





## Product description

Automation module MA-01 is designed for industrial automation systems. The role of the module is to mediate between the machine relay output and the signaling devices. The module can be connected to up to six relay outputs of the machine. The role of the module is to control the operation of the SG-Wgw (SG-Wgw IP65) and SO-Ad2 signaling devices, in response to a pertinent state of the device control outputs. By combining these two signaling devices, the user can create visual alarm signals combined with an appropriate voice message: for example, at the time when the machine activates the relay output, a red optical signal and a voice message "Warning! Attention! Failure of the machine!" will be generated. The signaling device SO-Ad2 permits to generate up to six visual alarm signals, while the signaling device SG-Wgw (SG-Wgw IP65) model allows for replay of six different messages with a total duration of up to 60 seconds. The MA-01 module converts signals from the machine relay outputs directly into control signals for the SO-Ad2 and SG-Wgw (SG-Wgw IP65) signaling devices, so that the user does not need to create any control circuits. The role of the user is only to connect the relay outputs to the control module, and the signaling devices to the module outputs. Automated control is carried out according to Table 1.1. The module does not require any programming, the user role is limited to merely creating the alarm messages best responding to the possible range of situations.

## **Technical data**

Power supply	20-30V DC
Current consumption at 24V DC	Inactive outputs < 5mA Active outputs < 10mA
Inputs number	6
Outputs number	6
Ingress protection	IP20
Working temperature range	-25°C ÷ 55°C
Max. conductor cross-section	2,5mm <sup>2</sup>
Weight	~90g
Dimensions	45x75x45mm





Construction

The module casing is made of ABS plastic, the casing shape design allows for direct mounting of the module on a DIN rail. MA-01 module is equipped with two terminal blocks, consisting of eight tracks each. Connection terminals of the module are located on the front panel of the casing, which facilitates the device wiring. The module does not require any programming, it is ready to use immediately after connecting the power supply. In response to the state of the inputs, the module suitably resets the outputs (as per Table 1.1.), which translates into a corresponding alarm sequence of the signaling device.

Table 1.1 Alarm signa	I sequence in response t	o to the input state
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Priority	Inputs number	Sequence of SG-Wgw	Sequence of SO-Ad2
1	IN 1	2	Red
2	IN 2	3	Yellow
3	IN 3	1	Green
4	IN 4	4	Light blue
5	IN 5	6	White
6	IN 6	5	Violet

The user's role boils down solely to the creation of sound recordings associated with the appropriate color. The created recordings can be "uploaded" to the SG-Wgw (SG-Wgw IP65) signaling device using the SG software and an SD card. The above software creates a file which is in turn transferred onto the signaling device on an SD card.

'Connection diagram



SIGNALLING DEVICE SIGNALLING DEVICE SG-Wgw SO-Ad2



