

# Motor controller CMMP-AS-C2-3A-M0

Part number: 1622901

FESTO



## Data sheet

| Feature                                      | Value                                                                                    |
|----------------------------------------------|------------------------------------------------------------------------------------------|
| Type of mounting                             | On sub-base<br>Screw-clamped                                                             |
| Product weight                               | 2100 g                                                                                   |
| Display                                      | 7-segment display                                                                        |
| Approval                                     | RCM trademark<br>c UL us listed (OL)                                                     |
| CE mark (see declaration of conformity)      | To EU EMC Directive<br>To EC Machinery Directive<br>In accordance with EU RoHS Directive |
| UKCA marking (see declaration of conformity) | To UK instructions for EMC<br>To UK regulations for machines<br>To UK RoHS instructions  |
| Certificate issuing authority                | German Technical Control Board (TÜV) Rheinland 01/205/5262.03/25                         |
| Storage temperature                          | -25 °C...70 °C                                                                           |
| Ambient temperature                          | 0 °C...40 °C                                                                             |
| Relative air humidity                        | 0 - 90%                                                                                  |
| Degree of protection                         | IP10<br>IP20                                                                             |
| Pollution degree                             | 2                                                                                        |
| Note on materials                            | RoHS-compliant                                                                           |
| LABS (PWIS) conformity                       | VDMA24364 zone III                                                                       |
| Phases of nominal operating voltage          | Single-phase                                                                             |
| Nominal operating voltage AC                 | 230 V                                                                                    |
| Permissible voltage fluctuations             | +/- 10 %                                                                                 |
| Input voltage range AC                       | 100 V...230 V                                                                            |
| Mains frequency                              | 50 Hz...60 Hz                                                                            |
| Nominal current                              | 2 A...3 A                                                                                |
| Active PFC                                   | yes                                                                                      |
| Mains filter                                 | Integrated                                                                               |
| Max. intermediate circuit voltage DC         | 320 V                                                                                    |
| Brake resistance                             | 60 Ohm                                                                                   |
| Pulse power, brake resistance                | 2.8 kVA                                                                                  |
| Nominal voltage for logic power supply DC    | 24 V                                                                                     |

| Feature                                                          | Value                                                                                                                  |
|------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Permissible range for logic voltage                              | ± 20 %                                                                                                                 |
| Current consumption of logic power supply without clamping brake | 0.55 A                                                                                                                 |
| Output voltage class AC                                          | 3x 0 - 270 V                                                                                                           |
| Nominal output current                                           | 2.5 A                                                                                                                  |
| Nominal current per phase, effective                             | 2.5 A                                                                                                                  |
| Peak current per phase, effective                                | 5 A                                                                                                                    |
| Max. peak current duration                                       | 5 s                                                                                                                    |
| Controller nominal output                                        | 500 VA                                                                                                                 |
| Maximum output                                                   | 1000 VA                                                                                                                |
| Output frequency                                                 | 0 Hz...1000 Hz                                                                                                         |
| Parameterisation interface                                       | Parameterisation and commissioning<br>USB<br>Ethernet                                                                  |
| Fieldbus link                                                    | CANopen<br>Modbus/TCP                                                                                                  |
| Communication profile                                            | DS301/DSP402                                                                                                           |
| Process interfacing                                              | I/O coupling<br>For 256 position sets                                                                                  |
| Max. fieldbus transmission rate                                  | 1 Mbit/s                                                                                                               |
| Bus connection                                                   | 9-pin<br>Sub-D<br>Socket                                                                                               |
| Encoder interface output, features                               | Resolution 16384 ppr                                                                                                   |
| Encoder interface output, function                               | Actual value feedback via encoder signals in speed control mode.<br>Setpoint specification for downstream slave drive. |
| Encoder interface input, features                                | 3-phase encoder signals<br>EnDat<br>HIPERFACE<br>RS422<br>SINCOS                                                       |
| Encoder interface input, function                                | Setpoint speed value as encoder signal<br>Specifies the speed of the slave drive in synchronous mode.                  |
| Number of digital logic inputs                                   | 10                                                                                                                     |
| Features of logic input                                          | Galvanically isolated<br>Freely configurable                                                                           |
| Working range of logic input                                     | 8 V...30 V                                                                                                             |
| Number of digital logic outputs 24 V DC                          | 5                                                                                                                      |
| Features of digital logic outputs                                | Galvanically isolated<br>Freely configurable in some cases                                                             |
| Max. current digital logic outputs                               | 100 mA                                                                                                                 |
| Number of analogue setpoint inputs                               | 2                                                                                                                      |
| Features of setpoint inputs                                      | Differential inputs<br>Configurable for speed<br>Configurable for current                                              |
| Working range setpoint input                                     | ± 10 V                                                                                                                 |
| Impedance of setpoint input                                      | 20 kOhm                                                                                                                |
| Number of analogue monitor outputs                               | 2                                                                                                                      |
| Working range of monitor outputs                                 | ± 10 V                                                                                                                 |
| Resolution of monitor outputs                                    | 9 bit                                                                                                                  |
| Features of monitor outputs                                      | Short-circuit proof                                                                                                    |
| Safety function                                                  | Safe torque off (STO)<br>Safe Stop 1 (SS1)                                                                             |
| Safety Integrity Level (SIL)                                     | Safe torque off (STO)/SIL 3/SILCL 3                                                                                    |
| Performance Level (PL)                                           | Safe Torque Off (STO)/category 4, performance level e                                                                  |
| Diagnostic coverage                                              | 97 %                                                                                                                   |
| SFF Safe Failure Fraction                                        | 99.17 %                                                                                                                |
| Hardware fault tolerance                                         | 1                                                                                                                      |
| Proof test interval                                              | 20 y                                                                                                                   |

