



164-645-907
Issue A 23/02/95
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Order Number

Serial Number

2T645K7 TEST PROCEDURE

DEFINITE TIME RELAY

1. TEST EQUIPMENT REQUIRED

DC Auxiliary Supply
Frequency Counter
Digital Voltmeter
Electronic Counter (for measuring operate times)
High Voltage Test Equipment

2. ASSOCIATED DRAWINGS

164-645-007 Descriptive Manual 2T645K7
164-645-207 Circuit Diagram
660-171-301 Loading Diagram PCB Logic
660-172-301 Loading Diagram PCB Relay Mounting

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 2	Group 1
3,4,6,7,8,9	11,12,15,16,18,19,E
7,8,15,16,18,19	3,4,6,9,11,12,E
6,9,11,12,18,19	3,4,15,16,E

4. CALIBRATION & TEST PROCEDURE

- a) Cut links B and D on 660/171 PCB.
- b) Set all switches on the DIL switch to the "in" position (ie time setting of 1.275 sec).
- c) Connect frequency counter probe to TP1 (0V to TP2).
- d) Apply auxiliary voltage of 66V and check that 10 V rail is within +/- 10% of nominal
- e) Set auxiliary supply to 110 V DC
- f) Adjust trimpot R6 until the waveform period at TP1 as measured on the counter is 5.0ms.

Minimum	Maximum	Nominal	Actual	Unit
4.95	5.05	5.00	<input type="text"/>	msec

- g) Check that pick up time at the following settings is within tolerance.

(Note that 20ms electronics initialisation and output relay PU time must be subtracted from measured time).

Minimum	Maximum	Nominal	Actual	Unit
8	12	10	<input type="text"/>	msec
95	105	100	<input type="text"/>	msec
620	650	635	<input type="text"/>	msec
1250	1300	1275	<input type="text"/>	msec



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5. GENERAL & FUNCTIONAL

- a) Check that the Relay operates correctly at auxiliary voltages of 66V and 132 V.

OK

- b) Check for correct operation of magnetic disc flag. (Note that the flag circuitry must be connected to terminals 7 and 8.)

OK

- c) Check that the relay is electrically sound and mechanically robust as per Standard Inspection & Test Schedule 903-000-026.

PASS

TESTED BY : _____ DATE : _____