Integrated motor
EMCA-EC-67-S-1TE-CO

Part number: 8034238



Data sheet

Feature	Value
KC characters	KC EMC
Type code	EMCA
Controller operating mode	PWM MOSFET power output stage Cascade controller with P position controller PI speed controller PI current regulator
Rotor position sensor	Absolute encoder, single-turn
Rotor position sensor measuring principle	Magnetic
Protective function	I²t monitoring Temperature monitoring Current monitoring Voltage failure detection Contouring error monitoring Software end position detection
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. rotational speed	3500 1/min
Nominal rotary speed	3100 1/min
Braking resistor, external	6 Ohm
Diagnostic coverage	90 %
Characteristics of digital logic outputs	Freely configurable in some cases Not galvanically isolated
Hardware fault tolerance	1
Max. current of digital logic outputs	100 mA
Max. positive test pulse with 0 signal	10000 µs
Max. negative test pulse on 1 signal	600 µs
Motor nominal power	120 W
DC nominal voltage	24 V
Nominal current	6.9 A
Parameterization interface	Ethernet
Protocol	CANopen
SFF safe failure fraction	>90 %
Max. number of positioning sets	64
Rotor position sensor resolution	12 bit
Motor peak power	158 W

Feature	Value
Peak current	10.2 A
Permissible voltage fluctuations	+/- 20 %
Certificate issuing authority	German Technical Control Board (TÜV) 01/205/5514.00/16 UL E331130
CE marking (see declaration of conformity)	As per EU EMC directive as per EU machinery directive
Vibration resistance	Transport application test with severity level 2 as per FN 942017-4 and EN 60068-2-6
Shock resistance	Shock test with severity level 2 as per FN 942017-5 and EN 60068-2-27
Corrosion resistance class (CRC)	1 - Low corrosion stress
Storage temperature	-25 °C ... 70 °C
Relative air humidity	0 - 95 % Non-condensing
Degree of protection	IP54
Ambient temperature	0 °C ... 50 °C
Note on ambient temperature	Above an ambient temperature of 20 °C, the power must be reduced by 1.75% per °C.
Certification	RCM compliance mark c UL us - Recognized (OL)
Rotor mass moment of inertia	0.175 kgcm²
Nominal torque	0.37 Nm
Peak torque	0.85 Nm
Permissible axial shaft load	60 N
Permissible radial shaft load	100 N
PFH	1.0E-9
PFD	1.86E-5
Proof test interval	20 y
Product weight	1900 g
Number of digital logic outputs 24 V DC	2
Number of digital logic inputs	2
Communication profile	CiA402 FHPP
Logic input specification	Based on IEC 61131-2
Work range of logic input	24 V
Characteristics of logic input	Galvanically connected to logic potential
Ethernet, supported protocols	TCP/IP
Input switching logic	PNP (positive switching)
Switching logic at outputs	PNP (positive switching)
Type of mounting	Screwed tightly With through-hole
Note on materials	Contains paint-wetting impairment substances RoHS-compliant