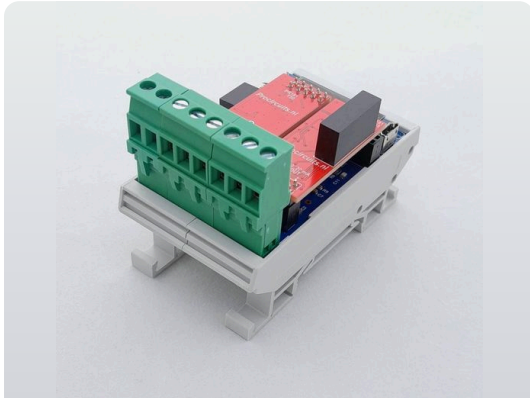


PWM to relay with adjustable threshold, isolated, with display

Article number PR181-X055



The PR181-X055 reads a PWM signal and switches a relay as soon as the signal stays above the threshold for longer than a set time. The threshold and the minimum duration are set on the display, so the relay does not chatter when the signal hovers around the threshold for a long time. The input is galvanically isolated from the supply and therefore reads PWM signals that are high-side or low-side switched. A DIP switch selects a PWM level of 3.3, 5, 12 or 24 V; as delivered, the module is set to 12 V.

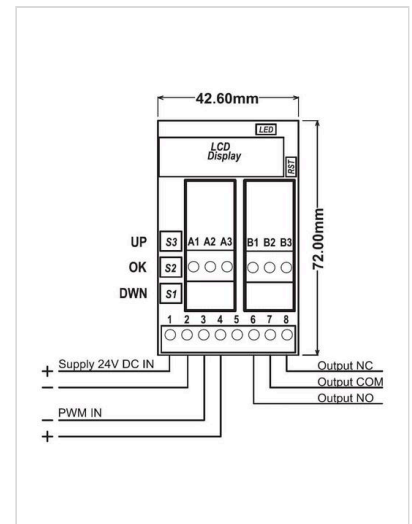
Price on request. Lead time on request. Not in stock? We will make it.

Specifications

Supply	9 to 30 V DC
Input	PWM, 3.3, 5, 12 or 24 V, on terminals 3 (minus) and 4 (plus); high-side or low-side switched
Output	Relay with changeover contact (NO, COM, NC)
Isolation	Input and output galvanically isolated from each other and from the supply
Setup	Display with UP, OK and DOWN buttons; PWM level with DIP switches S1 and S2
Input frequency	100 Hz to 5 kHz
Threshold	Adjustable, with a minimum duration above the threshold in milliseconds
Relay contact voltage	24 V DC max.
Relay contact current	5 A DC max.
Ambient temperature	-25 to 55 °C, non-condensing
Dimensions	45 x 83 mm with DIN rail enclosure, 42.6 x 72 mm without
Factory setting	Input set for a 12 V PWM signal

Connections

Terminal 1	Supply plus
Terminal 2	Supply minus
Terminal 3	PWM input minus (-)
Terminal 4	PWM input plus (+)
Terminal 5	Not used
Terminal 6	Relay contact, normally open (NO)
Terminal 7	Relay contact, common (COM)
Terminal 8	Relay contact, normally closed (NC)



Setup

1. Select the PWM signal level with DIP switches S1 and S2: 24 V = S1 off, S2 off; 12 V = S1 off, S2 on; 5 V = S1 on, S2 off; 3.3 V = S1 on, S2 on. Only change the DIP switches with the input signal disconnected, to avoid damaging the module.
2. Connect the module according to the terminal table and switch on the supply.
3. Set the input to the required threshold, for example 50 % duty cycle. In the menu, select IN1 – Set trig, select YES and confirm with OK.
4. Use IN1 trig time adj to set how many milliseconds the input must at least stay above the threshold before the relay switches: change the value with UP and DOWN and confirm with OK.
5. Fine adjustment: IN1 – trig adj adjusts the threshold.
6. Go to the SAVE menu to store the new settings.

More information, price and lead time: www.procircuits.nl/en/products/pr181-x055

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