

## Potentiometer interface input, voltage 0-10Vdc, current 4-20mA output

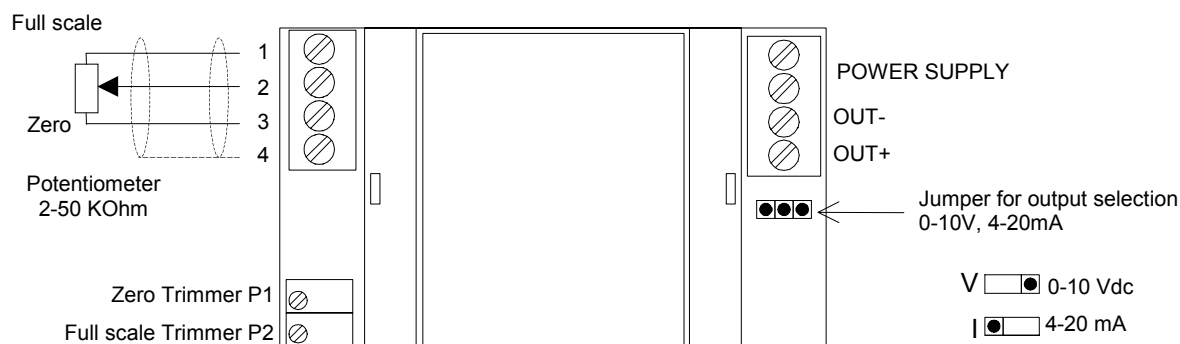
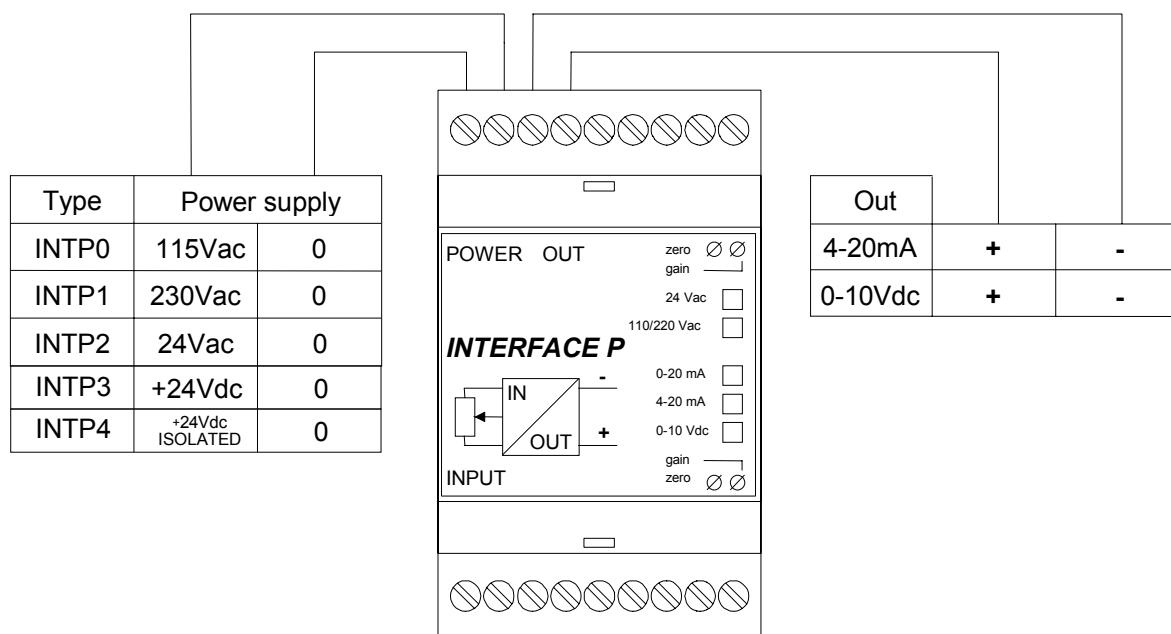
### Description

The INTP\_ interface converts the signal supplied by a potentiometric trasductor into a 0-10V or 4-20mA output signal.

Through the calibration you can refer all the output range (4-20mA, 0-10Vdc) to the effective stroke employed by the potentiometer.

The INTP\_ interface is housed in a 3M (3 modules) gray RAL 7035 plastic (Noryl UL94 V-0) self-extinguishing plastic container for mounting on DIN rail DIN EN50022 according to standards 43880.

### Connection wiring



view without terminal covers

## Calibration

The factory calibration sets the analogue output to 0-10V.

It is possible to modify this calibration to change the output type 4-20mA or to refer all the range of the output to the stroke of the transducer really used.

To calibrate the output, remove the covers of terminal blocks, then set the Jumper for output selection 0-10V/4-20mA to the correct position (see the figure), then connect a voltmeter for out 0-10V (or a milliamperometer for out 4-20mA) on the terminals OUT+ and OUT- of the terminal block. Please carry out the electrical connections with the INTP\_ not powered.

Position transducer on minimum position of the analogue output, then turn the zero trimmer P1 to read the value of the output to 0V for the output in voltage, or 4mA for the output in current (turn P1 clockwise to increase the output).

Position the transducer on the position that has to corresponds the maximum of the analogue output and turn the full scale trimmer P2 to read the output to 10V for the output in tension or 20mA for the output in current (turn P2 clockwise to increase the output).

Bring the transducer to the minimum position and readjust P1, go back to the maximum position and readjust P2. Repeat the readjustments until reaching a perfect calibration.

## General technical features

Power supply	115 Vac, 230 Vac, 24 Vac, 24Vdc $\pm 10\%$ , 3VA max
Input impedance	>1 MOhm
Input potentiometric transducer	2-50KOhm
Minimum charge impedance for voltage output	1KOhm
Maximum charge impedance for current output	200 Ohm
Output	0-10 Vdc, 4-20 mA
Case	plastic material Noryl UL94 V-0 self-extinguish
Case color	gray RAL 7035
Dimensions	3M (3 modules)
Assembling way	DIN EN 50022 according to 43880 regulations
Electromagnetic compatibility	2014/30/UE
Low voltage	2014/35/UE
RoHS	2011/65/UE

## Other items

INTP0	Power supply	115 Vac
INTP1	Power supply	230 Vac
INTP2	Power supply	24 Vac
INTP3	Power supply	24 Vdc
INTP4	Power supply	24 Vdc with analog output isolated form power supply

**NOTE:** In INTP3 version (direct current supply voltage) there is no galvanic isolation between the power supply, the transducer and the analog output: in particular the OUT-negative output terminal is connected to the negative power terminal.