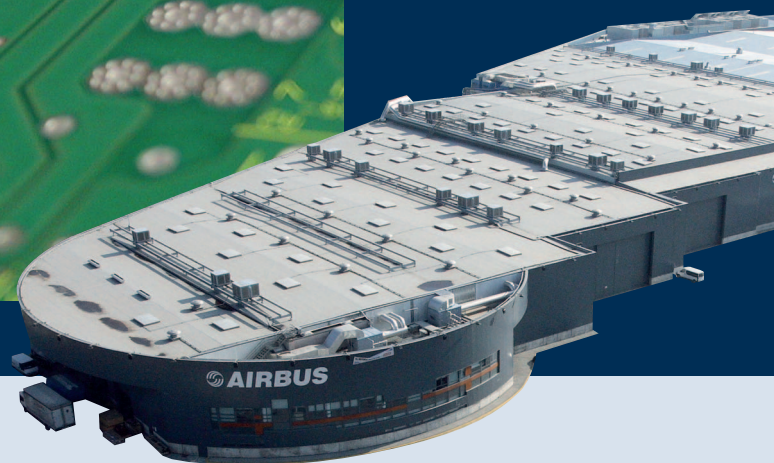
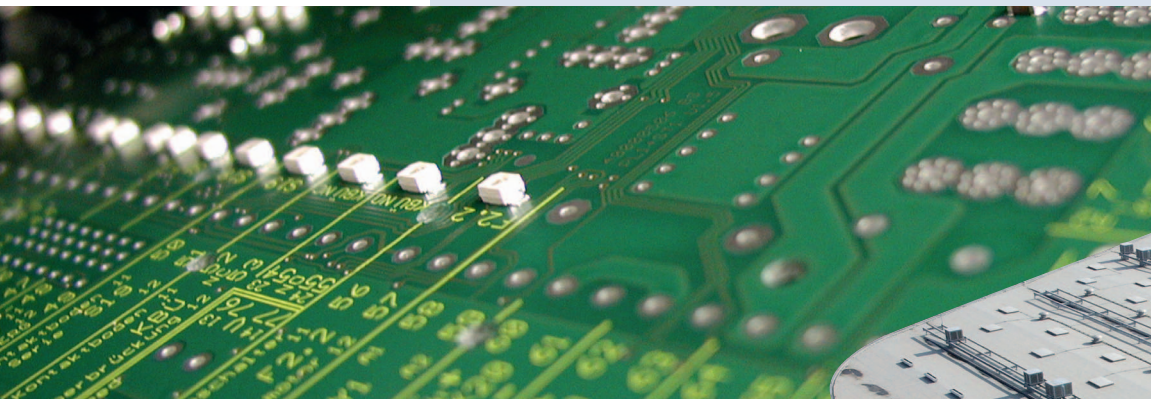




# ESSMANN

▲ LIGHT ● AIR ■ SAFETY

## ESSMANN Control Systems



Intelligent systems for  
controlling aeration, ventilation  
and fire prevention

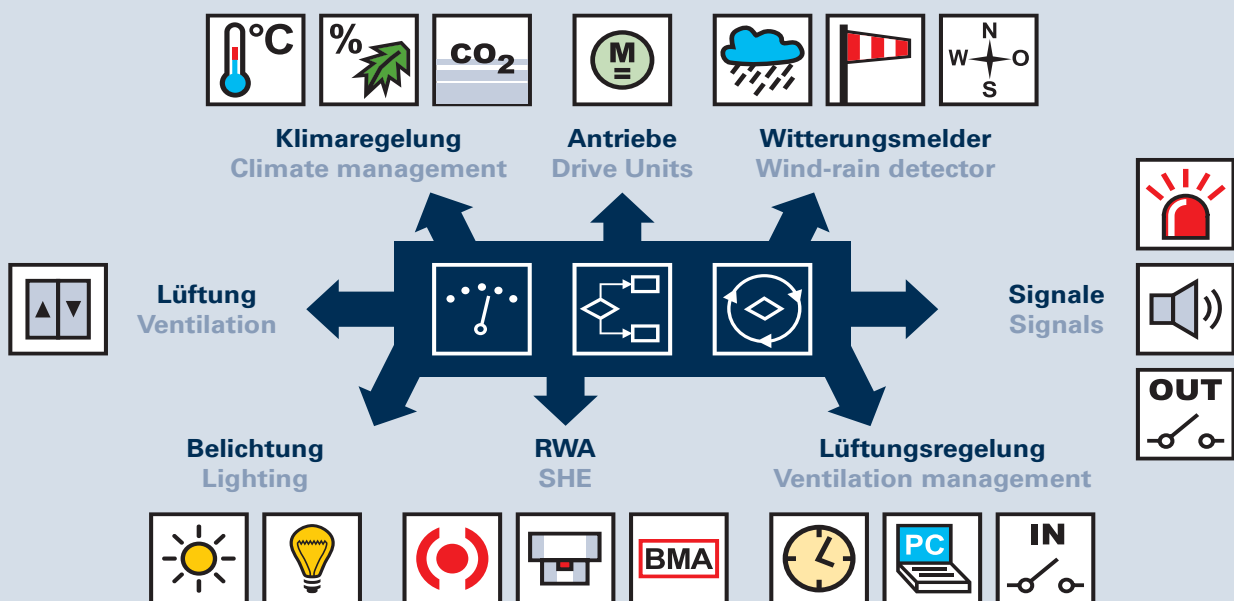
## Measure, manage, control ... from a single source!

Any building thrives on the precision and quality of its details. It is not just a question of shapes and functions; the technical equipment in a building plays a major role in the overall project. In addition, buildings nowadays need to be planned with special focus on energy efficiency and sustainability. This includes the optimal utilisation of daylight, a good climate, and reliable fire protection. All of the components must be technically perfect and compatible with the physical structure of a building to achieve the best results, high earnings, an optimised energy balance and good cost efficiency.

### Strategic considerations for efficient construction processes.

The number of possible solutions for one and the same construction project is enormous. Not only are fundamental decisions made at this early stage; it is also the phase where projects offer the most savings potential. ESSMANN has set itself the task of developing the best possible alternative for each project. Its considerations are, of course, always based on the latest findings, options and the intended function of

the construction project. To this end we offer innovative and integrated solutions for daylight, aeration and ventilation, and fire protection systems that link up all technical control interfaces and take account of all official requirements in respect of physical construction and technical fire protection specifications. We provide competent, binding and technology-neutral advice on all issues relating to technical building equipment, together with information about system components, fixtures and control options.



# ESSMANN SHE Staircase Control Centre

The surface-mounted version of the ESSMANN SHE staircase control centre (SCC) is designed to control two 24V ESSMANN servomotor openers. SHE buttons or automatic detectors can be connected to control the SHE function.

The centre can be expanded to include an interface for transferring malfunction or activation signals potential-free to other systems. ESSMANN wind and rain detectors can also be connected to it.

Ventilation buttons control the ventilation function. Or the ventilation can be closed automatically after 10 minutes.

### The following can be connected:

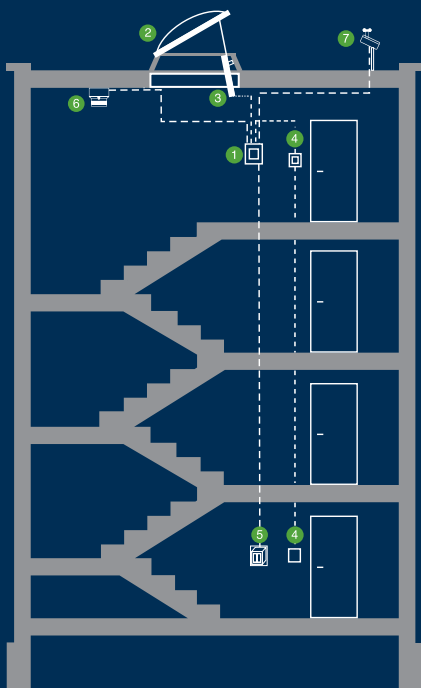
- 2 x 24V ESSMANN servomotor openers
- 10 x ESSMANN SHE buttons
- 10 x ESSMANN automatic detectors
- 10 x ESSMANN ventilation buttons

The ESSMANN SHE staircase control centre is also suitable for controlling pneumatic smoke extraction systems in conjunction with pressurised gas generators (PGG). A maximum of eight sequentially switched pressurised gas generators can be activated simultaneously by the centre, which also permanently monitors their performance.

### The benefits of the SHE staircase control centre at a glance:

- Includes a “daily ventilation” function
- Includes repeated activation of the motors during the first half hour following SHE activation (for example to remove icing on the skylight dome)
- One SHE group and one ventilation group
- Automatic ventilation can be switched additionally; automatic closure is triggered after 10 minutes
- Integrated 230V AC/24V DC power supply, emergency batteries and charging pack for 72 hours operational readiness during power cuts
- Lockable door
- Type tested by TÜV

- 1 ESSMANN 24 V control centre as a set for staircase skylight domes
- 2 ESSMANN skylight dome  $\geq 120 \times 120$  cm
- 3 24 V servomotor with integrated load breaking 50 cm lift (other lift heights available on request) (cable diameter 3 x 1.5 mm up to 100 m)
- 4 NAT-DIN emergency release button (cable diameter 4 x 2 x 0.8 mm)
- 5 Ventilation button
- 6 Smoke detector
- 7 Wind and rain detector



### Available sizes: ESSMANN skylight domes combined with SCC

Nominal size cm x cm	Shape of the skylight dome and position of the installation units	Geometric access face m <sup>2</sup>	Ventilation cross-section of the various lifting heights in m <sup>2</sup>		
			30 cm	50 cm	75 cm
60/60		0.16	0.16	–	–
60/90		0.28	0.28	–	–
70/137		0.59	0.50	0.59	–
70/141		0.61	0.51	0.61	–
80/80		0.36	0.36	–	–
90/90		0.49	0.42	0.49	–
90/120		0.70	0.51	0.70	–
100/100		0.64	0.48	0.64	–
100/150		1.04	0.63	1.04	–
100/200		1.44	0.78	1.30	1.44
100/250		1.84	0.93	1.55	1.84
120/120		1.00	0.60	1.00	–
120/240		2.20	0.96	1.60	2.20
125/250		2.42	1.00	1.67	2.42
141/231		2.55	1.00	1.66	2.49
150/150		1.69	0.78	1.30	1.69
150/240		2.86	1.06	1.75	2.63
150/270		3.25	1.14	1.90	2.85
180/240		3.52	1.14	1.90	2.85
180/270		4.00	1.24	2.05	3.07
200/200		3.24	1.08	1.80	2.70

## ESSMANN SCC VdS SHE Staircase Control Centre

The difference between the SCC VdS SHE staircase control centre and the standard SCC version is that the former product is officially approved by VdS (G 501004). SHE buttons or automatic detectors control the SHE function. The servomotors, SHE buttons and automatic detectors must also be VdS tested and approved to ensure compliance with VdS specifications.



The control centre and SHE button are only available in RAL 2011 orange to ensure certain identification of the control centre and the emergency release buttons in case of fire.

### The following can be connected:

- 2 x 24V ESSMANN servomotor openers
- 10 x ESSMANN SHE buttons
- 10 x ESSMANN automatic detectors
- 10 x ESSMANN ventilation buttons
- 1 x ESSMANN wind and rain detection system

### The benefits of the SCC VdS at a glance:

- Includes a "daily ventilation" function
- Includes repeated activation of the motors during the first half hour following SHE activation (for example to remove icing on the skylight dome)
- One SHE group and one ventilation group
- Automatic ventilation can be switched additionally; automatic closure is triggered after 10 minutes
- Integrated 230V AC/24V DC power supply, emergency batteries and charging pack for 72 hours operational readiness during power cuts
- With integrated ventilation button and SHE control unit
- With acoustic and visual malfunction warnings
- Lockable door



## ESSMANN 4A and 8A Compact Centres

The ESSMANN 4A and 8A compact centres offer innovative technology, a more compact design and a wide range of functions.

Unlike the previous modular design, all control functions are stored on a space-saving circuit board in the compact centres.

The compact centre houses all of the standard functions for SHE and ventilation, including connections for wind and rain detectors and the forwarding of reports.

A switch panel is integrated for setting 12 additional functions on dip switches.

These include, for example, switching off the engine stroke, limiting the lift at specific times, automatic closing, etc.

Moreover, the compact centres are fitted with an integrated service port that allows ESSMANN maintenance engineers to configure the centre at any time with the help of a connecting cable and laptop with appropriate software.

### The benefits of the 4A and 8A compact centres at a glance:

- Includes a "daily ventilation" function
- One SHE group and two ventilation groups
- Two motor circuits
- Adjustable special functions
- Integrated 230V AC/24V DC power supply, emergency batteries and charging pack for 72 hours operational readiness during power cuts
- Lockable door
- Type tested by TÜV



# ESSMANN MZ2 Module Centre

The ESSMANN MZ2 module centre is a centre for controlling servo powered smoke extraction and daily aeration and ventilation.

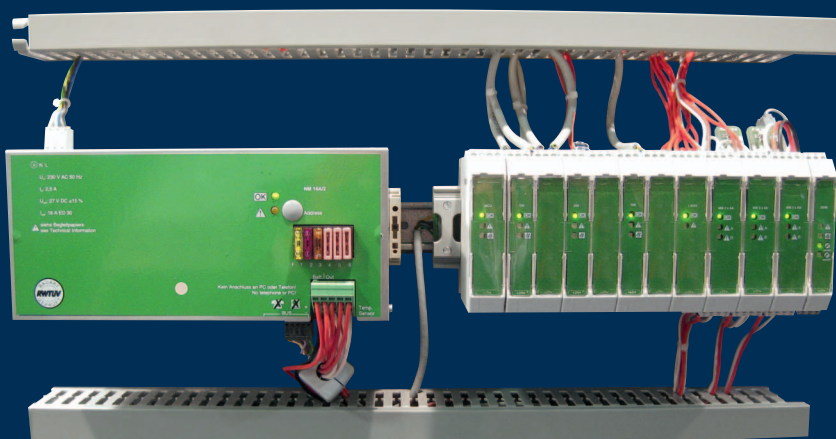
The MZ2 offers a whole host of additional functions for which other module systems require separate modules. These include, for example:

- **Integrated maintenance function**
- **Forwarding of reports**
- **Standard connection for wind/rain detector**
- **Evaluation of wind/rain reports**
- **Lift limitation**

This makes the MZ2 module centre less expensive than other systems. It is, moreover, compatible with all existing connection components. The power pack for the drive provides 16 A performance and can be expanded in 16 A increments. Maintenance and changes to the configuration may only be performed by trained and licensed specialists to ensure that the module centre is not manipulated in any way without authorisation.

## The benefits of the MZ2 module centre at a glance:

- Self-monitoring, modular RWA bus system
- Windows configuration software is used to configure, import, export and save
- Freely configurable special functions are included as standard
- Several SHE and ventilation groups
- Several motor and ventilation circuits
- Integrated power supply, emergency batteries and charging pack for 72 hours operational readiness during power cuts
- With visual malfunction warning
- Ready for connection, built into a sheet steel housing with lock
- Type tested by TÜV
- Tested in accordance with prEN 12101-9 and EN 12101-10



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