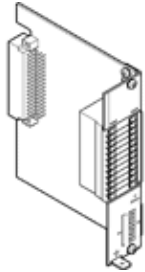


# safety module CAMC-G-S3

Part number: 1501331

FESTO

One plug-in module CAMC-DS-M1, CAMC-G-S1 or CAMC-G-S3 is required in order to operate the motor controller CMMP-AS-...-M3.



## Data sheet

| Feature  | Value   |
|--|---|
| Nominal DC voltage, logic power supply                         | 24 V  |
| Nominal operating voltage DC                                   | 24 V  |
| Nominal current, logic supply                                  | 0.15 A  |
| Permissible range, logic voltage                               | ± 20 %  |
| Current consumption, logic power supply without clamping brake | 0.2 A   |
| Short circuit strength   | Yes, exception: contact C1/C2   |
| Acceptable current load at 40°C                                | 0.2 A   |
| Protection (short circuit)                                     | No  |
| Design of the digital output                                   | Potential-free signal contact<br>3 safe, 2-channel semiconductor outputs  |
| Number of digital logic inputs                                 | 10  |
| Digital outputs, switching logic                               | Semiconductor outputs: parameterisable<br>PNP (positive switching)<br>2-channel equivalent/antivalent   |
| Dimensions W x L x H   | 112,2 mm x 99,1 mm x 28,7 mm  |
| Product-specific LED display                                   | Error (red)<br>Normal operation (green)<br>Safe state (yellow)  |
| Safety function  | Safe brake control (SBC)<br>Safe speed range (SSR)<br>Safe speed monitor (SSM)<br>Safe torque off (STO)<br>Safely-limited speed (SLS)<br>Safe operating stop (SOS)<br>Safe stop 1 (SS1)<br>Safe stop 2 (SS2)  |
| Probability of Failure per Hour in [1/h].                      | 9.5E-09   |
| Proof test interval  | 20 a  |
| Hardware fault tolerance                                       | 1   |
| SFF Safe Failure Fraction                                      | 99.5 %  |
| Certified for safety function to ISO 13849 and IEC 61508 (SIL) | Product can be used in SRP/CS up to SIL 3 (high demand)   |
| Safety Integrity Level (SIL)                                   | Safe brake control (SBC)/SIL 3<br>Safely limited speed (SLS)/SIL 3<br>Safe operating stop (SOS)/SIL 3<br>Safe stop 1 (SS1)/SIL 3<br>Safe stop 2 (SS2)/SIL 3<br>Safe Speed Monitor (SSM)/SIL 3<br>Safe Speed Range (SSR)/SIL 3<br>Safe torque off (STO)/SIL 3                                  |
| Performance level (PL)   | Safe brake control (SBC)/category 4, Performance Level e<br>Safely limited speed (SLS)/category 3, Performance Level e<br>Safe operating stop (SOS)/category 3, Performance Level e<br>Safe stop 1 (SS1)/category 3, Performance Level e<br>Safe stop 2 (SS2)/category 3, Performance Level e |

| Feature  | Value   |
|--|---|
|  | Safe speed monitor (SSM)/category 3, Performance Level e<br>Safe speed range (SSR)/category 3, Performance Level e<br>Safe Torque off (STO)/Category 4, Performance Level e |
| Diagnostic coverage                              | 97.5 %  |
| Certified for safety functions to ISO 13849 (PL) | Product can be used in SRP/CS up to category 4, PL e  |
| Authorisation                                    | TÜV   |
| CE mark (see declaration of conformity)          | to EU directive for EMC<br>to EU directive for machinery  |
| Certificate issuing department                   | 01/205/5165.02/19<br>TÜV Rheinland  |
| Storage temperature                              | -25 ... 55 °C   |
| Relative air humidity                            | 5 - 90 %<br>non-condensing  |
| Protection class                                 | IP20<br>in assembled condition  |
| Ambient temperature                              | 0 ... 40 °C   |
| Product weight                                   | 220 g   |
| Mounting type                                    | Plug-in module for CMMP-AS...-M3  |
| Materials note                                   | Contains PWIS substances<br>Conforms to RoHS  |
| Assembly position                                | Any   |
| Wire ends  | Wire end ferrule  |
| Terminal cross-section                           | 0.25 ... 0.5 mm <sup>2</sup>  |
| Electrical connection                            | Screwed terminal<br>Plug straight   |
| Display  | LED green/yellow/red  |
| Control elements                                 | DIP switches  |
| Specification, logic input                       | IEC 61131-2, type 3   |
| Logic input characteristics                      | 4 safe, 2-channel inputs<br>Equivalent/antivalent switching<br>Test pulses configurable<br>Function configurable<br>6 safe, 1-channel inputs<br>Test pulses configurable    |
| Logic input working range                        | 13 ... 28.8 V   |
| Max. nominal input current                       | 0.015 A   |
| Debouncing time, inputs                          | 0.3 ms  |
| Current-carrying capacity per output             | 50 mA   |
| Max. current, digital logic outputs              | 50 mA   |
| Fuse protection, output                          | Short-circuit and cross-circuit monitoring  |
| Minimum cycle time                               | 2 ms  |
| Parameters configuring                           | Via SafetyTool  |