



Serial Number

Number in Batch

6RAXX / 6RM2XX

6R AUXILIARY RELAY

Issue Level	Date	Summary of changes
A	17/11/2010	Initial release
B	25/10/2011	Update to timing specifications for 6RM

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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
Each 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. Check
- 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) Make sure that the contact wiring of the relay corresponds to the connection diagram on the side of the relay. Check
- d) Check operation of relay at specified minimum and maximum DC operating voltage, when the relay is energised (via 27+, 28-) according to the following table. Also check operation of all BREAK contacts. For 2 element versions (6RMXX-A / 6RA2X), separately energise (13+, 14-) and repeat test. Also check that the armature is fully home.

Model	Nominal Voltage	Minimum voltage (75% nom.)	Maximum voltage (120%)
6RM2XXXX-A 6RAXX-A	24V	18	29
6RM2XXXX-B 6RAXX-B	32V	24	39
6RM2XXXX-C 6RAXX-C	48V	36	58
6RM2XXXX-D 6RAXX-D	110V	82	132
6RM2XXXX-E 6RAXX-E	125V	93	150
6RM2XXXX-F 6RAXX-F	250V	187	300

Check

- e) For 6RM202, 6RM204, 6RM206, 6RM208-X, 6RM210-X, 6RM211-X and all 6RA models, check that the HR flag operates at minimum voltage (75%), when the relay is energised. Check



6RM207 6RM208 6RM210 6RM211 1W coil		~42mA (during operation - each element)	~31mA (during operation - each element)	~21mA (during operation - each element)	~9mA (during operation - each element)	~8mA (during operation - each element)	~4mA (during operation - each element)
6RM204 6RM206 6RM207 6RM208 6RM210 6RM211 2W coil	Latching	0 (operated)/ ~83mA (during operation - each element)	0 (operated)/ ~62mA (during operation - each element)	0 (operated)/ ~42mA (during operation - each element)	0 (operated)/ ~18mA (during operation - each element)	0 (operated)/ ~16mA (during operation - each element)	0 (operated)/ ~8mA (during operation - each element)

Check

- j) For 6RM207-X, 6RM208-X, 6RM210-X, 6RM211-X and 6RA15 models, check electrical reset burden at nominal voltage is as according to the following table:

Model	Nominal Voltage	Maximum current (mA.)
6RM2XXXX-A	24V	1667
6RM2XXXX-B	32V	1250
6RM2XXXX-C	48V	833
6RM2XXXX-D	110V	363
6RM2XXXX-E	125V	320
6RM2XXXX-F	250V	160

5. GENERAL & FUNCTIONAL

- a) Determine if unit is specified for presence of magnetic blowouts on contacts, by referring to the following ordering code:

6RM2XXX1: Magnetic blowouts fitted.

- b) Check that the label has been labelled correctly as per the wiring diagram.

Check

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

Check

PASS

TESTED BY: _____ DATE: _____