

LABOR – ASTER

INDUSTRIAL AUTOMATION



SIGNAL ANALOG CONVERTER FOR PWM type S2A-PWM-4A – high current version

- **Processing to PWM signal:**
 - current or voltage (0/4÷20mA, 0÷10V)
 - 4÷20mA signal from two-wire transducer
 - any signal as agreed
- **Galvanic insulation of circuits: input and output.**

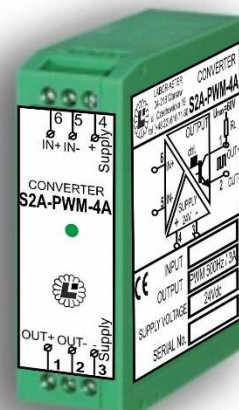
APPLICATION:

The S2A-PWM converter is used to convert analogue signal value into pulse sequence in the open collector type "OC" with variable pulse width.

The output circuit of the converter is galvanically isolated from the input circuit. The converter has high processing accuracy. The standard use of the converter is to convert an analogue signal from the industrial controller to a PWM signal for (for example:) steering a solenoid valve.

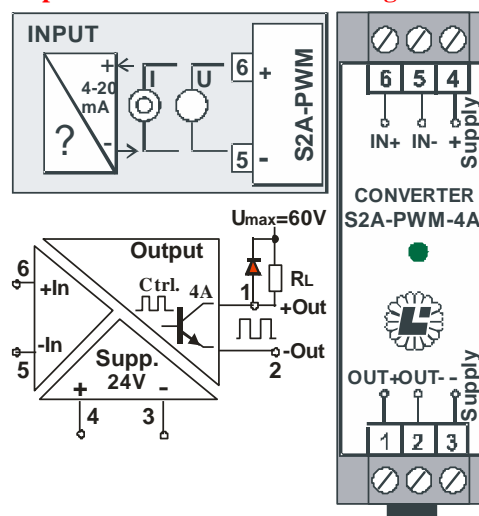
BASIC TECHNICAL PARAMETERS:

Input signal	- 4÷20mA, 0÷20mA, 0÷10V
	- any signal as agreed
	- Supply 24Vdc 4÷20mA
	for two-wire converter loop
Output signal	- OC PWM, U _{max} = 60V,
	I _{max} = 4A, f = 300Hz
	- or another as agreed
Output current limiter	- if the instantaneous current (for
	1ms) exceeds 4A, the limiter
	will be activated regardless of
	the PWM value and will
	shorten the duration of the
	pulses.
Accuracy class	- 0,2%
Temperature drift	- 0,01 %/°C
Voltage, current or load changes	- ±0,005 %/V
error	
Supply voltage	- 18...28V/60mA
Time constant	- typically 0,2s
Galvanic insulation	- 2kV, 50Hz
LED indication:	
- correct work	- LED constantly shine
- line damage	- LED flash
Housing:	- width – 22,5 mm
	height - 79 mm
	depth - 74 mm
Protection level	- IP40
mounting	- on TS35 rail
Operating conditions:	
ambient temperature	- 0 ... 65°C
ambient atmosphere	- 95%
Safety requirements	- PN-EN 61010-1:2002
EMC requirements	- PN-EN 61000-6-1
	- PN-EN 61000-6-3



It is recommended to use an individual 24V external fuse depending on the load: $I_B = 2 \cdot I_{ocb \max}$

Note: For resistive and inductive loads (R_L), e.g. valve coil, induction brake, etc., always connect the diode in parallel to the R_L with polarization as shown in the figure.



HOW TO ORDER:

S2A-PWM – X – X – 4A

input range (1...8)	output frequency
1 - 0...5mA	0 - 300Hz
2 - 0...20mA	1 - any as agreed
3 - 4...20mA active	
4 - 0...5V	
5 - 0...10V	
6 - 1...5V	
7 - 4...20mA passive	
8 - any as agreed	

Order example: Signal converter for PWM high current version
signal: input 4÷20mA, output frequency 300Hz: **S2A-PWM-7-0-4A**

Production and distribution:

LABOR – ASTER

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The manufacturer reserves the right to make changes to the product.

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