Testing of enclosures made of insulating material Is the panel builder is responsibility. 10.10 Temperature rise Does not apply, since the entire switchgaar needs to be evaluated. Is the panel builder's responsibility. 10.11 Short-circuit rating Is the panel builder is responsibility. 10.12 Electromagnetic compatibility Is the panel builder's responsibility. The specifications for the switchgaar must be observed. 10.13 Mechanical function The device meets the requirements, provided the information in the instruction | 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects | Meets the product standard's requirements. |
| 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. 10.9.2 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's responsibility. The specifications for the switchgear must be observed. 10.12 Electromagnetic compatibility 10.13 Mechanical function The device meets the requirements, provided the information in the instruction | 10.2.4 Resistance to ultra-violet (UV) radiation | Meets the product standard's requirements. |
| Meets the product standard's requirements. 10.3 Degree of protection of assemblies 10.4 Clearances and creepage distances 10.5 Protection against electric shock 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9.2 Power-frequency electric strength 10.9.3 Impulse withstand voltage 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function Meets the product standard's requirements. Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated. Is the panel builder's responsibility. Is the panel builder's responsibility. Is the panel builder's responsibility. The panel builder's responsibility. Is the panel builder's responsibility. Is the panel builder's responsibility. Is the panel builder's responsibility. The panel builder's responsibility. The specifications for the switchgear must be observed. In the device meets the requirements, provided the information in the instruction | 10.2.5 Lifting | Does not apply, since the entire switchgear needs to be evaluated. |
| Does not apply, since the entire switchgear needs to be evaluated. 10.4 Clearances and creepage distances 10.5 Protection against electric shock 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9.2 Power-frequency electric strength 10.9.3 Impulse withstand voltage 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.14 Edevice meets the requirements, provided the information in the instruction | 10.2.6 Mechanical impact | Does not apply, since the entire switchgear needs to be evaluated. |
| Meets the product standard's requirements. 10.5 Protection against electric shock 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9.2 Power-frequency electric strength 10.9.3 Impulse withstand voltage 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function Meets the product standard's requirements. Does not apply, since the entire switchgear needs to be evaluated. 1 be evaluated. 1 be panel builder's responsibility. 1 sthe panel builder's responsibility. The specifications for the switchgear must be observed. 1 sthe panel builder's responsibility. The specifications for the switchgear must be observed. 1 sthe panel builder's responsibility. The specifications for the switchgear must be observed. 1 sthe panel builder's responsibility. The specifications for the switchgear must be observed. | 10.2.7 Inscriptions | Meets the product standard's requirements. |
| 10.5 Protection against electric shock 10.6 Incorporation of switching devices and components 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9.2 Power-frequency electric strength 10.9.3 Impulse withstand voltage 10.10 Temperature rise 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function Does not apply, since the entire switchgear needs to be evaluated. 10 be evaluated. 10 be evaluated. 11 sthe panel builder's responsibility. 12 sthe panel builder's responsibility. 13 the panel builder's responsibility. 14 sthe panel builder's responsibility. 15 the panel builder is responsibility. 16 sthe panel builder's responsibility. 17 the panel builder's responsibility. 18 the panel builder's responsibility. 19 specifications for the switchgear must be observed. 10 sthe panel builder's responsibility. The specifications for the switchgear must be observed. 10 the panel builder's responsibility. The specifications for the switchgear must be observed. 10 the panel builder's responsibility. The specifications for the switchgear must be observed. | 10.3 Degree of protection of assemblies | Does not apply, since the entire switchgear needs to be evaluated. |
| 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. 10.10 Temperature rise The panel builder is responsibility. 10.11 Short-circuit rating Is the panel builder's responsibility. The specifications for the switchgear must be observed. 10.12 Electromagnetic compatibility 10.13 Mechanical function The device meets the requirements, provided the information in the instruction | 10.4 Clearances and creepage distances | Meets the product standard's requirements. |
| 10.7 Internal electrical circuits and connections 10.8 Connections for external conductors 10.9.2 Power-frequency electric strength 10.9.3 Impulse withstand voltage 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.14 Short-circuits and connections 10.15 Is the panel builder's responsibility. 10.16 Is the panel builder is responsibility. 10.17 Is the panel builder is responsibility. 10.18 Is the panel builder is responsibility. 10.19 Is the panel builder is responsibility. The specifications for the switchgear must be observed. 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.14 Electromagnetic provided the information in the instruction | 10.5 Protection against electric shock | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.8 Connections for external conductors 1 Is the panel builder's responsibility. 10.9.2 Power-frequency electric strength 10.9.3 Impulse withstand voltage 1 Is the panel builder's responsibility. 10.9.4 Testing of enclosures made of insulating material 1 Is the panel builder's responsibility. 1 Is the panel builder's responsibility. 1 Is the panel builder is responsibility. 1 In the panel builder is responsibility. 1 In the panel builder is responsibility. 1 Is the panel builder is responsibility. The specifications for the switchgear must be observed. 1 Is the panel builder's responsibility. The specifications for the switchgear must be observed. 1 Is the panel builder's responsibility. The specifications for the switchgear must be observed. 1 Is the panel builder's responsibility. The specifications for the switchgear must be observed. 1 Is the panel builder's responsibility. The specifications for the switchgear must be observed. 1 Is the panel builder's responsibility. The specifications for the switchgear must be observed. | 10.6 Incorporation of switching devices and components | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.9.2 Power-frequency electric strength 10.9.3 Impulse withstand voltage 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.9.4 Testing of enclosures made of insulating material 10.9.4 Testing of enclosures made of insulating material 10.9.5 Is the panel builder's responsibility. 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.14 Electromagnetic strength 10.15 Is the panel builder's responsibility. The specifications for the switchgear must be observed. 10.15 The device meets the requirements, provided the information in the instruction | 10.7 Internal electrical circuits and connections | Is the panel builder's responsibility. |
| 10.9.3 Impulse withstand voltage 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.9.4 Testing of enclosures made of insulating material 10.15 Is the panel builder's responsibility. 10.16 panel builder is responsibility of the temperature rise calculation. Eaton will provide heat dissipation data for the devices. 10.15 Is the panel builder's responsibility. The specifications for the switchgear must be observed. 10.16 device meets the requirements, provided the information in the instruction | 10.8 Connections for external conductors | Is the panel builder's responsibility. |
| 10.9.4 Testing of enclosures made of insulating material 10.10 Temperature rise 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function 10.13 Mechanical function 10.14 Testing of enclosures made of insulating material 15 the panel builder's responsibility. The temperature rise calculation. Eaton will provide heat dissipation data for the devices. 16 Is the panel builder's responsibility. The specifications for the switchgear must be observed. 17 Is the panel builder's responsibility. The specifications for the switchgear must be observed. 18 The device meets the requirements, provided the information in the instruction | 10.9.2 Power-frequency electric strength | 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 | 10.9.3 Impulse withstand voltage | Is the panel builder's responsibility. |
| provide heat dissipation data for the device's. 10.11 Short-circuit rating 10.12 Electromagnetic compatibility 10.13 Mechanical function provide heat dissipation data for the device's. Is the panel builder's responsibility. The specifications for the switchgear must be observed. Is the panel builder's responsibility. The specifications for the switchgear must be observed. The device meets the requirements, provided the information in the instruction | 10.9.4 Testing of enclosures made of insulating material | Is the panel builder's responsibility. |
| 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 | 10.10 Temperature rise | |
| observed. 10.13 Mechanical function The device meets the requirements, provided the information in the instruction | 10.11 Short-circuit rating | |
| · · · · · · · · · · · · · · · · · · · | 10.12 Electromagnetic compatibility | · · · · · · · · · · · · · · · · · · · |
| | 10.13 Mechanical function | |

Technical data ETIM 8.0

Low-voltage industrial components (EG000017) / Frequency converter =< 1 kV (EC001857)

Mains voltage V 380 - 480

Mains frequency 50/60 Hz

Electric engineering, automation, process control engineering / Electrical drive / Static frequency converter / Static frequency converter = < 1 kV (ecl@ss10.0.1-27-02-31-01 [AKE177014])

| Number of phases input | | 3 |
|---|----|-----|
| Number of phases output | | 3 |
| Max. output frequency | Hz | 500 |
| Max. output voltage | V | 500 |
| Nominal output current I2N | Α | 8.5 |
| Max. output at quadratic load at rated output voltage | kW | 4 |
| Max. output at linear load at rated output voltage | kW | 4 |

| Relative symmetric net frequency tolerance | % | | 10 |
|--|---|----|-------------|
| Relative symmetric net voltage tolerance | % | 6 | 10 |
| Number of analogue outputs | | | 0 |
| Number of analogue inputs | | | 0 |
| Number of digital outputs | | | 0 |
| Number of digital inputs | | | 4 |
| With control element | | | Yes |
| Application in industrial area permitted | | | Yes |
| Application in domestic- and commercial area permitted | | | Yes |
| Supporting protocol for TCP/IP | | | No |
| Supporting protocol for PROFIBUS | | | No |
| Supporting protocol for CAN | | | No |
| Supporting protocol for INTERBUS | | | No |
| Supporting protocol for ASI | | | Yes |
| Supporting protocol for KNX | | | No |
| Supporting protocol for Modbus | | | No |
| Supporting protocol for Data-Highway | | | No |
| Supporting protocol for DeviceNet | | | No |
| Supporting protocol for SUCONET | | | No |
| Supporting protocol for LON | | | No |
| Supporting protocol for PROFINET IO | | | No |
| Supporting protocol for PROFINET CBA | | | No |
| Supporting protocol for SERCOS | | | No |
| Supporting protocol for Foundation Fieldbus | | | No |
| Supporting protocol for EtherNet/IP | | | No |
| Supporting protocol for AS-Interface Safety at Work | | | No |
| Supporting protocol for DeviceNet Safety | | | No |
| Supporting protocol for INTERBUS-Safety | | | No |
| Supporting protocol for PROFIsafe | | | No |
| Supporting protocol for SafetyBUS p | | | No |
| Supporting protocol for BACnet | | | No |
| Supporting protocol for other bus systems | | | No |
| Number of HW-interfaces industrial Ethernet | | | 0 |
| Number of interfaces PROFINET | | | 0 |
| Number of HW-interfaces RS-232 | | | 0 |
| Number of HW-interfaces RS-422 | | | 0 |
| Number of HW-interfaces RS-485 | | | 1 |
| Number of HW-interfaces serial TTY | | | 0 |
| Number of HW-interfaces USB | | | 0 |
| Number of HW-interfaces parallel | | | 0 |
| Number of HW-interfaces other | | | 1 |
| With optical interface | | | No |
| With PC connection | | | Yes |
| Integrated breaking resistance | | | No |
| 4-quadrant operation possible | | | No |
| Type of converter | | | U converter |
| Degree of protection (IP) | | | IP65 |
| Degree of protection (NEMA) | | | 12 |
| Height | m | nm | 270 |
| Width | m | nm | 220 |
| Depth | m | nm | 195 |
| | | | |