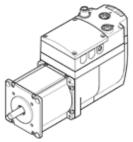# Integrated Drive
EMCA-EC-67-M-1TM-CO

Part number: 8034241
Product to be discontinued

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

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
Rotor position sensor	Absolute multi-turn encoder
Rotary position encoder measuring principle	Magnetic
Protective function	I²t monitoring
	Temperature monitoring
	Current monitoring
	Voltage failure detection
	Drag 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. speed	3,300 1/min
Nominal rotary speed	3,150 1/min
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	150 W
Nominal voltage DC	24 V
Nominal current	6.9 A
Parameters configuring interface	Ethernet
Protocol	CANopen
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
Rotor position encoder resolution	12 Bit
Peak motor power	200 W
Peak current	10.3 A
Permissible voltage fluctuation	+/- 20 %
Authorization	RCM Mark
	c UL us - Recognized (OL)
KC mark	KC-EMV

Feature	Value
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
Corrosion resistance classification CRC	1 - Low corrosion stress
PWIS conformity	VDMA24364 zone III
Storage temperature	-25 ... 70 °C
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	0.301 kgcm2
Nominal torque	0.45 Nm
Peak torque	0.91 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	2,285 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