



INSTRUCTION SHEET D2-3213

Reference Trim Pot

Model 1TP3000

For use with 230 VAC, 460 VAC AND 575 VAC
GP-2000

General Purpose A-C V*[®] Drive Controllers

DANGER

ONLY QUALIFIED ELECTRICAL PERSONNEL FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THIS EQUIPMENT AND THE HAZARDS INVOLVED SHOULD INSTALL, ADJUST, OPERATE, AND/OR SERVICE THIS EQUIPMENT. READ AND UNDERSTAND THIS MANUAL IN ITS ENTIRETY BEFORE PROCEEDING. FAILURE TO OBSERVE THIS PRECAUTION COULD RESULT IN SEVERE BODILY INJURY OR LOSS OF LIFE.

Receive and Accept the Shipment

Reliance[®] Electric's terms of sale, in all instances, are F.O.B. point of origin. The user is responsible for thoroughly inspecting the equipment before accepting shipment from the transportation company.

If all the items called for on the bill of lading or on the express receipt are not included or if any items are obviously damaged, do not accept the shipment until the freight or express agent makes an appropriate notation on your freight bill or express receipt. If any concealed loss or damage is discovered later, notify your freight or express agent within 15 days of receipt and request that he make an inspection of the shipment. Keep the entire shipment intact in its original shipping container.

The user is responsible for making claim against the Carrier for any shortage or damage occurring in transit. Claims for loss or damage in shipment must not be deducted from the Reliance Electric invoice, nor should payment of the invoice be withheld while awaiting adjustment of such claims since the Carrier guarantees safe delivery.

File a Return Request

1. To return equipment, send a written request to Reliance Electric within ten days of receipt.
2. Do not return equipment without a numbered Equipment Return Authorization (ERA) from Reliance Electric.
3. Reliance Electric reserves the right to inspect the equipment on site.

Store the Kit until Installation

After receipt inspections, repack the kit in its original shipping container until installation. If a period of storage is expected, store in the original shipping container with its internal packing.

To ensure satisfactory operation at startup and to maintain warranty coverage, store the equipment:

- in its original shipping container in a clean, dry, safe place
- within an ambient temperature range of -10°C to 40°C
- within a relative humidity range of 5 to 95% without condensation.
- away from a highly corrosive atmosphere. In harsh environments, cover the shipping/storage container.

Description

The products described in this instruction manual are manufactured by Reliance Electric Industrial Company.

The Reference Trim Pot Kit provides a hardware adjustment for the relationship between output frequency and speed reference when the process control is in the AUTO selection.

The trim pot is used to calibrate the reference to obtain maximum Hz when maximum analog reference is applied. The kit will compensate for analog inaccuracies in power supplies, pots, analog outputs, etc. Refer to Figure 2 for trim pot tolerances.

When the process control function (AUTO is selected) or the remote control function is selected, the GP2000 ("controller") accepts the external speed reference instead of the manual speed reference as set on the keypad. The standard wiring for the process control speed reference is as shown in Figure 1.

Installation

DANGER
EQUIPMENT IS AT LINE VOLTAGE WHEN A-C POWER IS CONNECTED TO THE CONTROLLER. ALL UNGROUNDED CONDUCTORS OF THE A-C POWER LINE MUST BE DISCONNECTED FROM THE CONTROLLER. AFTER POWER IS REMOVED, USE A VOLTMETER AT TERMINALS 147(+) AND 45 (-) TO VERIFY THAT THE D-C BUS FILTER CAPACITORS ARE DISCHARGED BEFORE TOUCHING ANY INTERNAL PARTS OF THE CONTROLLER OR INSTALLING KITS. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN SEVERE BODILY INJURY OR LOSS OF LIFE.

DANGER
THE USER IS RESPONSIBLE FOR CONFORMING WITH THE NATIONAL ELECTRICAL CODE AND ALL OTHER APPLICABLE LOCAL CODES. WIRING PRACTICES, GROUNDING, DISCONNECTS AND OVERCURRENT PROTECTION ARE OF PARTICULAR IMPORTANCE. FAILURE TO OBSERVE THESE PRECAUTIONS COULD RESULT IN SEVERE BODILY INJURY OR LOSS OF LIFE.

1. Disconnect all power to the controller.
2. Verify with a voltmeter at terminals 147 (+) and 45 (-) that bus voltage is below 50 VDC.
3. Loosen the four screws at the corners of the controller enclosure, and remove the cover.
4. If a jumper on T1 on the regulator board is connected between terminals 2 and 4, remove the jumper.
5. Wire the process control signal to the controller. Refer to Figure 3.

6. Directly insert three pins of the kit into the holes of terminals 2, 3, and 4 on the regulator board. See Figure 4.
7. Replace cover.

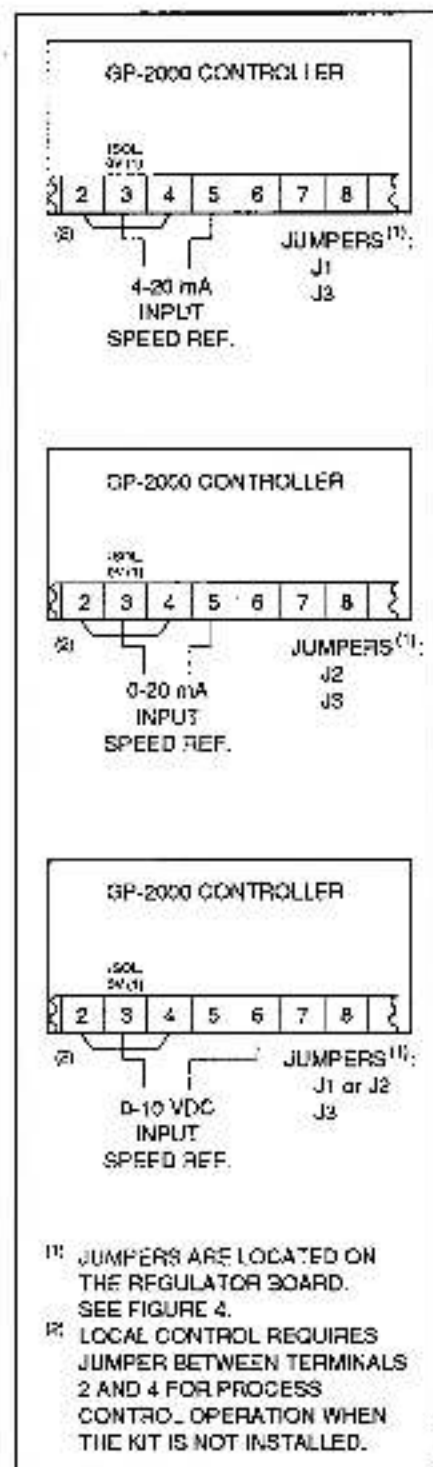


Figure 1. Standard Wiring for Process Control Speed Reference.

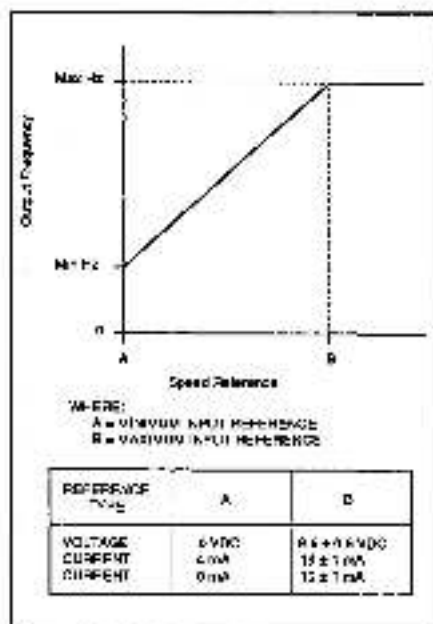


Figure 2. Relationship of Output Frequency and Speed Reference for Process Control Auto Selection.

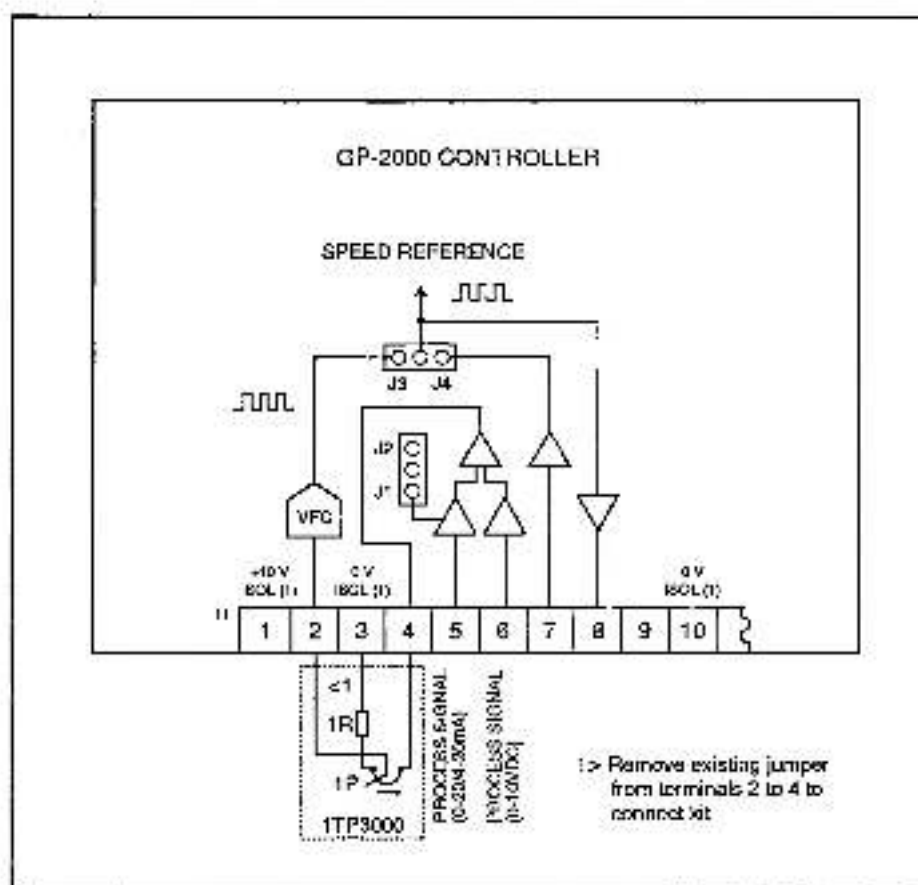


Figure 3. Kit Wiring.

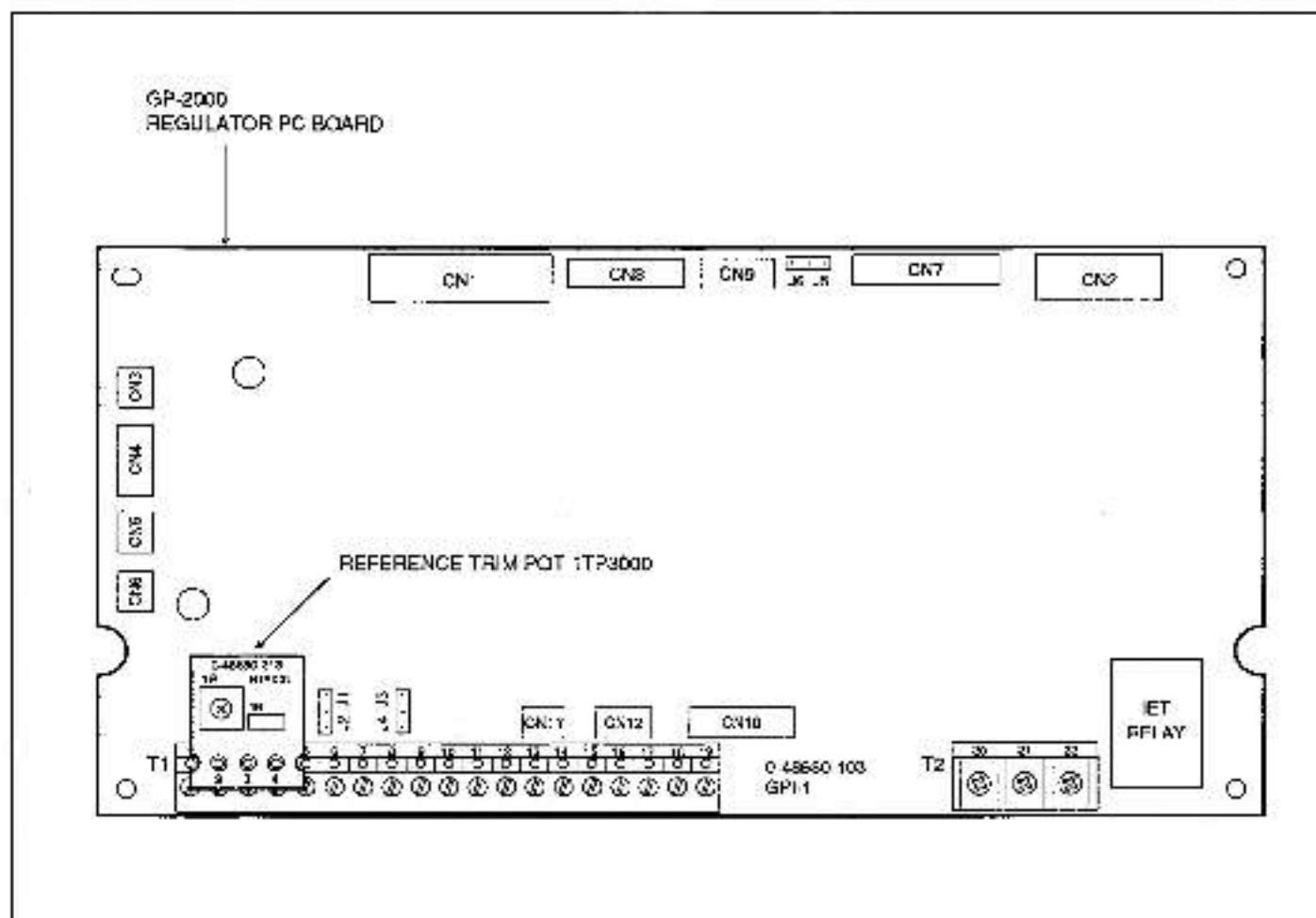


Figure 4. Installation Location

Reliance Electric Company / 24701 Euclid Avenue / Cleveland, Ohio 44117

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