

MBM || MAB



# Produktkatalog

ABV modul central EMB 8000



For this product series, a Type III Environmental Product Declaration (EPD) was issued according to ISO 14025 and EN 15804.

The LCA results of the different product types are listed at the end of this product catalogue. The EPD documents can be viewed or downloaded from our homepage [www.aumueller-gmbh.de](http://www.aumueller-gmbh.de).

### PRODUCT FEATURES EMB8000

- Modular control panel with digital bus technology and power supply for 24 V DC drives for use in smoke and heat exhausting ventilation (SHEV) and in controlled natural ventilation systems
- Control panel compliant with prEN 12101-9
- Power supply compliant with EN 12101-10
- Low residual ripple output voltage (<2 Vpp) - compatible with all common drives
- Easy and space saving installation on 35-mm snap-on mounting rail with many combination options
- Easy configuration of SHEV and ventilation groups by selective lining up of the modules
- Control- and Sensor-Module with 3 monitored detector lines with different priorities for connecting with:
  - Manual break-glass unit (HSE)
  - Automatic smoke and heat detectors
  - Control signal from fire alarm system (FAS)
- Drive-Module with monitored line outputs for connection of drives up to 20 A
- Relay-Module for the evaluation and transmission of events (emergency open signal, fault signal, feedback signals)
- Weather-Module for connection with wind speed sensors, wind direction sensors and rain sensors
- Network-Modules for connection and integration with building management systems (CAN, KNX)
- All ventilation button inputs with OPEN-STOP-CLOSE function and adjustable priorities
- Clear operating and display elements
- Extensive settings of the basic functions via software offered by download free of charge
- Special functions programmable via extra costs software license as in the following:
  - Service and maintenance intervals
  - Changes of priorities, switching-thresholds and switch-off times
  - Deactivation of the detector lines or of their monitoring
  - Control of the alarm functions by a volt-free contact of the fire alarm system (FAS)
  - Network integration
- Steel sheet housing, protection class IP40 / IP54 alternatively available with wall fixing brackets, cable exit from above
- Prepared for connection of backup batteries (72 hours)
- VdS certification no.: G 512005
- In the state of delivery, the interconnection of SHEV and ventilation groups can be configured - by targeted lining up of the modules - without software.
- System components for individual assembly consisting of functional basic control units each with one SHEV and one ventilation group, as well as a variety of modules and components that can be ordered either as factory-installed or for customer-side yourself installation.
- Software licences for enabling and configuration of complex integrated special functions as well as for the interconnection of multiple control units to a network with higher-ranking functions for SHEV, ventilation and weather groups
- Fully assembled and configured - at the factory or by self-expansion.
- Fully assembled and configured from the factory or for self-removal
- Individual customization through extensive software options

## IMPORTANT NOTES

The modular design of EMB8000 in combination with digital network technology makes it possible for our customers to size, assemble and configure the control units by themselves. For this AUMÜLLER is providing the required hardware and software.

AUMÜLLER also offers factory fitted standard control units with preprogrammed basic functions. These control units and control devices are marked accordingly in this list.

The minimum equipment of a fully functional control unit:

- 1x Switch mode power supply PS 5 A up to 24 A – the installation up to 3 identical power supplies up to a maximum of 72 A is possible
- 2x Backup Prepared for batteries 12 V DC from 7 Ah to 38 Ah to ensure the emergency power supply for 72 hours
- 1x Power-Module PM for the charging control of batteries – completed with up to 2 Power-Module-Extensions PME
- 1x Control-Module CM with 3 detector input lines for automatic and manual smoke detectors and 1 ventilation button input line
- 1x Drive-Module DM or DMX for connection of 24 V DC drives with a total current consumption of 10 A respectively 20 A and 1 ventilation button input line

## PLANNING NOTES

The Build-in-Modules of EMB8000 are connected to each other and communicate via the digital network bus. On delivery respectively as long as the delivered software configuration is not changed, the modules are self-learning. SHEV groups can be easily and flexibly configured by selective lining up of the modules. A new SHEV group is created by adding a Sensor-Module (SM) into the row. All following Drive-Modules (DM / DMX) belong to the new SHEV group.

In the control units with 2 or 3 switch mode power supplies in one housing (48 A and 72 A), the interconnection of Drive-Modules (DM / DMX) and their total current consumption has to be adapted to the current consumption of the individual switch mode power supply at which they are connected. This can be done by replugging the power supply of the modules. The SHEV group to which the DM/DMX belongs is irrelevant. To ensure the optimum of safety in case of a failure of a switch mode power supply, it is recommended to power the DM/DMX of one SHEV group from only one switch mode power supply. The maximum switching capacity of the DM-modules is to be noted.

Due to the compact design of the modules, the module connection terminals for peripheral devices are limited to 1 mm<sup>2</sup> and for drive lines to 2,5 mm<sup>2</sup> rigid wire conductors. The cross sections of the wires between control unit and drives depend on the cable length, the current consumption as well as the voltage drop on the line. A 35-mm snap-on mounting rail is provided inside the housing, for additional bigger connection terminals if the required cable cross section is larger than the module-own connection terminals. Suitable connection terminals will be found under „accessories“.

The sizing and equipment of the control units EMB8000 depend on:

- Number of smoke detectors per CM / SM or per control unit
- Number of break-glass units per CM / SM or per control unit
- Number of networked control units via CAN-BUS
- Maximum equipment with modules according to the internal power consumption, the size of main power supply and the capacity of backup batteries
- Number of cable entries according to the size of housing and the use of the inputs and outputs of the modules

## LIMITATION OF FACTORY FITTED STANDARD CONTROL UNITS

On the pages in the following you will find a variety of factory fitted standard control units. The selection was made under consideration of all design aspects which are necessary for planning as: maximum module equipment depending on the current consumption, size of the power supply, capacity of the backup batteries, maximum number of the cable entries which are depending on the dimensions of the housing and the use of the module inputs and outputs. When using factory fitted standard control units please note the limitations as in the following:

- |   |    |
|---|----|
| ▪ Number of smoke detectors per CM / SM         | 10 |
| ▪ Number of break-glass units per CM / SM       | 10 |
| ▪ Number of smoke detectors per control unit    | 60 |
| ▪ Number of break-glass units per control unit  | 60 |
| ▪ Number of networked control units via CAN-BUS | 35 |

1. The order of the module assembly is pre-specified
2. The factory expansion of these control units with additional modules is not possible
3. The customer-side installation of additional modules within the limitations of the control unit is possible

### ORDER DATA

Part.-No.

EMB8000 5 A – 0101

680305-0101

**Application:** SHEV modular control unit EMB8000 factory fitted and fully wired.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	322 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>5 A</b>
Connections and functions:	please see descriptions of modules installed
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	400 x 500 x 200 mm
SHEV groups:	1 (1 CM)
Vent groups:	1 (1 DM)
Prepared for batteries:	2 x 12 V / 7 Ah (Part.-No. 542000)

Module order

PM CM 1xDM

EMB8000 5 A – 0102

680305-0102

SHEV groups:	1 (1 CM)
Vent groups:	2 (2 DM)
Prepared for batteries:	2 x 12 V / 7 Ah (Part.-No. 542000)

Module order

PM CM 2xDM

EMB8000 5 A – 0103

680305-0103

SHEV groups:	1 (1 CM)
Vent groups:	3 (3 DM)
Prepared for batteries:	2 x 12 V / 12 Ah (Part.-No. 542200)

Module order

PM CM 3xDM

EMB8000 5 A – 0105

680305-0105

SHEV groups:	1 (1 CM)
Vent groups:	5 (5 DM)
Prepared for batteries:	2 x 12 V / 12 Ah (Part.-No. 542200)

Module order

PM CM 5xDM

EMB8000 5 A – 0202

680305-0202

SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	2 (2 DM)
Prepared for batteries:	2 x 12 V / 12 Ah (Part.-No. 542200)

Module order

PM CM 1xDM SM 1xDM

EMB8000 5 A – 0203

680305-0203

SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	3 (3 DM)
Prepared for batteries:	2 x 12 V / 12 Ah (Part.-No. 542200)

Module order

PM CM 2xDM SM 1xDM

ORDER DATA

		Part.-No.		
<b>EMB8000 10 A – 0101</b>		<b>680310-0101</b>		
<b>Application:</b> SHEV modular control unit EMB8000 factory fitted and fully wired.				



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	506 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>10 A</b>
Connections and functions:	please see descriptions of modules installed
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	400 x 500 x 200 mm
SHEV groups:	1 (1 CM)
Vent groups:	1 (1 DM)
Prepared for batteries:	2 x 12 V / 12 Ah (Part.-No. 542200)
VdS certification no.:	G 512005

Module order



<b>EMB8000 10 A – 0102</b>		<b>680310-0102</b>		
		SHEV groups:	1 (1 CM)	
		Vent groups:	2 (2 DM)	
		Prepared for batteries:	2 x 12 V / 12 Ah (Part.-No. 542200)	

Module order



<b>EMB8000 10 A – 0103</b>		<b>680310-0103</b>		
		SHEV groups:	1 (1 CM)	
		Vent groups:	3 (3 DM)	
		Prepared for batteries:	2 x 12 V / 12 Ah (Part.-No. 542200)	

Module order



<b>EMB8000 10 A – 0104</b>		<b>680310-0104</b>		
		SHEV groups:	1 (1 CM)	
		Vent groups:	4 (4 DM)	
		Prepared for batteries:	2 x 12 V / 12 Ah (Part.-No. 542200)	

Module order



<b>EMB8000 10 A – 0202</b>		<b>680310-0202</b>		
		SHEV groups:	2 (1 CM + 1 SM)	
		Vent groups:	2 (2 DM)	
		Prepared for batteries:	2 x 12 V / 12 Ah (Part.-No. 542200)	

Module order



<b>EMB8000 10 A – 0204</b>		<b>680310-0204</b>		
		SHEV groups:	2 (1 CM + 1 SM)	
		Vent groups:	4 (4 DM)	
		Prepared for batteries:	2 x 12 V / 12 Ah (Part.-No. 542200)	

Module order



### ORDER DATA

Part.-No.

EMB8000 24 A – 0102

680324-0102

**Application:** SHEV modular control unit EMB8000 factory fitted and fully wired.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	805 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>24 A</b>
Connections and functions:	please see descriptions of modules installed
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxD):	600 x 600 x 250 mm
SHEV groups:	1 (1 CM)
Vent groups:	2 (2 DM)
Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)
VdS certification no.:	G 512005

Module order

PM CM 2xDM

EMB8000 24 A – 0103

680324-0103

SHEV groups:	1 (1 CM)
Vent groups:	3 (3 DM)
Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)

Module order

PM CM 3xDM

EMB8000 24 A – 0104

680324-0104

SHEV groups:	1 (1 CM)
Vent groups:	4 (4 DM)
Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)

Module order

PM CM 4xDM

EMB8000 24 A – 0105

680324-0105

SHEV groups:	1 (1 CM)
Vent groups:	5 (5 DM)
Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)

Module order

PM CM 5xDM

EMB8000 24 A – 0106

680324-0106

SHEV groups:	1 (1 CM)
Vent groups:	6 (6 DM)
Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)

Module order

PM CM 6xDM

EMB8000 24 A – 0109








680324-0109

SHEV groups:	1 (1 CM)
Vent groups:	9 (9 DM)
Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)

Module order

PM CM 9xDM

ORDER DATA

		Part.-No.		
EMB8000 24 A – 0202		680324-0202		
<b>Application:</b> SHEV modular control unit EMB8000 factory fitted and fully wired.				
	<b>TECHNICAL DATA (Rated values)</b>			
	Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)		
Max. power consumption:	805 W			
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)			
Output current:	<b>24 A</b>			
Connections and functions:	please see descriptions of modules installed			
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)			
Dimensions (WxHxD):	600 x 600 x 250 mm			
SHEV groups:	2 (1 CM + 1 SM)			
Vent groups:	2 (2 DM)			
Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)			
VdS certification no.:	G 512005			
<b>Module order</b> 				
EMB8000 24 A – 0203		680324-0203		
		SHEV groups:	2 (1 CM + 1 SM)	
		Vent groups:	3 (3 DM)	
		Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)	
<b>Module order</b> 				
EMB8000 24 A – 0204		680324-0204		
		SHEV groups:	2 (1 CM + 1 SM)	
		Vent groups:	4 (4 DM)	
		Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)	
<b>Module order</b> 				
EMB8000 24 A – 0205		680324-0205		
		SHEV groups:	2 (1 CM + 1 SM)	
		Vent groups:	5 (5 DM)	
		Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)	
<b>Module order</b> 				
EMB8000 24 A – 0206		680324-0206		
		SHEV groups:	2 (1 CM + 1 SM)	
		Vent groups:	6 (6 DM)	
		Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)	
<b>Module order</b> 				
EMB8000 24 A – 0208		680324-0208		
		SHEV groups:	2 (1 CM + 1 SM)	
		Vent groups:	8 (8 DM)	
		Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)	
<b>Module order</b> 				

### ORDER DATA

Part.-No.

EMB8000 24 A – 0303

680324-0303

**Application:** SHEV modular control unit EMB8000 factory fitted and fully wired.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	805 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>24 A</b>
Connections and functions:	please see descriptions of modules installed
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	600 x 600 x 250 mm
SHEV groups:	3 (1 CM + 2 SM)
Vent groups:	3 (3 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)
VdS certification no.:	G 512005

Module order



EMB8000 24 A – 0304

680324-0304

SHEV groups:	3 (1 CM + 2 SM)
Vent groups:	4 (4 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)

Module order



EMB8000 24 A – 0305

680324-0305

SHEV groups:	3 (1 CM + 2 SM)
Vent groups:	5 (5 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)

Module order



EMB8000 24 A – 0309

680324-0309

SHEV groups:	3 (1 CM + 2 SM)
Vent groups:	9 (9 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)

Module order



EMB8000 24 A – 0404

680324-0404

SHEV groups:	4 (1 CM + 3 SM)
Vent groups:	4 (4 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)

Module order



EMB8000 24 A – 0406

680324-0406

SHEV groups:	4 (1 CM + 3 SM)
Vent groups:	6 (6 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)

Module order





ORDER DATA

		Part.-No.	
EMB8000 48 A – 0103		680348-0103	
<b>Application:</b> SHEV modular control unit EMB8000 factory fitted and fully wired.			



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	1610 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>48 A</b>
Connections and functions:	please see descriptions of modules installed
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	600 x 600 x 250 mm
SHEV groups:	1 (1 CM)
Vent groups:	3 (3 DM)
Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)
VdS certification no.:	G 512005

Module order	PM	CM	2xDM max. 20 A	1xDM max. 10 A
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EMB8000 48 A – 0104		680348-0104		
		SHEV groups:	1 (1 CM)	
		Vent groups:	4 (4 DM)	
		Prepared for batteries:	2 x 12 V / 17 Ah (Part.-No. 543000)	

Module order	PM	CM	2xDM max. 20 A	2xDM max. 20 A
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EMB8000 48 A – 0105		680348-0105		
		SHEV groups:	1 (1 CM)	
		Vent groups:	5 (5 DM)	
		Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)	

Module order	PM	CM	2xDM max. 20 A	3xDM max. 24 A
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EMB8000 48 A – 0106		680348-0106		
		SHEV groups:	1 (1 CM)	
		Vent groups:	6 (6 DM)	
		Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)	

Module order	PM	CM	3xDM max. 24 A	3xDM max. 24 A
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EMB8000 48 A – 0109		680348-0109		
		SHEV groups:	1 (1 CM)	
		Vent groups:	9 (9 DM)	
		Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)	

Module order	PM	CM	4xDM max. 24 A	5xDM max. 24 A
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EMB8000 48 A – 0112		680348-0112		
		Housing:	<b>600 x 800 x 250 mm</b>	
		SHEV groups:	1 (1 CM)	
		Vent groups:	12 (12 DM)	
		Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)	

Module order	PM	CM	6xDM max. 24 A	6xDM max. 24 A
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SHEV – Modular

### ORDER DATA

Part.-No.

EMB8000 48 A – 0203

680348-0203

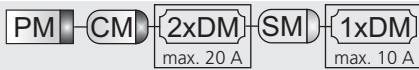
**Application:** SHEV modular control unit EMB8000 factory fitted and fully wired.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	1610 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>48 A</b>
Connections and functions:	please see descriptions of modules installed
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	600 x 600 x 250 mm
SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	3 (3 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)
VdS certification no.:	G 512005

Module order

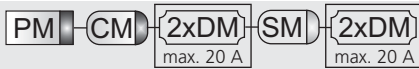


EMB8000 48 A – 0204

680348-0204

SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	4 (4 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)

Module order



EMB8000 48 A – 0205

680348-0205

SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	5 (5 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)

Module order



EMB8000 48 A – 0206

680348-0206

SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	6 (6x DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)

Module order



EMB8000 48 A – 0207

680348-0207

SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	7 (7 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)

Module order



EMB8000 48 A – 0209

680348-0209

SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	9 (9 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)

Module order



ORDER DATA

		Part.-No.	
EMB8000 48 A – 0303		680348-0303	
<b>Application:</b> SHEV modular control unit EMB8000 factory fitted and fully wired.			



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	1610 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>48 A</b>
Connections and functions:	please see descriptions of modules installed
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxD):	600 x 600 x 250 mm
SHEV groups:	3 (1 CM + 2 SM)
Vent groups:	3 (3 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)
VdS certification no.:	G 512005

<b>Module order</b>	
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EMB8000 48 A – 0304		680348-0304		
		SHEV groups:	3 (1 CM + 2 SM)	
		Vent groups:	4 (4 DM)	
		Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)	

<b>Module order</b>	
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EMB8000 48 A – 0305		680348-0305		
		SHEV groups:	3 (1 CM + 2 SM)	
		Vent groups:	5 (5 DM)	
		Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)	

<b>Module order</b>	
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EMB8000 48 A – 0306		680348-0306		
		SHEV groups:	3 (1 CM + 2 SM)	
		Vent groups:	6 (6 DM)	
		Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)	

<b>Module order</b>	
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EMB8000 48 A – 0307		680348-0307		
		SHEV groups:	3 (1 CM + 2 SM)	
		Vent groups:	7 (7 DM)	
		Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)	

<b>Module order</b>	
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EMB8000 48 A – 0310		680348-0310		
		Housing:	<b>600 x 800 x 250 mm</b>	
		SHEV groups:	3 (1 CM + 2 SM)	
		Vent groups:	10 (10 DM)	
		Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)	

<b>Module order</b>	
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SHEV – Modular

### ORDER DATA

Part.-No.

EMB8000 48 A – 0404

680348-0404

**Application:** SHEV modular control unit EMB8000 factory fitted and fully wired.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	1610 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>48 A</b>
Connections and functions:	please see descriptions of modules installed
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	600 x 600 x 250 mm
SHEV groups:	4 (1 CM + 3 SM)
Vent groups:	4 (4 DM)
Prepared for batteries:	2 x 12 V / 24 Ah (Part.-No. 544000)
VdS certification no.:	G 512005

Module order

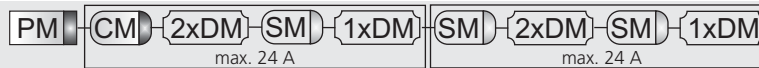


EMB8000 48 A – 0406

680348-0406

SHEV groups:	4 (1 CM + 3 SM)
Vent groups:	6 (6 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)

Module order

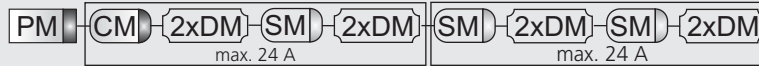


EMB8000 48 A – 0408

680348-0408

Housing:	<b>600 x 800 x 250 mm</b>
SHEV groups:	4 (1 CM + 3 SM)
Vent groups:	8 (8 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)

Module order



EMB8000 48 A – 0505

680348-0505

SHEV groups:	5 (1 CM + 4 SM)
Vent groups:	5 (5 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)

Module order



EMB8000 48 A – 0508

680348-0508

Housing:	<b>600 x 800 x 250 mm</b>
SHEV groups:	5 (1 CM + 4 SM)
Vent groups:	8 (8 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)

Module order



EMB8000 48 A – 0510

680348-0510

Housing:	<b>600 x 800 x 250 mm</b>
SHEV groups:	5 (1 CM + 4 SM)
Vent groups:	10 (10 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)

Module order



ORDER DATA

		Part.-No.		
EMB8000 72 A – 0105		680372-0105		
<b>Application:</b> SHEV modular control unit EMB8000 factory fitted and fully wired.				
	<b>TECHNICAL DATA (Rated values)</b>			
	Operating voltage: 230 V AC (195 – 253 V AC, 50/60 Hz) Max. power consumption: 2415 W Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp) Output current: <b>72 A</b> Connections and functions: please see descriptions of modules installed Housing: Surface mounting, steel sheet, RAL 7035 (light grey) Dimensions (WxHxD): 600 x 800 x 250 mm  SHEV groups: 1 (1 CM) Vent groups: 5 (5 DM) Prepared for batteries: 2 x 12 V / 24 Ah (Part.-No. 544000) VdS certification no.: G 512005			
Module order				
EMB8000 72 A – 0106		680372-0106		
SHEV groups: 1 (1 CM) Vent groups: 6 (6 DM) Prepared for batteries: 2 x 12 V / 24 Ah (Part.-No. 544000)				
Module order				
EMB8000 72 A – 0107		680372-0107		
SHEV groups: 1 (1 CM) Vent groups: 7 (7 DM) Prepared for batteries: 2 x 12 V / 38 Ah (Part.-No. 545000)				
Module order				
EMB8000 72 A – 0108		680372-0108		
SHEV groups: 1 (1 CM) Vent groups: 8 (8 DM) Prepared for batteries: 2 x 12 V / 38 Ah (Part.-No. 545000)				
Module order				
EMB8000 72 A – 0109		680372-0109		
SHEV groups: 1 (1 CM) Vent groups: 9 (9 DM) Prepared for batteries: 2 x 12 V / 38 Ah (Part.-No. 545000)				
Module order				
EMB8000 72 A – 0110		680372-0110		
SHEV groups: 1 (1 CM) Vent groups: 10 (10 DM) Prepared for batteries: 2 x 12 V / 38 Ah (Part.-No. 545000)				
Module order				

### ORDER DATA

Part.-No.

EMB8000 72 A – 0206

680372-0206

**Application:** SHEV modular control unit EMB8000 factory fitted and fully wired.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	2415 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>72 A</b>
Connections and functions:	please see descriptions of modules installed
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	600 x 800 x 250 mm
SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	6 (6 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)
VdS certification no.:	G 512005

Module order



EMB8000 72 A – 0208

680372-0208

SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	8 (8 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)

Module order



EMB8000 72 A – 0210

680372-0210

SHEV groups:	2 (1 CM + 1 SM)
Vent groups:	10 (10 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)

Module order



EMB8000 72 A – 0306

680372-0306

SHEV groups:	3 (1 CM + 2 SM)
Vent groups:	6 (6 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)

Module order



EMB8000 72 A – 0309

680372-0309

SHEV groups:	3 (1 CM + 2 SM)
Vent groups:	9 (9 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)

Module order



EMB8000 72 A – 0310

680372-0310

SHEV groups:	3 (1 CM + 2 SM)
Vent groups:	10 (10 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)

Module order



ORDER DATA

		Part.-No.	
EMB8000 72 A – 0407		680372-0407	
<b>Application:</b> SHEV modular control unit EMB8000 factory fitted and fully wired.			



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	2415 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>72 A</b>
Connections and functions:	please see descriptions of modules installed
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	600 x 800 x 250 mm
SHEV groups:	4 (1 CM + 3 SM)
Vent groups:	7 (7 DM)
Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)
VdS certification no.:	G 512005

Module order	PM	CM	3xDM	SM	2xDM	SM	1xDM	SM	1xDM
			max. 24 A		max. 20 A		max. 20 A		

EMB8000 72 A – 0410		680372-0410		
		SHEV groups:	4 (1 CM + 3 SM)	
		Vent groups:	10 (10 DM)	
		Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)	

Module order	PM	CM	3xDM	SM	3xDM	SM	2xDM	SM	2xDM
			max. 24 A		max. 24 A		max. 24 A		

EMB8000 72 A – 0505		680372-0505		
		SHEV groups:	5 (1 CM + 4 SM)	
		Vent groups:	5 (5 DM)	
		Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)	

Module order	PM	CM	1xDM	SM	1xDM	SM	1xDM	SM	1xDM	SM	1xDM
			max. 20 A		max. 20 A		max. 20 A		max. 10 A		

EMB8000 72 A – 0510		680372-0510		
		SHEV groups:	5 (1 CM + 4 SM)	
		Vent groups:	10 (10 DM)	
		Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)	

Module order	PM	CM	3xDM	SM	2xDM	SM	1xDM	1xDM	SM	2xDM	SM	1xDM
			max. 24 A		max. 24 A				max. 24 A			

EMB8000 72 A – 0606		680372-0606		
		SHEV groups:	6 (1 CM + 5 SM)	
		Vent groups:	6 (6 DM)	
		Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)	

Module order	PM	CM	1xDM	SM	1xDM	SM	1xDM	SM	1xDM	SM	1xDM	SM	1xDM
			max. 20 A		max. 20 A		max. 20 A						

EMB8000 72 A – 0608		680372-0608		
		SHEV groups:	6 (1 CM + 5 SM)	
		Vent groups:	8 (8 DM)	
		Prepared for batteries:	2 x 12 V / 38 Ah (Part.-No. 545000)	

Module order	PM	CM	2xDM	SM	1xDM	SM	2xDM	SM	1xDM	SM	1xDM	SM	1xDM
			max. 24 A		max. 24 A		max. 20 A						

SHEV – Modular



For this product series, a Type III Environmental Product Declaration (EPD) was issued according to ISO 14025 and EN 15804.

The LCA results of the different product types are listed at the end of this product catalogue. The EPD documents can be viewed or downloaded from our homepage [www.aumueller-gmbh.de](http://www.aumueller-gmbh.de).

### PRODUCT FEATURES EMB8000

- Modular control panel with digital bus technology and power supply for 24 V DC drives for use in smoke and heat exhausting ventilation (SHEV) and in controlled natural ventilation systems
- Control panel compliant with prEN 12101-9
- Power supply compliant with EN 12101-10
- Low residual ripple output voltage (<2 Vpp) - compatible with all common drives
- Easy and space saving installation on 35-mm snap-on mounting rail with many combination options
- Easy configuration of SHEV and ventilation groups by selective lining up of the modules
- Control- and Sensor-Module with 3 monitored detector lines with different priorities for connecting with:
  - Manual break-glass unit (HSE)
  - Automatic smoke and heat detectors
  - Control signal from fire alarm system (FAS)
- Drive-Module with monitored line outputs for connection of drives up to 20 A
- Relay-Module for the evaluation and transmission of events (emergency open signal, fault signal, feedback signals)
- Weather-Module for connection with wind speed sensors, wind direction sensors and rain sensors
- Network-Modules for connection and integration with building management systems (CAN, KNX)
- All ventilation button inputs with OPEN-STOP-CLOSE function and adjustable priorities
- Clear operating and display elements
- Extensive settings of the basic functions via software offered by download free of charge
- Special functions programmable via extra costs software license as in the following:
  - Service and maintenance intervals
  - Changes of priorities, switching-thresholds and switch-off times
  - Deactivation of the detector lines or of their monitoring
  - Control of the alarm functions by a volt-free contact of the fire alarm system (FAS)
  - Network integration
- Steel sheet housing, protection class IP40 / IP54 alternatively available with wall fixing brackets, cable exit from above
- Prepared for connection of backup batteries (72 hours)
- VdS certification no.: G 512005
- In the state of delivery, the interconnection of SHEV and ventilation groups can be configured - by targeted lining up of the modules - without software.
- System components for individual assembly consisting of functional basic control units each with one SHEV and one ventilation group, as well as a variety of modules and components that can be ordered either as factory-installed or for customer-side yourself installation.
- Software licences for enabling and configuration of complex integrated special functions as well as for the interconnection of multiple control units to a network with higher-ranking functions for SHEV, ventilation and weather groups
- Fully assembled and configured - at the factory or by self-expansion.
- Fully assembled and configured from the factory or for self-removal
- Individual customization through extensive software options



SCOPE OF THE CONFIGURATION SOFTWARE EMB8000		
Functions	Standard	Lizenz
Load configuration / Safe / Safe as	✓	✓
Print settings / Print / Create PDF	✓	✓
Set Password for control unit	--	✓
System configuration / Load settings / Save settings	✓	✓
Read RealTime LOG-Data	✓	✓
Edit RealTime LOG-Data	--	✓
Firmware update	--	✓
Show system-status / Save / Print	✓	✓
Get thresholds and on-off delay of wind sensor	✓	✓
Set thresholds and on-off delay of wind sensor	--	✓
Set thresholds of wind direction sensor	--	✓
System time synchronisation / updating	--	✓
Backup battery monitoring: Performance and fault indications (active, windows OPEN / CLOSE)	--	✓
Set backup battery type and charging characteristics (temperature dependent / constant)	--	✓
Power supply loss: Performance and fault indication (Energy saving mode, CLOSE, ventilation mode)	--	✓
Ventilation push button in dead-man or jog-switch mode (OPEN or/and CLOSE direction)	--	✓
Ventilation push button as one rocker push-button (OPEN/STOP or CLOSE/STOP with one button)	--	✓
Set step-automatic in OPEN-direction (Automatic enabled / Time setting)	--	✓
Enable reset of smoke detector lines with emergency-CLOSE button	--	✓
Enable control of smoke detector line by fire alarm system „FAS“	--	✓
Disable alarms caused by detector line monitoring failures (Automatic and manual detectors)	--	✓
Disable fault detection of detector lines (Automatic and manual detectors)	--	✓
Set functions of PM, CM and SM relay contact	--	✓
Set service and maintenance interval and system behaviour	--	✓
Set drive line mode for use with motors, magnets or gas pressure generators	--	✓
Disable retriggering of drive line in alarm mode	--	✓
Set switch-off time of drive lines	--	✓
Enable and set automatic time-controlled drive line closing mode for ventilation purpose	--	✓
Enable drive closing mode on primary power loss	--	✓
Set drive run time and opening stroke limit for ventilation purpose	--	✓
Set failures of drive line monitoring as alarm signal	--	✓
Set drive running direction in alarm mode from open to close	--	✓
Set signal input of DM drive line (feedback input / inhibiting input)	--	✓
Set wind direction dependent OPENING / CLOSING of drive lines	--	✓
Reset switch positions to the status before the weather control were activated	--	✓
Set emergency close button from jog-switch mode to dead-man mode	--	✓
Set functions of RM6 relays	--	✓
Set assignment of detector and drive lines to SHEV, ventilation and weather groups	--	✓
Interconnection of several control units to a network with higher-ranking functions	--	✓
Integration into digital networks with additional Plug-in Interface-Modules (CAN, KNX)	--	✓

### IMPORTANT NOTES

The modular design of EMB8000 in combination with digital network technology makes it possible for our customers to size, assemble and configure the control units by themselves. For this AUMÜLLER is providing the required hardware and software.

The minimum equipment of a fully functional control unit:

- 1x Switch mode power supply PS 5 A up to 24 A – the installation up to 3 identical power supplies up to a maximum of 72 A is possible
- 2x Backup Prepared for batteries 12 V DC from 7 Ah to 38 Ah to ensure the emergency power supply for 72 hours
- 1x Power-Module PM for the charging control of batteries – completed with up to 2 Power-Module-Extensions PME
- 1x Control-Module CM with 3 detector input lines for automatic and manual smoke detectors and 1 ventilation button input line
- 1x Drive-Module DM or DMX for connection of 24 V DC drives with a total current consumption of 10 A respectively 20 A and 1 ventilation button input line

The control units on the following pages are intended for individual configuration and are prepared for 1 SHEV group with 1 ventilation line (10 A or 20 A) and are preprogrammed for basic functions. AUMÜLLER does not assume any liability for further changes and configurations of these control units.

### PLANNING NOTES

The build-in modules of EMB8000 are connected to each other and communicate via the digital network bus. On delivery respectively as long as the delivered software configuration is not changed, the modules are self-learning. SHEV groups can be easily and flexibly configured by selective lining up of the modules. A new SHEV group is created by adding a Sensor-Module (SM) into the row. All following Drive-Modules (DM / DMX) belong to the new SHEV group.

In the control units with 2 or 3 switch mode power supplies in one housing (48 A and 72 A), the interconnection of Drive-Modules (DM / DMX) and their total current consumption has to be adapted to the current consumption of the individual switch mode power supply at which they are connected. This can be done by replugging the power supply of the modules. The SHEV group to which the DM/DMX belongs is irrelevant. To ensure the optimum of safety in case of a failure of a switch mode power supply, it is recommended to power the DM/DMX of one SHEV group from only one switch mode power supply. The maximum switching capacity of the DM-modules is to be noted.

Due to the compact design of the modules, the module connection terminals for peripheral devices are limited to 1 mm<sup>2</sup> and for drive lines to 2,5 mm<sup>2</sup> rigid wire conductors. The cross sections of the wires between control unit and drives depend on the cable length, the current consumption as well as the voltage drop on the line. A 35-mm snap-on mounting rail is provided inside the housing, for additional bigger connection terminals if the required cable cross section is larger than the module-own connection terminals. Suitable connection terminals will be found under „accessories“. The cross sections of the cables may be calculated with the formula indicated in chart 6.

### LIMITATIONS OF EXPANDABLE BASIC VERSIONS

Please note the data in the following when sizing control units:

- |  |             |
|--|-------------|
| ▪ Number of smoke detectors per CM / SM                      | 10          |
| ▪ Number of break-glass units per CM / SM                    | 10          |
| ▪ Number of smoke detectors per control unit                 | 60          |
| ▪ Number of break-glass units per control unit               | 60          |
| ▪ Number of networkable control units via CAN-BUS            | 35          |
| ▪ Maximum no. of modules per control unit                    | see chart 4 |
| ▪ Internal current consumption of modules                    | see chart 3 |
| ▪ Battery capacity / max. power consumption per control unit | see chart 3 |
| ▪ Dimensions of housing                                      | see chart 4 |
| ▪ No. of cable entries                                       | see chart 4 |

The values in the charts are referring to the use of all module inputs and outputs. The current values are calculated to ensure the backup power supply for 72 hours. Further calculation criteria on request.

The internal current consumption of all used modules may not exceed the maximum current value of the control unit. Please add the current values of all modules to receive the total consumption.

All information of outside diameters of the cables are referring to the cable types used in Germany. The wire cross sections are indicated in mm<sup>2</sup>. To obtain the electric protection rating of the housing is per cable entry only one cable allowed. The total numbers of the needed cables is to be calculated (see chart 1) and to be compared with the number of cable entries (see chart 4).

### CONFIGURATION

The basic configuration software for EMB8000 control units is available for download on [www.aumueller-gmbh.de](http://www.aumueller-gmbh.de) free of charge for. For the configuration of special functions or integration of control units into networks, a software license (with extra costs) is required.

CHART 1: PARAMETER OF MODULES EMB8000												
Features					Cables for inputs and outputs							
Module	Module width [mm]	Module units [ME]	Internal current consumption [mA]	Cable entries when using all inputs/outputs [pcs.]	Smoke detectors, FAS	Manual detectors Break-glass units	Drive line	Ventilation button with display	Ventilation button w/o display, other inputs	Volt free contact, drive feedback signal	Wind/Rain/Wind direction	Power supply
PM	46	2	16,0	1								1
PME	46	2	0,0	0								
CM	23	1	20,6	5	2	1			1	1		
SM	23	1	12,6	5	2	1			1	1		
DM	23	1	5,3	3			1	1		1		
DMX	46	2	5,3	3			1	1		1		
IDM	23	1	6,0	5			1	1		1		
RM6	23	1	5,3	1						1-6		
IM-K	23	1	6,0	10								
WM	23	1	13,0	4					2	1	1	
CAN			6,0	2					2			
<b>Rec. Number of wires (w/o protective earth conductor)</b>					4	8	4	8	4	4	7	3

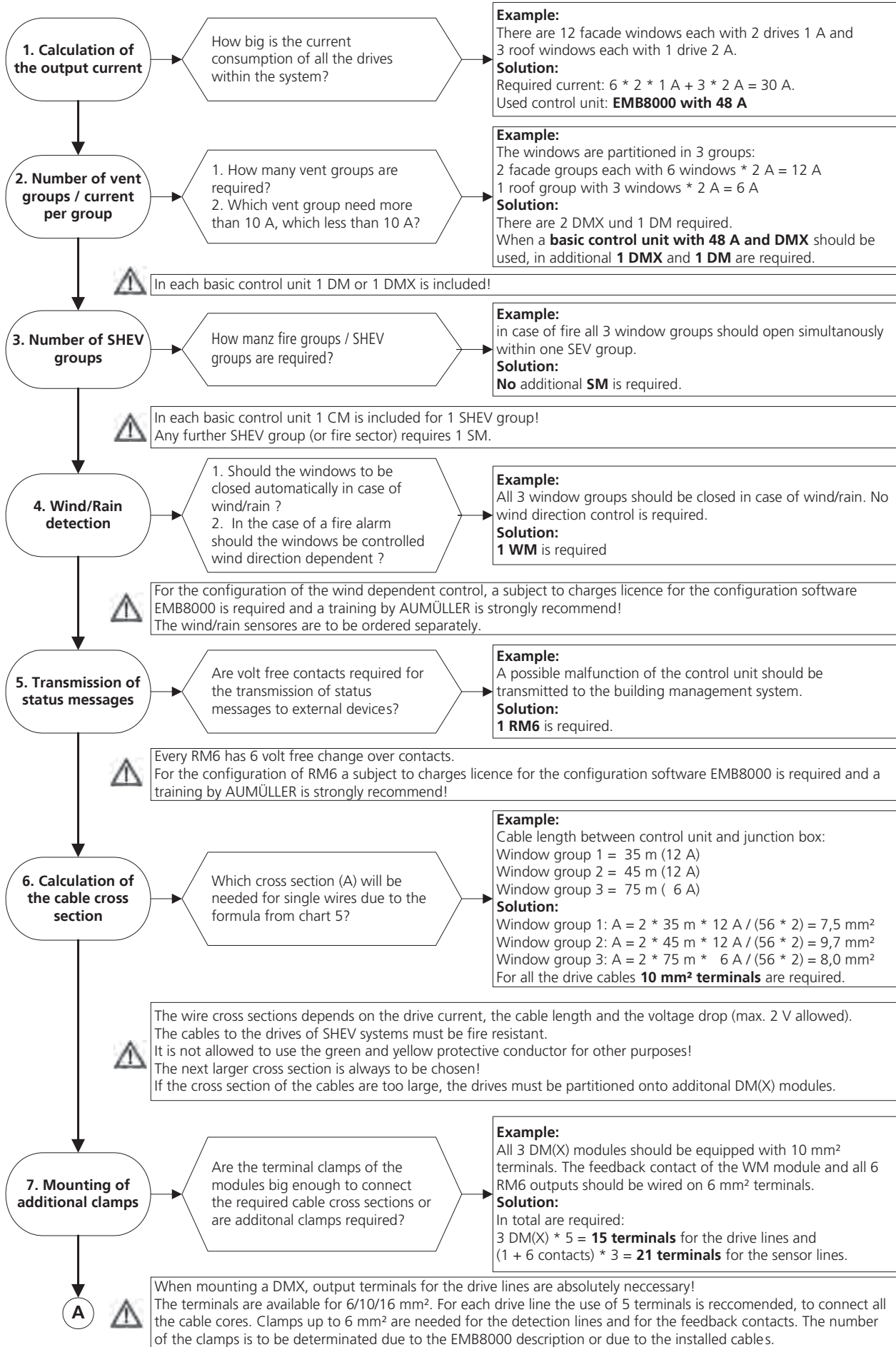
CHART 2: INTERNAL CURRENT CONSUMPTION OF BACKUP BATTERY POWERED DETECTORS	
Break-glass main unit (HSE)	1,2 mA
Break-glass secondary unit (HSE-N)	0,0 mA
Smoke detector	0,1 mA
Wind direction sensor (WRG)	7,1 mA

CHART 3: MAXIMUM CURRENT CONSUMPTION PER CONTROL UNIT					
PS / Battery	7 Ah	12 Ah	17 Ah	24 Ah	38 Ah
10 A	42 mA	120 mA	140 mA	240 mA	350 mA
24 A	✗	70 mA	120 mA	200 mA	300 mA
48 A	✗	✗	80 mA	170 mA	300 mA
72 A	✗	✗	✗	100 mA	300 mA

CHART 4: PARAMETERS OF THE HOUSINGS				
Housing dimensions	400 x 500 x 200	600 x 600 x 250	600 x 800 x 250	800 x 800 x 250
Number of cable entries	29 pcs.	48 pcs.	48 pcs.	58 pcs.
Maximum battery capacity	12 Ah	38 Ah	38 Ah	38 Ah
Module units / mounting rail EMB8000 5 A	8 ME / 300 mm	19 ME / 500 mm	✗	✗
Module units / mounting rail EMB8000 10 A	7 ME / 300 mm	19 ME / 500 mm	✗	✗
Module units / mounting rail EMB8000 24 A	✗	19 ME / 500 mm	19 ME / 1000 mm	✗
Module units / mounting rail EMB8000 48 A	✗	9 ME / 500 mm	17 ME / 500 mm	✗
Module units / mounting rail EMB8000 72 A	✗	✗	15 ME / 500 mm	24 ME / 700 mm

CHART 5: DIMENSIONS OF CONNECTION TERMINALS (pull spring feed through terminal blocks)				
Terminal size [mm]	6 mm <sup>2</sup>	10 mm <sup>2</sup>	16 mm <sup>2</sup>	End bracket
Cross section of the wire (rigid wire)	0,13-6 mm <sup>2</sup>	2,5-10 mm <sup>2</sup>	4-16 mm <sup>2</sup>	✗
External width (feed through terminal)	6 mm	10 mm	12 mm	8 mm
Width of set with 5 terminals + end bracket	38 mm	58 mm	✗	✗

CHART 6: CALCULATION OF DRIVE CABLES	
$A = 2 * L * I / (56 * \Delta U)$	
A	Cross section of wire [mm <sup>2</sup> ]
L	Length of the line [m]
I	Current of the drives [A]
$\Delta U$	Voltage drop on the line [V] = max. 2 V



**8. Current consumption of the modules / battery capacity**

Which battery capacity is needed to cover the current consumption of the used components (modules, sensors, etc.) according to chart 1?

**Example:**  
 The configured system with 48 A power supply contains:  
 1 PM, 1 PME, 1 CM, 2 DMX, 1 DM, 1 WM and 1 RM6  
 Components as in the following are connected in additional:  
 10 break-glass units (HSE) and 20 smoke detectors  
**Solution:**  
 2 DMX = 2x 5,3 mA = 10,6 mA  
 1 DM = 1x 5,3 mA = 5,3 mA  
 1 CM = 1x 20,6 mA = 20,6 mA  
 1 WM = 1x 13 mA = 13,0 mA  
 1 RM6 = 1x 5,3 mA = 5,3 mA  
 1 PM = 1x 16,1 mA = 16,1 mA  
**TOTAL:** 70,9 mA internal consumption for modules  
 10 break-glass units = 10x 1,2 mA = 12 mA  
 20 smoke detectors = 20x 0,1 mA = 2 mA  
**TOTAL:** 14 mA internal consumption for add. components  
**TOTAL SUM: 84,9 mA current consumption**  
 Due to chart 3 a **battery capacity of 24 Ah** (2 batteries 12V) is required for a 48 A control unit.

**⚠** In every standard or basic control unit 1 PM (PME) and 1 CM are included. Their power consumption is to be considered! The power consumption of additional built-in devices, which are feeded with backup power from the control unit, has to be considered into the calculation as well!

**9. Size of the housing**

How much space is required for the modules, additional devices and terminals (chart 4)?

**Example:**  
 Additional components needed for the basic 48 A control unit :  
**1 DMX, 1 DM, 1 WM and 1 RM6** as well as **15 terminals** for drive lines and **21 terminals** for sensor lines.  
**Solution:**  
 1 DMX = 2 ME  
 1 DM = 1 ME  
 1 WM = 1 ME  
 1 RM6 = 1 ME  
**TOTAL: 5 free ME for modules**  
 15 terminals 10 mm<sup>2</sup> \* 10 mm = 150 mm + end bracket 8 mm = 158 mm  
 21 terminals 6 mm<sup>2</sup> \* 6 mm = 126 mm + end bracket 8 mm = 134 mm  
**TOTAL: 292 mm free snap-on mounting rail for terminals**

**⚠** It is necessary to have one end bracket for every terminal block. The end bracket is included in delivery.

**10. Selection of the basic control unit**

Which control unit fulfils the criteria?

**Example:**  
 Output current: 48 A  
 Type of DM: DMX  
 Housing for: 5 ME  
 292 mm free mounting rail  
**Solution:**  
 The **basic control unit 48 A with DMX** and **standard housing 600 x 600 x 250 mm** - Part-no.: 680348-9502 offers space for 8 ME and contains 500 mm snap-on mounting rail.

**⚠** The basic control units differ to the current consumption, the size of housing and the type of used DM (DM for 10 A or DMX for 20 A). The size of housing must be equal or less to the values stated in the price list articles!

**Purchase order of a factory fitted customized control unit (at AUMÜLLER)**

**Factory fitted or self installation**

**Purchase order of single components for the customer-side self installation**

Place an order for an expandable basic version control unit + factory fitted modules

Place an order for an expandable basic version control unit + modules for self installation

1 Basic EMB8000 48 A, DMX, standard housing	680348-9502
1 DMX	680255-9
1 DM	680250-9
1 WM	680180-9
1 RM6	680200-9
15 Terminals for drive line (10 mm <sup>2</sup> )	659903
21 Terminals for sensor line (6 mm <sup>2</sup> )	659902
2 Batteries	544000
Factory fitted configuration	680930

1 Basic EMB8000 48 A, DMX, standard housing	68348-9502
1 DMX	680255
1 DM	680250
1 WM	680180
1 RM6	680200
3 Terminal sets 5x 10 mm <sup>2</sup> for drive line	659908
5 Terminal sets 5x 6 mm <sup>2</sup> for sensor lines	659906
2 Batteries	544000
Configuration software is required to configurate RM6!	

### ORDER DATA

Part.-No.

EMB8000 5 A – 9501

680305-9501

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	322 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>5 A</b>
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>400 x 500 x 200 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>DM</b>
Prepared for batteries:	max. 2 x 12 V / 12 Ah (Capacity acc. to equipment)
<b>Expansion options:</b>	
Module units:	8 free ME
35-mm mounting rail:	300 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations.

EMB8000 5 A – 9503

680305-9503

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	322 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>5 A</b>
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>400 x 500 x 200 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>IDM</b>
Prepared for batteries:	max. 2 x 12 V / 12 Ah (Capacity acc. to equipment)
<b>Expansion options:</b>	
Module units:	8 free ME
35-mm mounting rail:	300 mm space for terminals, etc.

Note: There is an **I-COM** needed for operation.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

EMB8000 5 A – 9601

680305-9601

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	322 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>5 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 600 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>DM</b>
Prepared for batteries:	max. 2 x 12 V / 12 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	19 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

ORDER DATA

		Part.-No.		
<b>EMB8000 5 A – 9603</b>		<b>680305-9603</b>		
<b>Application:</b> Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.				



**Note:** There is an **I-COM** needed for operation.

**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	322 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>5 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 600 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>IDM</b>
Prepared for batteries:	max. 2 x 12 V / 12 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	19 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

		Part.-No.		
<b>EMB8000 10 A – 9501</b>		<b>680310-9501</b>		
<b>Application:</b> Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.				



**Note:** There is an **I-COM** needed for operation.

**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	322 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>10 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>400 x 500 x 200 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>DM</b>
Prepared for batteries:	max. 2 x 12 V / 12 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	7 free ME
35-mm mounting rail:	300 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

		Part.-No.		
<b>EMB8000 10 A – 9503</b>		<b>680310-9503</b>		
<b>Application:</b> Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.				



**Note:** There is an **I-COM** needed for operation.

**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	506 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>10 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>400 x 500 x 200 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>IDM</b>
Prepared for batteries:	max. 2 x 12 V / 12 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	7 free ME
35-mm mounting rail:	300 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

### ORDER DATA

Part.-No.

EMB8000 10 A – 9601

680310-9601

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	506 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>10 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 600 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>DM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	19 free ME
35-mm mounting rail:	500 mm top rail

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

EMB8000 10 A – 9603

680310-9603

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	506 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>10 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 600 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>IDM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	19 free ME
35-mm mounting rail:	500 mm top rail

Note: There is an **I-COM** needed for operation.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

EMB8000 24 A – 9501

680324-9501

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	805 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>24 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 600 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>DM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	19 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations



ORDER DATA

		Part.-No.		
<b>EMB8000 24 A – 9601</b>		<b>680324-9601</b>		
<b>Application:</b> Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.				



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	805 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>24 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>DM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	19 free ME
35-mm mounting rail:	1000 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

		Part.-No.		
<b>EMB8000 24 A – 9502</b>		<b>680324-9502</b>		
<b>Application:</b> Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.				



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	805 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>24 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 600 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>DMX</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	18 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

		Part.-No.		
<b>EMB8000 24 A – 9602</b>		<b>680324-9602</b>		
<b>Application:</b> Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.				



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	805 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>24 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>DMX</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	18 free ME
35-mm mounting rail:	1000 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

### ORDER DATA

Part.-No.

EMB8000 24 A – 9503

680324-9503

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



**Note:** There is an **I-COM** needed for operation.

#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	805 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>24 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 600 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>IDM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	19 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

EMB8000 24 A – 9603

680324-9603

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



**Note:** There is an **I-COM** needed for operation.

#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	805 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>24 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, CM, <b>IDM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	19 free ME
35-mm mounting rail:	1000 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

EMB8000 48 A – 9501

680348-9501

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	1610 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>48 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 600 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, PME, CM, <b>DM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	9 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

ORDER DATA

Part.-No.

EMB8000 48 A – 9601

680348-9601

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	1610 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>48 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, PME, CM, <b>DM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	17 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

EMB8000 48 A – 9502

680348-9502

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	1610 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>48 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 600 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, PME, CM, <b>DMX</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	8 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

EMB8000 48 A – 9602

680348-9602

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	1610 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>48 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, PME, CM, <b>DMX</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	16 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

### ORDER DATA

Part.-No.

EMB8000 48 A – 9503

680348-9503

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	1610 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>48 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 600 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, PME, CM, <b>IDM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	9 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Note:** There is an **I-COM** needed for operation.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

EMB8000 48 A – 9603

680348-9603

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	1610 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>48 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, PME, CM, <b>IDM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	17 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Note:** There is an **I-COM** needed for operation.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

EMB8000 72 A – 9501

680372-9501

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	2415 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>72 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, 2 PME, CM, <b>DM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	15 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

ORDER DATA

			Part.-No.
EMB8000 72 A – 9601	680372-9601		
<b>Application:</b> Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.			



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	2415 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>72 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>800 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, 2 PME, CM, <b>DM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	24 free ME
35-mm mounting rail:	700 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

			Part.-No.
EMB8000 72 A – 9502	680372-9502		
<b>Application:</b> Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.			



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	2415 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>72 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, 2 PME, CM, <b>DMX</b>
Prepared for batteries:	2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	14 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations.

			Part.-No.
EMB8000 72 A – 9602	680372-9602		
<b>Application:</b> Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.			



**TECHNICAL DATA (Rated values)**

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	2415 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>72 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>800 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, 2 PME, CM, <b>DMX</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	23 free ME
35-mm mounting rail:	700 mm space for terminals, etc.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

### ORDER DATA

Part.-No.

EMB8000 72 A – 9503

680372-9503

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	2415 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>72 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>600 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, 2 PME, CM, <b>IDM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	15 free ME
35-mm mounting rail:	500 mm space for terminals, etc.

Note: There is an **I-COM** needed for operation.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

EMB8000 72 A – 9603

680372-9603

**Application:** Expandable basic version of modular control unit EMB8000, factory fitted and fully wired for customer-side self-configuration.



#### TECHNICAL DATA (Rated values)

Operating voltage:	230 V AC (195 – 253 V AC, 50/60 Hz)
Max. power consumption:	2415 W
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Output current:	<b>72 A</b>
Connections and functions:	depends on extension
Housing:	Surface mounting, steel sheet, RAL 7035 (light grey)
Dimensions (WxHxD):	<b>800 x 800 x 250 mm</b>
<b>Delivery state:</b>	
SHEV groups:	1
Vent groups:	1
Module equipment:	PM, 2 PME, CM, <b>IDM</b>
Prepared for batteries:	max. 2 x 12 V / 38 Ah (Capacity acc. to equipmet)
<b>Expansion options:</b>	
Module units:	24 free ME
35-mm mounting rail:	700 mm space for terminals, etc.

Note: There is an **I-COM** needed for operation.

**Features:** The installer of the control unit has to examine and to respect on its sole responsibility that the total current consumption of the internal and external devices, the number of the used modules and cable entries match with the battery capacity and the system limitations

ORDER DATA

	Part.-No.
<b>DM – Drive-Module</b>	<b>680250-9</b>
<b>Application:</b> Factory Fitted-Module installed into an EMB8000 and fully wired, for the controlling of drives, gas-pressure generators and magnetic locks.	



**TECHNICAL DATA (Rated values)**

Operating voltage:	24 V DC
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Internal consumption:	5,3 mA
Output current:	<b>10 A</b>
Housing (WxHxD):	100 x 120 x 22,5 mm, ABS, black
Module units:	1 ME
Inputs:	Vent. buttons (max. 10 pcs.), feedback contact OPEN / CLOSE
Outputs:	Drive line (gas-pressure generators / magnetic locks)
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

<b>Feature/Equipment</b>
<ul style="list-style-type: none"> <li>Drive line monitoring, fixing on 35-mm mounting rail, configuration of the functional and performance features which deviates from the standard systems via configuration software EMB8000</li> </ul>

<b>DMX – Drive-Module</b>	<b>680255-9</b>
<b>Application:</b> Factory Fitted-Module installed into an EMB8000 and fully wired, for the controlling of drives, gas-pressure generators and magnetic locks.	



**TECHNICAL DATA (Rated values)**

Operating voltage:	24 V DC
Output voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Internal consumption:	5,3 mA
Output current:	<b>20 A</b>
Housing (WxHxD):	100 x 120 x 45 mm, ABS, black
Module units:	2 ME
Inputs:	Vent. button (max. 10 pcs.), feedback contact OPEN / CLOSE
Outputs:	Drive line (gas-pressure generators / magnetic locks)
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), Blade terminals 6,3 mm: Drives + power supply, socket and plug with cable for internal BUS

<b>Feature/Equipment</b>
<ul style="list-style-type: none"> <li>Drive line monitoring, fixing on 35-mm mounting rail, configuration of the functional and performance features which deviates from the standard systems via configuration software EMB8000</li> </ul> <p><b>NOTE:</b> Drive output for blade terminals 6,3 mm! Purchased parts package: 3 wires 2,5 mm<sup>2</sup> with blade terminals. Terminals always have to be ordered separately! (See options)</p>

<b>IDM - Intelligent-Drive-Module</b>	<b>680257-9</b>
<b>Application:</b> Factory Fitted-Module installed into an EMB8000 and fully wired, for operating intelligent <b>Aumüller S12 / S3</b> drives up to max. <b>10 A</b> total current.	



**TECHNICAL DATA (Rated values)**

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):	100 x 120 x 22,5 mm, 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

Note: There is an **I-COM** needed for operation.

<b>Feature/Equipment</b>
<ul style="list-style-type: none"> <li>Drive line monitoring, fixing on 35-mm mounting rail, configuration of the functional and performance features which deviates from the standard systems via configuration software EMB8000</li> </ul>

### ORDER DATA

Part.-No.

#### SM – Sensor-Module

680150-9

**Application:** Factory Fitted-Module installed into an EMB8000 and fully wired, for the connecting of automatic smoke detectors and break-glass units.



#### TECHNICAL DATA (Rated values)

Operating voltage:	24 V DC
Detector line voltage:	24 V DC
Internal consumption:	12,6 mA
Housing (WxHxD):	100 x 120 x 22,5 mm, ABS, black
Module units:	1 ME
Inputs:	3 detector lines (max. 10 detectors/line) Vent. push button line (max. 10 pcs.)
Outputs:	1 feedback contact (change-over switch, 42 V / 0.5A)
Display:	Power, fault, alarm
Control elements:	Front push button: Reset
Connections:	Plug-in terminals 1 mm <sup>2</sup> (rigid wire), socket and plug with cable for internal BUS

#### Feature/Equipment

- Detector line monitoring, fixing on 35-mm mounting rail, configuration of the functional and performance features which deviates from the standard systems via configuration software EMB8000

#### RM6 – Relay-Module

680200-9

**Application:** Factory Fitted-Module installed into an EMB8000 and fully wired, for the transmitting of signals via volt free relay contacts.



#### TECHNICAL DATA (Rated values)

Operating voltage:	24 V DC
Intrenal consumption:	5,3 mA
Housing (WxHxD):	100 x 120 x 22,5 mm, ABS, black
Module units:	1 ME
Outputs:	6 Volt free relay contacts (change-over switch, 42V / 0,5A)
Display:	Operating, Fault
Connections:	Plug-in terminals 1 mm <sup>2</sup> (rigid wire), Socket and plug with cable for internal BUS

#### Feature/Equipment

- Fixing on 35-mm mounting rail, configuration of the functional and performance features via configuration software EMB8000

#### IM-K KNX-Module

680265-9

**Application:** Factory Fitted-Module installed into an EMB8000 and fully wired, for communication between the Aumüller control unit EMB 8000 and the KNX-BUS-System.



#### TECHNICAL DATA (Rated values)

Operating voltage:	24 V DC
Internal consumption:	6 mA
BUS current:	9 mA
Data points:	up to 16 lines with up to 16 data points
Housing (WxHxD):	100 x 120 x 22,5 mm, ABS(plastic), black
Module units:	1 ME
Inputs:	6 analog inputs KNX sided, 3 x potential free Relay contacts via KNX
Outputs:	<b>KNX-BUS terminal</b>
Display:	Operation, fault, KNX-programming LED
Control elements:	KNX-programming button
Connections:	Plug-in terminals 1 mm <sup>2</sup> (rigid wire), socket and plug with cable for internal BUS

#### Feature/Equipment

- Fixing on 35-mm mounting rail, configuration of the functional and performance features via configuration software EMB8000 and an ETS-Software for KNX programming



ORDER DATA

	Part.-No.
<b>WM – Weather-Module</b>	<b>680180-9</b>
<b>Application:</b> Factory Fitted-Module installed into an EMB8000 and fully wired, for the connecting of weather sensors.	



**TECHNICAL DATA (Rated values)**

Operating voltage:	24 V DC
Detector line voltage:	24 V DC
Intrenal consumption:	13,0 mA
Housing (WxHxD):	100 x 120 x 22,5 mm, ABS, black
Module units:	1 ME
Inputs:	Wind- and rain sensors, wind direction sensor, external signals
Outputs:	Volt free contac (change-over switch, 42 V / 0.5A)
Display:	Power, fault, wind / rain activ
Connections:	Plug-in terminals 1,5 mm <sup>2</sup> (rigid wire)

**Feature/Equipment**

- Fixing on 35-mm mounting rail, configuration of the functional and performance features via configuration software EMB8000

<b>I-COM – Intelligent Drive Connection-Module</b>	<b>680260</b>
<b>Application:</b> Module for the self installation on customer side - in site-supplied flush mounting junction box. Is required to connect <b>Aumüller S12</b> drives to the Intelligent Drive-Module <b>IDM</b> mandatory.	



**TECHNICAL DATA (Rated values)**

Operating voltage:	24 V DC
Detector line voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Drive current max.:	<b>10 A</b>
Housing (WxHxD):	44 x 73 x 29 mm
Inputs:	1 x 24 V + LK3 from <b>IDM</b>
Outputs:	2 x motor output <b>Aumüller S12</b> drive
Display:	status display
Connections:	Plug-in terminals 4,0 mm <sup>2</sup> (rigid wire) (motor output), core stone 6,0 mm <sup>2</sup> (rigid wire)

Note: Can only be used in conjunction with the EMB8000 **IDM**.

**Feature/Equipment**

- Module without housing, for the self installation in site-supplied flush mounting junction box.

<b>CAN-Module</b>	<b>680190-9</b>
<b>Application:</b> Factory fitted plug-in card installed in the Control-Module (CM) of an EMB8000, for the integrating of various EMB8000 into a <b>CAN-BUS network</b> .	



**TECHNICAL DATA (Rated values)**

Operating voltage:	24 V DC (+/- 20%)
Ambient temperature range:	-5°C ... + 40°C
Housing:	w/o (assembled PCB)
Dimensions (WxHxD):	20 x 32 x 13 mm
Connections:	Plug-in terminals 6 x 1,0 mm <sup>2</sup> (rigid wire)

**Feature/Equipment**

- Connector for plugging the network card into the Control-Module (CM),
- Configuration of the functional and performance features via configuration software EMB8000,
- Module is required in every networking control unit
- 6 pcs. of terminals 1,5 mm<sup>2</sup> installed and fully wired on 35-mm mounting rail

### ORDER DATA

Part.-No.

#### DM – Drive-Module

680250

**Application:** Module for the self installation on customer side into an EMB8000 for the controlling of drives, gas-pressure generators and magnetic locks.



#### TECHNICAL DATA (Rated values)

Operating voltage: 24 V DC  
 Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)  
 Internal consumption: 5,3 mA  
 Output current: **10 A**  
 Housing (WxHxD): 100 x 120 x 22,5 mm, ABS, black  
 Module units: 1 ME  
 Inputs: Vent. buttons (max. 10 pcs.), feedback contact OPEN / CLOSE  
 Outputs: Drive line (gas-pressure generators / magnetic locks)  
 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

#### Feature/Equipment

- Drive line monitoring, fixing on 35-mm mounting rail, configuration of the functional and performance features which deviates from the standard systems via configuration software EMB8000

#### DMX – Drive-Module

680255

**Application:** Module for the self installation on customer side into an EMB8000 for the controlling of drives, gas-pressure generators and magnetic locks.



#### TECHNICAL DATA (Rated values)

Operating voltage: 24 V DC  
 Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)  
 Internal consumption: 5,3 mA  
 Output current: **20 A**  
 Housing (WxHxD): 100 x 120 x 45 mm, ABS, black  
 Module units: 2 ME  
 Inputs: Vent. button (max. 10 pcs.), feedback contact OPEN / CLOSE  
 Outputs: Drive line (gas-pressure generators / magnetic locks)  
 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),  
 Blade terminals 6,3 mm: Drives + power supply,  
 socket and plug with cable for internal BUS

#### Feature/Equipment

- Drive line monitoring, fixing on 35-mm mounting rail, configuration of the functional and performance features which deviates from the standard systems via configuration software EMB8000

**NOTE:** Drive output for blade terminals 6,3 mm! Purchased parts package : 3 wires 2,5 mm<sup>2</sup> with blade terminals. Terminals always have to be ordered separately! (See options)

#### IDM - Intelligent-Drive-Module

680257

**Application:** Module for the self installation on customer side into an EMB8000 for operating intelligent **Aumüller S12 / S3** drives up to max. **10 A** total current.



#### TECHNICAL DATA (Rated values)

Operating voltage: 24 V DC  
 Output voltage: 24 V DC (20 – 28 V DC / 0,5 Vpp)  
 Internal consumption: 6 mA  
 Output current: **10 A**  
 Housing (WxHxD): 100 x 120 x 22,5 mm, ABS, black  
 Module units: 1 ME  
 Inputs: Vent. button (max. 10 pcs.), feedback contact OPEN/CLOSE,  
 0 - 10 V analog input  
 Outputs: Drive line (**Aumüller S12 / S3**)  
 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

**Note:** There is an **I-COM** needed for operation.

#### Feature/Equipment

- Drive line monitoring, fixing on 35-mm mounting rail, configuration of the functional and performance features which deviates from the standard systems via configuration software EMB8000

ORDER DATA

	Part.-No.
<b>SM – Sensor-Module</b>	<b>680150</b>
<b>Application:</b> Module for the self installation on customer side into an EMB8000 for the connecting of automatic smoke detectors and break-glass units.	



**TECHNICAL DATA (Rated values)**

Operating voltage:	24 V DC
Detector line voltage:	24 V DC
Internal consumption:	12,6 mA
Housing (WxHxD):	100 x 120 x 22,5 mm, ABS, black
Module units:	1 ME
Inputs:	3 detector lines (max. 10 detectors/line) Vent. push button line (max. 10 pcs.)
Outputs:	1 feedback contact (change-over switch, 42 V / 0.5A)
Display:	Power, fault, alarm
Control elements:	Front push button: Reset
Connections:	Plug-in terminals 1 mm <sup>2</sup> (rigid wire), socket and plug with cable for internal BUS

**Feature/Equipment**

- Detector line monitoring, fixing on 35-mm mounting rail, configuration of the functional and performance features which deviates from the standard systems via configuration software EMB8000

<b>RM6 – Relay-Module</b>	<b>680200</b>
<b>Application:</b> Module for the self installation on customer side into an EMB8000 for the transmitting of signals via volt free relay contacts.	



**TECHNICAL DATA (Rated values)**

Operating voltage:	24 V DC
Intrenal consumption:	5,3 mA
Housing (WxHxD):	100 x 120 x 22,5 mm, ABS, black
Module units:	1 ME
Outputs:	6 Volt free relay contacts (change-over switch, 42V / 0,5A)
Display:	Operating, Fault
Connections:	Plug-in terminals 1 mm <sup>2</sup> (rigid wire), Socket and plug with cable for internal BUS

**Feature/Equipment**

- Fixing on 35-mm mounting rail, configuration of the functional and performance features via configuration software EMB8000

<b>IM-K - KNX-Module</b>	<b>680265</b>
<b>Application:</b> Module for the self installation on customer side into an EMB8000, for communication between the Aumüller control unit EMB 8000 and the KNX-BUS-System.	



**TECHNICAL DATA (Rated values)**

Operating voltage:	24 V DC
Internal consumption:	6 mA
BUS current:	9 mA
Data points:	up to 16 lines with up to 16 data points
Housing (WxHxD):	100 x 120 x 22,5 mm, ABS(plastic), black
Module units:	1 ME
Inputs:	6 analog inputs KNX sided, 3 x potential free Relay contacts via KNX
Outputs:	<b>KNX-BUS terminal</b>
Display:	Operation, fault, KNX-programming LED
Control elements:	KNX-programming button
Connections:	Plug-in terminals 1 mm <sup>2</sup> (rigid wire), socket and plug with cable for internal BUS

**Feature/Equipment**

- Fixing on 35-mm mounting rail, configuration of the functional and performance features via configuration software EMB8000 and an ETS-Software for KNX programming

### ORDER DATA

Part.-No.

**WM – Weather-Module**

**680180**

**Application:** Module for the self installation on customer side into an EMB8000 for the connecting of weather sensors.



#### TECHNICAL DATA (Rated values)

Operating voltage:	24 V DC
Detector line voltage:	24 V DC
Intrenal consumption:	13,0 mA
Housing (WxHxD):	100 x 120 x 22,5 mm, ABS, black
Module units:	1 ME
Inputs:	Wind- and rain sensors, wind direction sensor, external signals
Outputs:	Volt free contac (change-over switch, 42 V / 0.5A)
Display:	Power, fault, wind / rain activ
Connections:	Plug-in terminals 1,5 mm <sup>2</sup> (rigid wire)

#### Feature/Equipment

- Fixing on 35-mm mounting rail, configuration of the functional and performance features via configuration software EMB8000

**I-COM – Intelligent Drive Connection-Module**

**680260**

**Application:** Module for the self installation on customer side - in site-supplied flush mounting junction box. Is required to connect **Aumüller S12** drives to the Intelligent Drive-Module **IDM** mandatory.



#### TECHNICAL DATA (Rated values)

Operating voltage:	24 V DC
Detector line voltage:	24 V DC (20 – 28 V DC / 0,5 Vpp)
Drive current max.:	<b>10 A</b>
Housing (WxHxD):	44 x 73 x 29 mm
Inputs:	1 x 24 V + LK3 from <b>IDM</b>
Outputs:	2 x motor output <b>Aumüller S12</b> drive
Display:	status display
Connections:	Plug-in terminals 4,0 mm <sup>2</sup> (rigid wire) (motor output), core stone 6,0 mm <sup>2</sup> (rigid wire)

Note: Can only be used in conjunction with the EMB8000 **IDM**.

#### Feature/Equipment

- Module without housing, for the self installation in site-supplied flush mounting junction box.

**CAN-Module**

**680190**

**Application:** Plug-in card for self installation on customer side in the Control-Module (CM) of an EMB8000, for the integrating of various EMB8000 into a **CAN-BUS network**.



#### TECHNICAL DATA (Rated values)

Operating voltage:	24 V DC (+/- 20%)
Ambient temperature range:	-5°C ... + 40°C
Housing:	w/o (assembled PCB)
Dimensions (WxHxD):	20 x 32 x 13 mm
Connections:	Plug-in terminals 6 x 1,0 mm <sup>2</sup> (rigid wire)

#### Feature/Equipment

- Connector for plugging the network card into the Control-Module (CM),
- Configuration of the functional and performance features via configuration software EMB8000,
- Module is required in every networking control unit

ORDER DATA

		Part.-No.	
<b>WR-Set Type 7x/8x – Wind und Rain Sensor Set</b>	<b>482100</b>		
<b>Application:</b> Sensors for wind and rain to work with an evaluation unit WRAG2 or Typ IV, a WM Weather-Module or directly with a SHEV control unit, for closing and blocking the natural ventilation under bad weather conditions.			



**TECHNICAL DATA (Rated values)**

Rated voltage:	24 V DC (+/- 20%)
<b>Rain sensor Type III</b> – heated sensor	surface, switch-off delay approx. 5 min.
Contact:	1 Change-over switch, max. 48 V / 5A
Current consumption:	<150 mA
Housing:	Surface mounting, ABS black with stainless steel bracket
Dimensions (WxHxD):	100 x 85 x 172 mm
Connection cable:	Non-halogen cable, approx. 4 m
Volt free contact:	1 Change-over switch, max. 48 V / 1A
<b>Wind sensor Type III</b> – Anemometer	with 3 impact resistant wind cups (PA6)
Measuring principle:	Pulse generator
Dimensions:	250 x 250 x 80 mm
Connection cable:	non-halogen cable, approx. 4 m

**Feature/Equipment**

- Set including: Wind sensor Type III (Part.-No. 482021), rain sensor Type III (Part.-No. 480210), clamp ring (Part.-No. 515950), aluminium bracket for pole or wall mounting (Part.-No. 482093), without mounting screws

<b>WRG-Set – Wind direction sensor</b>	<b>482120</b>		
<b>Application:</b> Sensor for wind direction detecting to work with an evaluation unit or a WM Weather-Module for the wind direction depending OPENING / CLOSING of windows in case of fire.			



**TECHNICAL DATA (Rated values)**

Operating voltage:	24 V DC (+/- 20%)
<b>Wind direction sensor</b> – ball beared	measuring element with wind vane
Measuring range:	8 wind directions
Material:	Revolving head: PA6 black, wind vane: stainless steel
Connection cable:	Non-halogen 6 x 0,34 mm <sup>2</sup> , length ca. 3 m
<b>Junction box</b> with circuit board and	screw terminals
Connections:	WRG, wind sensor Type III, rain sensor TYP III
Housing (WxHxD):	110 x 110 x 66 mm, IP54
Connections:	Screw terminals 1,5 mm <sup>2</sup> (rigid wire),

**Feature/Equipment**

- Set including: Wind direction sensor (Part.-No. 482120), Junction box (Part.-No. 482110), clamp ring (Part.-No. 515950), aluminium bracket for pole or wall mounting (Part.-No. 482093), without mounting screws

### ORDER DATA

Part.-No.

**Software licence EMB8000**

**Application:** Software licence for configuration, integration in networks and maintenance of EMB8000.

System requirements: Vista™ / 7™



#### Feature/Equipment

- Free updates within licence period
- AUMÜLLER grants licences only after attending a product training

#### OPTIONS

**Standard Permanent Basic** (licence linked to control unit)

**SPB-1M** – Licence for 1 month

**680921**

**SPB-3J** – Licence for 3 years

**680923**

**Technician Permanent Basic** (licence not linked to control unit)

**TPB-1M** – Licence for 1 month

**680911**

**TPB-3J** – Licence for 3 years

**680913**

#### OPTIONS

Factory fitted assembly and wiring of additional terminals in control units

**Part.-No.**

**Single terminals 6 mm<sup>2</sup>** (pull spring feed through terminal blocks 0,13 – 6 mm<sup>2</sup>)

specify at order stage:

**659902**

**Single terminals 10 mm<sup>2</sup>** (pull spring feed through terminal blocks 2,5 – 10 mm<sup>2</sup>)

specify at order stage:

**659903**

**Single terminals 16 mm<sup>2</sup>** (pull spring feed through terminal blocks 4 – 16 mm<sup>2</sup>)

specify at order stage:

**659904**

**Terminal sets** (includes connection cable / BUS cables to module) for customer-side self installation

**Set 5 feed through terminals 6 mm<sup>2</sup> + end bracket** (w/o installation)

**659907**

**Set 5 feed through terminals 10 mm<sup>2</sup> + end bracket** (w/o installation)

**659908**

**Factory fitted preprogramming of EMB8000**

**Customer specific configuration of EMB8000 at factory**

**680930**

**ORDER DATA**

Part.-No.

**Accumulators**

**Application:** Maintenance of standby operation of SHEV control units over a period of 72 hours of main power supply loss.



**TECHNISCHE DATEN**

Type:	Lead storage battery
Output voltage:	12 V DC
Capacity:	see order data
Lifetime:	4 years (normal conditions)
Connections:	1,2 – 12 Ah: blade terminals 4,8 mm 17 – 38 Ah: screw terminals M5
Housing:	plastic, impact- and break-resistant

**Feature/Equipment**

- Maintenance free operation, long lasting durability, high charging performance and long-cycle stability
- Disposal due to local, national or international rules (WEEE)

**NOTE:** Always 2 batteries are required per control unit!

**OPTIONS**

**for control units with backup power supply**

1,2 Ah, 12 V	1 Pcs.	540000			
2,2/2,3 Ah, 12 V	1 Pcs.	541000			
7 Ah, 12 V	1 Pcs.	542000			
12 Ah, 12 V	1 Pcs.	542200			
17 Ah, 12 V	1 Pcs.	543000			
24 Ah, 12 V	1 Pcs.	544000			
38 Ah, 12 V	1 Pcs.	545000			

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