

## Motor controller CMMB-AS

**FESTO**



## Characteristics

### At a glance

- Full integration of all components for the controller and power unit, including RS232 and pulse direction interface
- Digital single-turn absolute encoder
- Can be operated as a torque, rotational speed or position controller
- Integrated positioning control
- Time-optimised (trapezoidal) or jerk-free (S-shaped) positioning
- Absolute and relative movements
- Point-to-point positioning, with and without motion smoothing
- Position synchronisation
- Wide range of homing methods
- Compliance with the latest CE, EN and UL standards
- 32 position records
- 8 acceleration profiles

### Input/output

- Freely programmable I/Os
- Simple coupling to a higher-level controller via an I/O interface
- Synchronous operation
- Master/slave mode

### Integrated sequence control

- Automatic sequence of position sets without a higher-order controller
- Linear and cyclical position sequences
- Adjustable delay times

### Motion program

- Linking any number of position sets into a motion program
- Step enabling conditions for the motion program possible via digital inputs, for example: MC – motion complete / I/O – digital inputs

## Type code

001	Series
<b>CMMB</b>	Motor controller

002	Motor type
<b>AS</b>	AC synchronous

003	Performance class
<b>01</b>	100 W
<b>02</b>	200 W
<b>04</b>	400 W
<b>07</b>	750 W

## Datasheet

General technical data				
Controller nominal output	100	200	400	750
Type of mounting	On sub-base, Screw-clamped			
Display	7-segment display			
Parameterisation interface	Parameterisation and commissioning, RS232 (38400 baud)			
Encoder interface output, function	Setpoint specification for downstream slave drive.			
Encoder interface output, features	Resolution 65536 ppr			
Encoder interface input, function	Setpoint speed value as encoder signal			
Encoder interface input, features	Nikon A-format			
Number of analogue setpoint inputs	2			
Brake resistor, external	75 Ohm			
Brake resistance	300 Ohm			
Product weight	740 g		760 g	

Technical data I/O interface	
Number of digital logic outputs 24 V DC	5
Number of digital logic inputs	7
Working range of logic input	12.5 ... 30 V
Process interfacing	Pulse/direction For 32 position sets

Electrical data				
Controller nominal output	100 VA	200 VA	400 VA	750 VA
Output voltage class AC	3x 0 - 240 V			
Nominal current	1.5 A	3 A	4.5 A	7 A
Peak current per phase, effective	7 A		15 A	
Max. peak current duration	5 s			
Max. intermediate circuit voltage DC	300 V			
Output frequency	0 ... 400 Hz			
Phases of nominal operating voltage	Single-phase			
Input voltage range AC	200 ... 240 V			
Permissible voltage fluctuations	+/- 10%			
Maximum output	2,100 VA		4,500 VA	
Mains frequency	50 ... 60 Hz			
Nominal voltage for logic power supply DC	24 V			
Permissible range for logic voltage	± 10%			
Current consumption of logic power supply without clamping brake	0.5 A			
Max. current digital logic outputs	100 mA			

## Datasheet

Operating and environmental conditions	
Features of digital logic outputs	Galvanically isolated Freely configurable in some cases
Degree of protection	IP20
Ambient temperature	0 ... 40°C
Storage temperature	-10 ... 70°C
Relative air humidity	5 - 95%
Pollution degree	2
CE mark (see declaration of conformity) <sup>1)</sup>	To EU EMC Directive To EU Low Voltage Directive In accordance with EU RoHS Directive
CE marking (see declaration of conformity) <sup>2)</sup>	To UK instructions for EMC To UK RoHS instructions To UK regulations for electrical equipment
Approval	c UL us listed (OL)
LABS (PWIS) conformity	VDMA24364 zone III
Note on materials	RoHS-compliant

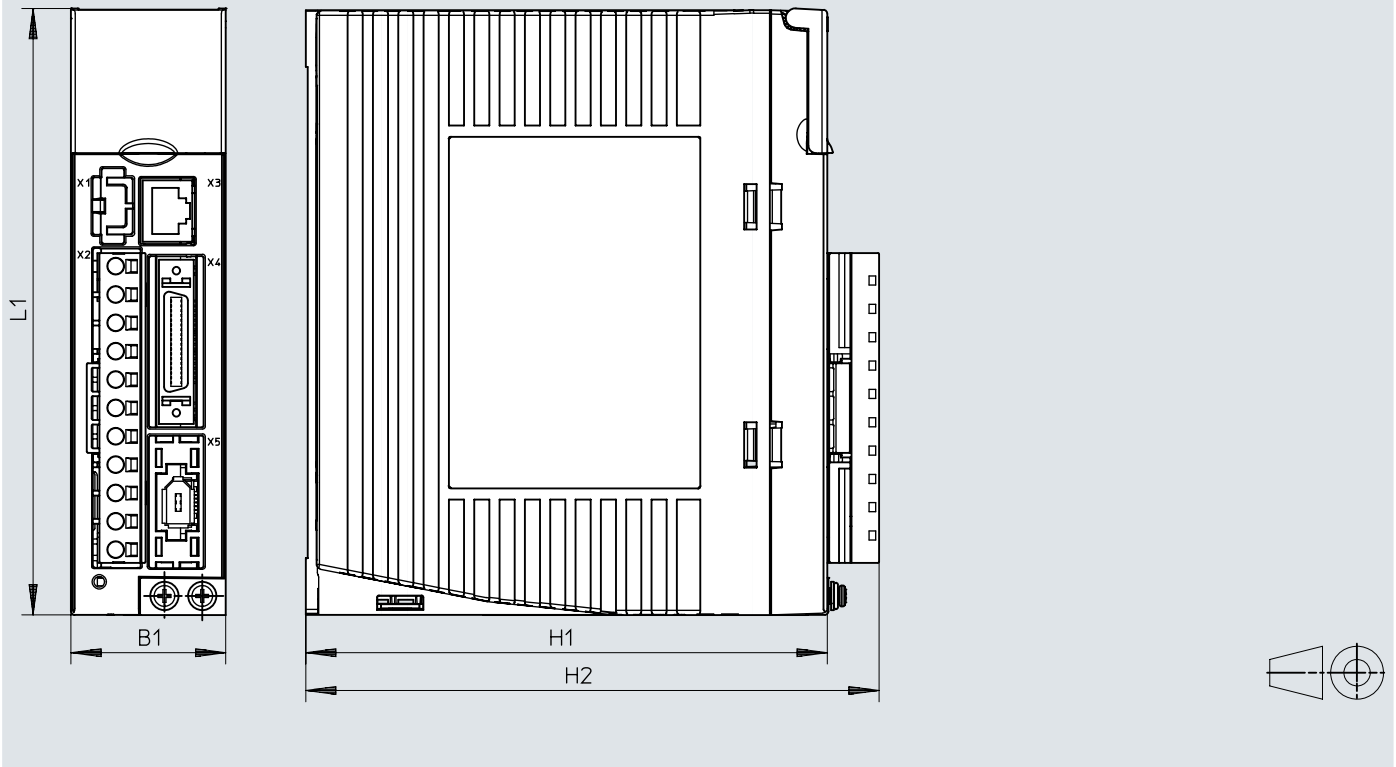
1) More information [www.festo.com/catalogue/cmmb](http://www.festo.com/catalogue/cmmb) → Support/Downloads

2) More information [www.festo.com/catalogue/cmmb](http://www.festo.com/catalogue/cmmb) → Support/Downloads

## Dimensions

Dimensions – Motor controller CMMB-AS, for servo motors

Download CAD data → [www.festo.com](http://www.festo.com)

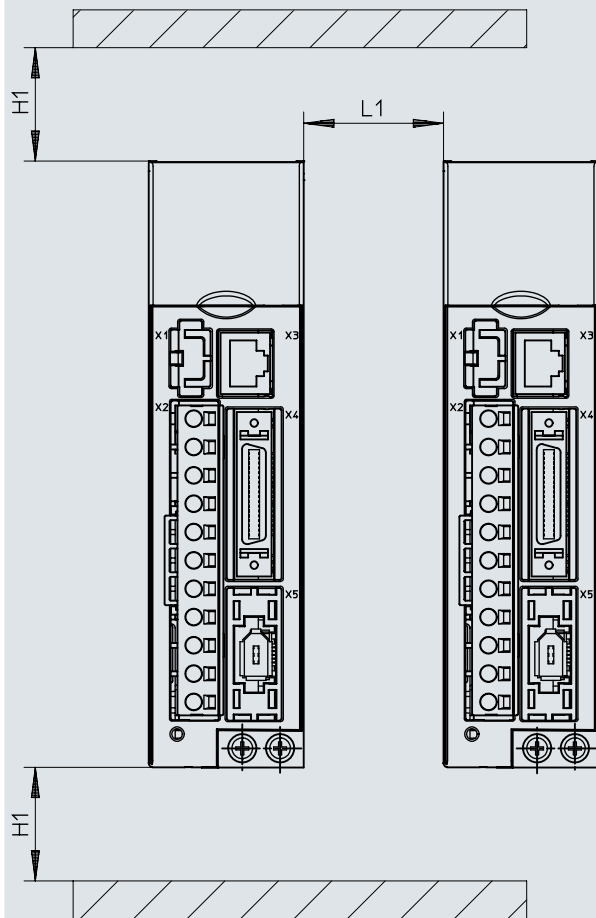


	B1	H1	H2	L1
CMMB-AS-01	41	138	152	160,5
CMMB-AS-02				
CMMB-AS-04				
CMMB-AS-07				

## Dimensions


### Dimensions – Installation clearance for motor controller

Download CAD data → [www.festo.com](http://www.festo.com)



H1	L1
50	10

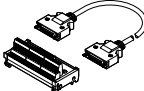
## Ordering data

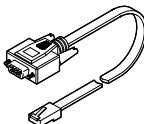
Ordering data			
	Controller nominal output <sup>1)</sup>	Part no.	Type
	100 VA	5105641	CMMB-AS-01
	200 VA	5105642	CMMB-AS-02
	400 VA	5105643	CMMB-AS-04
	750 VA	5105644	CMMB-AS-07

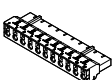
1) The assortment of plugs NEKM-C-11 is included in the scope of delivery of the motor controller.



## Accessories

Manifold block with connecting cable from I/O interface to controller				
	Description	Cable length	Part no.	Type
	For I/O interface to any controller, The connection block is used for simple and clear wiring. The connection to the motor controller is established via the control cable NEBC-S2G36-...	0.5 m	5105646	NEBC-S2G36-K-0.5-N-C2W36-S7

Programming cable NEBC					
	Electrical connection 1, connector system	Electrical connection 2, connector system	Cable length	Part no.	Type
	Sub-D	RJ45	1.5 m	5105645	NEBC-S1G9-K-1.5-N-R3G8

Assortment of plugs NEKM			
	Note on materials <sup>1)</sup>	Part no.	Type
	RoHS-compliant	5105647	NEKM-C-11

1) The assortment of plugs is included in the scope of delivery of the motor controller.