



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)
- 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 24 V DC 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 (LON, KNX)
- All ventilation button inputs with OPEN-STOP-CLOSE function and adjustable priorities
- Various display and control elements
- Various 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

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 mm² and for drive lines to 2,5 mm² 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:

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| ▪ 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