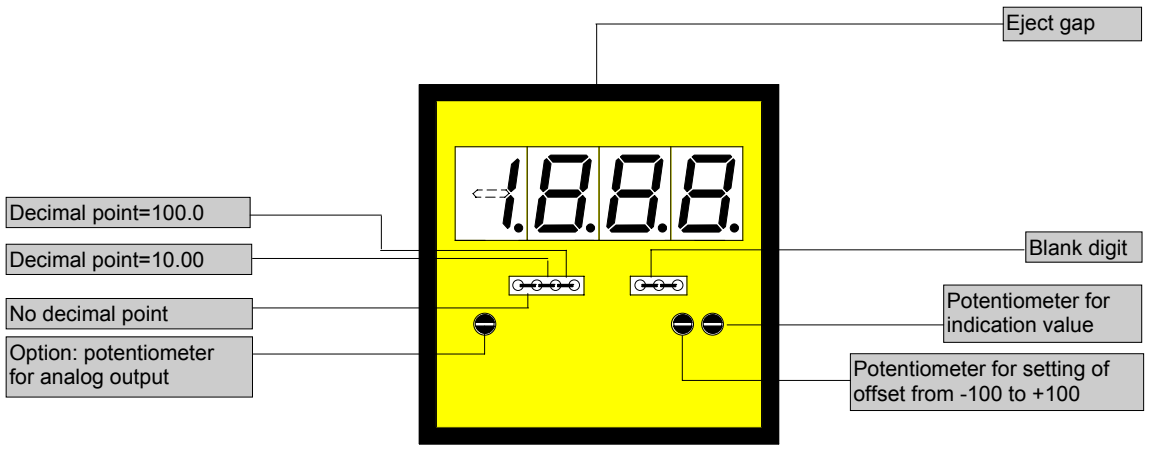
Alternating voltage, alternating current

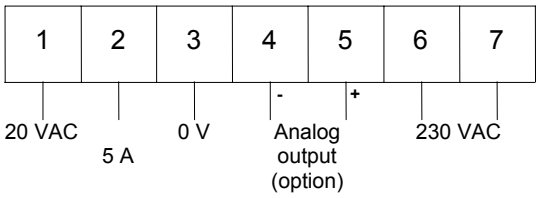
- Option: analogue output

- Mounting into panels with thickness up to 50 mm

48x48

1888





ORDER NUMBER OF TYPE

Standard	**DV 3.004.850B**
True effective value RMS	**DV 3.104.850B**

Power supply 24 VDC

galv. insulated - (7=plus, 6=minus)

Standard	**DV 3.004.870B**
True effective value RMS	**DV 3.104.870B**

Options

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

Reference: Decimal point and blank digit 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

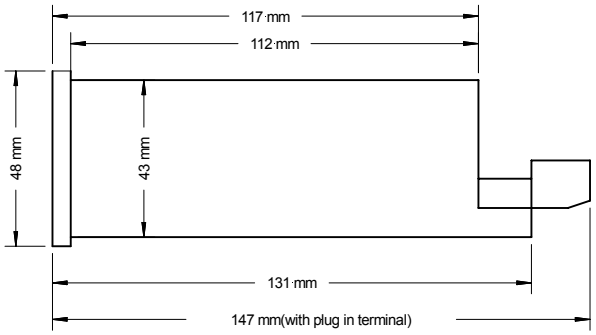
(The measuring inputs are not galvanic insulated from the analogue output!)

- Dimension strip selectable (8 characters max.)
- Other supply voltages on demand

Technical data, handling

Dimensions	Housing	48 x 48 x 131 mm, including screw terminal
	Assembly cut out	$45.0^{+0.6}$ 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-Blend, colour black, UL94V-0
	Protective system	at the front IP40, connection IP40
	Weight	approx. 0.180 kg
	Connection	at the rear side via screw terminal up to 2.5 mm^2
Measuring input	Measuring range	0-20 V, 5 A (option 1 A) - offset adjustment supported by offset potentiometer all ranges are selectable via connection terminal
	Input resistance	Ri with 20 V = 200 KΩ 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	U~100 ppm/K - I~200 ppm/K
	Measuring principle	Dual-Slope-Integration
	Frequency range	nominal precision 40 Hz up to 1000 Hz
DV 3.0x4.8xxB	Measuring fault	range: +/-0.5 % of measuring value +/-1digit 0 – 1 A range: +/-0.5 % of measuring value +/-1digit (option) 1 – 5 A range: +/-0.5 % of measuring value +/-1digit
	Measuring (input)	via rectifier – (effective value with sine waveform only)
DV 3.1x4.8xxB	Measuring fault	range: +/-0.5 % of measuring value, crestfactor 3 0 – 1 A range: +/-0.5 % of measuring value, crestfactor 3 (option) 1 – 5 A range: +/-0.5 % of measuring value, crestfactor 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. 2 VA
Indication	Display	LED with 7 segments, 10 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 temp.	0 up to + 60 °C
	Storing temp.	-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.

Important reference!

During attitude as well as in the case of connection in the reverse field of the device, the corresponding precautions are to be taken concerning ESD in order to preclude a harm of the device.

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	20 V	5 A
U/I min	10 V	2.5 A
U/I max	30 V	5 A

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