GENERAL

Model 380E4 and 380E5 Reference Supply Modules provide up to three adjustable reference voltages. External connections to the supply sources are made at the terminal strip on the enclosure. The reference voltages are continuously adjustable from 0 to 6V dc.

Model 380E4 Reference Supply Modules utilize 22-turn potentiometers for excellent resolution, and provide three independent reference voltages.

Model 380E5 Reference Supply Modules utilize single turn potentiometers with graduated dials, and provide two independent reference voltages.

Both models have test points at the module front for setting or checking the reference voltages.

SPECIFICATIONS

Model 380E4:  
Voltage Range: 3 independent 0 to 6.2V dc (±5%) variable voltage supplies, each continuously variable with a 22-turn potentiometer.

Loading: The sum of the currents drawn from the 3 supplies should be less than 3 mA.

Settability: Voltage can be set to within 5 mV of the desired value.

Model 380E5:  
Voltage Range: 2 independent 0 to 6.2V dc (±5%) variable voltage supplies, each continuously variable with a 1 turn potentiometer mounted on a graduated dial.

Loading: The sum of the currents drawn from the two supplies should be less than 3 mA.

Settability: Voltage can be set to within 50 mV of the desired value.

MOORE PRODUCTS CO., Spring House, Pa. 19477
INSTALLATION

The Model Series 380 Card Cage Enclosures are equipped with safety keys that must be set by the user at the time of installation. Using the Card Cage Enclosure Instruments for reference (Service Instruction SD3801), set the keys in the slot the module is to be used in as follows:

Left Key: V (vertical)
Right Key: V (vertical)

Refer to the connection diagram for the electrical connections at the terminal strip.

CALIBRATION

GENERAL

Test points are provided at the front of the module for connecting a voltmeter to set or check the reference voltages. Model 380E5 Reference Supply Modules are supplied with graduated dials (0 to 100%) to provide convenient setting of the reference voltages. However, if the application requires the reference voltage be more accurately set, it is recommended that the adjustment procedure which follows be used.

TEST EQUIPMENT

A digital multimeter is required to set the reference supply voltages. The meter must have an accuracy of at least 0.1% of reading and an input impedance of at least 1 Meg Ohm. The multimeter should also have sufficient resolution to display the desired reference voltage plus one least significant digit.

PROCEDURE

1. Connect the module as shown in the connection diagram. The load must be within the limits shown in the SPECIFICATIONS section of this instruction.

2. Connect the negative lead of the multimeter to:
   
   Model 380E4 - TP-COM
   Model 380E5 - TP-C

3. Connect the positive lead of the multimeter to the reference supply to be adjusted (i.e., TP-A, TP-B, etc.).

4. Rotate the appropriate adjustment until the multimeter indicates the desired reference voltage.

5. Repeat as required for the remaining reference supplies.

MAINTENANCE

Except for annual cleaning and reference voltage checks, this module requires no periodic maintenance. If the Reference Supply Module is not operating properly, check the field wiring and the Power Supply Module (refer to Service Instruction SD380P). A schematic diagram of the Reference Supply Module is provided at the rear of this instruction.
CONNECTION DIAGRAM

Terminal strip on Series 380 rack enclosures.

1. OUTPUT A-0 to 6V dc (Note 1)
2. OUTPUT B-0 to 6V dc (Note 1)
3. COMMON
4. OUTPUT C-0 to 6V dc - MODEL 380E4 ONLY (Note 1)
5. NC
6. NC
7. NC
8. COMMON
9. NC

NOTE 1: See output specification for load limits.
**NOTES:**

1. See SPECIFICATIONS section for output load limits.

<table>
<thead>
<tr>
<th>MODEL 380E4</th>
<th>MODEL 380E5</th>
</tr>
</thead>
<tbody>
<tr>
<td>R1: 5000 Ohm pot., 22 turns</td>
<td>R1: 5000 Ohm pot., 1 turn</td>
</tr>
<tr>
<td>R2: 5000 Ohm pot., 22 turns</td>
<td>R2: 5000 Ohm pot., 1 turn</td>
</tr>
<tr>
<td>R3: 5000 Ohm pot., 22 turns</td>
<td>R3: NOT USED</td>
</tr>
</tbody>
</table>