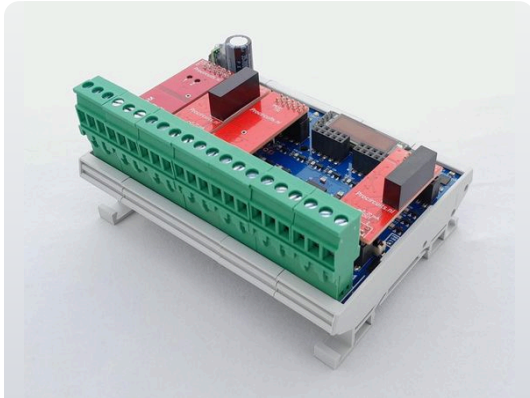


Up/down pulse input to dual 4-20 mA signal conditioner with limit input, isolated, with display

Article number PR181-X087



The PR181-X087 converts the pulses of two contacts, one for up (UP) and one for down (DOWN), into two 4-20 mA signals. Input, outputs and supply are galvanically isolated from each other, and the two outputs from one another as well. When the limit input is active, the outputs cannot rise above the set limit; if an output is higher at that moment, it jumps straight to the limit. The pulse inputs accept high-side or low-side switched contacts; LED 1 (up) and LED 2 (down) light up on a pulse.

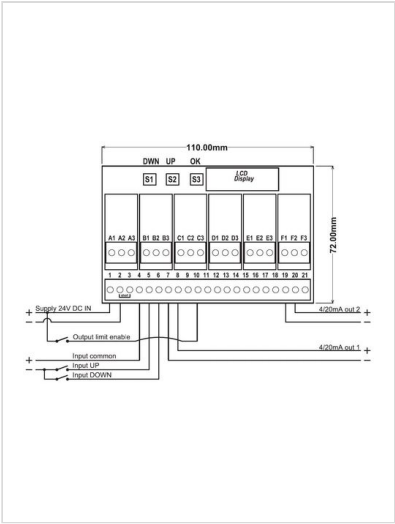
Price on request. Lead time on request. Not in stock? We will make it.

Specifications

Supply	9 to 30 V DC
Input	Two pulse inputs, UP and DOWN, 20 to 50 V DC; high-side or low-side switched contacts
Output	Two 4-20 mA outputs as delivered, 21 mA max.; lower and upper limit adjustable per output
Isolation	Input, outputs and supply galvanically isolated from each other; the two outputs also from one another
Setup	Display with UP, OK and DOWN buttons
Minimum pulse width	100 ms
Limit enable input	On terminal 10; active above 15 V, 34 V absolute maximum
Output refresh rate	10 Hz
Rise and fall rate	Adjustable on the display
Ambient temperature	-25 to 55 °C, non-condensing
Dimensions	114 x 83 mm with DIN rail enclosure, 110 x 72 mm without
Factory setting	Both outputs 4-20 mA; output limit 100 %

Connections

Terminal 1	Supply plus
Terminal 2	Supply minus
Terminal 3	Minus, internally connected to terminal 2
Terminal 4	Pulse inputs common (Input common)
Terminal 5	Pulse input UP
Terminal 6	Pulse input DOWN
Terminal 7	Isolated common of output 1
Terminal 8	Isolated output 1, 4-20 mA (plus)
Terminal 9	Not used
Terminal 10	Limit input (Output limit enable)
Terminal 11	Not used
Terminal 12	Not used
Terminal 13	Not used
Terminal 14	Not used
Terminal 15	Not used
Terminal 16	Not used
Terminal 17	Not used
Terminal 18	Not used
Terminal 19	Isolated common of output 2
Terminal 20	Isolated output 2, 4-20 mA (plus)
Terminal 21	Not used



Setup

1. Connect terminal 4 (Input common) to the plus if the contacts switch the minus, or to the minus if they switch the plus (see the wiring diagrams).
2. Complete the wiring according to the terminal table and switch on the supply.
3. Set the lower limit of output 1 with Output 1 min: change the value with UP and DOWN and confirm with OK.
4. Set the upper limit of output 1 in the same way with Output 1 max.
5. Set output 2 in the same way with Output 2 min and Output 2 max.
6. Setting the limit: bring the output to the required limit level and note the output value shown in the Status menu.
7. Select the Output limit menu, press OK, enter the noted value with UP and DOWN and confirm with OK. Here 0 % is the lower limit of the output (4 mA by default) and 100 % the upper limit (20 mA by default).
8. Other menu items: Output speed in seconds sets how many seconds the output takes to go from 0 to 100 % and back; Ramp up and Ramp down set the rise and fall rate of the output.
9. Go to the SAVE menu to store the new settings.

More information, price and lead time: www.procircuits.nl/en/products/pr181-x087

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