APPLICATION

ETC232 Telephone power relays are used with Crouse-Hinds ETW Series telephones, and are suitable for use in non-hazardous and Class I, Groups B*, C†, D; Class II, Groups E, F, G and Class III hazardous (classified) areas as defined by the National Electrical Code® (NEC) and Canadian Electrical Code (CEC).

The ETC232 power relay is used to supply power to Crouse-Hinds ESR bells, ETH, W2H or WH auxiliary signaling devices. The relay coil is energized by the telephone ringing circuit, with the relay contacts controlling a separate 120VAC, 60 Hz power source.

ETC232 power relays must be installed, inspected and maintained by qualified and competent communication personnel in compliance with NEC and local codes.

* With conduit seals installed within 18 inches of enclosure. † For CSA group C applications, unsealed conduit lengths must not exceed 5 ft. (152 cm).

INSTALLATION

WARNING

To prevent electrical shock, electrical power must be OFF before and during installation and maintenance.

1. ETC232 power relays are furnished with 3/4" NPT offset throughfeed cast hubs for conduit entries. (Use Crouse-Hinds RE21-SA to reduce to 1/2" hubs.)

2. Secure the enclosure to the conduit system. If the enclosure has mounting feet, select a mounting location that will provide sufficient strength and rigidity to support the enclosure as well as the enclosed device and wiring.

3. Install Crouse-Hinds EYS Sealing Fittings required by Section 501-5 and/or 502-5 of the National Electrical Code® and Section 18 of the Canadian Electrical Code as well as any other applicable local codes and when enclosure is installed in Class I, Group B hazardous locations. (For CSA Group C applications, unsealed conduit lengths must not exceed 5 ft. or 152 cm.)

4. Unthread cover and carefully set aside to prevent damage to the cover threads.

5. Pull wires into enclosure making certain they are long enough to make the required connections.

6. Run tip and ring wires from the central exchange into the enclosure, connecting the tip wire to TCO and ring wire to RCO. Next, connect the tip and ring wires running to the telephone to TPH and RPH respectively.

Run one of the wires from the external ringer and the hot lead from the power supply into the enclosure. Connect power lead to the terminal marked C and the ringer lead to the terminal marked NO. Ensure all wires have a good connection to the terminal.

7. Test wiring for correctness by checking continuity and also check for unwanted grounds with insulator resistance tester. Make sure test equipment being used will not damage the relay device. After a successful continuity check, call this telephone on the exchange. The ringer will ring.

8. Carefully rethread cover to enclosure housing. Tighten cover until cover flange contacts body face.

CAUTION

To prevent damage to any equipment: Select a mounting location so that the enclosure will not be subjected to impact by heavy objects. Impacts can damage enclosed relay. Refer to Figure 1 for mounting dimensions.

The hazardous location information specifying class and group listing of this enclosure is marked on the nameplate of each enclosure.

All unused conduit openings must be plugged. Plug unused conduit openings with Crouse-Hinds PLG2. Plugs must be a minimum of 1/8" thick and engage a minimum of 5 full threads.

CAUTION

Use care to prevent dirt, grit or other foreign material from lodging on threads. If any such material settles on these threads, clean them with Kerosene or Stoddard solvent*, then relubricate with Crouse-Hinds Type STL thread lubricant.

*To avoid the possibility of an explosion, oxidation and corrosion, do not use gasoline or similar solvent.

9. Tighten cover set screws to prevent cover from loosening under vibration.
MAINTENANCE

WARNING
Always disconnect primary power source before opening enclosure for inspection or service.

1. Frequent inspection should be made. A schedule for maintenance check should be determined by the environment and frequency of use. It is recommended that it should be at least once a year.

2. Perform visual, electrical, and mechanical checks on all components on a regular basis.

3. We recommend an Electrical Preventive Maintenance program as described in the National Fire Protection Association Bulletin NFPA No. 76B.

WIRING DIAGRAM

Legend:
- TPH: Tip connection of telephone
- RPH: Ring connection of telephone
- TCO: Tip connection from central exchange
- RCO: Ring connection from central exchange
- C: Common
- NO: Normally open contacts
- NC: Normally closed contacts

Relay Contact Ratings:
- 10 A 1/3 HP 120 VAC
- 10 A 1/2 HP 240 VAC
- 10 A 30 VDC

All statements, technical information and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof are not guaranteed. In accordance with Crouse-Hinds "Terms and Conditions of Sale", and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability whatsoever in connection therewith.