

Mysłowice, 15.02.2021r.

**POLAND**

## The ventilation sluice



The door off ventilation sluice type T-350



The passage door for people

The door of ventilation sluice is opened and closed with an electric actuator. The actuator is powered by an alternating current power installation with a rated voltage of 3x500VAC (from 220VAC to 1000VAC as an option) through an electrical switch WE.

1. The movement of the door off ventilation sluice can be blocked by emergency stop switches located on both sides of the dam.
2. The drives of the ventilation lock are controlled by means of:
  - manual control buttons with mode switches located on both sides of the door there;
  - remote control with of foto-optical sensors using a personal lamp;
  - remote control sensors on the transport route;
  - manual control buttons with priority, e.g. from the control room.
3. The ventilation sluice are equipped with optical-acoustic signaling and lighting.
4. Electrical equipment of the ventilation sluice can be used in non-explosive fields, methane fields of mining plants in excavations classified as "a", "b" or "c" explosion hazard, in a gas environment belonging to explosion group I or in rooms with a risk of coal dust explosion. Meets the requirements for explosion-proof devices and can be used as a group I equipment in the M2 category.

The door of ventilation sluice: type **T-350**

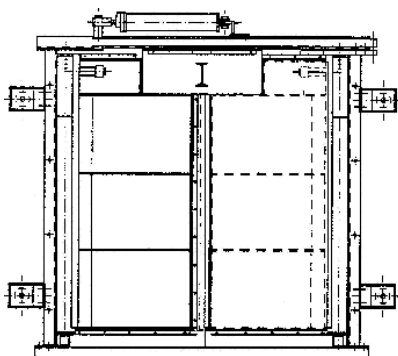
Marking of explosion protection of the ventilation sluice: **CE** **Ex** **I M2 c I**

Marking of explosion protection of electrical equipment

**CE** 1453 **Ex** **I M2 Ex d ia I Mb**

**Certyfikat CBiDGP 17 ATEX 001X**

#### **I. Basic specification - a single the door of ventilation sluice**



The door of ventilation sluice - **type T-350**

The price depends on the version (adjustment to transport routes) and dimensions.

**Note!** The door of the ventilation sluice can be produced in intermediate dimensions.


Widht [mm]	Height [mm]	The weight of the ventilation door [kg]
1600	2000	704
	2200	738
	2400	773
	2600	807
	2800	841
1800	2000	735
	2200	771
	2400	807
	2600	843
	2800	878

Widht [mm]	Height [mm]	The weight of the ventilation door [kg]
2000	2000	766
	2200	804
	2400	841
	2600	878
	2800	916
2200	2000	811
	2200	850
	2400	889
	2600	928
	2800	967
2400	2000	842
	2200	883
	2400	923
	2600	964
	2800	1005
2600	2000	888
	2200	930
	2400	972
	2600	1014
	2800	1056
2800	2000	919
	2200	962
	2400	1006
	2600	1050
	2800	1093
3000	2000	964
	2200	1009
	2400	1055
	2600	1100
	2800	1145

## Basic electrical equipment - manual control of a single door of the ventilation sluice

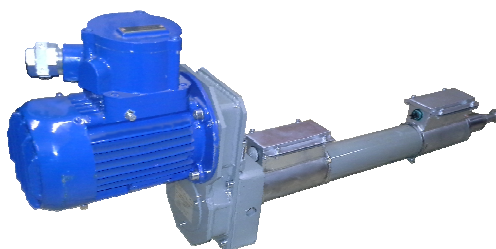
### 1. Electric switch type WE-009Q2ET with 230VAC outflow to power the lighting there

Certyfikat OBAC 10 ATEX 201 X

Supply voltage	3 x 230V ÷ 3 x 1000V
Current	9A - depending on the version
Relative humidity of air in the workplace	do 95 %
The degree of housing protection	IP 54
Ambient temperature	0°C ÷ +40°C
Dimensions	300 x 600 x 250 (mm)
Weight	~ 70 kg
Designation of explosion protection	 I M1 Ex d ia I

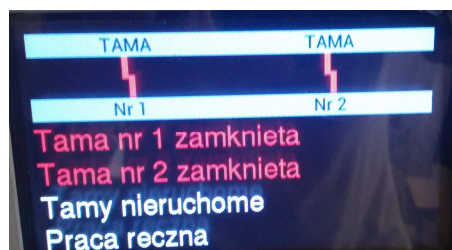


## 2. Electric actuators type PE-4/500/500/0,75-ET- 1 pc.



Electric actuators type PE-4/500/500/0,75-ET with ventilation door position sensors PT type CPo2-ET

## 3. Control panel ST - 1 pc.



Control panel ST the ventilation sluice with controller, with manual control buttons - opening and - closing, emergency switch WA and PTP operating mode selection switch "Automatic operation" or "Manual operation". The control panel has an LCD screen displaying messages graphically.

## 4. Manual control buttons - opening and closing and emergency stops

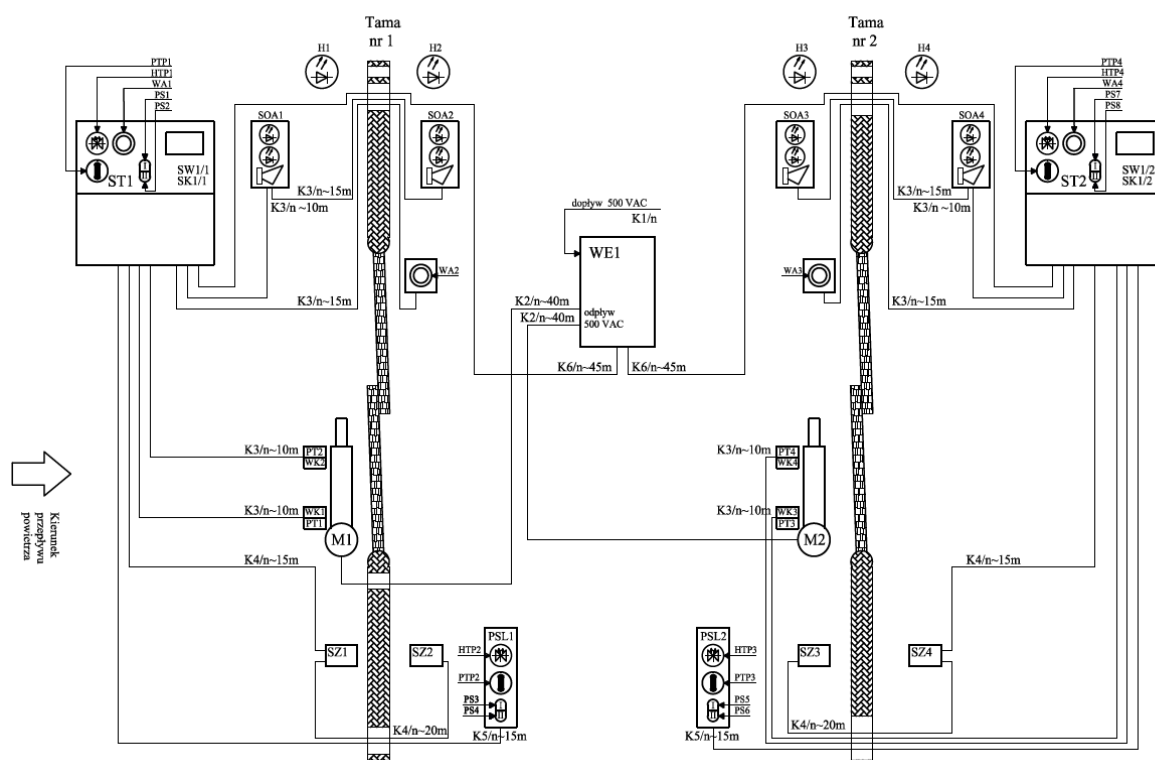
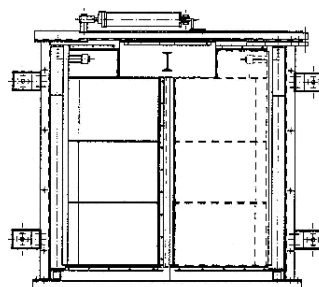
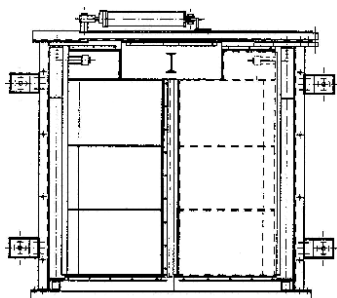


## 5. Optical and acoustic signaling devices SOA type ESOA-1.1.1.2/3.2



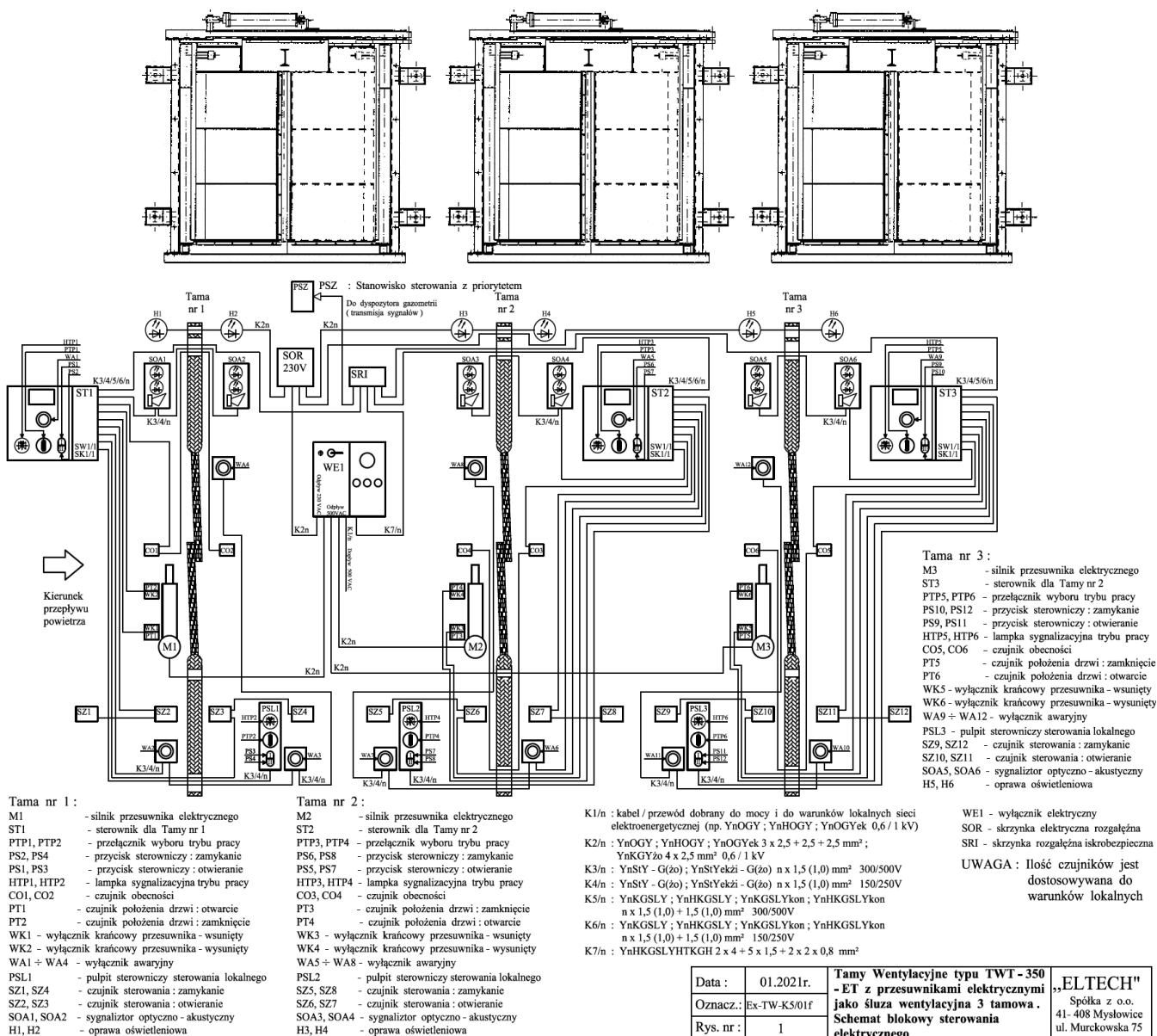
Signals warn against opening and closing the airlock door. Optical signals signal the opening of the ventilation sluice door (green light - passage allowed) and closing the door (red light - no passage).

## II. Basic specification - ventilation sluice - two doors in a system





## III. Basic specification - ventilation sluice - three doors in a system



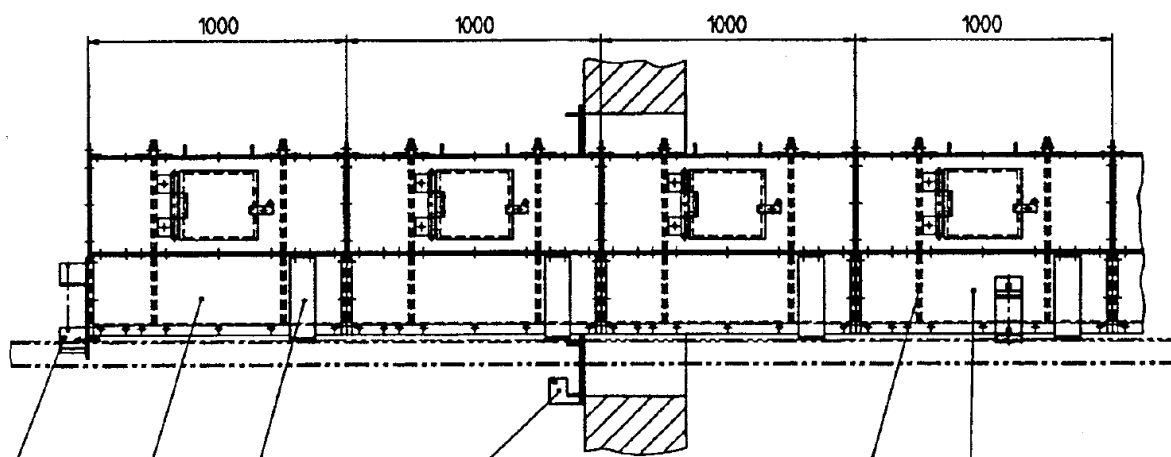
## IV. Optional accessories

### 1. The passage door for people



The passage door for people is closed automatically

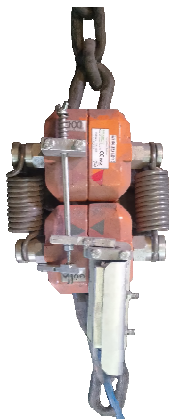
### 2. Conveyor belt passage through the door of ventilation sluice





### 3. Remote controls:

a) Suspended railway - the remote control switch is mounted on the track of the suspended railway. The door is opened and closed by loading the rail of the railway route by the transport set.



b) Track railway - The door of ventilation sluice opening and closing is performed with the use of CF2ET type photoelectric sensors, which control the opening and closing of the dam using sensor lighting, e.g. a personal lamp.

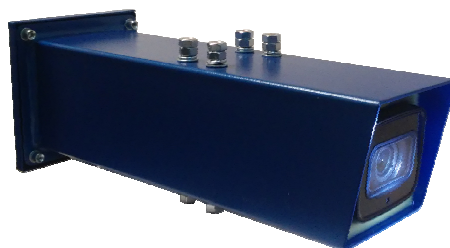


Photoelectric sensor CF2ET

c) Manual control buttons with priority, e.g. from the control room.

d) Enabling transmission of signaling of opening or closing of ventilation sluice to the control room.

### 4. The video cameras for viewing ventilation sluice

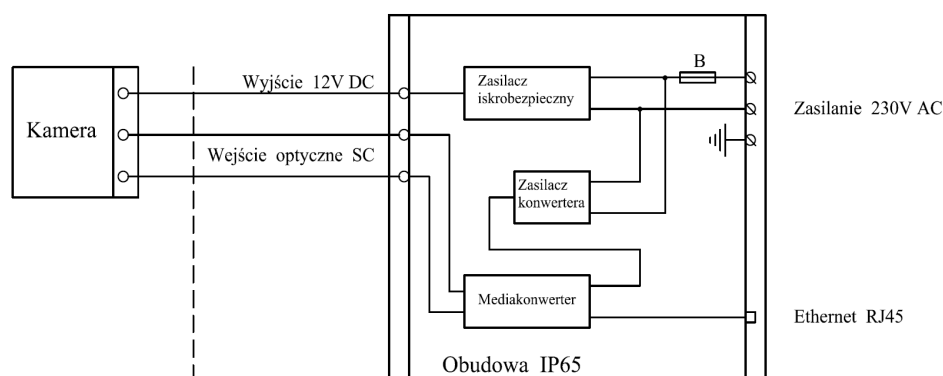


#### Certyfikat OBAC 18 ATEX 0439X

Intrinsically safe camera type KAI\*\*\* - ET is intended for use in monitoring systems based on the TCP / IP protocol. Meets the requirements for devices of group I category M1, group II category 1G and 1D. Transmission up to 20 km.



INTRINSICALLY SAFE TYPE POWER SUPPLY ZI12/2ZET Certificate OBAC 13 ATEX 062X



## 5. Electrical installation for lighting the door of ventilation sluice

The lighting kit includes 2 lamps with LED diodes to illuminate the door of ventilation sluice on both sides, together with cabling and power supply and the necessary technical documentation.

## 6. Presence sensors type COU-ET

The presence sensor, e.g. of a means of transport, stops the door of ventilation sluice closing / opening process.



The presence sensor type COU-ET

e-mail: [eltech@eltechnet.pl](mailto:eltech@eltechnet.pl)

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