LABOR – ASTER

INDUSTRIAL AUTOMATION

UNIVERSAL SEPARATOR type S2Us

- **Input and output signal selected with code switchers.**
- **Possibility of supply input 4…20mA current loop (two-wire transmitter).**
- **Full galvanic separation between input, output and power supply circuits.**

APPLICATION:

The **S2Us** separator is an universal device with input and output signal standards set by the user. The setting of standards (0÷20mA, 4÷20mA, 0÷10V) is done with two code switchers which are available for the user on the sides of the housing. First double switcher (1, 2) is on input side, the second switcher (3) is on output side.

The separator can also operate as supplier-separator for two-wire transmitters (terminals 4, 2).

Typical application for this separator is galvanic separation of measure circuits installed on the site from central part. Using separation reduces impact of site interferences on controllers, regulators and recorders and provides safe operation of these devices by isolating their inputs from danger (atmospheric discharges, high power voltages, radioelectric disturbances).

Conversion of any standard input signal to any standard output signal makes it easier to set together devices operating in different standards.

Setting standards:

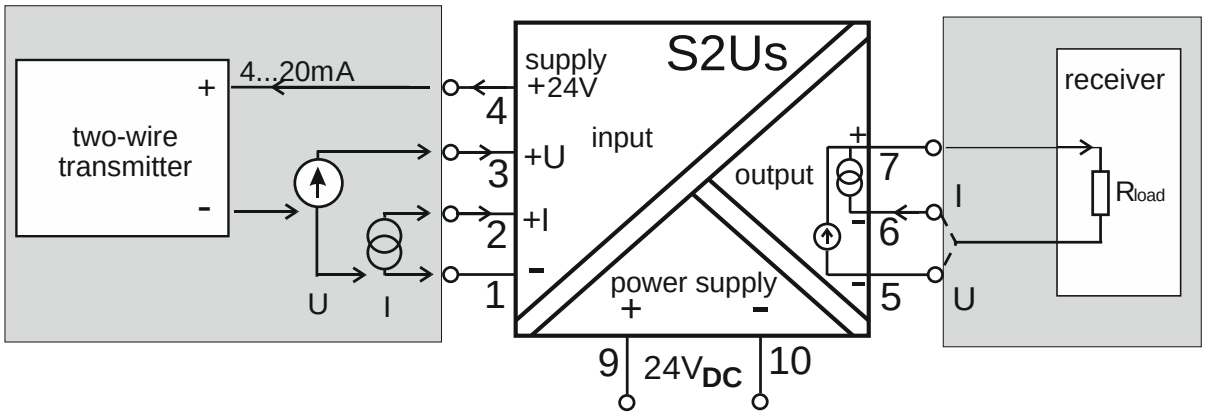
- Setting the input and output standards is done by switching the code switchers (switchers 1, 2 are on input side, switcher 3 is on output side) according to the table below.
- Calibration of the beginning of the range "zero" and the range gain "span" can be performed in range ±8% with potentiometers available on the front panel.
- There can be different input and output signals on request.

BASIC TECHNICAL PARAMETERS

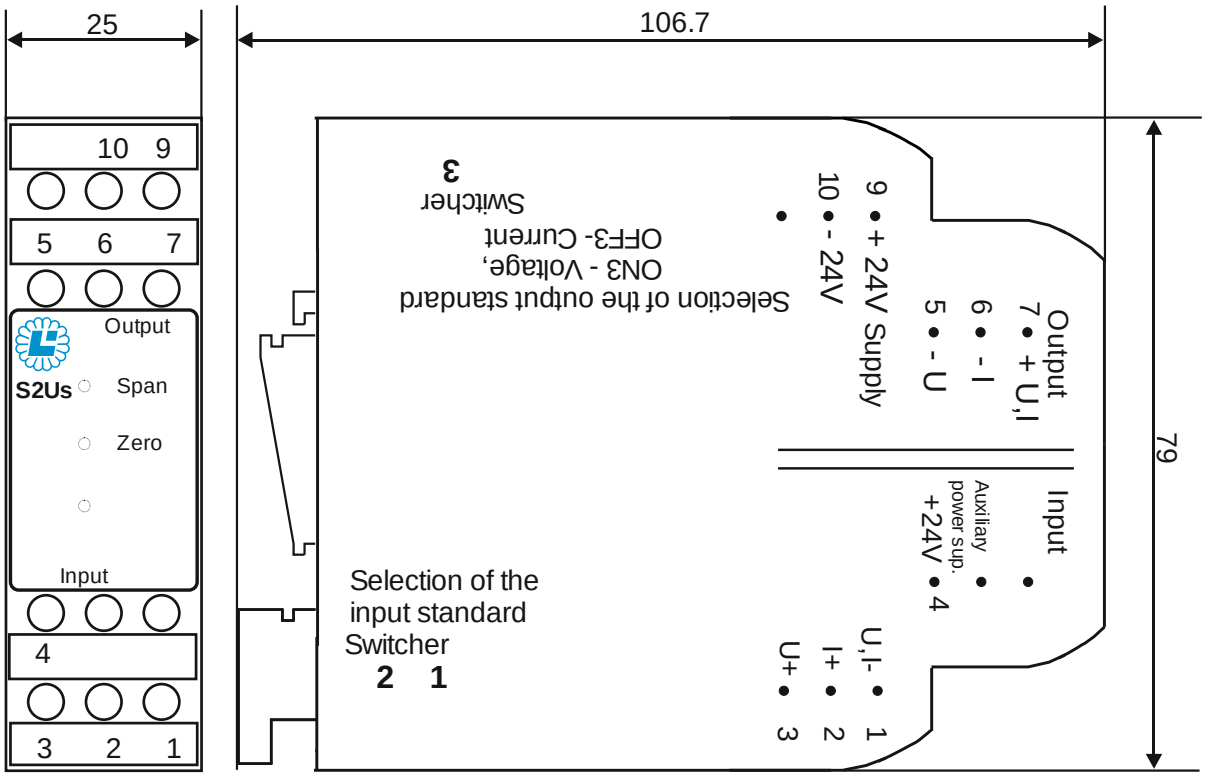
Input signal	-	any standard set with switchers (or other on request)
Input resistance	-	current input - 50Ω
	-	voltage input - ≥100kΩ
Supply for input 4…20mA current loop	-	24V dc
Output signal	-	any standard set with switchers (or other on request)
Load resistance	-	current output - max 750Ω
	-	voltage output - ≥2kΩ
Power supply	-	21...28V dc / 60mA
Class	-	0.15%
Nonlinearity	-	±0.05%
Temperature drift	-	±0.015 % / ºC
Error due to changes in power supply or load resistance	-	±0.02%
Galvanic separation	-	mutually between input, output and power supply
Isolation test voltage	-	2kV, 50Hz or equivalent
Time constant	-	0.2s or as agreed
Rail housing	-	width – 25 mm height - 99 mm depth – 114.5 mm
protection level	-	IP40
mounting	-	on TS35 rail
Operation conditions		
ambient temperature	-	-5...+55°C
ambient atmosphere	-	no dusts and aggressive gases
Safety requirements	-	PN-EN 61010-1:2002
EMC requirements	-	PN-EN 61000-6-1 PN-EN 61000-6-3

HOW TO ORDER:

Rail universal separator type S2Us



Description of connection terminals



Housing scheme

Input range	Terminal number	Output range	Terminal number	Switcher position		
				1		3
0...20mA	+2, -1	0...20mA	+7, -6	OFF	OFF	OFF
0...20mA	+2, -1	4...20mA	+7, -6	OFF	ON	OFF
0...20mA	+2, -1	0...10V	+7, -5	OFF	OFF	ON
4...20mA	+2, -1	0...20mA	+7, -6	ON	OFF	OFF
4...20mA	+2, -1	4...20mA	+7, -6	OFF	OFF	OFF
4...20mA	+2, -1	0...10V	+7, -5	ON	OFF	ON
0...10V	+3, -1	0...20mA	+7, -6	OFF	OFF	OFF
0...10V	+3, -1	4...20mA	+7, -6	OFF	ON	OFF
0...10V	+3, -1	0...10V	+7, -5	OFF	OFF	ON

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 Issue 3/2019