

# SR-300

## RYS SMOKE EXTRACTION CONTROL PANEL



### Product characteristics

The RYS SR-300 Smoke Extraction Control Panel is designed for controlling, supplying and monitoring devices in the smoke extraction systems in buildings. It also provides the ventilation function including using a weather station.

### Intended Use

The RYS SR-300 unit is the main element in the smoke extraction and ventilation system. The control panel is available in 12 hardware variants and has a dedicated configuration to any of the application.

The user configures individual inputs / outputs of the control panel depending on the requirements of a given facility. It is possible to set automatic ventilation schedules, control delays of the roof hatch, operate in free selected up to 4 fire and ventilation zones.

### Technical Data

Table 1. RYS SR-300 Smoke Extraction Control Panel technical data.

Supply voltage	230 VAC +15% -20%
Maximum mains current consumption	Depending on the Control Panel type: from 1.7 A to 8 A
Permissible output current	Depending on the Control Panel type: from 5.5 A to 46 A
Protection class IP	IP30 or IP40 as a standard (depending on the Control Panel type) or IP54 as an option
Operating temperature	from -5°C to +40°C
Environmental class	I
Maximum battery	45 Ah
Overall dimensions	depending on the configuration: <ul style="list-style-type: none"> <li>• 410 x 400 x 140 [mm]</li> <li>• 480 x 480 x 160 [mm]</li> <li>• 550 x 480 x 200 [mm]</li> <li>• 415 x 400 x 170 [mm] – for IP54</li> <li>• 480 x 480 x 180 [mm] – for IP54</li> <li>• 550 x 480 x 220 [mm] – for IP54</li> </ul>
Design	compact housing
Group/zone configuration	<ul style="list-style-type: none"> <li>• up to 4 smoke extraction zones</li> <li>• up to 4 ventilation zones</li> </ul>
Electric actuator outputs	<ul style="list-style-type: none"> <li>• up to 4 x 24 V DC actuator outputs</li> <li>• load capacity of a single output up to 12 A</li> </ul>
Monitoring lines / smoke detector inputs	<ul style="list-style-type: none"> <li>• Conventional parametric (open)</li> <li>• Up to 4 smoke detector lines</li> <li>• Up to 32 detectors on a single monitoring line</li> <li>• Line open-circuit / short-circuit control function</li> </ul>
Lines of manual smoke vent buttons	<ul style="list-style-type: none"> <li>• Up to 6 lines of manual smoke vent button boards</li> </ul>

Electric door holders outputs	<ul style="list-style-type: none"> <li>• 2 x 24 V DC outputs</li> <li>• Support for standard and reversible electric door holders</li> </ul>
Digital inputs	<ul style="list-style-type: none"> <li>• Up to 6 monitored and up to 7 unmonitored inputs</li> <li>• Open-circuit / short-circuit control function</li> </ul>
Relay outputs	Up to 7 unmonitored outputs; <ul style="list-style-type: none"> <li>• Implementation of both simplified and complex control algorithms</li> <li>• Operation status optical signaling</li> <li>• Possibility of expanding</li> <li>• with additional optional boards to increase capabilities of the device</li> </ul>
Functionality	<ul style="list-style-type: none"> <li>• Fire alarm optical and acoustic signaling</li> <li>• Staircase ventilation in the household mode</li> <li>• Communication with a fire detection system, system for integration of fire protection devices, BMS system as well as the access control system</li> </ul>
Additional information	<ul style="list-style-type: none"> <li>• Type series of 12 RYS Control Panels</li> <li>• Conforms to the requirements of PN-EN 12101, Part 9 "Control panels"</li> <li>• Meets the requirements of the National Technical Assessment</li> <li>• Conforms to the requirements of PN-EN 12101, Part 10 "Power supplies"</li> </ul>

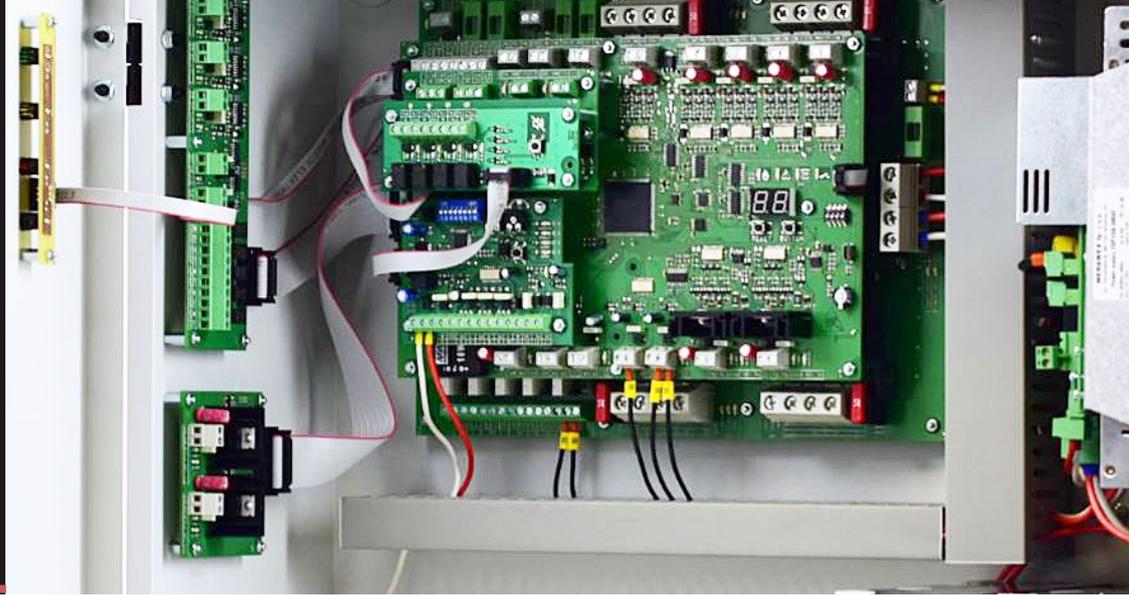
Type series of 12 RYS Control Panels Conforms to the requirements of PN- EN 12101, Part 9 "Control panels" Meets the requirements of the National Technical Assessment Conforms to the requirements of PN- EN 12101, Part 10 "Power supplies"

### Operating principle

The RYS SR-300 Smoke Extraction Control Panel can receive the initiating signals from the Fire Alarm System and other fire safety systems, or can carry out its control and monitoring functions on the basis of its own fire hazard detection by means of smoke and heat detectors and manual smoke vent pushbuttons placed on the RYS SR-300 Smoke Extraction Control Panel monitoring lines.

The Smoke Extraction Control Panel is designed for controlling, supplying and monitoring devices such as:

- Fire dampers, smoke control dampers, smoke vents, daily vents
- Linear, rotary, door and window actuators
- electromagnetic door holders of fire protection doors and gates, electric door strikes, solenoid valves
- Fire protection gates
- Smoke curtains
- Sets of units for gravity extraction of heat and smoke



## Type series of the RYS Control Panels

The RYS SR-300 Smoke Extraction Control Panels are available in 12 types, different in terms of available maximum output current, number of input and output signals supported by the device and overall dimensions of the Control Panel.

Table 2. Type series of the RYS Smoke Extraction Control Panels.

SR-300 type	1.4	1.8	1.8P	1.20P	2.8	2.20	2.29P	4.8	4.20	4.29	4.39	4.48
Number of supported fire zones	1	1	1	1	2	2	2	4	4	4	4	4
Number of supported ventilation zones	1	1	2	2	2	2	3	4	4	4	4	4
Number of 24 V DC actuator outputs	1	1	2	2	2	2	3	4	4	4	4	4
Total output current [A]	5,5	10	10	22	10	22	31	10	23,4	31	41,3	46
Number of inputs of smoke detector lines	1	1	1	1	2	2	2	2	2	2	2	2
Number of full inputs/outputs of manual smoke	1	1	1	1	1	1	1	1	1	1	1	1
Number of simplified inputs/outputs of manual smoke vent button boards	0	0	0	0	1	1	1	1	1	1	1	1
Number of potential-free outputs	4	4	4	5	5	5	5	4	5	5	5	5
Number of monitored inputs	2	2	2	2	3	3	3	4	4	4	4	4
Number of unmonitored inputs	2	2	2	3	2	3	3	3	3	3	3	3

## Additional cards – option

It is possible to expand the RYS SR-300 Smoke Extraction Control Panel with additional optional cards. They increase the number of input and output signals supported by the Control Panel and provide optional functionalities for the device, such as support for optical and acoustic indicators and weather stations.

Table 3. Additional cards for the RYS Control Panels.

Additional card	Additional functionality of the RYS Control Panel using the given card
Additional card 1 - Digital input/output card	+ 2 monitored digital inputs + 2 potential-free digital outputs
Additional card 2 - Manual smoke vent buttons card	+ 1 full manual smoke vent button board input (fire, reset and full signalling) + 1 simplified manual smoke vent button board input (fire and fire signalling)
Additional card 3 - Smoke detectors	+ 2 smoke detector lines
Additional card 4 - Indicators card	+ 2 sounder outputs + 2 optical indicator outputs
Additional card 5 - Weather station	+ 1 wind and rain detector



More parameters describing individual types of Control Panels may be found in the Installation Manual of the device available on the Manufacturer's website.

## Examples of devices supported by the RYS Control Panel

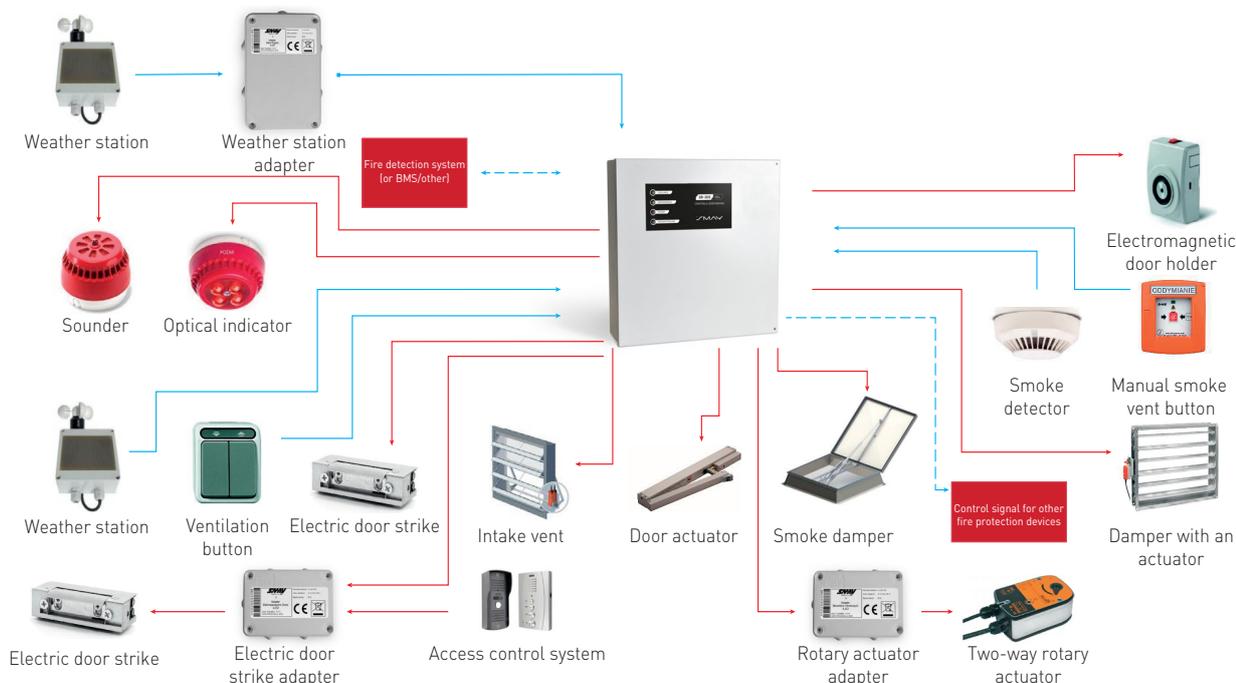


Figure 1. Urządzenia współpracujące z centralą RYŚ.

# SR-300 – Rys smoke extraction control panel

When ordering, please provide information in accordance with the following pattern:

**SR-300 - <TYP> - <IP>-<PD1> -<PD2>-<PD3>-<PD4>-<PD5>- <AKU>**

Where:

<b>SR-300</b>	Generic name: RYS SR-300 Smoke Extraction Control Panel
<b>TYP</b>	Type of the Smoke Extraction Control Panel:
	1.4 - Control Panel of type 1.4
	1.8 - Control Panel of type 1.8
	1.8P - Control Panel of type 1.8P
	1.20P - Control Panel of type 1.20P
	2.8 - Control Panel of type 2.8
	2.20 - Control Panel of type 2.20
	2.29P - Control Panel of type 2.29P
	4.8 - Control Panel of type 4.8
	4.20 - Control Panel of type 4.20
	4.29 - Control Panel of type 4.29
	4.39 - Control Panel of type 4.39
	4.48 - Control Panel of type 4.48
<b>IP</b>	Protection class IP
	<b>none - IP30 or IP40 as a standard</b>
	54 - IP54 as an option

<b>PD1</b>	Additional card 1
	<b>none - without digital input/output card</b>
	WWC - with digital input/output card
<b>PD2</b>	Additional card 2*
	<b>none - without manual smoke vent button card</b>
	RPO - with manual smoke vent button card
<b>PD3</b>	Additional card 3*
	<b>none - without smoke detectors card</b>
	CD - with smoke detectors card
<b>PD4</b>	Additional card 4
	<b>none - without indicators card</b>
	S - with indicators card
<b>PD5</b>	Additional card 5
	<b>none - without weather station card</b>
	SP - with weather station card
<b>AKU</b>	batteries
	<b>none - without batteries</b>
	7.2 - 2x 7.2 Ah batteries
	18 - 2x 18 Ah batteries
	26 - 2x 26 Ah batteries
	33 - 2x 33 Ah batteries
	45 - 2x 45 Ah batteries

\* a possibility of using in any Control Panel type with the exception of 1.4, 1.8, 1.8P and 1.20P

Order example: **SR-300-2.20-WWC-SP-18**

# ARENA TARNÓW JASKÓŁKA



SMAY

REALIZACJE