

MODEL 211  
PHASE-LOSS AND UNBALANCE DETECTOR

PART NUMBER 12M03-00107-01  
APPLICATION NOTES

1. Adjustment - The Phase Loss and Unbalance Detector is adjusted as follows:
  - a. Temporarily jumper the output contacts, so that the circuit can be adjusted without stopping the drive.
  - b. Start with the "Sensitivity" at zero and repeatedly operate the drive in current limit, by accelerating rapidly. The relay should drop out as indicated by the LED. Advance the potentiometer just far enough so that the relay does not drop out and note the position of the potentiometer.
  - c. Short circuit the gate to cathode of any one of the thyristors, thus preventing firing. Repeat acceleration and deceleration and adjust so that the relay just does not drop out. Note the potentiometer position.  
  
CAUTION: DO NOT ATTEMPT TO OPERATE A FIELD REVERSING REGENERATIVE DRIVE IN THE REGENERATIVE MODE WITH THE GATE TO CATHODE OF A THYRISTOR SHORTED.
  - d. Set the potentiometer approximately midway between the two positions noted.
  - e. Remove jumper from contacts.
2. The relay contact between terminals 3 and 5 is held closed until an unbalance is detected, then opens. It can be wired directly into the normal stop circuit. It may be wired through a time delay relay or to an alarm to allow time for an orderly shutdown of the operation.
3. The output at terminal 6 swings to plus 13 volts when an unbalance is detected and may be used with solid-state fault logic.
4. This assembly may be used with any three-phase, full-wave power converter. The 2 volt signal may be obtained from a shunt in the DC output, or an isolated signal such as that obtained from the REFLEX Model 213 Signal Isolator or Model 224 Current Isolator.



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