

Technical Datasheet clima AA4-MP

1. Product description



The MP-Bus actuator clima AA4-MP is designed for connection to spega M/R series LON controller.

The actuator can control up to four MP-Bus compatible damper actuators, valve actuators or VAV actuators. The clima MP is the bus master on the Multi-Point-bus system with up to eight slaves.

In addition, the sensors connected to the MP-Bus devices can be queried.

A RJ12 socket on the front of the clima MP can be used to connect directly an external configuration- or diagnostic-tool (e.g. Belimo PC-Tool) – without disconnecting the bus wires.

The actuator can be operated in conjunction with other e.control actuators for heating, ventilation and air-conditioning technology.

For configuration purposes, an easy to use LNS plug-in is available for the controller.

2. Mounting and installation

2.1. Mounting

1. Installation on DIN EN50022 rail, width 3 TE
2. The connection interface is located on the left-hand side of the housing. The actuator must only be operated with spega e.control controllers. Observe the maximum space available on the DIN rail.
3. MP-Bus Slaves must be configured with the Belimo tools.



Circuits must obey SELV (Safety Extra Low Voltage) specifications.



The power supply of the MP-Bus must not be connected to the DC power supply of the spega M/R series LON controller.



Electrical devices must be assembled and installed by trained personnel only.



Please observe local standards, guidelines and regulations when planning and installing electrical devices.



Do not exceed device specifications.

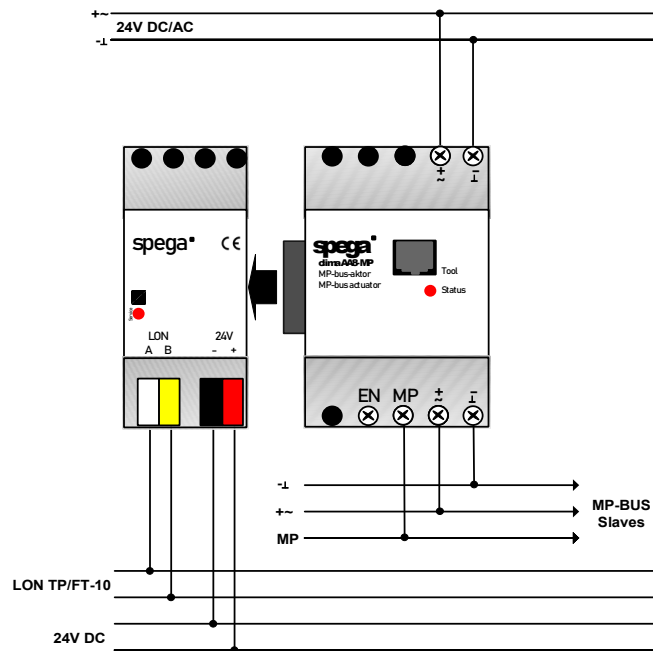


The system installer has to take care that the correct application and the associated parameters are corresponding with the wiring and the intended use of the device.



Connecting or disconnecting modules or controllers is only allowed if they are disconnected from all power supplies.

2.2. Installation



The EN terminal carries the same signal that is used on the RJ12 tool socket to deactivate the actuator during configuration tool usage.



There are no limits on bus topologies. Star-, ring-, tree topologies or combinations of those are allowed. No special cables or terminating resistors are needed. A MP bus connection can be established using normal installation cables. To accommodate an easy installation special bus cables can be obtained. For the maximum bus length please consult the appropriate documents from Belimo (www.belimo.com)

3. Technical Data

Power supply

Operating voltage DC	via spega M/R series LON controller
Current consumption DC	45 mA (1,1W)
Operating voltage MP-Bus Interface DC	24V DC, (21,6V - 28,8V)
Operating voltage MP-Bus Interface AC	24V AC, (19,2V - 28,8V)
Current consumption MP-Bus Interface	40mA (1W) with DC supply 100mA (2,4VA) with AC supply
Power dissipation (max.)	2,1W with DC supply 3,5W with AC supply

Inputs/Outputs

Actuator interface	Control interface for spega M/R series LON controller
Power supply MP-Bus Interface	present
EN (Tool-Enable)	control signal for switching off the MP-Bus Interface (U>9V, max. 18V)
MP-Bus interface	3-pin (0, 24V, MP)

Connections

Actuator Interface	Integrated 14 pin connector
Power supply, MP-Bus, EN (Tool-Enable)	6 x 1 pin terminal screw connection, Ø up to 4mm ² Supply loop through for MP-Bus devices up to 100VA power consumption (dimensioning) possible
RJ12 socket	Connection for Belimo ZIP-USB-MP or ZIP-RS232

Indicators

Status-LED	Multi color LED showing MP-Bus actuator state
------------	---

Housing

Protection	IP 20 (EN 60529)
Dimensions	85(45) x 52,5 x 60 mm (H x W x D) – corresponds to 3 modular spacings
Type/location of installation	distribution board, 35mm DIN mounting rail

Ambient conditions

Operating temperature	-5°C ... +45°C
Storage temperature	-25°C ... +55°C
Transport temperature	-25°C ... +70°C
Relative humidity	5% ... 93% (w/o condensation)
Installation height	up to 2000 m above sea level

Safety

Electrical isolation	SELV (EN 60950)
Protection class	II (DIN EN 61140, VDE 0140-1)

Standards

Device safety	EN 50090-2-2
Immunity	EN 50090-2-2
Certification	CE

4. Order information

Order number	Product	Description
120 354	clima AA4-MP	MP-Bus actuator 4 channels
121 000 C	sistema MC	LON Universal controller for M/R series modular actuators

5. Support

The information given in this manual was carefully compiled. Should you have any further questions regarding this product, please contact:

SafeSquare GmbH

Am Graben 2-6
42477 Radevormwald
Germany

Fon: +49 (2191) 56814-0
Fax: +49 (2191) 56814-89
Email: info@safesquare.eu