

## INSTALLATION AND COMMISSIONING INSTRUCTION

### Intelligent-Drive-Module IDM

#### IDM - Intelligent-Drive-Module

**10 A**



**Part.-No.: 680257-9**

**Application:** Factory fitted module installed into an EMB 8000 and fully wired, for operating intelligent Aumüller S12/S3 drives up to max. 10 A total current.

**Part.-No. : 680257**

**Application:** Module for the self installation on customer side into an EMB 8000 for operating intelligent Aumüller S12/S3 drives up to max. 10 A total current.

Operating voltage:	24 V DC
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Internal consumption:	6 mA
Output current:	<b>10 A</b>
Housing (WxHxD):	<b>100 x 120 x 22,5 mm</b> , ABS, black
Module units:	1 ME
Inputs:	Vent. button (max. 10 pcs.), feedback contact OPEN / CLOSE, 0 - 10 V analog input
Outputs:	Drive line ( <b>Aumüller S12 / S3</b> )
Display:	Power, fault, alarm, running direction OPEN / CLOSE
Control elements:	Front push button: OPEN / CLOSE
Connections:	Plug-in terminals 1 mm <sup>2</sup> (rigid wire), Drives: 2,5 mm <sup>2</sup> , Blade terminals 6,3 mm: Power supply, socket and plug with cable for internal BUS 0-10 V analog input



#### Intelligent-Drive-Module IDM

For the use of Intelligent-Drive-Module **IDM** is a licensed software mandatory!

#### Functions:

- It has a connector for electric motor Aumüller **S12/S3** drives up to max. **10 A**.
- The drive line is through a communication wire to fault (short circuit, open circuit) monitors.
- Processes signals from ventilation buttons and if needed line end signals from drives.
- Has connections for external relaying of line end status signal.
- Has a direct 0 - 10 V analog input for connection to a control voltage.
- 2 configurable inputs (24 V DC, 0,5 A).
- Intrusion of GLT - contact.
- Exact positioning of drives via **BUS** system.

#### Re-program the drive system:

Whenever a new drive or a new composite system is connected to the **IDM** (this also applies when replacing a drive), the drive system must be re-programmed. This is necessary to ensure accurate positioning and feedback of the drive.

This is tripped „RE-PROGRAM THE DRIVE SYSTEM“ with the button, find it on the **IDM** status page. One click is enough and the drive detection starts. Duration of this process for about 15 seconds - then the **IDM** and the drive system is ready for use.

#### Normal operation:

The voltage is constant in **CLOSE** direction on the drive. Choosing the wrong direction, feedback, speed, or the same can be controlled via the communication wire.

#### SHEV operation:

The **IDM** is to **BUS communication** on a **pole reversal process**, the drive will be approached at full speed in the **OPEN** direction. After resetting the SHEV condition, the system returns to normal operation.



Warranty claims require proper and professional assembly, installation and maintenance in accordance with national regulations and manufacturer's instructions as to SHEV Control Unit EMB 8000.

Always disconnect the system from power supply and back-up battery voltage prior to any installation or modification work on the control unit.



Strictly observe the information given in the SHEV Control Unit **EMB 8000** description when mounting the **IDM**.

Setting of functions requires the software of the control unit's manufacturer.

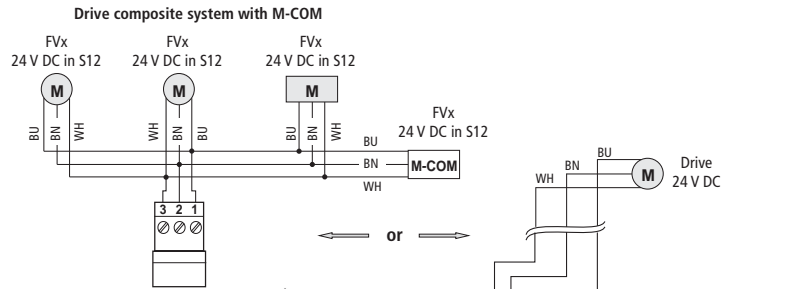
Keep this instruction over the lifetime of the control unit.

CONNECTION: INTELLIGENT-DRIVE-MODULE IDM

Connection: Intelligent-Drive-Module IDM

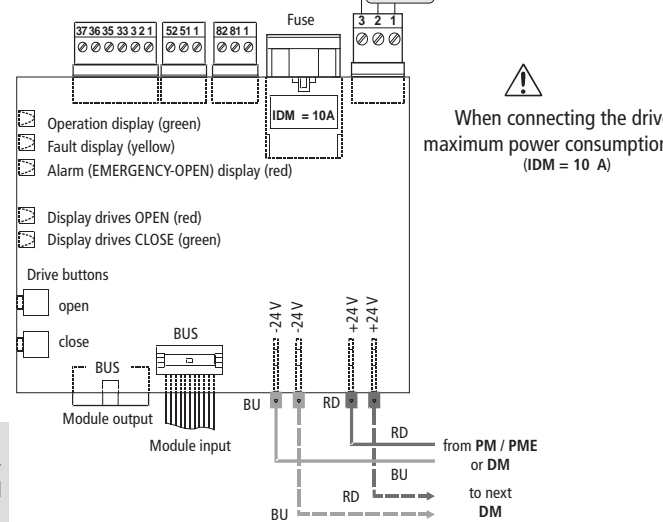


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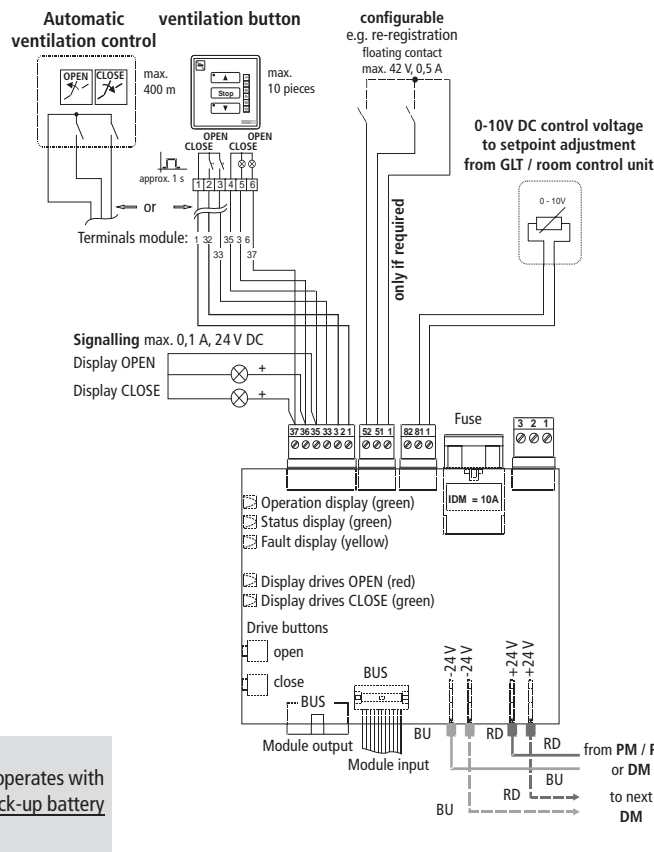


When teaching from a drive composite system the composite **must** first be taught!

When connecting the drives maximum power consumption note (IDM = 10 A)



**Note when operating with M-COM:**  
If the drive composite system is a M-COM installed, the complete composite must be set up with the M-COM and learned first. Only then can the drive composite system to be programmed.



**0 - 10 V switching device:**  
You can give the 0 - 10 V switching device, when it operates with a supply voltage of 24 V, connect directly to the back-up battery not cached output of the power-module PM.

BK	=	black
BN	=	brown
BU	=	blue
OG	=	orange
RD	=	red
WH	=	white

## INDICATOR AND CONTROL ELEMENTS

Display the operating state	
Icon	Importance
	<b>Display green:</b> Permanently lit: Correct conditions Blinks: Back-up battery operation (power failure) No signal: Back-up battery operation (power failure)
	<b>Display green:</b> Vents are closed.
	<b>Display red:</b> Vents are open.

Displays: Triggering of Alarm / EMERGENCY-OPEN	
Icon	Importance
	<b>Display red:</b> Automatic or manual triggering of EMERGENCY-OPEN
	<b>Display red:</b> Smoke and heat vents are opened (drive line).

Displays of status: Fault	
Icon	Importance
	<b>Display yellow:</b> Fault

Display: IDM	
<b>Display:</b>	
Operation (green)	
Fault (yellow)	
Alarm (red)	
	<b>EMB 8000</b>
Drives	OPEN (red)
	ZU (CLOSE) (green)
	<b>IDM</b>
Button:	
Open	
Drives	Close

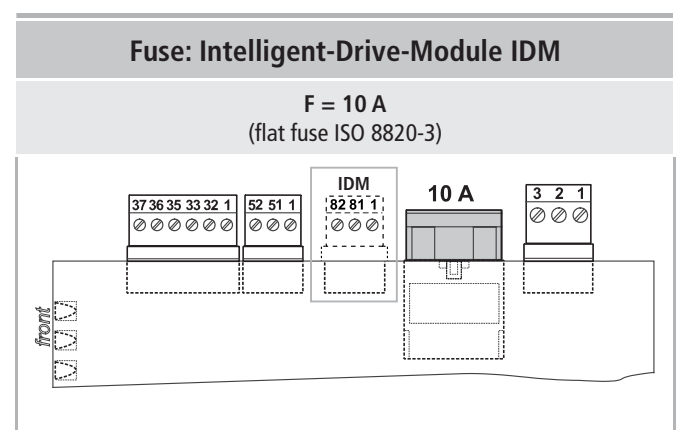
## TROUBLESHOOTING AND REPAIR

All functions and system components that are important for the SHEVS operation are constantly monitored for faults. A fault indication signals the type of fault and, respectively, possible errors when connecting system components (such as back-up batteries, detectors, drives) during commissioning of the Control Unit.

Fault: Intelligent-Drive-Module IDM (10A)		
Triggering of alarm (EMERGENCY-OPEN)	Cause / possible solution	
red	Open smoke vents (drives)	
red	Open smoke vents open at back-up battery operation	
Displays also valid for external LEDs (breakglass unit)		
Fault	Cause / possible solution	
green	No correct BUS connection (check ribbon cable)	
green	no signal	and
yellow	Fuse defective (IDM = 10A) (check and replace if need be) or Short circuit or line interruption at drive line (check the line end module) or Fault in power supply of module	

## FUSE

The fuse is located on top of the respective module. The following modules are secured with fuses:





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