

PCV20 Signal converter

- AC/DC Current input from 15 μ A to 10 A
- AC/DC voltage input from 10 mV to 1000 VAC/1500 VDC
- Frequency for input. Up to 10 kHz
- Analogue and/or pulse outputs
- Galvanic separation between supply, inputs, and outputs
- Supply 24 VDC

PCV20 is a programmable multi-area signal converter and isolation amplifier.

PCV20 is equipped with 6 inputs.

3 for current.

3 for voltage.

It's therefore possible to configure any input range between 15 μ A and 10 A or 15 mV or 1000VAC/1500 VDC to any output within the specified limits. In addition, at DC inputs it is possible to measure both positive and negative signals. When the module measures AC signals, it calculates the RMS value, ensuring accurate conversion without measurement errors, regardless of the waveform.



Technical Specification

Supply voltage:	24VDC (Range 12-35VDC)
Isolation voltages:	Supply - internal electronics: 3 kV Input - output: 5 kV
Power consumption:	Max 4VA
Operation temp.:	-20°C til +60°C
Humidity:	0-90% RH, non-condensing
Temp. coefficient:	< 0,003% /°C
Conversion speed:	AC input (50 Hz): in - out delay: 150 msec DC input in - out delay: 20 msec.
Accuracy:	better than 0.2%, except at 10 A range at currents > 5 A: accuracy better than 1%
Linearity:	better than 0.02%
Resolution:	Between 0.037% and 0.1%, dependent on the programmed metering range. If the unit is programmed with input and/or output offset, the resolution will be reduced proportionally.
EMC og Sikkerhedsregulativer:	
Emission:	DA 50 081-1
Immunitet:	DA 50 082-2
Sikkerhed:	DA 60 730
Godkendelser: Enhederne er produceret i overensstemmelse med CE og lavspændingsdirektiverne.	



Outout

Current output:	
Terminals 14 and 13	programmable from 0 to 20 mA Max. external load: 500 Ohm
Voltage output:	
Terminals 15 and 13	programmable from -10 to +10 V Min. external load: 1000 Ohm
Switch output:	
Terminals 9 and 10	Switch output maximum rating 40 VAC/DC 500 mA

Input

Current Input:		
Terminals 1 and 2	Metering ranges:	Max. AC 10 A Max. DC 10 A, Rin = 1 m Ω
Terminals 1 and 3	Metering ranges:	Max. AC 207 mA Max. DC 290 mA, Rin=100 m Ω
Terminal 1 og 4:	Metering ranges:	Max. AC 5.8 mA Max. DC 8 mA, Rin = 3.3 Ω
Voltage input:		
Terminals 1 and 5:	Metering ranges:	Max. AC 0.8 V Max. DC 1.1 V, Rin = 4.99 k Ω
Terminals 1 and 6:	Metering ranges:	Max. AC 27 V Max. DC 38 V Rin = 270 k Ω
Terminals 1 and 8:	Metering ranges:	Max. AC 1000 V Max. DC 1500 V Rin = 11 M Ω

PCV20 – Programming

To configure the PCV20, you will need the PCV20 setup program from Comadan.

Download from www.comadan.com/en/vare/c-mac-programerbar-signalkonverter-2/

or send an email to sales@comadan.com, and ask for it.

Then you connect the PCV20 to your PC using a mini-USB cable, the USB port on PCV20 is situated under the front cover which you must remove.

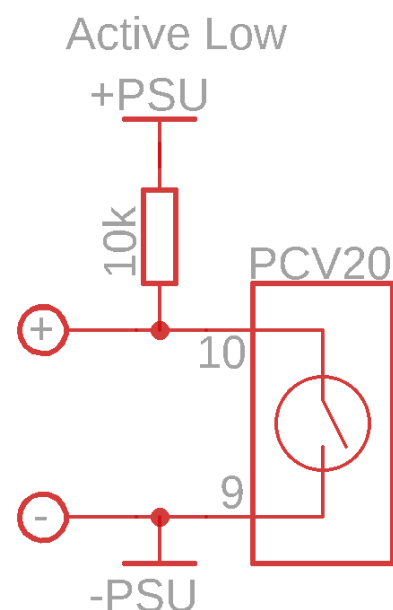
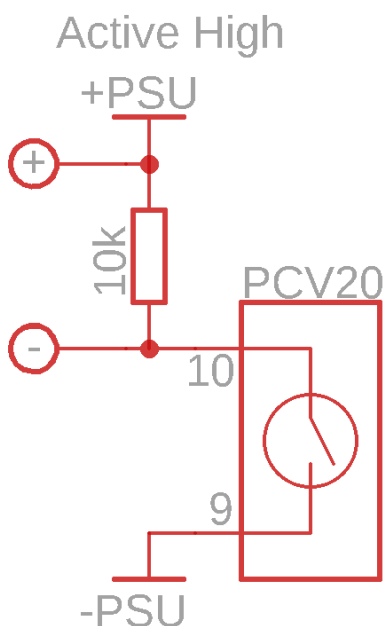
Run the software and select the ranges you want and specify the values for input and output.

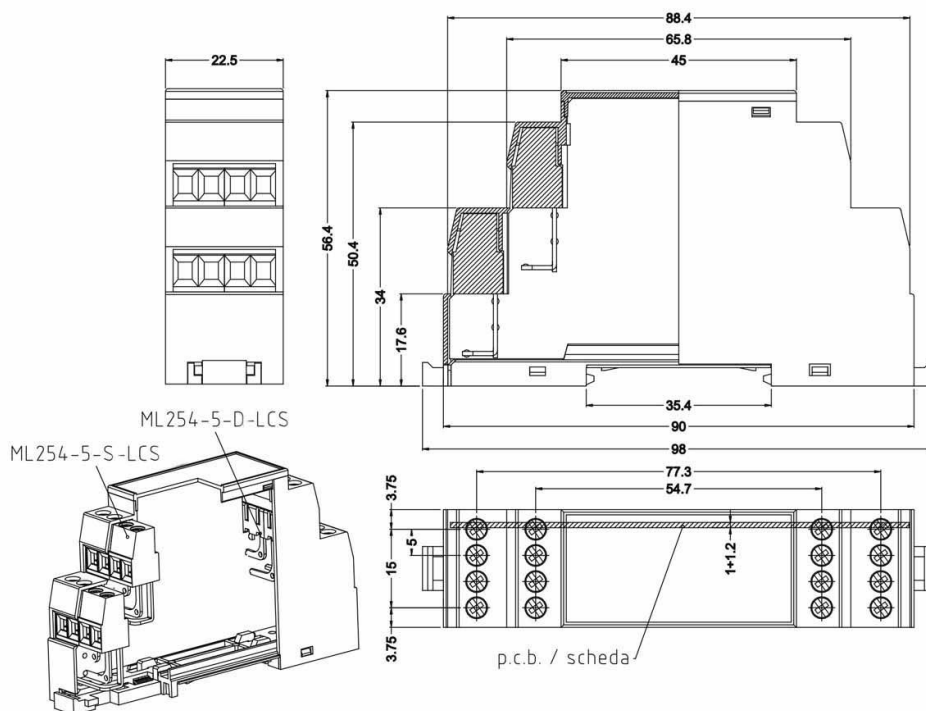
When the configuration is completed, the software will guide you how to make the correct wiring of the PCV20.

Note: From prod.no 24XX – the newest config program is to be used

Connection overview

- | | |
|---------------------------|--------------------|
| 1. Com for input | 9. Out: Puls |
| 2. Input: 10A | 10. Out: Puls |
| 3. Input: 292 mA | 11. Supply V (-) |
| 4. Input: 8 mA | 12. Supply V (+) |
| 5. Input: 1V | 13. Com for output |
| 6. Input: 40V | 14. Out: I |
| 7. No used | 15. Out: V |
| 8. Input: 1000VAC/1500VDC | 16. Not used |





Where to find UBS-Mini port in PVC20-24



Behind the front cover is a USB mini connector

Remove the front cover with a small screwdriver by gently pushing on the tabs.