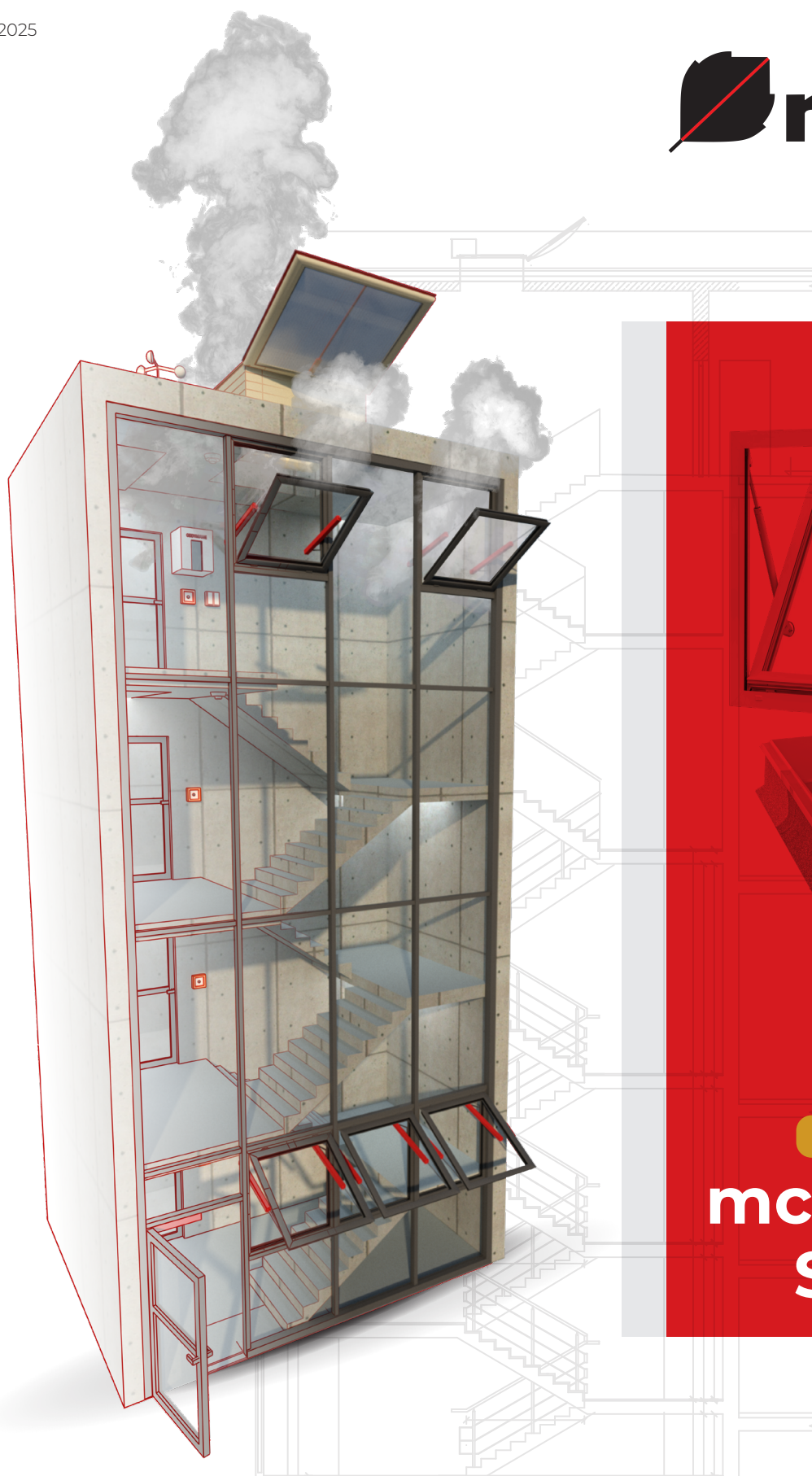




staircases with  
mcr PROLIGHT

**mcr THERM  
SYSTEMS**

We provide safety

**NATURAL SMOKE EXHAUST SYSTEM**

Ensuring the safety of users is one of the key requirements affecting the design of each building. Staircases are the main way of safe evacuation of people, that is why it is so important to equip them with an efficient smoke exhaust system. It is used to remove smoke, fire gases and heat energy generated during a fire from the building.

In the **mcr THERM SYSTEM** natural smoke exhaust system for staircases, which can be found in the **Mercor Light&Vent sp. z o.o.** offer, we have used a number of innovative devices. These solutions are the result of our many years of re-

search, improvements and industry experience. They contribute to the protection of life and property, while meeting current and future requirements for the thermal insulation of buildings. Their aesthetics and handling can meet the expectations of even the most demanding users and fit perfectly into the context of modern architecture.

The complete stairwell smoke extraction system proposed by **Mercor Light&Vent sp. z o.o.** consists of devices for smoke extraction, aeration and ventilation as well as control devices.



Mercor Light&Vent's mission is to deliver safety to building users by providing them with comprehensive fire protection. For over 35 years, we have been offering our business partners, at every stage of the investment process, products and services they can always trust. As a leader of modern technologies in the fire protection industry, we introduce new solutions that are ahead of the norm, and are additionally characterized by high quality and aesthetic workmanship.

staircases with  
**mcr PROLIGHT**

## mcr THERM SYSTEMS

### SYSTEM'S ADVANTAGES

#### FUNCTION

The system ensures safe evacuation through the staircase, while offering additional natural ventilation and enabling access to the roof (vent with hatch function).



#### AESTHETICS

Simplicity and modern design make the devices easy to integrate into interior design, adapting them to buildings of various character and purpose.



#### INTUITIVE SERVICE

One control panel is used for configuration and diagnostics of all devices in the system, the advantage is also the possibility of continuous monitoring of the system operation from the front panel of the control panel.



**mcr PROLIGHT** smoke vents obtained environmental declaration showing environmental impact of the product – from sources extraction to transport



#### QUALITY

It is the result of combining the unique features of the mcr THERM SYSTEM: functionality, aesthetics and advanced technology, and the system is made of materials with high quality parameters.



#### WARMTH

The use of innovative products (smoke vents and windows) with high insulation, without thermal bridges guarantees no heat loss.



#### RELIABILITY

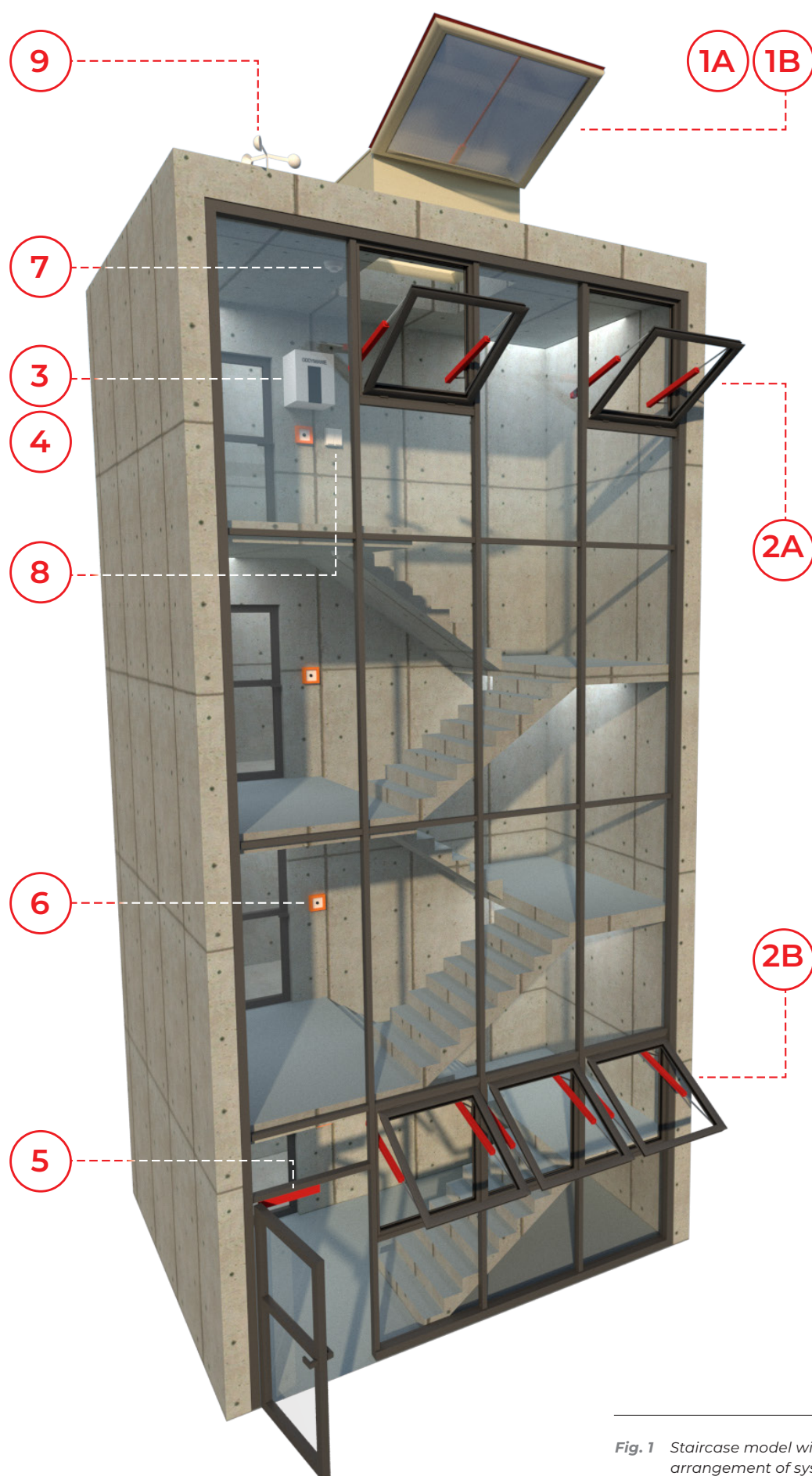
Devices included in the system (vents and windows) have been tested in 10 000 cycles to the position of ventilation.



#### FRIENDLY SERVICE

Notifications from the system control panel make it possible to quickly determine the causes of errors, and the design of the control panel mainboard allows the system to be expanded with additional functions or devices.

## COMPLETE SYSTEM FOR STAIRCASES



**Fig. 1** Staircase model with an example arrangement of system devices natural smoke exhaust

## DEVICES FOR SMOKE EXHAUST AND VENTILATION

### Smoke exhaust vent mcr PROLIGHT

**Function:** smoke exhaust, daily ventilation, roof access (variant)

**Dimensions min.:** 100 x 100 cm

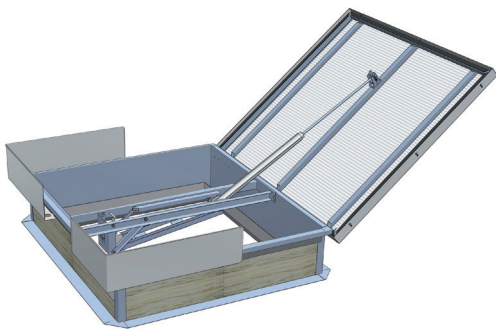
**Dimensions max.:** 195 x 220 cm

**Design:** steel or aluminum base in standard or overlay design

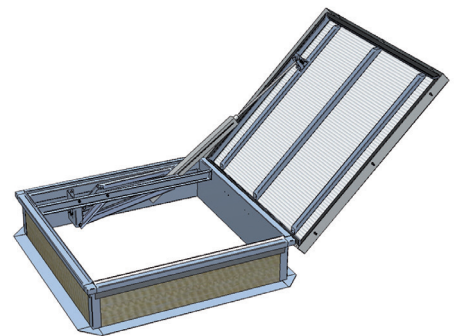
**Glazing:** multi-chamber polycarbonate plates  
acrylic or solid polycarbonate domes, mixed glazing

**Control:** electric 24 V- / 230 V~

1A



1B



2A



2B



### Smoke exhaust windows mcr OSO THERM 75

**Function:** smoke exhaust and daily ventilation

**Dimensions min.:** 80 x 80 cm

**Dimensions max.:** 270 x 130 cm or 160 x 220 cm

**Design:** thermally broken multi-chamber aluminium profiles

**Glazing:** glazing unit or sandwich panel

**Control:** electric 24 V-/48 V-/230 V~

### Aeration window mcr OSO THERM 75

**Function:** aeration and daily ventilation

**Dimensions min.:** 80 x 80 cm

**Dimensions max.:** 270 x 130 cm or 160 x 220 cm

**Design:** thermally broken multi-chamber aluminium profiles

**Glazing:** glazing unit or sandwich panel

**Control:** electric 24 V-/48 V-/230 V~



## ELECTRIC CONTROL SYSTEM DEVICES



### Control unit mcr SVM

mcr SVM 24V- 5 A / mcr SVM 24- 8 A  
In accordance with EN12101  
– class A (double power supply)

**Power supply voltage:** 230 V~ (1.2 A/1.7 A)

**Output voltage:** 24 V-

**No. of outputs:** 1 (1 fire zone / 1 comfort ventilation group)

**Max. total load:** 5 A / 8 A

**Operation time without main voltage source:** 72 h

**Dimensions:** 238 x 113 x 286 mm

### Control unit mcr SV

mcr SV 24V-xx-ds / mcr SV 48V-xx-ds  
In accordance with EN12101  
– class A (double power supply)

**Power supply voltage:** 230 V~ (5 A/10 A)

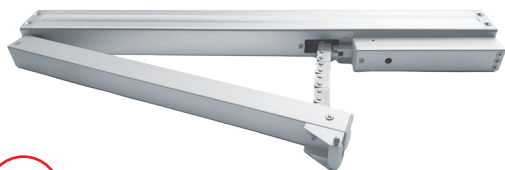
**Output voltage:** 24 V- or 48 V-

**No. of outputs:** 2 (2 fire zones / 2 comfort ventilation groups)

**Max. total load:** 8 A / 24 A / 30 A / 32 A

**Operation time without main voltage source:** 72 h

**Dimensions:** 343 x 178 x 450 mm



5

Door actuator mcr HCV 500/600 Door Drive



6

Emergency pushbutton mcr BVT

7



Optical smoke sensor

8



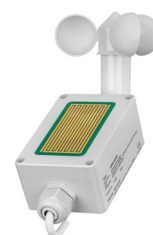
Ventilation pushbutton LT

+



Remote control FLEX

9



Rain-wind sensor AR|AWR



**Mercor Light&Vent sp. z o.o.**  
**ul. Grzegorza z Sanoka 2**  
**80-408 Gdańsk, Poland**  
**tel. +48 58 341 42 45**  
**export@mercortecresa.com.pl**

**MERCOR UKRAINE SP. Z O.O.**  
**Ukraine**

**www.mercor.com.ua**

📍 Scheptyckich 26  
📞 79-016 Lviv  
☎ +380 32 240 34 47  
☎ +380 32 240 34 07  
✉ info@mercortecresa.com.ua

**MERCOR FIRE PROTECTION**  
**SYSTEMS S.C. S.R.L.**

**Romania**

**www.mercor.ro**

📍 Drum Centura Chitila:  
📍 Mogosoia, no 3, floor 4  
📍 Oras Chitila, Ilfov RO-077045  
☎ +40 371 324 182  
☎ +40 372 877 070  
✉ romania@mercortecresa.com.pl

**MERCOR TECRESA**  
**Spain**

**Parque Tecnológico Legatec.**  
**www.mercortecresa.com**

📍 C/ Margarita Salas n° 6  
📍 28919 Leganés (Madrid)  
☎ +34 91 428 22 60  
☎ +34 91 428 22 62  
✉ info@mercortecresa.com

**MERCOR SLOVAKIA S.R.O.**  
**Slovakia**

**www.mercor-slovakia.sk**

📍 Galvaniho 7/D  
📍 821 04 Bratislava  
☎ +421 2 2062 0040  
☎ +421 2 2062 0049  
✉ mercor@mercortecresa.com

**MERCOR CZECH REPUBLIC S.R.O.**  
**Czech Republic**

**www.mercor-czech.cz**

📍 Letní 1122/1  
📍 721 00 Ostrava-Svinov  
☎ +420 597 317 665  
✉ mercor@mercortecresa.cz

**MERCOR - DUNAMENTI**  
**TŰZVÉDELEM ZRT.**

**Hungary**

**www.dunamenti.hu**

📍 Nemeskéri Kiss Miklós utca 39  
📍 2131 Göd  
☎ +36 30 919-0542  
✉ godcenter@dunamenti.hu

**MERCOR FIRE PROTECTION UK LTD**  
**England**

**mercortecresa-uk.co.uk**

📍 Unit P(10), Heywood Distribution Park,  
📍 Pilsworth Road, Heywood, OL10 2TT  
☎ +44 (0) 0161 3598309  
✉ enquiries@mercortecresa-uk.co.uk

**CONTINUOUS**  
**ROOFLIGHT WITH**  
**SMOKE VENTS**



**SMOKE AND**  
**VENTILATION**  
**VENTS**



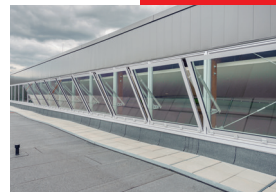
**LOUVERED**  
**VENTS**



**SMOKE**  
**CURTAINS**



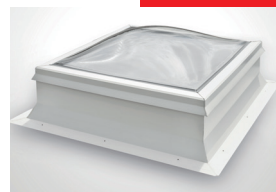
**SMOKE**  
**EXHAUST**  
**WINDOWS**



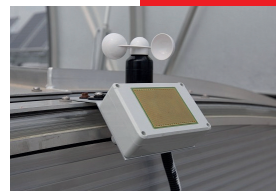
**ROOF**  
**HATCHES**



**FIXED**  
**SKYLIGHTS**



**CONTROL**  
**SYSTEMS**



**STAIRCASE SMOKE**  
**EXHAUST SYSTEMS**



**European**  
**Funds**  
Smart Growth

**European Union**  
European Regional  
Development Fund



The product was developed within the framework of an innovative project entitled:  
***"Comprehensive solutions in the scope of passive fire protection  
of buildings including the development of display line"***  
subsidized with European funds.



Read more about  
our mcr THERM  
SYSTEMS for staircases

**www.mercortecresa.com.pl/en**

