Order Number | Serial Number

PRODUCT/TEST MANUAL

3Y60K4

110V DC INDICATOR RELAY

Issue Level	Date	Summary of changes
A	28/02/2008	Initial issue.

Author	Checked & Registered	.pdf file created	Released
MVL	DG	DG	David Greenwood Digitally signed by David Greenwood DN: CN = David Greenwood, C = AU, O = RMS Reason: Document is released Date: 2008.02.28 13:52:57 +11'00'

1. BROAD DESCRIPTION OF RELAY

The 3Y60K8 contains three IDEC relays with latching front panel LEDs. These LEDs indicate when the instantaneous output relay operates, and when latched remain illuminated until reset remotely or by the push button on the front panel.

2. SPECIFICATIONS

DC Auxiliary Supply	110 VDC –30% + 10%
Supply Burden (At 110V DC)	Less than 5 watts
Speed of operation	Less than 15ms
Overall Ambient Temperature Range	-5 to 55 deg C
Operation Indicator (Timed output)	LED
Operating Contacts	Six C/O

Output Relay Contact Ratings

Make and Carry Continuously
1700 VA AC resistive with maximums of 380 Volt and 8 Amp
1700 VA DC resistive with maximums of 250 Volt and 8 Amp

AC Break Capacity
1700 VA AC resistive with maximums of 380 Volt and 8 Amp

Operation Indicators	Remote and hand resettable LED
Insulation Withstand	In accordance with AS2481-1981 (Clause 5-4), 2KV 50Hz between output and input. In accordance with AS2481-1981 (Clause 5-4), 1.2/50 5kV.
Noise Immunity	The 3Y60K4 relay has been designed to withstand the high frequency interference test detailed in AS2481-1981 (Clause 5-5).
Case Type	2M28

3. ASSOCIATED DRAWINGS

182-060-104 Wiring Diagram
182-060-704 Label Diagram

4. TEST EQUIPMENT REQUIRED

DC Auxiliary Supply
Doble 2251 test instrument (for measuring operate & release times)

5. HIGH VOLTAGE TESTING

a) Apply 2KV RMS 50Hz between terminal Groups 1 and 2 in Table 1 for 1 minute.

b) Apply three 3KV 1/50us pulses of each polarity between terminal Groups 1 and 2 in Table 1.

TABLE 1

GROUP 1	GROUP 2
1,3,5,2,4,6,7,9,11,8,10,12,21,23,25	15,16,17,13,18,20,14,27,28
All terminals	Earth (case)

6. TEST PROCEDURE

a) Connect the auxiliary supply to relay 1 (terminal 15) and common to terminal 14. Check that relay operates and the corresponding LED is enabled. Also measure the operate time using the Doble, this should be less than 15 ms. Now connect auxiliary supply to relay 1 latch input (terminal 13) and repeat. Check that the corresponding LED remains enabled after removal of supply to relay 1.

b) Connect the auxiliary supply to relay 2 (terminal 16) and common to terminal 14. Check that relay operates and the corresponding LED is enabled. Also measure the operate time, this should be less than 15 ms. Now connect auxiliary supply to relay 2 latch input (terminal 18) and repeat. Check that the corresponding LED remains enabled after removal of supply to relay 2.

c) Connect the auxiliary supply to relay 3 (terminal 17) and common to terminal 14. Check that relay operates and the corresponding LED is enabled. Also measure the operate time, this should be less than 15 ms. Now connect auxiliary supply to relay 3 latch input (terminal 20) and repeat. Check that the corresponding LED remains enabled after removal of supply to relay 3.

d) Apply auxiliary supply to Reset + and – (terminal 27 and 28) and check all relays and LEDs reset

Check ☐

7. GENERAL & FUNCTIONAL

a) Check that the reset button resets all three LED indicators.

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

PASS ☐

TESTED BY: _____ DATE: _____

8. CONNECTION DIAGRAM