

# LD DPM 48x96 – 1PH ACI/ACV

## Operating Manual

The **LD DPM 48x96 – 1PH ACI/ACV** is a Digital Panel Meter (DPM) in 48 x 96 size for measurement of 1PH AC Current and 1PH AC Voltage. Four ranges for power supply are available.

### **Operation:**

By changing short links on front side of Display the 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 5% to 100% of FSD (FSD = 1999). If required Zero can be adjusted with the help of Zero adjust potentiometer at the rear side.

Further **LD DPM 48x96 – 1PH. ACI/ACV** versions from the series :

**LD DPM 48x96 – 1PH. ACI** Instrument for 1PH. AC Current measurement.

**LD DPM 48x96 – 1PH. ACV** Instrument for 1PH. AC Voltage measurement.

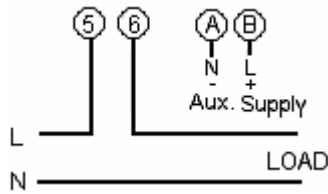
### **Technical data**

<b>Display</b>	Display range	1999
	Decimal point position	selectable by short links at the front side of Display.
	Negative display indication	“_“
	Digit Height	14 mm / 7- segment digits
	Overload indication	last 3 digits blank (1 ).
<b>Measuring ranges</b>	Accuracy	< 0.5 % + 1 digit.
	Voltage AC (Input Current < 600 $\mu$ A ).	0 ... 110 V [45...60 Hz] or [400 Hz] or 0 ... 240 V [45...60 Hz] or [400 Hz] or 0 ... 500 V [45...60 Hz] or [400 Hz].
	Current AC (Input Current < 600 mV ).	0 ... 1A [45...60 Hz] or [400 Hz] or 0 ... 5A [45...60 Hz] or [400 Hz].
	Temperature coefficient	100 ppm / °C, plus.
	Zero point drift	200 ppm / °C.
Range adjustment span	From 5% to 100% of range.	
<b>Power supply</b>	Direct voltage DC	24 V (21V to 30V) max.5.5 W (isolated). 110 V +10 %, -15% max.5.5 W (isolated).
	Alternating voltage AC (47 - 60 Hz)	110 V +10 %, -15% max.5.5 W (isolated). 230 V +10 %, -15% max.5.5 W (isolated).
<b>Environmental conditions</b>	Operating temperature	0 ... 50 °C.
	Storage temperature	-25 °C ... +70 °C.
	Protection class	For Back : IP 20 to IEC EN 60529. Front : IP 50 ( IP 54 on request )
	Device safety	According to IEC EN 61 010.
	EMC immunity	According to DIN EN 61 000-4-1 up to 4.
EMC radiated interference	According to DIN EN 50 081 class B.	
<b>Dimensions and weights</b>	Front bezel size	96 mm x 48 mm DIN 43 718.
	Panel cut-out	92 + 0.8 mm x 43.5 + 0.6 mm.
	Overall depth	68 mm.
	Weight Approx.	300 gm.
<b>Sundry</b>	Connections	Plug and screw terminal blocks.

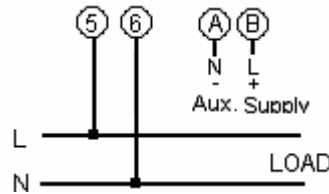
**Sample sticker**

LD DPM 48X96 1PH ACI	Sr. No.
Full-Scale : 1999	
Aux. Supply	A N 230V AC 50Hz. B L (+10% -15%)
Input Current	5 HI 1 A AC 6 LO COMMON
Z S	Aux. Supply (+) (-)
Measuring Input (I)	
Front Display	
Decimal point Adjustment	

LD DPM 48X96 1PH ACV	Sr. No.
Full-Scale : 1999	
Aux. Supply	A N 230V AC 50Hz. B L (+10% -15%)
Input Voltage	5 HI 0...500 VAC 6 LO COMMON
Z S	Aux. Supply (+) (-)
Measuring Input (V)	
Front Display	
Decimal point Adjustment	



**Connection For 1PH ACI**



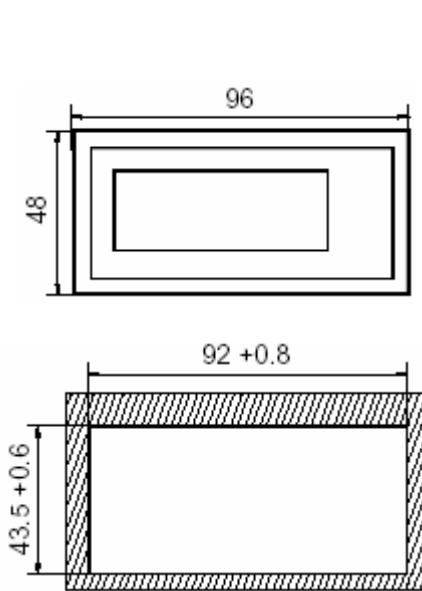
**Connection For 1PH ACV**

**Measuring input**

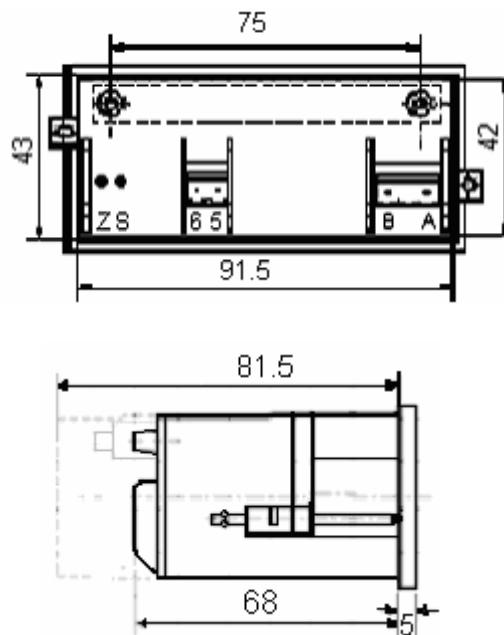
Voltage Input  
Current Input  
Display adjust (with external calibrator)  
Decimal point programming

Terminals 5 and 6  
Terminals 5 and 6  
With zero and span pots at rear of meter.  
With short links at Front on Display.

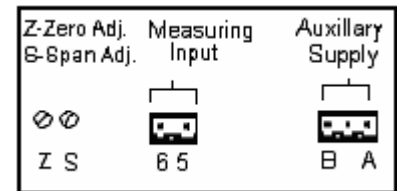
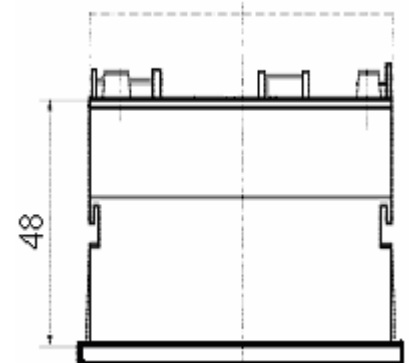
**Design and Installation**



**Installation Cutout**



**Mounting Position**



**Connection Diagram**



**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!  
Item Code : 15000504

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