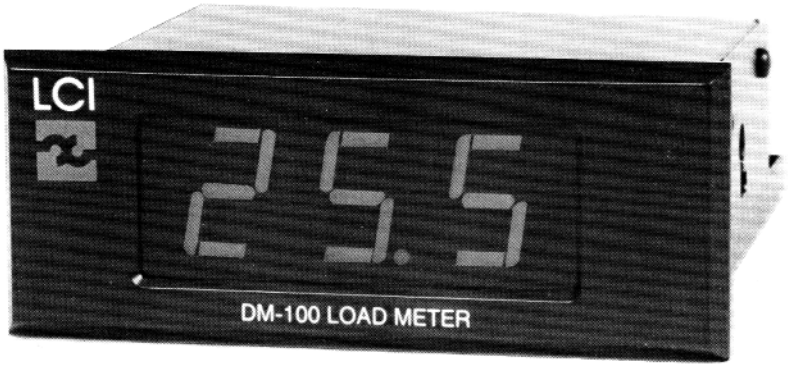
DM-100
DIGITAL LOAD METER



The DM-100 Digital Load Meter displays motor load. The DM-100 can be adjusted to read the motor load in:

- Percent 0-100%
- Horsepower
- Kilowatts or Watts

Inputs to the DM-100 can be:

- 0-10 Volts
- 0-5 Volts
- 0-1 Milliamp
- 4-20 Milliamp

The input for motor load indication comes from the analog output of a Load Controls, Inc. Load Control or from a LCI Power Cell power transducer.

PEAK EMPHASIS

The DM-100 has a Peak Emphasis Circuit. This captures the peak load and displays it long enough so that your eye can see it. (Other digital meters update the data on a regular basis so you have no guarantee that the Peak Value is displayed.)

The Peak Emphasis feature is useful when monitoring fast changing loads such as machine tools (Dip Switch 2 Off).

Normally, the DM-100 will display the average reading (Dip Switch 2 On).

TO INSTALL

Cut an opening in the panel 1-7/16" x 4-3/16" (36mm x 107mm).

Leave at least 5-1/2" (140mm) rear clearance.

Pass the control through the hole.

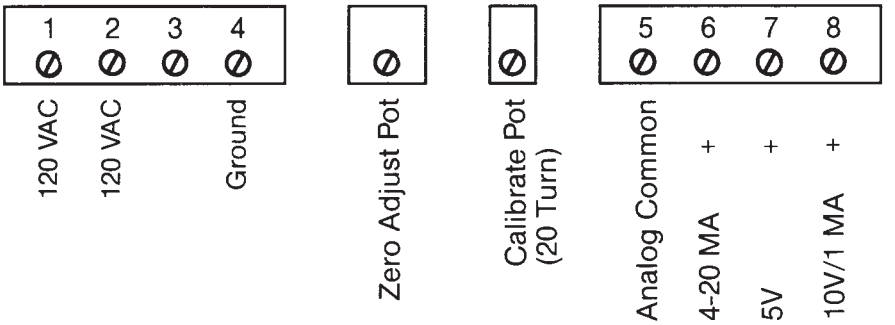
Insert the two holding ears into the "L" slots in the chassis.

Tighten the screw.

For convenience, the Terminal Strips can be snapped-off for easier wiring.

When the wiring is complete, snap the Terminal Strips into place.

WIRING



DIP SWITCH

		ON	OFF
1	Calibrate		Normal Operation
2	Average Value (Normal Operation)		Peak Emphasis
3	Decimal XX.X		
4	Decimal X.XX		

ADJUSTING THE DISPLAY

The Display can be adjusted to read

EITHER

- Your Motor Horsepower (or Kilowatts) Directly

OR

- % of Your Motor Full Load

TO DISPLAY MOTOR POWER DIRECTLY

Your Full Scale Capacity depends on how you hooked up the Power Cell or Load Control.

- Find the Full Scale Capacity in the instruction books for the Power Cell or Load Control.
- Turn Dip Switch 1 ON.
- Adjust the 20 turn CAL pot until the display reads your Full Scale Capacity.
- Dip Switches 3 and 4 turn the decimal points ON and OFF.
- Turn Dip Switch 1 OFF.

TO DISPLAY % OF YOUR MOTOR FULL LOAD

To display % of your motor load requires 1 calculation. It is the ratio of your Full Scale Capacity and your motor size.

$$\text{"RATIO"} = \frac{\text{Full Scale Capacity}}{\text{Your Motor Size}} \quad X\ 100$$

Example:

You have a 25 HP Motor - 460 Volts. You have a Full Scale Capacity of 32 HP.

Ratio = 32/25 x 100 = 128

The Ratio must be greater than 100. If is isn't, change your hook-up to a higher capacity.

- Turn ON Dip Switch 1. Turn OFF 3 and 4.
- Adjust the 20 turn CAL pot until the display reads your "Ratio".
- Return Dip Switch 1 to OFF.

The display will now read 100% when your motor reaches its Full Load.