servo drive
CMMT-AS-C2-11A-P3-EP-S1

Part number: 5340826
Product to be discontinued

Type to be discontinued. Available until 2023. See Support Portal for alternative products.

FESTO

Data sheet

Feature	Value
Mounting type	Mounting plate, bolted
Assembly position	Free convection
	Vertical
Product weight	2,100 g
Display	LED green/yellow/red
Control elements	Optional: control unit CDSB
Conforms to standard	EN 61800-3
	EN 61800-5-1
	EN 61800-5-2
	EN ISO 13849-1
Based on the standard	EN 50581
	EN 60204-1
	EN 61508-1
	EN 61508-2
	EN 61508-3
	EN 61508-4
	EN 61508-5
	EN 61508-6
	EN 61508-7
	EN 61800-2
	EN 62061
Authorization	RCM Mark
	TÜV
	c UL us - Listed (OL)
KC mark	KC-EMV
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
Certificate issuing department	TÜV Rheinland 01/205/5640.00/18
	UL E331130
	TÜV Rh. UK 01/205U/5640.00/22
Storage temperature	-25 ... 55 °C
Ambient temperature	0 ... 50 °C
Note on ambient temperature	Power must be reduced by 3%/°C at ambient temperatures above 40°C.
UL ambient temperature	0 ... 40 °C
Relative air humidity	5 - 90 %
	non-condensing
Max. installation height	2,000 m
Note on max. installation height	From 1000 m, power reduction by 1% per 100 m
Protection class	IP20

Feature	Value
Safety class	I
Overvoltage category	III
Degree of contamination	2
Surge strength	6 kV
Materials note	Conforms to RoHS
PWIS conformity	VDMA24364 zone III
Nominal operating voltage, phases	Three-phase
Nominal operating voltage, AC	400 V
Permissible voltage fluctuation	+/- 10 %
Input voltage range AC	200 ... 480 V
Line frequency	48 ... 62 Hz
Nominal current, load supply	2 A
Peak current, load supply	6 A
Active PFC	No
Mains filter	Integrated
System voltage to EN 61800-5-1	300 V
Max. short circuit protection of the mains	10 kA
Mains types	TN
	IT
Nominal voltage, load supply DC	560 V
Permissible range, load supply	± 10 %
Max. intermediate circuit voltage, DC	800 V
Braking resistor, integrated	130 Ohm
Braking resistance pulse power	5 kW
Pulse energy for braking resistor	850 Ws
Nominal power braking resistor (IEC)	48 W
Braking resistor, external	130 ... 250 Ohm
Max. continuous output of the external braking resistor (IEC)	400 W
Nominal DC voltage, logic power supply	24 V
Permissible range, logic voltage	± 20 %
Current consumption, logic power supply without clamping brake	0.5 A
Current consumption for logic supply with locking brake	1.5 A
Max. current consumption for logic supply, holding brake and I/O	2.3 A
Output voltage range AC	3x (0 – Input) V
Effective nominal current per phase	1.7 A
Effective peak current per phase	5.1 A
Max. peak current duration	2 s
Nominal controller power	800 W
Peak power	2,400 W
Output frequency	0 ... 599 Hz
Max. length of motor cable without external mains filter	50 m
Max. output current of holding brake	1 A
Max. voltage drop from logic supply to brake output	0.8 V
Number of inputs for motor temperature sensor	1
Controller operating mode	Cascade controller
	P position controller
	PI speed controller
	PI current regulator for F or M
	Profile operation with record and direct mode
	Interpolated mode via fieldbus
	Synchronised operating modes
	Homing
	Setting-up
	Autotuning
Operating mode	Field-oriented closed-loop control
	Position resolution 24 bit/U
	Sampling rate 16 kHz
	PWM at 8 or 16 KHz
	Vector modulation with 3rd harmonic
	Real-time data acquisition
	2x Input-Capture (x, v, F)

Feature	Value
	2x Output-Trigger (x, v, F)
	2x position encoder input
	1x SYNC interface for encoder emulation or encoder input
Ethernet interface, function	Parameterisation and commissioning
Ethernet interface, protocol	TCP/IP
Fieldbus interface, protocol	EtherNet/IP
	Modbus/TCP
Fieldbus coupling	EtherNet/IP
	Modbus/TCP
Communications profile	DriveProfile
Process interface	Adjustable speed drives
	Drives with positioning function
Fieldbus interface, transmission rate	100 Mbit/s
Fieldbus interface, type of connection	2x socket
Fieldbus interface, connection technology	RJ45
Encoder interface, function	ENDAT 2.1 encoder
	ENDAT 2.2 encoder
	Hiperface encoder
	Incremental encoder
	Nikon
	SIN/COS encoder
Encoder interface 2, function	Incremental encoder
	SIN/COS encoder
Synchronisation interface, function	Encoder emulation A/B/Z
	Encoder input A/B/Z
Encoder interface output, characteristics	1 MHz maximum output frequency
	max. 16384 ppr
Encoder interface input, characteristics	1 MHz maximum output frequency
	max. 16384 ppr
Number of digital logic inputs	12
Input circuit logic	PNP (positive-switching)
Logic input characteristics	Freely configurable to a given extent
	Safety inputs in some cases
	Not electrically isolated
Specification, logic input	Based on IEC 61131-2, type 3
Logic input working range	-3 ... 30 V
Number of high-speed logic inputs	2
Time resolution of high-speed logic inputs	1 µs
Number of 24 V DC digital logic outputs	6
Switching logic, outputs	PNP (positive-switching)
Digital logic output characteristics	Freely configurable to a given extent
	Not electrically isolated
	Diagnostics outputs in some cases
Max. current, digital logic outputs	20 mA
Number of high-speed switching outputs	2
Time resolution of high-speed switching outputs	1 µs
Number of floating switching outputs	1
Max. current of the floating switching outputs	50 mA
Number of analog set point inputs	1
Set point input characteristics	Differential inputs
	Can be configured for speed in RPM
	Configurable for current/force
Set point input working range	± 10 V
Operating range Analog inputs	± 10 V
Set point input impedance	70 kOhm
Safety function	Safe brake control (SBC)
	Safe torque off (STO)
	Safe stop 1 (SS1)
Safety Integrity Level (SIL)	Safe brake control (SBC) / SIL 3 / SILCL 3
	Safe torque off (STO)/SIL 3/SILCL 3
Performance level (PL)	Safe brake control (SBC) / category 3, Performance Level e

Feature	Value
	Safe Torque off (STO)/Category 4, Performance Level e
Diagnostic coverage	97 %
SFF Safe Failure Fraction	99 %
Hardware fault tolerance	1
Number of safe 2-pin inputs	2
Number of diagnostic outputs	2