









Conception of SHE Control Centres / Controls

Smoke and Heat Exhaust (SHE)
Smoke and Heat Exhaust Ventilation System (SHEVS)

1 Controlling of 24 V- actuators

SHEVS Control Centres type RWZ and SHEVS Controls type RWD for smoke extraction and ventilation in stairwells and small objects up to complex buildings.

Features of all Control Centres / Controls:

- 24 V- output for actuators (direction of motion is changed by reversing polarity)
- Signal line for automatic fire detectors
- Signal line for manual call points
- Possibility of connecting a Fire Alarm Control Panel (FACP) to activate the SHE - alarm function
- Monitoring of signal lines for wire-break and short-circuit
- Monitoring of accumulator, mains and fuse failure
- Monitoring the common line of actuators for wire-break
- Repetition of OPEN cycle for reliable opening in the case of alarm
- Emergency power supply for at least 72 hours with automatic recharge
- Reverse-connection and deep-discharge protection of the accumulators
- Accumulators with VdS approval
- Selectable function: "Auto Close" (automatic closure after resetting an alarm)
- Selectable function: "Malfunction = Alarm" (alarm upon malfunction of a signal line)
- Internal indicators Operation , Alarm  and Malfunction 
- Manual call points with indicators Operation  / Alarm  / Malfunction  and button *Reset* can be connected
- Internal service display for detailed status indication
- Maintenance mode for simplified checking of the system. Indication of due maintenance can be activated
- Possibility of connecting a Wind and Rain Control (WRC)
- Adjustable ventilation position and ventilation time
- Internal indication of active travel commands  / 
- Manual ventilation in "Start-Stop mode" (no need to hold down the ventilation buttons) or in "dead man's mode" (when the button is released, the actuators will stop)





Especially for complex buildings or for use in industrial buildings, the Control Centres type RWZ 6 are designed in a modular design. The Control Centres type RWZ 6 in modular design are specially designed for complex buildings or the use in industrial buildings. They can also be equipped with impulse modules for integration in / controlling of pneumatic systems (also see section Controlling of 24 V- solenoids / electrovalves).

The decentralised system with Controls type RWD 2 is practically as flexible as desired. 60 Controls can be organised in up to 9 smoke and heat ventilation groups in a monitored bus system. Each SHE group can contain up to 9 ventilation groups. The controls are installed in the immediate vicinity of the smoke and heat exhaust vents (SHEVs). This saves high costs for long cable routes with large cross-sections to the actuators.

Special demands can be realised cost-effectively by individual software and hardware adaptations.



More characteristic features:

	<u>RWZ 1b</u>	<u>RWZ 2f</u>	<u>RWZ 4d</u>	<u>RWZ 5e</u>	<u>RWZ 5f-E</u>	<u>RWZ 5f</u>	<u>RWZ 6</u>	<u>RWD 2a</u>
Output current at 24 V- in A	4	4	8	8 / 16 / 24 / 32	10 / 20	20 / 40	①	10 / 20
Output current at 48 V- in A	-	-	-	-	-	10 / 20	-	-
Number of SHE groups	1	1	1	1 / 2	1	1 / 2	①	①
Number of ventilation groups	1	1	1	1 - 4	1 - 2	1 - 4	①	②
Potential-free contacts (PFC) alarm / malfunction	○	○	○	○	○	○	○	○
Alarm output for warning devices	-	-	○	○	○	○	○	○
Indicators operation  , alarm  and malfunction  in enclosure door	-	-	●	●	-	-	●	③
Connection of manual call points with buzzer  possible	●	-	●	●	●	●	●	●
Connection of ventilation buttons with indication of position OPEN possible	●	●	●	●	●	●	●	●
Internal Wind- and Rain Control (WRM)	○	-	○	○	○	○	○	○
Monitoring the actuators for short-circuit	●	●	●	●	●	●	-	●
Automatic travel commands (apart from the alarm) can be disabled	●	●	●	-	●	●	●	●
VdS approval	●	-	●	●	-	-	-	-
Approved according to EN 12101-10, ISO 21927-9	●	-	●	●	-	●	-	-

- Standard feature
- Optional feature
- Not available







- ① Depending on the design of the system
- ② Up to 9 per SHE group
- ③ By control unit SD 2

2 Controlling of 24 V- solenoids / electrovalves

SHE Controls type IS for smoke extraction of stairwells and small objects up to complex buildings by pneumatic systems.




Building protection by Extinguishing Centre type KLZ for CO₂ extinguishing systems.

Standard features:

- 24 V- output for solenoids / electrovalves, also pressure gas generators can be connected
- Signal line for automatic fire detectors
- Signal line for manual call points
- Possibility of connecting a Fire Alarm Control Panel (FACP) to activate the SHE - alarm function
- Monitoring of signal lines for wire-break and short-circuit
- Monitoring of accumulator, mains and fuse failure
- Monitoring the common line of solenoids for wire-break
- Emergency power supply for at least 72 hours with automatic recharge
- Reverse-connection and deep-discharge protection of the accumulators
- Selectable function: "Malfunction = Alarm" (alarm upon malfunction of a signal line)
- Internal indicators Operation , Alarm  and Malfunction 
- Internal service display for detailed status indication
- Maintenance mode for simplified checking of the system. Indication of due maintenance can be activated
- Manual call points with indicators Operation , Alarm  / Malfunction  and button *Reset* can be connected

Special demands can be realised cost-effectively by individual software and hardware adaptations.

More characteristic features:

	IS 2d	IS 3b	KLZ 1d
Output current at 24 V- in A	3,75	4	1,25
Number of SHE groups	1	1	1
Potential-free contacts (PFC) alarm / malfunction	●	○	●
Alarm output for warning devices	●	○	●
Indicators operation  , alarm  and malfunction  in front panel	●	-	●
Connection of manual call points with buzzer possible	-	●	-
Monitoring of solenoids for short-circuit	-	●	-
VdS approval	-	●	-
Approved according to EN 12101-10, ISO 21927-9	-	●	-

- Standard feature
- Optional feature
- Not available