

# DPM 72 x 144 - 1 Phase 4 ½ DIGIT ACI/ACV

## Operating Manual

The **DPM 72 x 144 - 1 Phase 4 ½ ACI/ACV** is a Digital Panel Meter (DPM) in 72 x 144 size for measurement of AC Voltage and AC Current. Five ranges for power supply are available.

### Operation:

By changing short links decimal point can be adjusted as shown in sticker on page 2. The full scale value on the display can be adjusted on site with potentiometer at the rear side of the instrument from 10% to 100% of FSD (FSD = 19999). If required zero can be adjusted with the help of zero adjustment potentiometer at the rear side.

Further **DPM 72x144 - 1 Phase 4 ½ ACI/ACV** version from the series :

**DPM 72 x 144 - 4 ½ ADC/VDC** Instrument for DC Current and DC Voltage measurement.

### Technical data

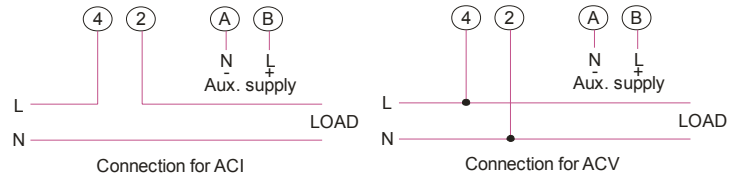
<b>Display</b>	Display range	19999
	Decimal point position	selectable by short links at the Rear side.
	Negative display indication	“_”
	Digit height	26 mm / 7- segment digits
	Overload indication	last 4 digits blank (1 ).
<b>Measuring ranges</b> (Max overload 20% of Full scale range value)	Accuracy	< 1 % of range ± 1 digit (Optional: 0.5% of range ± 1 digit)
	Voltage AC	0...110 V or (45...65 Hz) or 400 Hz 0...240 V or (45...65 Hz) or 400 Hz 0...500 V (45...65 Hz) or 400 Hz
	Nominal Input Voltage Burden Current AC	< 0.3VA approx. 0...1 A or (45...65 Hz) or 400 Hz 0...5 A (45...65 Hz) or 400 Hz
	Nominal Input Current Burden	< 0.2VA approx.
	Temperature coefficient	300 ppm / °C.
	Zero point drift	200 ppm / °C.
	Range adjustment span	from 10% to 100% of range.
<b>Power supply</b>	Direct voltage DC	24 V DC (+/-15%) / 110V DC (+10% / -15%) 220V DC (+10% / -15%)
	VA Burden	5.5 W approx. (Isolated)
	Alternating voltage AC	110 V AC(+10 % / -15%) / 230V AC (+10 % / -15%)
	VA Burden	5.5VA approx. (Isolated)
	Frequency	47 - 60 Hz
<b>Environmental conditions</b>	Climatic class	Class 2 to VDE / DIN 3540.
	Operating temperature	0 ... 55 °C.
	Storage temperature	-25 °C ... +65 °C.
	Safety class	II to IEC 348 / VDE 0411.
	IP Protection	IEC EN 60 529. For Back : IP 20. Front : IP 50 ( IP 54 on request )
	Device safety High Voltage Test	According to IEC EN 61 010. For AC Aux. : 2 kV AC, 50 Hz for 1 minute. For DC Aux. : 1 kV AC, 50 Hz for 1 minute.
	EMC immunity EMC radiated interference	According to IEC / EN 61 000-4-1 up to 4. According to IEC / EN 61326 class B.
<b>Dimensions and weights</b>	Front bezel size	72 mm x 144 mm DIN 43 700.
	Panel cut-out	68 + 0.7 mm x 138 + 1.0 mm.
	Overall depth	94 mm.
	Weight Approx.	approx. 500 gm.
<b>Sundry</b>	Connections	Plug and screw terminal blocks.

### Sample sticker

DPM 72X144 – 1 Phase 4 ½ ACI		Sr. No. / /			
Range: 0... 1A[45-65Hz]		Display: 19999			
Aux. Supply	A N (-) B L (+)	110 VDC (+10 % -15 %)			
Input Current (I)	4 LO	COMMON			
	2 HI	0... 1 A			
Decimal Point Adjustment	XXXXX	X.XXXX	XX.XXX	XXX.XX	XXXX.X
	Decimal Point	Zero Adj.	Span Adj.	Measuring Input	Aux. Supply
	10 9 8 7			4 3 2 1	B A

DPM 72X144-1 Phase 4 ½ ACV		Sr. No. / /			
Range: 0... 110V[45-65Hz]		Display: 19999			
Aux. Supply	A N (-) B L (+)	110 VDC (+10 % -15 %)			
Input Voltage (V)	4 LO	COMMON			
	2 HI	0... 110 V			
Decimal Point Adjustment	XXXXX	X.XXXX	XX.XXX	XXX.XX	XXXX.X
	Decimal Point	Zero Adj.	Span Adj.	Measuring Input	Aux. Supply
	10 9 8 7			4 3 2 1	B A

### Connection Diagram

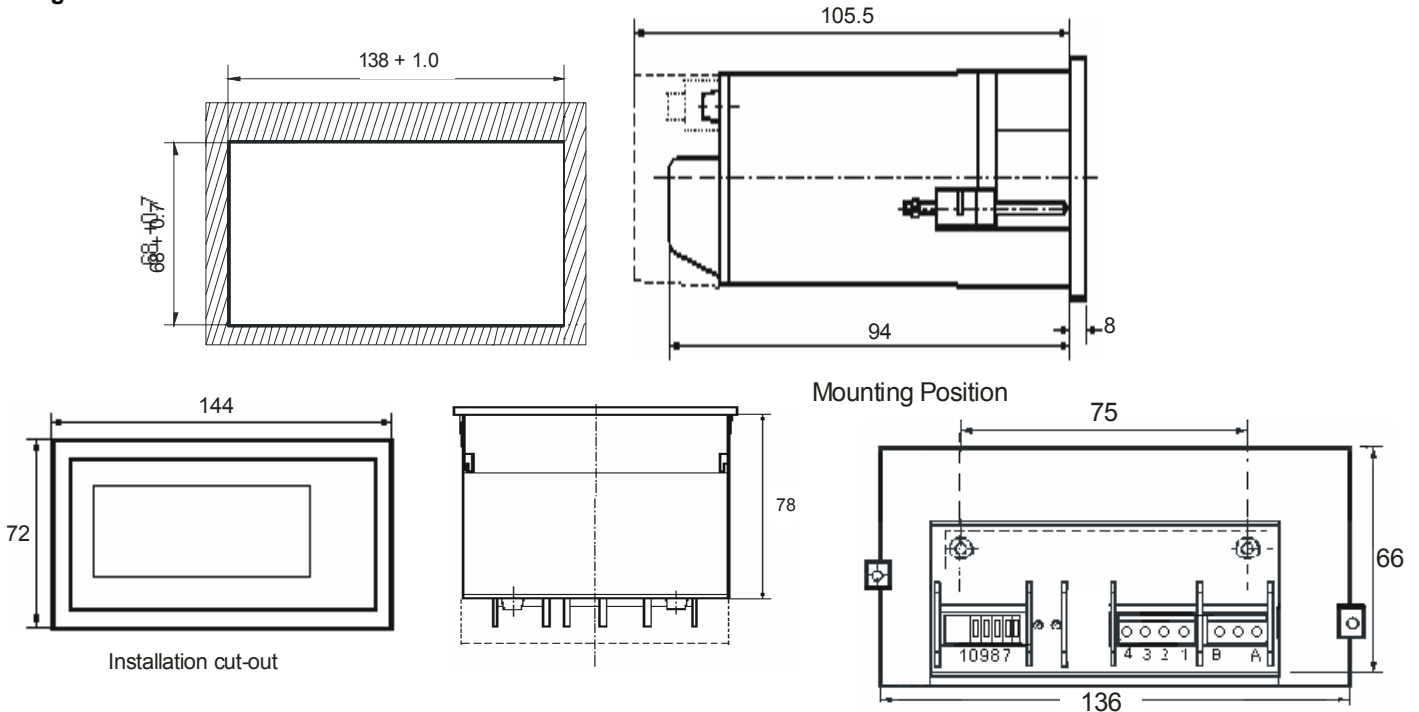


### Measuring input

Aux. Supply :  
Voltage AC :  
Current AC :  
Display adjust (with external calibrator)  
Decimal point programming

Terminals A (-N) and B (+L)  
Terminals 4 and 2  
Terminals 4 and 2  
With zero and span pots.  
With short links at rear side.

### Design and Installation



**Caution :** Do not change the short links on Display (for decimal point adjustment) when the input is applied to the DPM.

Subject to change without notice!  
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