

Assembly and Commissioning Instructions

M-COM

M-COM (Main control unit)

24V



Part.-No.: 524177

Application: Communication module for automatic configuration and surveillance of max. 4 opening and 2 locking drives version S12 / S3 (software version SW-V2) in synchronised multi-drive systems.

Rated voltage: 24V DC +/- 20%, (max. 2 Vss)
 Current consumption: <12 mA
 Control type: S12

Protection rating: IP30 rubber envelope
 Ambient temperature range: min. - 5 °C ... + 70 °C

Dimensions: 45 x 17 x 6 mm

Connection wire: 3 wire 0,5 mm² x 50 mm

Feature / Equipment: Printed circuit board with components and connection wires to be installed in connection box to be supplied on site.

- By using the **M-COM** 6 single actuators (drives or locks) are linked together in a multi-drive system.
- Whithin seconds, the **M-COM** links and programmes the synchronized driverunnint mode and one sequentce control, if additional locks are involved.
When using 2 locking drives, these run parallel.
- There is no more factory set programming required. All opening and locking drives in the multi-drive system are blind supplied. Drives do not have specific markings, such as Master, Slave 1 , Slave 2, etc.
- To allow assembly and installation work, each drive may be run individually - i. e. one locking drive in test run
- Configuration of the multi-drive system will be performed only after the drive installation has been completed.
- Commissioning of the multi-drive system may only be carried out when the drives have been correctly installed and the **M-COM** has been connected; these are important prerequisites in order to minimize possible damages / injuries caused by improper installation.
- A Reset of the configured multi-drive system may be performed at any time using „UniPC“. Once the Reset has been performed, single operation of the drives is again possible.
- **M-COM** allows a smooth exchange of drives in need of repair within the multi-drive system.



Warranty claims require proper and professional assembly, installation and maintenance in accordance with national regulations and manufacturer's instructions as to drives.

The safety of the supplied product documentation are to be observed.



Strictly observe the information given in this and in the instructions for installation of drives when mounting the **M-COM**.


Details can be found on our website www.aumueller-gmbh.de

Keep this instruction over the lifetime of the product.

INSTALLATION STEP 1: INSTALLATION


■ Mount the drives according the instructions for installation the drives.

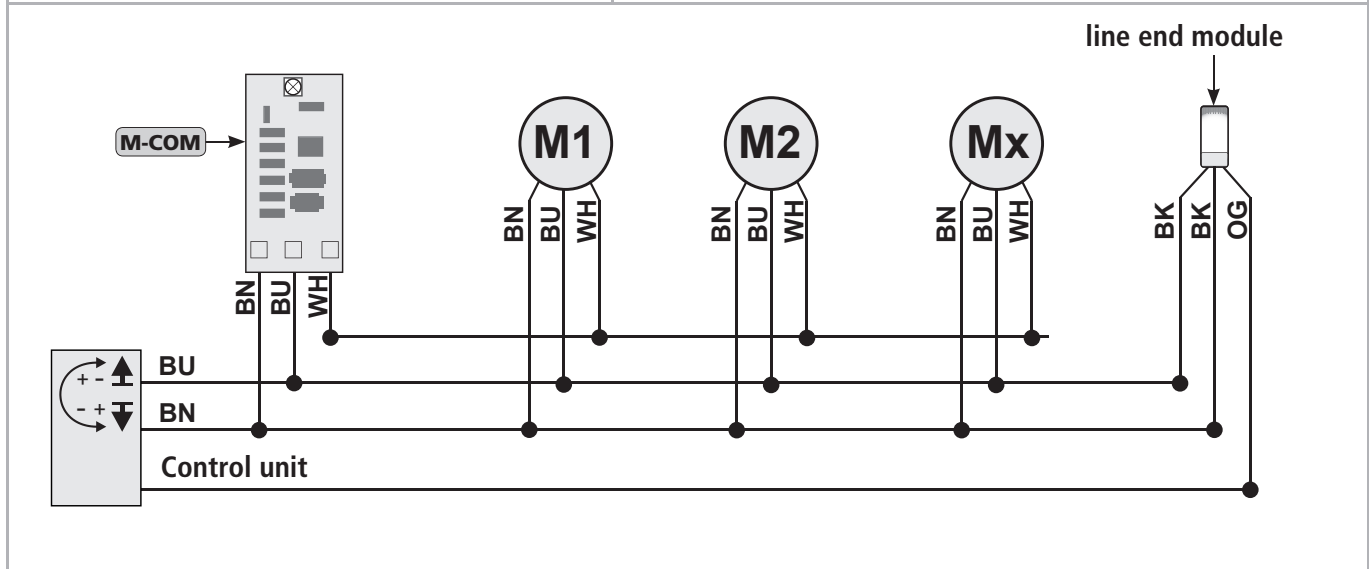
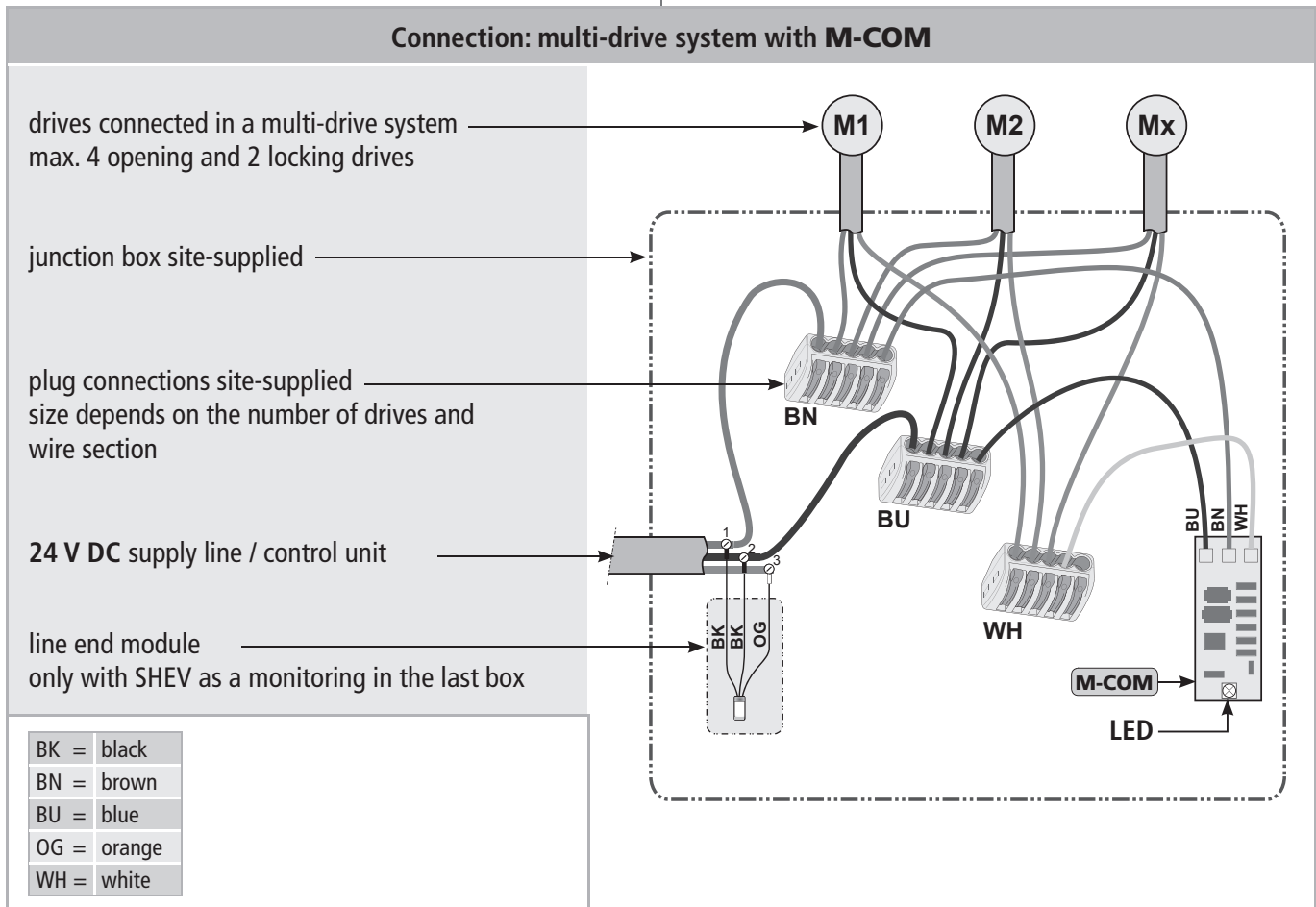
NOTE 24V-drives with version S12 / S3 (software version SW-V2) required.

 Before installation make sure, that there is no voltage applied to the supply line!

■ Connect the multi-drive system to the **M-COM** and to the supply line.

NOTE In SHEV case fit additionally the line end module into the last junction box.

 Do not connect the **WH**-wire of the end module to the **WH**-wire of the drives!



INSTALLATION STEP 2:

FIRST COMMISSIONING

- Switch **on** the supply voltage (24 V DC) - in **CLOSE** direction.
- Observe the **LED** reaction of the **M-COM**.
- **LED** blinks **red** (Factory settings).
- **LED** starts blinking **red / green**. The communication - to the multi-drive operation - is running.
- **LED** blinks **green**, for each participant once. The process is complete.
- Compare the number of devices with the number of identified participants.
- Check the operation of the multi-drive system according to the instructions for installing the drives.

LED display		State
Display		
●	3s lights red	Factory settings (M-COM is reset).
● ●	0,5s - 0,5s blinks red / green (10 times)	Communication - to the multi-drive operation - becomes set up.
●	0,5s - 0,5s - 3s blinks green (X times)	X drives identified (1 time blinks $\hat{=}$ identified <u>one</u> drive).

INSTALLATION STEP 3:

TEST RUN, MALFUNCTION, TROUBLESHOOTING

- Switch **on** the supply voltage (24 V DC) - in **CLOSE** direction.
- Observe the **LED** reaction of the **M-COM**.

LED display		State
Display		
●	0,5s - 0,5s - 3s blinks green (per drive 1 time)	System is o.k. (can be operated) drives identified (1 time blinks $\hat{=}$ identified <u>one</u> drive).
●	0,5s - 0,5s - 3s blinks red (X-times) When the number of the <u>learned</u> drives does not coincide with the number of drives <u>now recognized</u> .	FAULT: System is NOT o.k. X drives identified (1 time blinks $\hat{=}$ identified <u>one</u> drive).

RESET OF M-COM

- Switch **off** the supply voltage (24 V DC).
- Disconnect white wires (**WH**) of the **M-COM**.
- Switch **on** the supply voltage (24 V DC) - in **CLOSE** direction.
- Observe the **LED** reaction of the **M-COM**.
- The **LED** starts blinking **red** and lights after successful reset permanently **red** until the drives are connected.

LED display		State
Display		
●	0,5s - 0,5s blinks red (6 times)	M-COM is waiting.
●	continuous lights red until the drives are connected	M-COM is reset (Factory settings).

- Connect white wires (**WH**) of the **M-COM**.
- Put the system - with **M-COM** - back into operation (see chapter „First commissioning“).

TROUBLESHOOTING:

Number of participants was mis-identified.

- Check wiring and the system.
- Eliminate faults.
- Reset the **M-COM** (see chapter „Reset of M-COM“).

TROUBLESHOOTING:

Function of the multi-drive system does not satisfying the requirements

- If the synchronism and the control of the closing sequence does not satisfying the requirements, contact our Service for special programming.

TROUBLESHOOTING:

Exchanging a faulty drive in the multi-drive system:



No adjustment is carried out in case of **exchange of drives with special programming** (e.g. stroke, speed)!

In case of repair please order an exchange drive with the same parameter assignment as that of the faulty drive.

- Switch **off** the supply voltage (24 V DC).
- Disconnect the connection cable from the faulty drive. Do not remove the **M-COM**.
- Mount the new / repaired drive and connect it.
- Switch **on** the supply voltage (24 V DC) - in **CLOSE** direction.
- Observe the **LED** reaction of the **M-COM**.
- Within 10 seconds the **M-COM** signals „Ready for operation“ for the configured system.

LED display	State
0,5s - 0,5s - 3s blinks green (per drive 1 time)	System is o.k. (can be operated) drives identified (1 time blinks $\hat{=}$ identified <u>one</u> drive).

- If the **LED** blinks red, an error is displayed.
- Reset the **M-COM** (see chapter „Reset of **M-COM**“).
- Check wiring and the system.
- Eliminate faults.
- Put the system - with **M-COM** - back into operation (see chapter „First commissioning“).

LED display	State
0,5s - 0,5s - 3s blinks red (X-times) When the number of the <u>learned</u> drives does not coincide with the number of drives <u>now recognized</u> .	FAULT: System is not o.k. X drives identified (1 time blinks $\hat{=}$ identified <u>one</u> drive).

TROUBLESHOOTING USING UniPC

- Connect the **UniPC** to the system (observe the information given in the instructions for installation of **UniPC**).
- By **UniPC** determine the address of the faulty drive.
- Individually disconnect white wires (**WH**) of drives, to find out where the fault drive is localized.
- Switch **off** the supply voltage (24 V DC).
- Disconnect and replace the faulty drive.
- Switch **on** the supply voltage (24 V DC) - in **CLOSE** direction.
- Observe the **LED** reaction of the **M-COM**.
- Within 10 seconds the **M-COM** signals „Ready for operation“ for the configured system.

LED display	State
0,5s - 0,5s - 3s blinks green (per drive 1 time)	System is o.k. (can be operated) drives identified (1 time blinks $\hat{=}$ identified <u>one</u> drive).

- If the **LED** blinks red, an error is displayed.
- Reset the **M-COM** (see chapter „Reset of **M-COM**“).
- Check wiring and the system.
- Eliminate faults.
- Put the system - with **M-COM** - back into operation (see chapter „First commissioning“).

LED display	State
0,5s - 0,5s - 3s blinks red (X-times) When the number of the <u>learned</u> drives does not coincide with the number of drives <u>now recognized</u> .	FAULT: System is not o.k. X drives identified (1 time blinks $\hat{=}$ identified <u>one</u> drive).

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