


- MP-Bus Power supply for MP-actuators
- AC 230 / 24 V for local power supply of MP-actuators operating on the MP-Bus



## Content

<u>Technical Data</u>	<u>2</u>
<u>Application</u>	<u>2</u>
<u>Product features</u>	<u>3</u>
<u>Device Overview</u>	<u>3</u>
<u>Cable lengths MP-Bus</u>	<u>3</u>
<u>Connection MP-actuator with sensor</u>	<u>4</u>
<u>Connection of 2 MP-actuators</u>	<u>5</u>
<u>Connection parameterizing tools PC-Tool</u>	<u>6</u>
<u>Connection parameterizing tools ZTH EU</u>	<u>7</u>
<u>Dimensions</u>	<u>7</u>

## Technical Data

<b>Electrical Data</b>	Nominal voltage	AC 230 V, 50/60 Hz
	Nominal voltage range	AC 198 ... 264 V
	Power consumption operation For wire sizing	11 W 13VA ( Power consumption in relation to the connected actuator)
<b>Connection</b>	Secondary output power consumption	Max. 10VA
	Power supply	cable 0,9 m with Euro plug type 26
	MP-Bus	Screw terminal, 2-pin
	Parameterization devices	3-pin Weidmüller socket
<b>Safety</b>	BF(G)24TL Fire damper	4-pin socket
	MP-Actuators	Screw terminal for 2 x wire 1,5mm <sup>2</sup>
	Protection class	II Totally insulated 
	EMV	CE according to 2004/108/EC
	Low voltage directive	CE according to 2006/95/EC
	Mode of operation	Type 1 (EN 60730-1)
	Rated impulse voltage	2,5 kV (EN 60730-1)
	Control pollution degree	2 (EN 60730-1)
	Ambient temperature	-20 ... 50 °C
	Non-operating temperature	-40 ... 80 °C
<b>Dimensions / Weight</b>	Moisture test	95% r.H., non-condensing (EN 60730-1)
	Maintenance	Maintenance-free
	Dimensions	See "Dimensions" at page 7
	Weight	750 g

## Definitions

**MP-Actuator** Umbrella term for MP/MPL/ MFT (2)-actuators and VAV-controller.

## Safety notes



- The device has been designed for use in stationary heating, ventilation and air-conditioning systems and is not allowed to be used outside the specified field of application, especially in aircraft or in any other airborne means of transport.
- Only authorized specialists may carry out installation. All applicable legal or institutional installation regulations must be complied with during installation.
- The device contains electrical and electronic components and is not permitted to be disposed of as household refuse. All locally valid regulations and requirements must be observed.

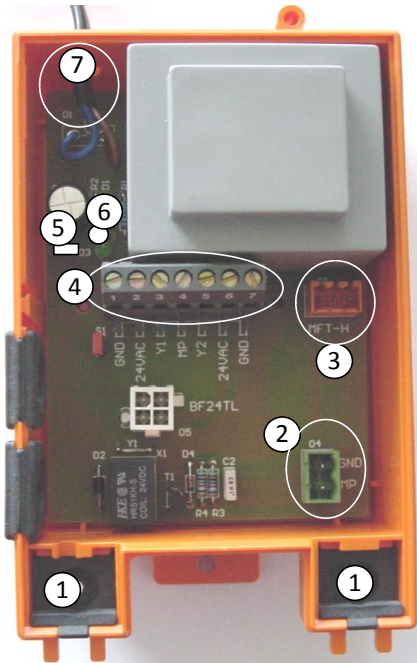
## Application

- Applications in 2-wire MP-Bus networks. The MP-actuators are supplied locally by AC24V from the ZN230-24MP. Due to this, longer MP-Bus lengths can be realized,
- Connection of one actuator and one sensor, or 2 actuators.
- The PC-Tool or ZTH EU can be connected to the MP-actuator via the ZN230-24MP. Once a parameterization tool is connected (Tool), the communication gets separated from the MP-network, thus preventing data collision.

Product features

- Connection AC230 V over Euro plug
- Terminal connection for MP-actuators
- Connection possibility for sensors
- Socket for connecting parameterizing tools (PC-Tool, ZTH EU)

Device Overview



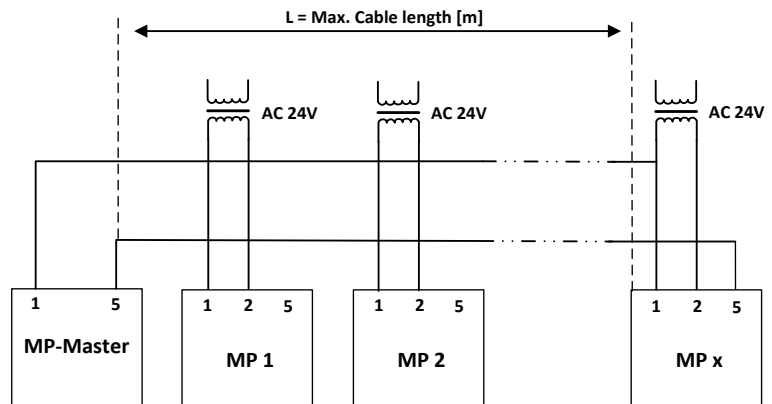
- 1) Cable gland for Belimo actuators
- 2) Connection MP-Bus
- 3) Connection for parameterizing tool
- 4) Connection for Belimo MP-actuators and sensors
- 5) Jumper S1
  - plugged: Connection 1 MP-actuator and 1 sensor
  - open: Connection 2 MP-actuators
- 6) Power-On LED
- 7) Power supply AC230 V

Cable lengths MP-Bus

If the MP-actuators are supplied by a separate local transformer with AC 24V, the cable lengths can be increased. Regardless of the performance specifications of the connected actuators and independently of the wire- $\phi$  of the MP-wiring, the cable lengths, as listed in the table below, can be reached

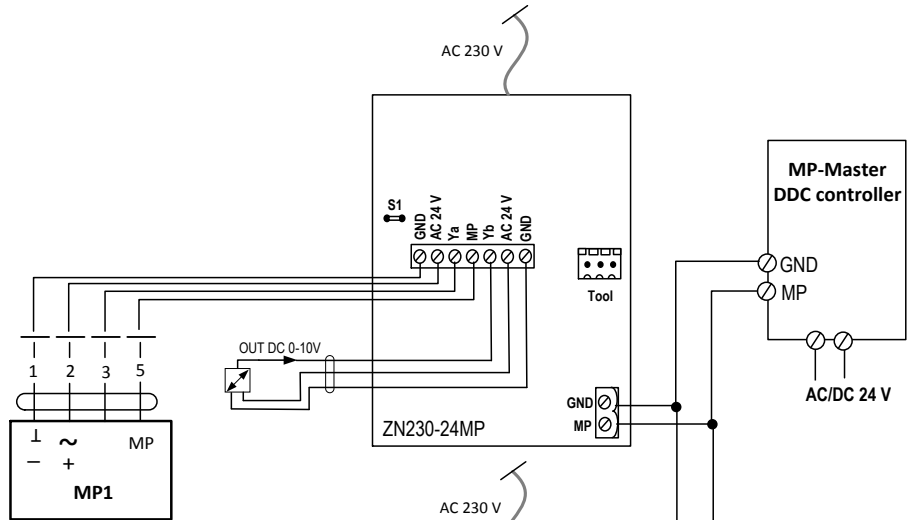
Cable lengths for all MP-Bus capable actuators

Wire- $\phi$ [mm <sup>2</sup> ]	L = Max. Cable length [m]
0.75	800
1.0	
1.5	
2.5	

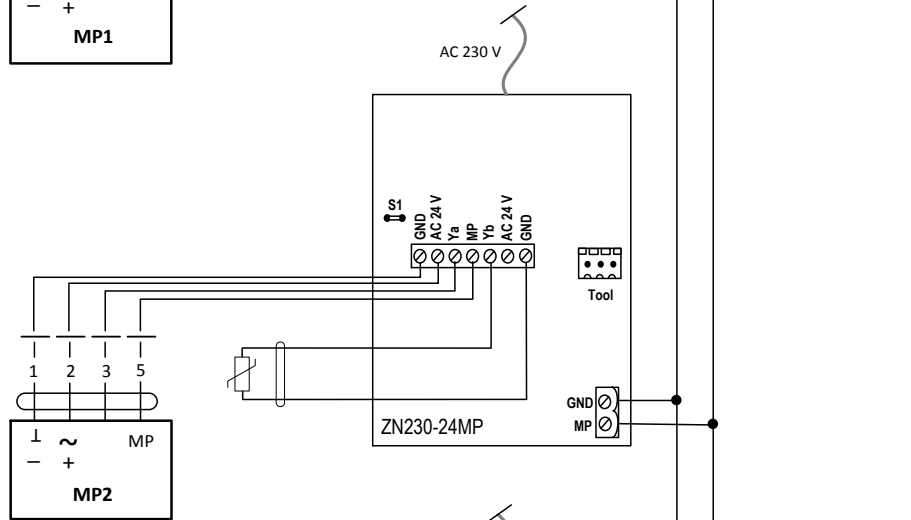


Connection MP-actuator with sensor

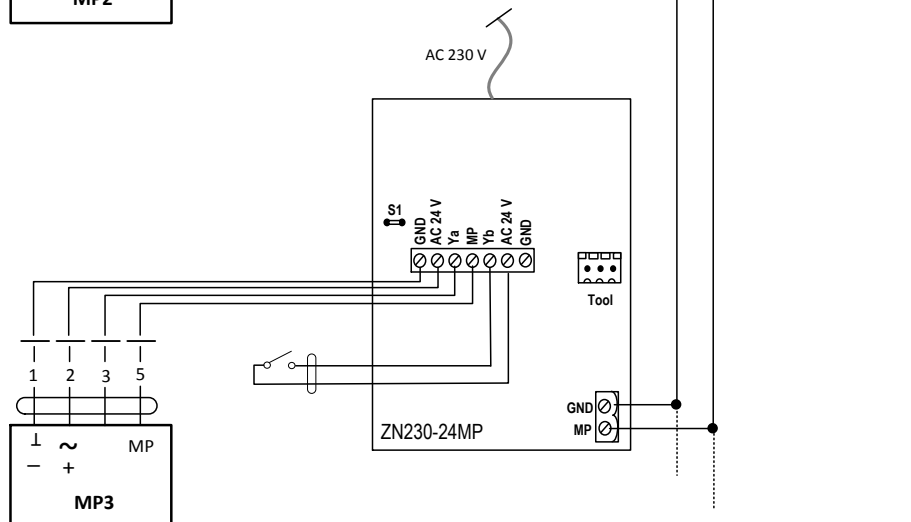
Connection 1 MP-actuator with active sensor



Connection 1 MP-actuator with passive sensor

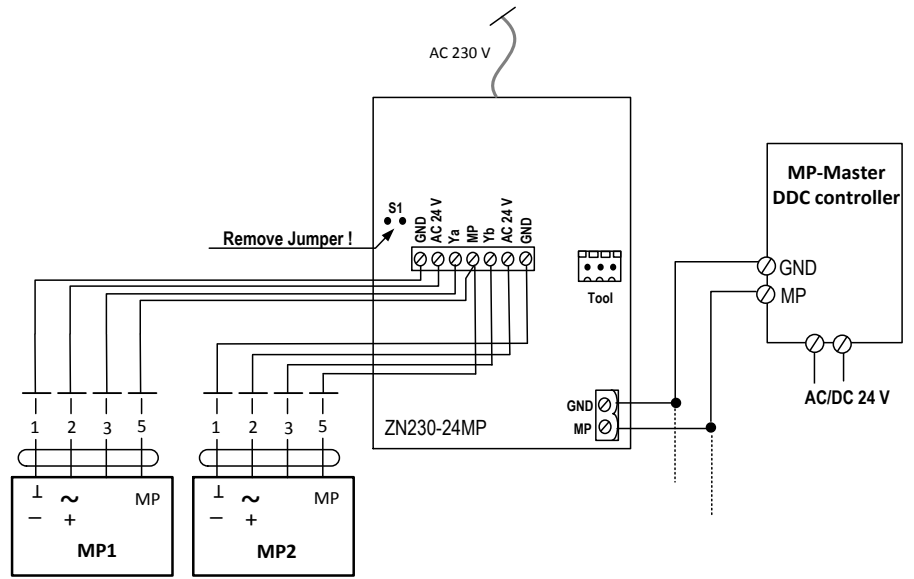


Connection 1 MP-actuator with external switch contact



Connection of 2 MP-actuators

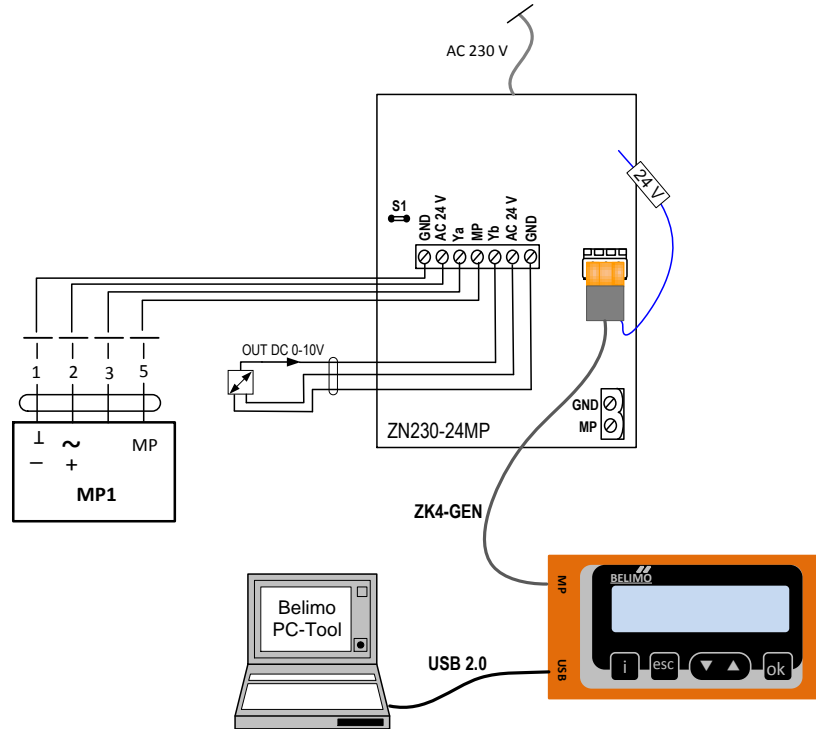
When operating 2 MP-actuators, Jumper S1 must be removed.



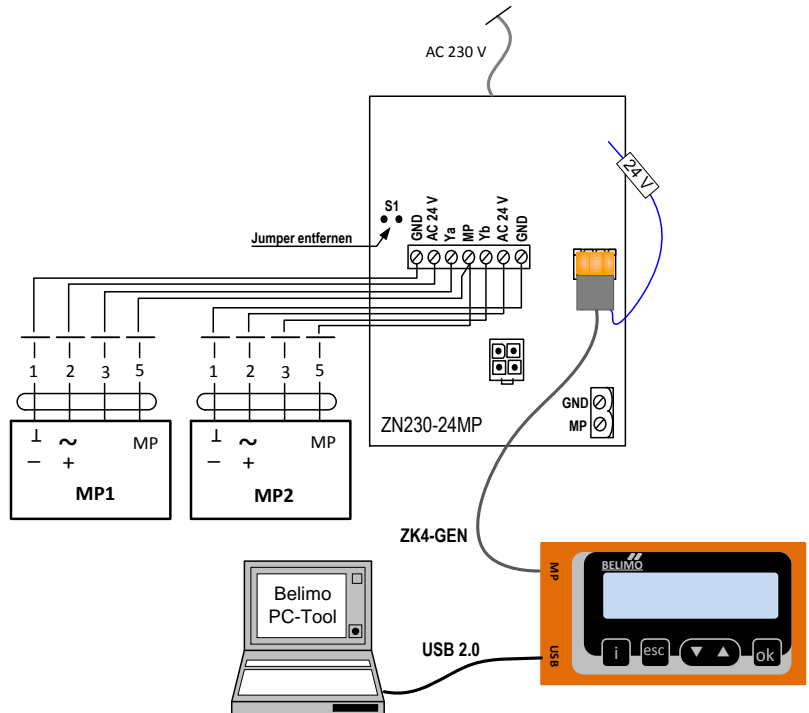
Connection parameterizing tools PC-Tool

By using the tool socket, the corresponding ZN230 MP-24 MP is temporarily disconnected from the network.

Connection 1 actuator and 1 sensor  
PC-Tool via ZIP-device  
(Figure ZTH EU)



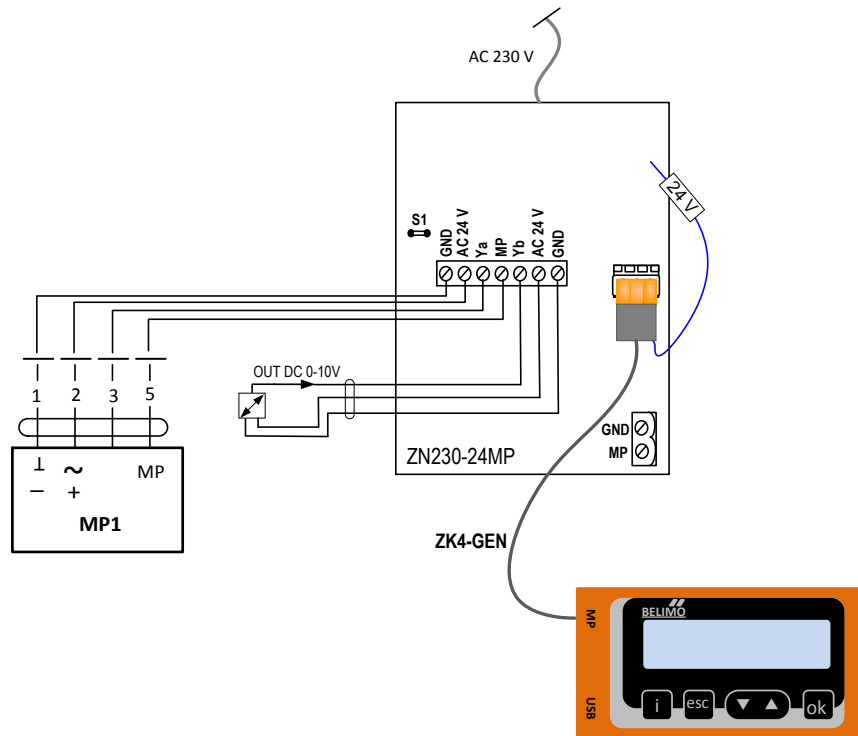
Connection 2 actuators  
PC-Tool via ZTH EU  
(ZIP-function)



**Note:**  
For parameterizing by the PC-Tool, the actuators must be accessed by their corresponding MP-address.

Connection parameterizing tools ZTH EU

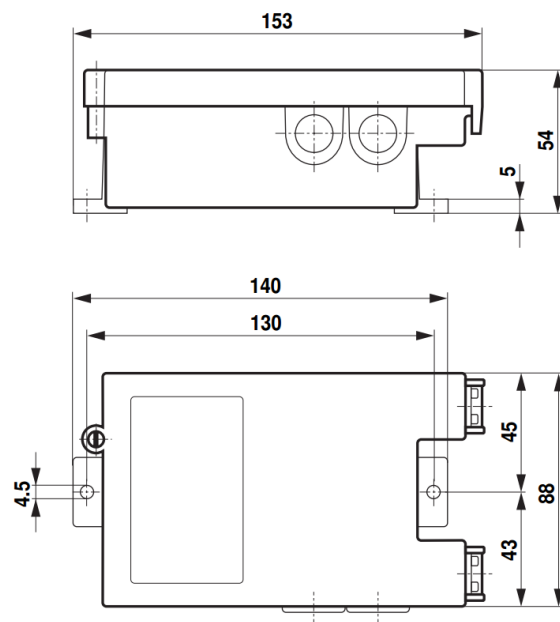
ZTH EU



**Note:**  
The ZTH EU can only be connected to a single connected actuator.

Dimensions

Dimensional drawings



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