



Order Number

Serial Number

## 2P740K26-3348 TEST PROCEDURE

### 415 V PHASE FAILURE RELAY

#### 1. TEST EQUIPMENT REQUIRED

- 3 Phase AC Variable Power Supply.
- HV Test Equipment.
- Digital Volt Meter.

#### 2. ASSOCIATED DRAWINGS

- 690-069-201 Circuit Diagram PCB
- 690-069-301 Loading Diagram PCB

#### 3. HIGH VOLTAGE TESTING

- a) Apply 2KV RMS 50 Hz between terminal groups 1 and 2 in table 1 for 1 minute.
- b) Apply 3 5KV 1/50us pulses of each polarity between terminal groups 1 and 2 in table 1.

#### TABLE 1

**GROUP 1**  
All Input Terminals

**GROUP 2**  
All Output Terminals

#### 4. CALIBRATION & TEST PROCEDURE

- a) Connect the DVM between TP 1 and TP 0 with range set to 100 V.
- b) Apply 415 V 3 Phase to the 2P740 as per the connection label. The output relay should be picked up.
- c) Adjust Balance trimpot (R1) for a minimum reading between TP1 & TP0



#### 4. CALIBRATION PROCEDURE (Cont)

- d) Connect the DVM between TP 2 and TP 0 with range set to 20 V. Decrease yellow phase so that the RED-YELLOW line voltage is 95 % of the normal line voltage. Adjust trimpot R6 while monitoring TP2. Set R6 so that TP2 gives a maximum reading.
- e) Set the three phase supply to the nominal line voltage. Decrease all three phases slowly to 80 % of nominal voltage. By adjusting trimpot R14 the relay will drop out at 80 % of the normal line voltage. Increase voltage slowly until relay picks up. The pick up voltage should be in the range of 85 to 88 %. Return all phases to normal line voltage.
- f) Set front panel potentiometer to 15 % (fully anti-clockwise). Decrease yellow phase so that the BLUE-YELLOW line voltage 85% of normal line voltage. Adjust R21 until the relay drops out. Increase voltage and check that the relay picks up at between 90 and 93% of normal line voltage.
- g) Set front panel potentiometer to 5% (fully clockwise). Decrease yellow phase so that the BLUE-YELLOW line voltage is 95% of the nominal line voltage. Adjust R24 until the relay drops out at 95 % of line voltage.

#### 5. GENERAL & FUNCTIONAL

- a) Check operation of relay contacts.
- b) Check that the relay is electrically sound and mechanically robust as per Standard Inspection & Test Schedule 903-000-026

c) Number of Relays Tested

PASS

TESTED BY : \_\_\_\_\_ DATE : \_\_\_\_\_