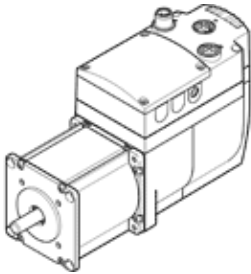


# Integrated Drive EMCA-EC-67-S-1TE-EC

Part number: 8069729  
Product to be discontinued

FESTO

Type to be discontinued. Available until 2026. See Support Portal for alternative products.



## 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 single turn encoder
Rotary position encoder measuring principle	Magnetic
Protective function	I <sup>2</sup> 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 %

<b>Feature</b>	<b>Value</b>
Absolute encoder operating time	With external battery: 6 months Without external battery: 3 - 7 days
Max. number of positioning sets	64
Rotor position encoder resolution	12 Bit
Peak motor power	158 W
Peak current	10.2 A
Permissible voltage fluctuation	+/- 20 %
Authorization	RCM Mark c UL us - Recognized (OL)
KC mark	KC-EMV
Certificate issuing department	TÜV 01/205/5514.00/16 UL E331130 German Technical Control Board (TÜV) Rheinland UK Ltd. 01/205U/5514.00/22 German Technical Control Board (TÜV) Rheinland 01/205/5514.01/21
CE symbol (see declaration of conformity)	according to EU-EMV guideline according to EU machines guideline in accordance with EU RoHS directive
UKCA marking (see declaration of conformity)	To UK instructions for EMC To UK instructions for machines To UK RoHS instructions
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
PWIS conformity	VDMA24364 zone III
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 <sup>2</sup>
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	1,900 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	Conforms to RoHS