

# Switched-mode power supply assembly for signals ZZI-11/24.1 DM and ZZI-11/24.1DM LED

Switched-mode power supply assembly for signals is designed to control the operation of light bulbs (ZZI-11/24.1 DM) and LED matrices (ZZI-11/24.1DM LED) in road signals and, additionally, to control the operation of a bell, as an upgrade to RTC equipment.

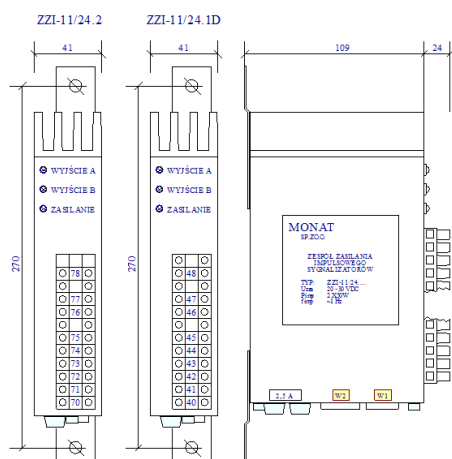
## OPERATING PRINCIPLE

On depressing the „Close” button on the manipulator, lights on road signals and the bell are switched on. Boom barriers are lowered min. 8 s after the lights are switched on. When the boom is out of plumb by more than 6\*operation of road signals is supported by gate machine contact P4, and when the boom is out of plumb by less than 1\*road signals are deactivated. In the event of P4 contact failure, it is possible to switch road signal lights and the bell on and off by means of external emergency control pushbuttons. For easy identification of failures, there are three LEDs on the assembly housing notifying as follows:

- functioning of internal PSU - green LED,
- correct operation of the assembly - red LEDs, flashing.

## SPECIFICATION

Parameter	Value	Notes
Supply voltage	20 – 30 VDC	rated 24 VDC
<b>Driving power</b>		
Output A	serially connected light bulbs 12V/24W - 2 pcs. serially connected light bulbs 12V/12W - 2 pcs.	
Output B	serially connected light bulbs 12V/24W - 2 pcs. serially connected light bulbs 12V/12W - 2 pcs.	
Output 19	closing of boom barrier (only ver. 1) max. 0.5A	
Output 23	controlling the bell (only ver. 1) max. 0.5A	
Closing time delay	Min. 8 s	
Impulse frequency	~1Hz	50 – 70 pulses per minute
Dimming depth of light bulbs	Down to 75% rated power	
Working temperature	-30°C to +40°C	
Method of installation	Screwed with 10 bolts M6 to the gate machine structure	



Drawing of the finished switched-mode power supply assembly for signals ZZI-11/24.1 DM (LED)