Serial Number [ ] Number in Batch [ ]

6RX12-X / 1TM11

SR Contacts & HR Flag

TRIP SUPPLY SUPERVISION RELAY

Issue Level	Date	Summary of changes
A	15/11/2010	Initial release
B	10/12/2010	TB update
C	08/02/2012	Update to dropout time based on Rev F 1TM11 drawing (107011102)

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1. ASSOCIATED DRAWINGS

Refer to Job Card and associated documentation.
Relay Connection Diagram

2. HIGH VOLTAGE TESTING

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

b) Apply three 5kV 1/50us pulses of each polarity between terminal Groups 1 and 2 in Table 1.

TABLE 1

GROUP 1	GROUP 2
Coil	All other connections and Frame
Each contact set	All other connections and Frame
All terminals	Frame

PASS ☐

3. TEST PROCEDURE

Check the job card for any special requirements of the relay to be tested.

a) Connect all specified MAKE contacts in series, and connect to contact sensor/ timer.

b) Manually operate the relay by pushing the armature towards the pole face of the relay. Ensure that the contacts have sufficient over travel by ensuring that all of the contacts have made before the armature is fully home.

Check ☐

c) Check operation of relay at specified minimum and maximum DC operating voltage, when the relay is de-energised, according to the following table. Also check operation of all BREAK contacts. Also check that the armature is fully home.

Model	Nominal Voltage	Minimum voltage (65%)	Maximum voltage (120%)
6RX12-A	24V	15	29
6RX12-B	32V	20	39
6RX12-C	48V	31	58
6RX12-D	110V	71	132
6RX12-E	125V	81	150
6RX12-F	250V	162	300
6RX12-G	220V	143	264
6RX12-H	240V	156	288

Check ☐

d) Reduce the supply voltage to determine that the drop out voltage is as per the following table. Adjust the residual screw if necessary.

Model	Nominal Voltage	Min. drop out voltage (25%)	Max. drop out voltage (40%)
6RX12-A	24V	6	9.5
6RX12-B	32V	8	13
6RX12-C	48V	12	19
6RX12-D	110V	28	44
6RX12-E	125V	31	50
6RX12-F	250V	63	100

6RX12-G	220V	55	88
6RX12-H	240V	60	96

Check ☐

e) Check that the HR flag operates at minimum voltage, when the relay is de-energised.

Check ☐

f) Connect the counter / timer to measure the drop out delay of the relay (when slugged relay element is de-energised from nominal voltage- via 27 & 28). This should be greater than 200ms

Check ☐

g) Check that the supervision current when powering healthy state (RL1 & R1- pins 27 & 28) is as according to the following table:

Model	Nominal Voltage	Max. operating current (mA)
6RX12-A	24V	25
6RX12-B	32V	31
6RX12-C	48V	21
6RX12-D	110V	11
6RX12-E	125V	12
6RX12-F	250V	11
6RX12-G	220V	11
6RX12-H	240V	11

Check ☐

5. GENERAL & FUNCTIONAL

a) Check that the label has been engraved correctly as per the wiring diagram.

Check ☐

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

Check ☐

PASS ☐

TESTED BY: _____ DATE: _____