

The Ethernet IP Enabled Servo Drive

CMMP-AS-...-M3

FESTO



Enhanced Scalability and Flexibility

Safe Torque Off (STO) Functionality

The CMMP-AS-...-M3 servo drive offers an optional slide card with Safe Torque-Off (STO) functionality for increased productivity and personnel safety. With the STO capability, tasks such as machine setup, cleaning, removal of jams and other typical maintenance work that previously required power-down conditions can now be accomplished without removing power from the entire machine. Instead, drive output can be safely disabled, allowing faster machine restart and shorter machine downtime. In addition, components such as input contactors are not required, simplifying machine design and helping reduce both panel space requirements and overall system costs.

Suitable for Machines Built for Any Market

With the available voltage and power ranges (single and three phase), the CMMP-AS-...-M3 servo drive meets a wide range of global machine requirements including applications in the packaging, automotive, alternative energy, manufacturing and assembly industries.

High Flexibility

- 255 configurable positioning profiles
- Position sequencing capability
- Position, velocity and torque control
- Absolute and relative positioning (with torque reduction)
- E-Gearing and E-Camming
- Flying Saw and Flying Measurement

Improved Performance

Improved inertia with inertial load mismatches of up to 20 to 1 resulting in more accurate motion profiles and faster acceleration and deceleration and therefore higher throughput and efficiency. High performance current loop bandwidth for smooth motion and rapid response.

User Benefits

SD memory card for storing and loading parameter settings which facilitates trouble-free device replacement without commissioning procedure, duplicating devices for high volume production of machines and restoring drive configurations.

Drive configuration and diagnostics is now very easy and convenient with the integrated Ethernet interface (TCP/IP) allowing for both direct and remote drive access (single or multiple drive systems). Simplifies control cabinet assembly with integrated braking resistors and mains filter.

Integrates Into Many Control Architectures and Platforms

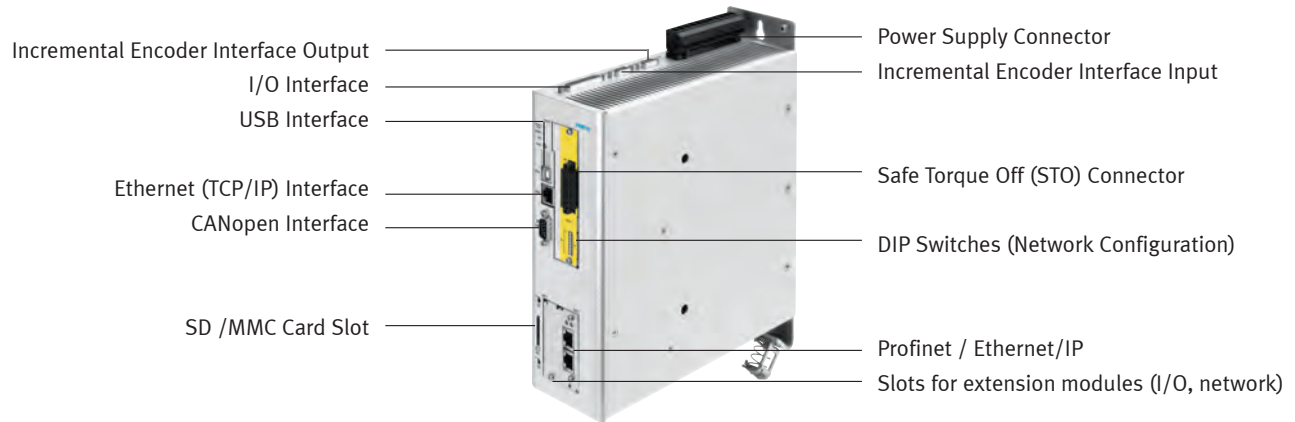
This drive offers EtherNet/IP and Profinet RT network ability in addition to EtherCAT, Profibus DP and DeviceNet. The drive comes with optional slide in network cards for all supported networks which allows the user to customize the drive to meet the application needs and allows for easy integration with both Rockwell and Siemens control architectures.

In addition to being integrated with a Festo motion controller via the built in CAN interface, the CMMP-AS-...-M3 drive can also work with the Rockwell Automation Integrated Architecture system via EtherNet/IP for point to point handling systems.

CMMP-AS-M3.PSI.US

Product Short Information

The Ethernet IP Enabled Servo Drive CMMP-AS-...-M3



General Technical Data CMMP-AS-...-M3

Position sets	255 ¹⁾	
Linking position sets	Sequential with branching	
Safety/performance level (PL)	SafeTorque Off (STO)/Category 4, Performance level e	
Encoder Interfaces		
Feedback from motor	EnDat V2.1 (without analog signals, resolution of 18 bit/rev)/ Resolver/HIPERFACE	
Emulated encoder output	Incremental (resolution 16,384 PPR)	
Encoder input	Incremental	
Control Interfaces		
Digital I/O [V DC]	8 - 30 (10 DI, 5 DO, configurable I/O)	
Analog I/O [V]	± 10 (3 AI, differential; 2 AO, short circuit-proof, resolution 9-bit)	
Parameterization interfaces	USB/Ethernet (TCP/IP) ²⁾	
Fieldbus Communications		
	Communication Profile	Max. Fieldbus Transmission Rate [Mbit/s]
CANopen (integrated)	(DS301) FHPP+ & DSP402	1
DeviceNet	FHPP+	0.5
Profibus DP	DP-V0/FHPP+	12
EtherCAT	(DS301) FHPP+ & COE: DS301, DSP402	100
EtherNet/IP ³⁾ / Profinet RT ³⁾	FHPP+	100

Electrical Data CMMP-AS-...-M3

	-C2-3A	-C5-3A	-C5-11AP3	-C10-11A-P3	-C20-11A-P3
Nominal voltage phases	1		3		
Nominal/Peak current [A]	2.5/5	5/10	5/15	10/20	20/41.5
Mains frequency [Hz]	50 ... 60				
Load supply: Input voltage range [V AC]	100 ... 230 ±10%		3x230 ... 480 ±10%		
Max. nominal input current [A]	3	6	5.5	11	20
Rated output [VA]	500	1,000	3,000	6,000	12,000
Peak output [VA]	1,000	2,000	6,000	12,000	25,000
Logic supply: Nominal voltage [V DC]	24 ±20%				
Nominal current [A]	0.55/2.05 ⁴⁾	0.65/2.15 ⁴⁾	1/3.5 ⁴⁾		
Max. current of DO [mA]	100				

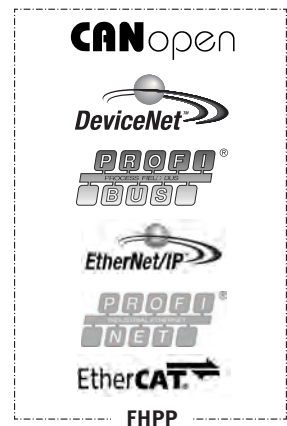
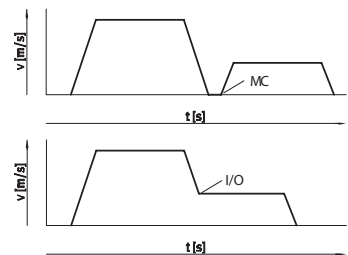
Ordering Data

Motor controllers CMMP-AS	1501325	1501326	1501327	1501328	1366842
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1) With additional I/O plug-in card CAMC-D8E8A
2) For -C20-11A-P3 only RS232

3) Not available with CMMP-AS-C20 (RS232 only)
4) Max. current with brake

Linking & Branching Position Sets



Festo Corporation

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