

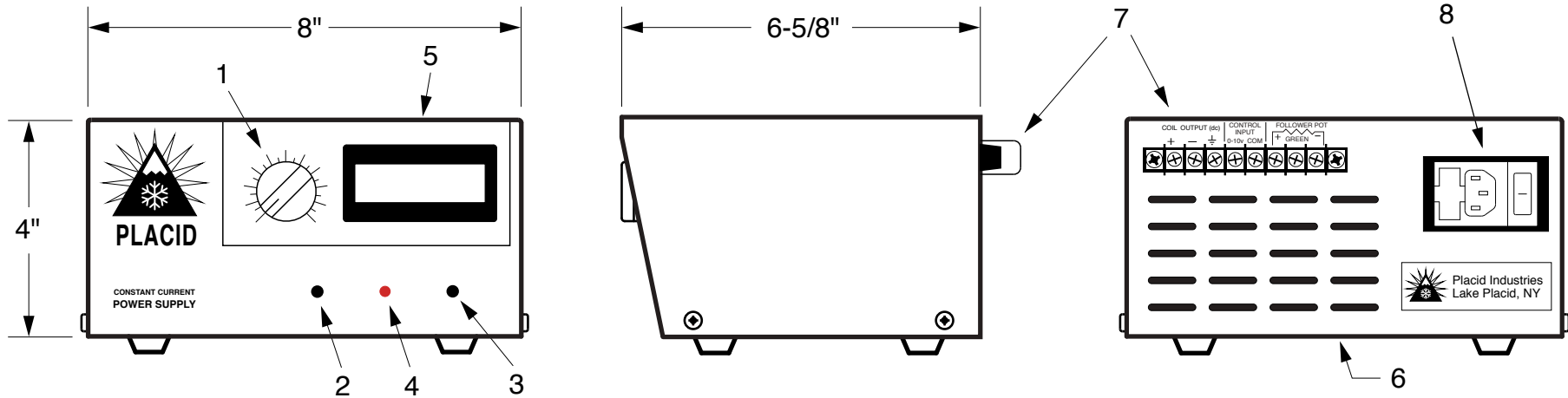
# POWER SUPPLY

MODEL: PS - ( voltage ) - MC ( 1 or 2 )

Specify 12 or 24 Volts D.C. \_\_\_\_\_

\_\_\_\_\_ Number of AC Input Fuses

The power supply is suitable for Placid Industries brakes up to 220 lb.-in. & clutches up to 130 lb.-in. torque. The power supply is a constant current type, with a 3/4 turn potentiometer for setting output current from 0% to 100%. The output current can also be controlled with a 0-10 Volt Input Signal or Follower Arm Potentiometer. The SPAN adjustments set maximum and minimum current levels.



1. % RATED CURRENT potentiometer
2. Current SPAN MAX. potentiometer
3. Current SPAN MIN. potentiometer
4. LED 'Power On' light
5. L.C.D. digital ammeter
6. On underside of case: SWITCH for Manual (Potentiometer) or 0-10 volt control & Follower control.
7. Terminal Strip for :
  - 1) D.C. Output for brake or clutch coil ( + , - )
  - 2) Ground (  $\perp$  )
  - 3) 0-10 Volt Input Signal ( 0-10v, COM. )
  - 4) Follower Arm Potentiometer
8. A.C. input, A.C. power On/Off switch, input fuse(s)

Input : 220 Volts A.C. 50 / 60 Hz.

Input Fuse(s) : 1 Ampere

PS-(voltage)-MC2, 2 fuses, for USA

PS-(voltage)-MC1, 1 fuse, for most foreign markets

Output: 12 Volt version: 0-12 Volts D.C., 1.25 Amps, 15 Watts

24 Volt version: 0-24 Volts D.C., 0.75 Amps, 22 Watts

0-10 Volt Input Resistance: 2000 ohms



Phone 518 523-2422

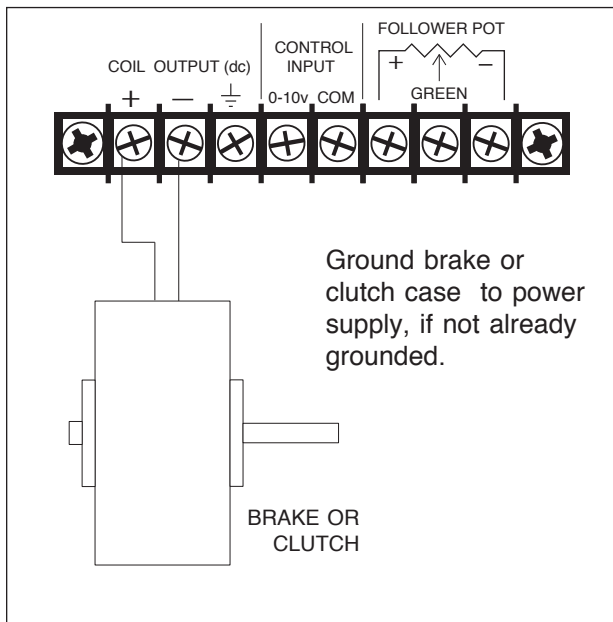
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# POWER SUPPLY - PS-MC

## INSTRUCTIONS - MANUAL (Potentiometer) CONTROL

MODELS: All enclosed power supplies



### ADJUSTMENTS - When Using Manual (Potentiometer) Control:

**% RATED CURRENT POTENTIOMETER** - To control output current, from 0% to 100%.

**SPAN MAX.** - Sets the maximum output current. Is a 15 turn potentiometer. Use the miniature plastic screwdriver provided to make adjustments.

**SPAN MIN.** - Sets the output current to zero when the % RATED CURRENT potentiometer is set to zero. Is a 15 turn potentiometer. Use the miniature plastic screwdriver provided to make adjustments.

### INITIAL SET UP - When Using Manual (Potentiometer) Control:

- 1) Determine the 100% rated current of the brake (or clutch) from the data sheet, or estimate it from the formula:  
$$100\% \text{ rated current} = (\text{rated voltage}) / (\text{coil resistance, ohms})$$

The rated voltage is listed on the label of the brake or clutch.
- 2) For safety, disconnect the A.C. power.
- 3) Set 'SWITCH' (on underside of case) to position 2, 'FRONT PANEL POTENTIOMETER' position, so the output current is controlled by the % Rated Current Potentiometer.
- 4) Set the SPAN MAX. potentiometer fully counter-clockwise (for minimum output current).
- 5) Connect A.C. power.
- 6) Set the % RATED CURRENT potentiometer to 100% (for maximum output current).
- 7) SPAN MAX. - Turn the SPAN MAX. potentiometer clockwise until output current equals the 100% rated current of the brake (or clutch).
- 8) SPAN MIN. - Set the % RATED CURRENT potentiometer to 10%. Adjust the SPAN MIN. potentiometer until the output current is 10% of rated current.
- 9) Recheck Steps 6 - 8.



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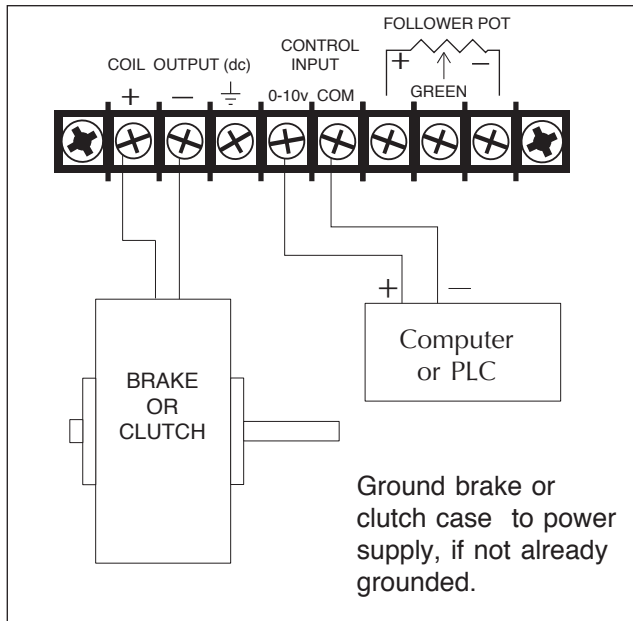
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P2/3

# POWER SUPPLY - PS-MC

## INSTRUCTIONS - 0-10 VOLT CONTROL

MODELS: All enclosed power supplies



### ADJUSTMENTS - When Using 0-10 Volt Control:

**0-10 VOLT INPUT SIGNAL** - Output current is proportional to the user's 0-10 volt input signal. At 0 volts, output current is 0. At 10 volts, output current is maximum.

**SPAN MAX.** - This 15 turn potentiometer sets the maximum output current level.

**SPAN MIN.** - This 15 potentiometer sets the output current to zero when the 0-10 volt signal is zero volts.

### INITIAL SET UP - When Using 0-10 Volt Control:

- 1) Determine the 100% rated current of the brake (or clutch) from the data sheet, or estimate it from the formula:  
$$100\% \text{ rated current} = (\text{rated voltage}) / (\text{coil resistance, ohms})$$
  
The rated voltage is listed on the label of the brake (or clutch).
- 2) For safety, disconnect the A.C. power.
- 3) Set 'SWITCH' (on underside of case) to position 1, '0-10v CONTROL' so the output current is controlled by the 0-10 volt D.C. input signal.
- 4) Set the SPAN MAX. potentiometer fully counter-clockwise, approximately 15 turns, or until it clicks (for minimum output current).
- 5) Connect A.C. power.
- 6) Set your 0-10 volt signal to 10 volts. (for maximum output current).
- 7) SPAN MAX. ADJ. - Using the miniature plastic screwdriver, turn the SPAN MAX. potentiometer clockwise until the output current equals the 100% rated current of the brake (or clutch).
- 8) SPAN MIN. - Set your 0-10 volt signal to 1 volt. Adjust the SPAN MIN. potentiometer until output current is 10% of rated current.
- 9) Recheck Steps 6 - 8.



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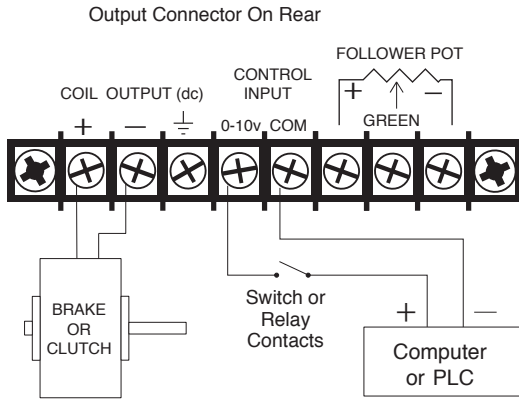
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P3/3

# POWER SUPPLY PS-MC

## INSTRUCTIONS - HOW TO REPEATEDLY CYCLE BETWEEN 0 AMPERES & ANY CURRENT LEVEL

DO NOT power up & power down the AC input. DO NOT interrupt the DC output wires.

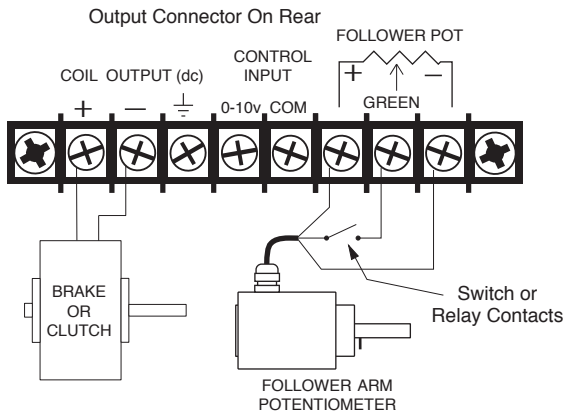


### When using 0 - 10 VOLT CONTROL:

If the signal voltage cannot be brought to 0, then use a switch or relay to interrupt the 10 volt signal.

When the wire is connected, output current is controlled by the 0-10v signal.

With the wire disconnected, power supply output current is zero.

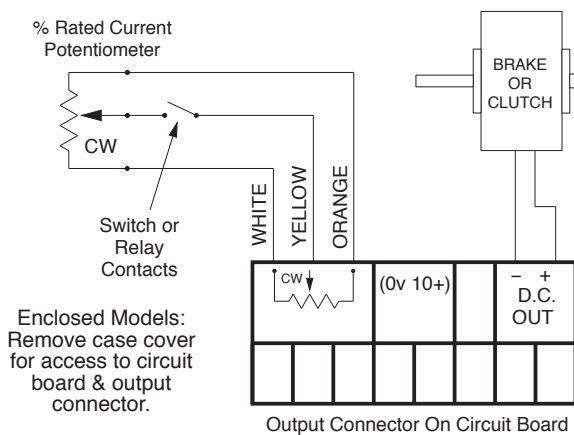


### When using a FOLLOWER ARM POTENTIOMETER:

Swing the follower arm into the inactive region. If this is not possible, then disconnect the wiper using a switch or relay.

When the wire is connected, output current is controlled by the follower arm potentiometer.

With the wire disconnected, power supply output current is zero.



### When using MANUAL (Potentiometer) control:

Use a switch or relay to interrupt the yellow wire to the % Rated Current Potentiometer (the wire to the wiper).

When the wire is connected, output current is controlled by the % Rated Current Potentiometer.

With the wire disconnected, power supply output current is zero.



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P4/4