

ELECTRONIC POTENTIOMETER EPS-100



- Coupling of a step controller to the input of a speed controller
- Replacing of electro-mechanical motor-potentiometers
- interruption-free converting of binary signals into analogue signals
- DIN standard-rail mounting

Application:

The EPS-100 generates a potential-separated, analogue signal out of binary signals as e.g. potential-free contacts or digital SPC (stored program control) – outputs. Activation of the “Higher” - function will cause an increase of the output signal, activation of the “Lower” - function will cause a decrease of the output signal. In case of activation of the “Reset” - function, or after switching-on of the operating voltage the output signal is set on 0V + offset . Attaining of the maximum output signal is indicated by blinking of the corresponding LED “Higher” or “Lower”.

Function:

By means of the push button “HAND - AUTO” the operating mode is preselected. Indication of the activated mode of operation takes place by means of LED.

Manual mode: Yellow LED “HAND” is on. Only the push buttons \uparrow “Higher”, \downarrow “Lower” at the front side are active. A short push (sensitive push function) of the push buttons “Higher” or “Lower” will cause an output signal change of approximately 2.5mV. A simultaneous push of the buttons “Higher” and “Lower” will cause a reset of the output signal. The inputs via the terminals are without influence.

Automatic mode: Green LED “AUTO” is on. The relay contact, terminal 14 – 15, is closed. On automatic mode the inputs “Higher”, “Lower” and “Reset” (via terminals) are active. Indication of the input conditions is signalled by LED at the device’s rear side and at the front side.

The push buttons \uparrow “Higher” and \downarrow “Lower” at the front side are now inactive.

Operating elements:

Push buttons for: “HAND / AUTO”, “Higher”, “Lower”
Potentiometers for: “Swing”, “Offset”, “Ramp”

Technical data:

Dimensions: 100x110x75 mm
for 35mm DIN-rail mounting
Operating voltage: 24V DC -25%/+30%
(12V DC -25%/+30% optional)
Operating temperature: -10°C - 55°C
Storage temperature: -40°C - 70°C
Climate: HSE, DIN 40040
Galv. separation: 2kV, 50Hz, 1min
EMC: EN 50081-1/2,
EN 50082-1/2,SS 4361503(PL4)
and IEC 255-3

Output:

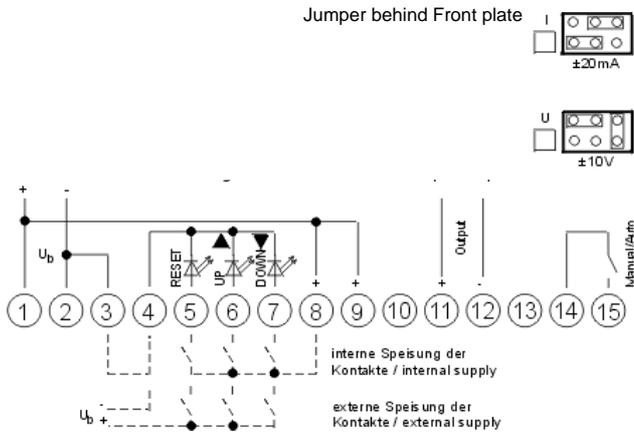
Level: $\pm 10V$ DC and /or
 $\pm 20mA$
Resolution: appr. 2.5mV
Ripple: max. 5mV
Swing: 0 – 100%
Offset: -5V - 0 - +5V
Ramp: 2s - 250s
Temperature drift: max. $\pm 0,2\%$ per 10 degr.

Input:

Voltage: 24V DC $\pm 25\%$
(12V DC $\pm 25\%$ optional)

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Connecting diagram:



Terminals:

Cross section:	2.5mm ² , stranded
Operating voltage:	2 pc., (X1+, X2-)
Supply	
Pot.-free contacts:	3 pc, (X8, X9, +24V DC X3, -24V /DC
„Reset“:	1 pc. (X5, input)
„Higher“:	1 pc. (X6, input)
„Lower“:	1 pc. (X7, input)
Reference potential:	1 pc. (X4, reference pot. of inputs)
Mode of operation:	2 pc. (X14, X15, automatic contact closed)
Output signal:	X11, +; X12. -

Order data- example:

Type, dimension, auxiliary voltage
EPS-100, 24V/DC