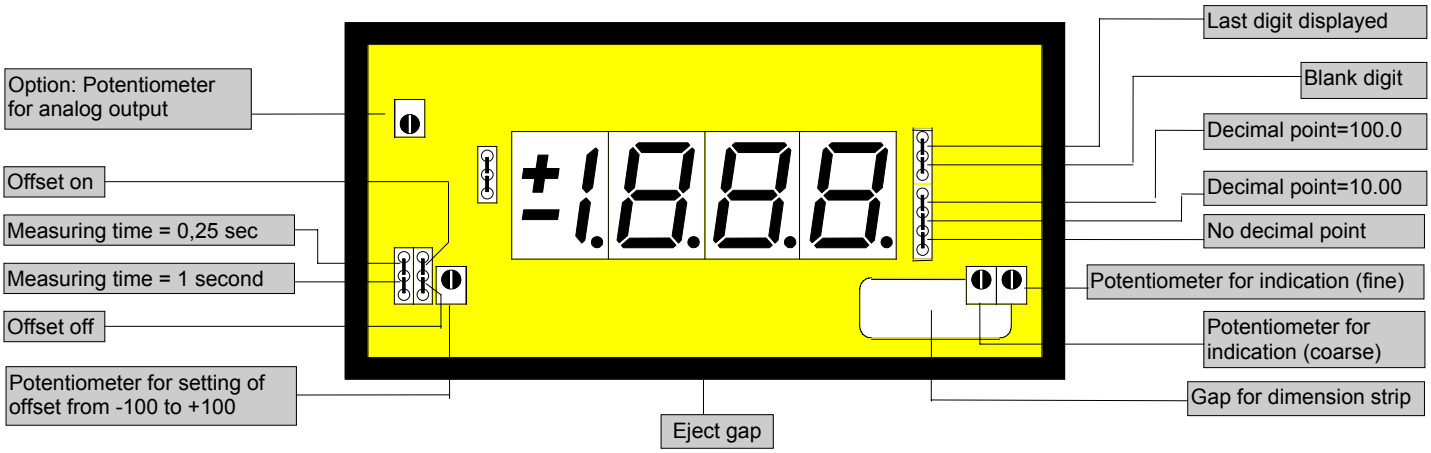
Alternating voltage, alternating current

- Option: analogue output

- Mounting into panels with thickness up to 50 mm

96x48

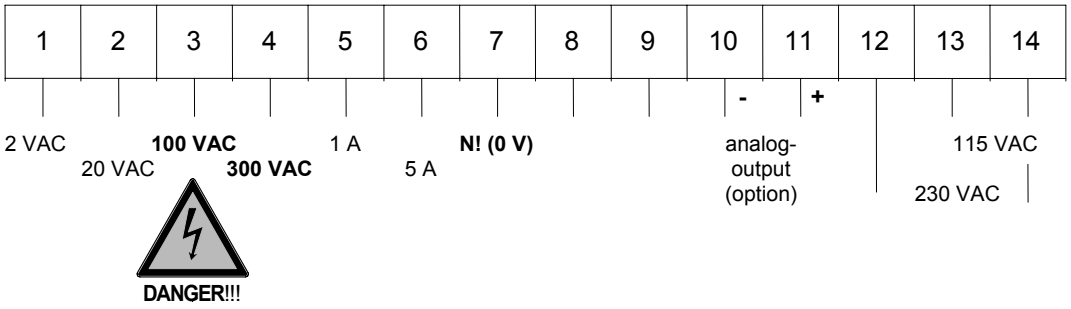
1888



ORDER NUMBER OF TYPE

Standard **DV 3.004.110C**

Tru effective value RMS **DV 3.104.110C**



Power supply 24 VDC **- galv. insulated -**

(14=plus, 13=minus)

Standard **DV 3.004.170C**

True effective value RMS **DV 3.104.170C**

Caution!

With high input voltages 100 VAC/300 VAC, always connect terminal 7 (0V) to N-conductor. Change jumper only in voltage-free state and use an insulated screwdriver when adjusting the potentiometer.

Options

- Green LED
- Protection IP54
- Protection IP65 **(see reference)**
- Plug in terminal with protection IP40
- Plug in terminal with protection IP54
- Plug in terminal with protection IP65 **(see reference)**

Reference: Decimal point, blank digit, measuring time have to be pretended!

- Analog output 0-10 VDC/10 mA
- Analog output 0-20 mA/load 500 Ω
- Analog output 4-20 mA/load 500 Ω
- Analog output 0-10 VDC/10 mA *(power supply 24 VDC galvanically insulated)*
- Analog output 0-20 mA/load 500 Ω *(power supply 24 VDC galvanically insulated)*
- Analog output 4-20 mA/load 500 Ω *(power supply 24 VDC galvanically insulated)*
- Analog output with customer specified offset

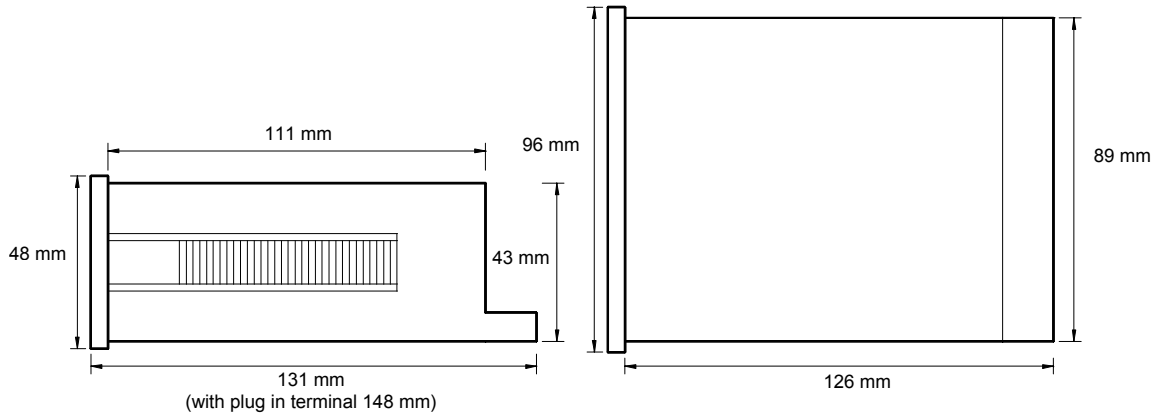
Measuring inputs are not galvanically insulated from the analog output!

- Power supply 24/48 VAC
- Setpoints see type PVE 4.xx4.1xx

Technical data, handling

Dimensions	Housing	96 x 48 x 134 mm, including screw terminal
	Assembly cut out	$92.0^{+0.8}$ x $45.0^{+0.6}$ mm
	Fastening	special quick plastic clamp proper to fix in wall thickness up to 50 mm
	Housing material	PC/ABS-plastic blend, colour black, UL94V-0
	Protective system	at the front IP40 connection IP00
	Weight	approx. 0.35 kg
	Connection	at the rear side via terminals up to 2.5 mm^2
Measuring input	Measuring range	0-2 V, 20 V, 100 V, 300 V, 1 A, 5 A - offset adjustment supported by offset potentiometer all ranges are selectable via connection terminal
	Input resistance	Ri with 2 V = 20 KΩ 300 V = 4 MΩ 20 V = 200 KΩ 1 A = 276 mΩ 100 V = 1 MΩ 5 A = 56 mΩ
Output	Analogue output	0-10 VDC/10 mA (0.1 % of measuring value, +/-0.05 % of full scale) 0-20 mA, 4-20 mA - load 500 Ohm (0.1 % of measuring value, +/-0.05 % of full scale)
Accuracy	Resolution	+/- 1999 Digit
	Temp. drift	I~200 ppm/K – U~100 ppm/K
	Measuring principle	Dual-Slope-Integration
	Frequency range	nominal precision 40 Hz up to 1000 Hz
DV 3.0x4.1xxB	Measuring fault	range: +/-0.5 % of measuring value +/-1 digit 0 – 1 A range: +/-0.5 % of measuring value +/-1 digit 1 – 5 A range: +/-0.5 % of measuring value +/-1 digit
	Measuring (input)	via rectifier - (effective value with sine waveform only)
DV 3.1x4.1xxB	Measuring fault	range: +/-0.5 % of measuring value, crest factor 3 0 – 1 A range: +/-0.5 % of measuring value, crest factor 3 1 – 5 A range: +/-0.5 % of measuring value, crest factor 3
	Measuring (input)	True effective value **RMS**
Power Unit	Supply voltage	230/115 VAC +/- 10 % (50-60 Hz), 24 VDC +/-10 % galvanic insulated
	Power consumption	approx. 5 VA
Indication	Display	LED with 7 segments, 14 mm high, red 3½-digit = indication 1999
	Measuring time	1 second
	Overflow	by showing "**1**" on the fourth digit
	Decimal point	adjustable by bridging on front side
	Blanking	blanking out of last digit (selectable by bridge)
Ambient conditions	Working temperature	0 up to + 60 °C
	Storing temperature	-20 up to + 80 °C

Housing:



CE-sign
For unlimited use of the instrument within the directives for electromagnetic compatibility 89/336/EC analogue input wires have to be used with shielded cable and cable's shield connected to earth ground at one end only.

Setting

1. Connect the instrument according to the wiring diagram and turn power on.
2. Adjustment of indication value: Remove the front pane by using the eject gap.
3. Set the maximum input voltage/current and adjust the desired indication value by means of the potentiometer.
4. In order to achieve the maximum value indication of 1999, the following minimum input voltages are required at the various measuring inputs:

Measuring input	2 V	20 V	100 V	300 V	1 A	5 A
U/I min	1 V	10 V	50 V	200 V	0.4 A	2.5 A
U/I max	3 V	30 V	150 V	300 V	1 A	5 A

5. With input voltages smaller than U/I min, maximum value indication is not available!