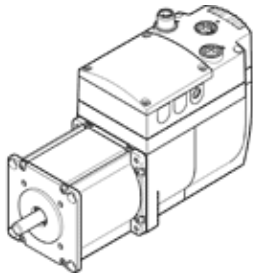


Integrated Drive EMCA-EC-67-S-1TM-EC

Part number: 8069731

FESTO



Data sheet

| Feature | Value |
|---|--|
| Controller operating mode | PWM-MOSFET power output stage Cascade controller with P position controller PI speed controller Proportional and integral controller for electricity |
| Configuration support | ESI file |
| Minimum cycle time | 2 ms |
| Rotor position sensor | Absolute multi-turn encoder |
| Rotary position encoder measuring principle | Magnetic |
| Protective function | I ² t monitoring Temperature monitoring Current monitoring Voltage failure detection Drag error monitoring Software end-position detection |
| Topologies | Star Ring Line |
| Additional functions | CoE (CSP only) Distributed clocks Emergency Message Variable PDO mapping |
| Safety function | Safe torque off (STO) |
| Safety Integrity Level (SIL) | Safe torque off (STO)/SIL 2 |
| Performance level (PL) | Safe torque off (STO)/category 3, performance level d |
| Display | LED |
| Max. speed | 3,500 1/min |
| Nominal rotary speed | 3,100 1/min |
| Baud rate | 10/100 Mbit/s (Full/Half) |
| Braking resistor, external | 6 Ohm |
| Diagnostic coverage | 90 % |
| Digital logic output characteristics | Freely configurable to a given extent Not electrically isolated |
| Hardware fault tolerance | 1 |
| Max. current, digital logic outputs | 100 mA |
| Max. positive test pulse with logic 0 | 10,000 µs |
| Max. negative test pulse with logic 1 | 600 µs |
| Nominal motor power | 120 W |
| Nominal voltage DC | 24 V |
| Nominal current | 6.9 A |
| Parameters configuring interface | Ethernet |
| Protocol | EtherCAT |
| SFF Safe Failure Fraction | > 90 % |
| Absolute encoder operating time | With external battery: 6 months Without external battery: 3 - 7 days |
| Max. number of positioning sets | 64 |

| Feature | Value |
|---|--|
| Rotor position encoder resolution | 12 Bit |
| Peak motor power | 158 W |
| Peak current | 10.2 A |
| Permissible voltage fluctuation | +/- 20 % |
| Authorisation | RCM Mark c UL us - Recognized (OL) |
| KC mark | KC-EMV |
| Certificate issuing department | TÜV 01/205/5514.00/16 UL E331130 |
| CE mark (see declaration of conformity) | to EU directive for EMC to EU directive for machinery |
| Vibration resistance | Transport application test at severity level 2 in accordance with FN 942017-4 and EN 60068-2-6 |
| Shock resistance | Shock test with severity level 2 in accordance with FN 942017-5 and EN 60068-2-27 |
| Storage temperature | -25 ... 70 °C |
| Media redundancy | Ring redundancy |
| Relative air humidity | 0 - 95 % non-condensing |
| Protection class | IP54 |
| Ambient temperature | 0 ... 50 °C |
| Note on ambient temperature | Power must be reduced by 1.75% per °C at ambient temperatures above 20 °C |
| Mass moment of inertia of rotor | 0.175 kgcm ² |
| Nominal torque | 0.37 Nm |
| Peak torque | 0.85 Nm |
| Permissible axial shaft load | 60 N |
| Permissible radial shaft load | 100 N |
| Probability of Failure per Hour in [1/h]. | 1E-09 |
| PFD (Probability of Failure on Demand) | 1.86E-05 |
| Proof test interval | 20 a |
| Product weight | 1,925 g |
| Number of 24 V DC digital logic outputs | 2 |
| Number of digital logic inputs | 2 |
| Communications profile | CiA402 FHPP |
| Specification, logic input | Based on IEC 61131-2 |
| Logic input working range | 24 V |
| Logic input characteristics | galvanically connected to logic potential |
| Ethernet, supported protocols | TCP/IP |
| Input circuit logic | PNP (positive-switching) |
| Switching logic, outputs | PNP (positive-switching) |
| Mounting type | Tightened with through hole |
| Materials note | Contains PWIS substances Conforms to RoHS |