

# Servo drive

## CMMT-AS-C2-11A-P3-MP-S1

Part number: 8143165

FESTO



## Data sheet

| Feature                                    | Value  |
|--|--|
| Type of mounting                           | Mounting plate, screwed on   |
| Mounting position                          | Free convection<br>Vertical  |
| Product weight                             | 2100 g   |
| Display                                    | LED green/yellow/red   |
| Control elements                           | Optional: CDSB operating unit  |
| Conforms to standard                       | EN 61800-3<br>EN 61800-5-1<br>EN 61800-5-2<br>EN ISO 13849-1   |
| Based on norm                              | EN 50581<br>EN 60204-1<br>EN 61508-1<br>EN 61508-2<br>EN 61508-3<br>EN 61508-4<br>EN 61508-5<br>EN 61508-6<br>EN 61508-7<br>EN 61800-2<br>EN 62061 |
| Certification                              | RCM compliance mark<br>German Technical Control Board (TÜV)<br>c UL us - Listed (OL)   |
| CE marking (see declaration of conformity) | As per EU EMC directive<br>as per EU machinery directive<br>As per EU RoHS directive   |
| Storage temperature                        | -25 °C...55 °C   |
| Ambient temperature                        | 0 °C...50 °C   |
| Note on ambient temperature                | Above an ambient temperature of 40 °C, the power must be reduced by 3%/ <sup>o</sup> C.  |
| Relative air humidity                      | 5 - 90 %<br>Non-condensing   |
| Max. installation height                   | 2000 m   |
| Information on max. installation height    | 1% power reduction/100 m above 1000 m.   |
| Degree of protection                       | IP20   |
| Overvoltage category                       | III  |

| Feature  | Value  |
|--|--|
| Note on materials  | RoHS-compliant   |
| LABS (PWIS) conformity   | VDMA24364 zone III   |
| Nominal operating voltage phases                                 | 3-phase  |
| Nominal operating voltage AC                                     | 400 V  |
| Permissible voltage fluctuations                                 | +/- 10 %   |
| Max. DC link voltage   | 800 V  |
| Pulse power of braking resistor                                  | 5 kVA  |
| Nominal voltage, logic supply DC                                 | 24 V   |
| Permissible range of logic voltage                               | ± 20 %   |
| Max. current consumption for logic supply without clamping brake | 0.5 A  |
| Nominal current per phase, effective                             | 1.7 A  |
| Peak current per phase, effective                                | 5.1 A  |
| Max. peak current duration                                       | 2 s  |
| Controller nominal power   | 800 W  |
| Peak power   | 2400 W   |
| Mode of operation  | Field-oriented regulation<br>Position resolution 24 bit/rev.<br>Sampling rate 16 kHz<br>PWM with 8 or 16 kHz<br>Vector modulation with 3rd harmonic<br>Real-time data acquisition<br>2x input capture (x, v, F)<br>2x output trigger (x, v, F)<br>2x position sensor input<br>1x SYNC interface for encoder emulation or encoder input |
| Ethernet interface, function                                     | Parameterization and commissioning   |
| Ethernet interface, protocol                                     | TCP/IP   |
| Fieldbus interface, protocol                                     | EtherCAT<br>EtherNet/IP<br>Modbus®/TCP<br>PROFINET IRT<br>PROFINET RT  |
| Fieldbus interface, connection type                              | 2x socket  |
| Fieldbus interface, connection technology                        | RJ45   |
| Encoder interface, function                                      | BiSS-C<br>EnDat® 2.1 encoder<br>EnDat® 2.2 encoder<br>Hiperface encoder<br>Incremental encoder<br>Nikon<br>SIN/COS encoder   |
| Encoder interface 2, function                                    | Incremental encoder<br>SIN/COS encoder   |
| Synchronization interface, function                              | Encoder emulation A/B/Z<br>Encoder input A/B/Z   |
| Input switching logic  | PNP (positive switching)   |
| Number of high-speed logic inputs                                | 2  |
| Time resolution of high-speed logic inputs                       | 1 µs   |
| Number of high-speed switching outputs                           | 2  |
| Time resolution of high-speed switching outputs                  | 1 µs   |
| Number of floating switching outputs                             | 1  |
| Max. current of the floating switching outputs                   | 50 mA  |
| Number of analog setpoint inputs                                 | 1  |
| Characteristics of setpoint inputs                               | Differential inputs<br>Configurable for rotational speed<br>Configurable for current/force   |
| Work range of setpoint input                                     | ± 10 V   |
| Impedance of setpoint input                                      | 70 kOhm  |
| Number of safe 2-pin inputs                                      | 2  |

| Feature                      | Value |
|------------------------------|-------|
| Number of diagnostic outputs | 2     |