



Speed controller, 3p, 3.3A, 400V, +manual override switch, connection at bottom

Part no. **RASP-300AI1S0-C32RS1**  
Article no. **150201**  
Catalog No. **RASP-300AI1S0-C32RS1**

## Delivery program

|                                |          |    |   |
|--------------------------------|----------|----|---|
| Product range                  |          |    | Speed controller  |
| Description                    |          |    | integrated PTC thermistor monitoring and Thermoclick with safe isolation<br>Two sensor inputs through M12 sockets (max. 150 mA) for quick stop and interlocked manual operation<br>Connection of supply voltage via adapter cable on round or flexible busbar junction<br>Diagnostics and reset on device and via AS-Interface with AUTO - OFF/RESET - HAND key switches<br>3 fixed speeds and 1 potentiometer speed<br>can be switched over from U/f to (vector) speed control<br>Two sensor inputs through M12 sockets with Y-connector (optional) for creep speed<br>with selector switch REV - OFF - FWD<br>selectable: with quick stop on failure of the external 24 V |
| Repair switch                  |          |    | with manual override switch   |
| Fan                            |          |    | without fan   |
| Braking resistance             |          |    | without braking resistance  |
| Rated operational voltage      | $U_e$    |    | 400 V AC, 3-phase   |
| Output voltage with $V_e$      | $U_2$    |    | 400 V AC, 3-phase   |
| Mains voltage (50/60Hz)        | $U_{LN}$ | V  | 380 (-10%) - 480 (+10%)   |
| At 150% overload               | $I_e$    | A  | 3.3   |
| Mains voltage (50/60Hz)        | $U_{LN}$ | V  | 380 (-10%) - 480 (+10%)   |
| <b>assigned motor rating P</b> |          |    |   |
| Note                           |          |    | at 400 V, 50 Hz   |
| 150 % Overload                 | P        | kW | 1.1   |
| Note                           |          |    | at 440 - 480 V, 60 Hz   |
| 150 % Overload                 | P        | HP | 1.5   |
| Note                           |          |    | for normal internally and externally ventilated 4 pole, three-phase asynchronous motors with $1500 \text{ rpm}^{-1}$ at 50 Hz or $1800 \text{ min}^{-1}$ at 60 Hz   |
| AS-Interface profile cable     |          |    | S-7.4 for 31 modules  |

## Technical data

### General

|                                 |           |    |  |
|---------------------------------|-----------|----|--|
| Standards                       |           |    | EN 61800-5-1<br>EN 61800-3<br>Directive 2002/95/EG (RoHS)<br>CE approval   |
| Climatic proofing               | $\rho_w$  | %  | < 95%, non-condensing<br>IEC/EN 50178  |
| Ambient temperature             |           |    |  |
| Storage                         | $\theta$  | °C | -30 - +70  |
| Overvoltage category            |           |    | III  |
| Rated impulse withstand voltage | $U_{imp}$ | kV | 2  |
| Radio interference level        |           |    |  |
| Environment (EMC)               |           |    | 2. Environment, Class C3   |
| maximum motor cable length      | l         | m  | 5  |
| Mechanical shock resistance     |           | g  | 1000 shocks per shaft, semi-sinusoidal 15 g/11 ms<br>IEC/EN 60068-2-27   |
| Vibration                       |           |    | Oscillation frequency: 10 - 150 Hz<br>Amplitude 0.15 mm: 6 Hz<br>Amplitude transition frequency on acceleration: 57 Hz<br>IEC/EN 60068-2-6 |
| Mounting position               |           |    | Vertical   |
| Altitude                        |           | m  | 0 - 1000 m above sea level<br>above 1000 m with 1 % performance reduction per 100 m<br>max. 2000 m   |
| Degree of Protection            |           |    | IP65<br>IEC/EN 60529   |

## Main circuit

|  |            |         |   |
|--|------------|---------|---|
| Supply   |            |         |   |
| Rated operational voltage                              | $U_e$      |         | 400 V AC, 3-phase   |
| Mains voltage (50/60Hz)                                | $U_{LN}$   | V       | 380 (-10%) - 480 (+10%)   |
| Input current (150% overload)                          | $I_{LN}$   | A       | 4   |
| System configuration                                   |            |         | AC voltage<br>Center-point earthed star network (TN-S network)<br>Phase-earthed AC supply systems are not permitted.  |
| Supply frequency                                       | $f_{LN}$   | Hz      | 50/60   |
| Frequency range  | $f_{LN}$   | Hz      | 47 - 66 Hz ( $\pm 0\%$ )  |
| Mains switch-on frequency                              |            |         | Maximum of one time every 60 seconds  |
| Mains current distortion                               | THD        | %       | > 120   |
| Rated conditional short-circuit current                | $I_q$      | kA      | < 5   |
| Short-circuit protection for output circuits, external |            |         | Type 1 coordination via the power bus' feeder unit  |
| Power section  |            |         |   |
| Function   |            |         | Frequency inverter with internal DC link and IGBT inverter  |
| On-delay   | $t_{ON}$   | ms      | 30 - 50   |
| Off-delay  | $t_{OFF}$  | ms      | 15 - 35   |
| Overload current (150% overload)                       | $I_L$      | A       | 5   |
| Note regarding overload current                        |            |         | at 40 °C  |
| Note about max. starting current                       |            |         | for 2 seconds<br>at 40 °C   |
| Output voltage with $V_e$                              | $U_2$      |         | 400 V AC, 3-phase   |
| Output Frequency                                       | $f_2$      | Hz      | 0 - 50/60 (max. 320)  |
| Switching frequency                                    | $f_{PWM}$  | kHz     | 6<br>adjustable 1.5 - 16  |
| Operation Mode   |            |         | linear, parameterizable   |
| Frequency resolution (setpoint value)                  | $\Delta f$ | Hz      | 0.01  |
| Rated operational current                              |            |         |   |
| At 150% overload                                       | $I_e$      | A       | 3.3   |
| Note   |            |         | Rated operational current at an operating frequency of 6 kHz and an ambient air temperature of +40 °C   |
| Motor current limit                                    | $I$        | A       | 0.66 - 6.6<br>adjustable  |
| Efficiency   | $\eta$     | %       | 0.95  |
| Maximum leakage current to ground (PE) without motor   | $I_{PE}$   | mA      | 3.5   |
| Fan  |            |         | internal, temperature controlled<br>optional RASP-FAN-S1 on heat sink, temperature-controlled   |
| Fitted with  |            |         | with manual override switch<br>without fan<br>without braking resistance  |
| Motor feeder   |            |         |   |
| Note   |            |         | for normal internally and externally ventilated 4 pole, three-phase asynchronous motors with 1500 rpm <sup>-1</sup> at 50 Hz or 1800 min <sup>-1</sup> at 60 Hz |
| Note   |            |         | at 400 V, 50 Hz   |
| 150 % Overload   | P          | kW      | 1.1   |
| Note   |            |         | at 440 - 480 V, 60 Hz   |
| 150 % Overload   | P          | HP      | 1.5   |
| Braking function                                       |            |         |   |
| DC braking   | %          | $I/I_e$ | $\leq$ 100, adjustable  |

## Control section

|                          |       |   |   |
|--------------------------|-------|---|---|
| External control voltage | $U_c$ | V | 24 V DC - 15 % / + 20 % via AS-Interface® plug  |
| AS-Interface®            |       |   | max. total power consumption from AS-Interface® power supply unit (30 V): 250 mA<br>Specification: S-7.4<br>Number of slave addresses: 31 |

## Design verification as per IEC/EN 61439

|  |  |  |  |
|--|--|--|--|
| Technical data for design verification |  |  |  |
|--|--|--|--|

|                                    |    |    |
|------------------------------------|----|----|
| Operating ambient temperature min. | °C | 0  |
| Operating ambient temperature max. | °C | 40 |

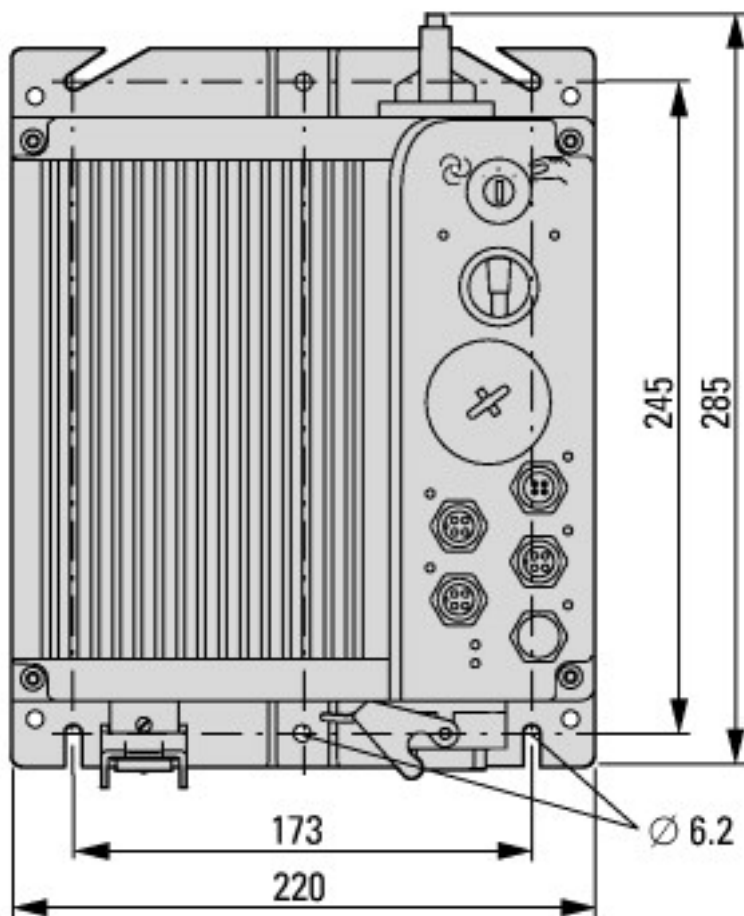
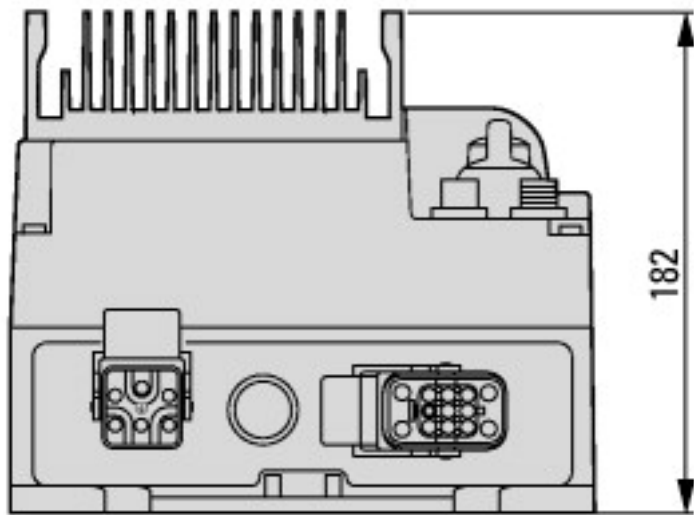
## Technical data ETIM 6.0

Devices for distribution board-/surface mounting (EG000062) / Speed controller (EC000256)

Electric engineering, automation, process control engineering / Electrical installation, device / Modular serial built-in device for electrical circuit distributors / Speed controller (ec@ss8.1-27-14-23-20 [ACN359008])

|                             |  |    |                           |
|-----------------------------|--|----|---------------------------|
| Mounting method             |  |    | Surface mounted (plaster) |
| Colour                      |  |    | Grey                      |
| RAL-number                  |  |    | 0                         |
| Nominal current             |  | A  | 3.3                       |
| Output voltage              |  | V  | 0 - 400                   |
| Number of phases            |  |    | 3                         |
| Power control step less     |  |    | Yes                       |
| Number of steps             |  |    | 0                         |
| Basic element without cover |  |    | Yes                       |
| Method of operation         |  |    | Key                       |
| Illumination                |  |    | None                      |
| Switching contact           |  |    | No                        |
| With temperature sensor     |  |    | Yes                       |
| Height                      |  | mm | 270                       |
| Width                       |  | mm | 220                       |
| Depth                       |  | mm | 157                       |
| Degree of protection (IP)   |  |    | IP65                      |

## Dimensions



with manual override switch

without fan

## Additional product information (links)

### IL03406020Z Rapid Link: Speed Control Unit

IL03406020Z Rapid Link: Speed Control Unit [ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03406020Z2014\\_09.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03406020Z2014_09.pdf)

### MN03406003Z Rapid Link 4.0

MN03406003Z Rapid Link 4.0 - Deutsch [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN03406003Z\\_DE.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03406003Z_DE.pdf)

MN03406003Z Rapid Link 4.0 - English [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN03406003Z\\_EN.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03406003Z_EN.pdf)

MN03406003Z Rapid Link 4.0 - français [ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN03406003Z\\_FR.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03406003Z_FR.pdf)

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