

EDWARDS SIGNALING

Installation Instructions for Catalog Numbers B-8313, B-8315, B-8316, B-8319, B-8320, B-8322, B-8323 and B-8325 Mechanical Telecode Relays

- These devices are intended for connection to single line telephone or key systems only.
- When installed in accordance with these instructions, the devices can be readily disconnected without affecting equipment remaining on the telephone network.
- Registered with the Federal Communications Commission in compliance with Part 68 of FCC Rules and Regulations.
- UL Listed Type NM (non-monitored) signal device

Description

The Edwards mechanical telephone relays are designed for use with horns, bells, strobes, or similar devices to create remote telephone ringing capability in areas where ambient noise levels are high or personnel are unable to be near telephones at all times. The relays can operate up to five vibrating-type horns, buzzers, and bells and do not affect the efficiency of the phone. The panel mount, pressed steel and Hazardous Location units are UL Listed for indoor use and the weatherproof units are UL Listed for outdoor use.

The panel mount unit has a steel cover on a 4 1/4" diameter bakelite base. The pressed steel unit has a hinged steel cover and 1/2" and 3/4" knockouts. The weatherproof unit has a cast back box with a threaded joint for a cast aluminum enclosure. The Hazardous Location unit has a cast box with a dust tight, flame proof joint, and is tapped for 1/2" conduit. The Hazardous Location unit is UL Listed for Class I, Group D and Class II, Groups F and G.

Important Telephone Information (Applies only to units with capacitor)

The following information may be required by the telephone company: Telephone Number, FCC Registration Number: 329USA-21458-RG-N, Ringer Equivalence Number (REN): 3.4B.

The REN allows the installer to determine the number of devices that can be added to the telephone line and still have all the devices ring when the number is called. In most, but not all, areas, the sum of all RENs for all devices connected to your line should not exceed five. To be sure of the number of devices you can connect to your telephone line, contact your local telephone company.

If these devices damage the telephone network, the tele-

phone company will notify the owner that it may temporarily disconnect service if they consider such action necessary. If the owner considers the disconnection unwarranted, they have the right to bring a complaint to the FCC.

The telephone company may make changes in its communication facilities, equipment, operations, or procedures when such action is required. If these changes render the devices incompatible with the telephone company facilities, the telephone company will provide enough written notice so that necessary changes can be made in order to maintain uninterrupted service.

Specifications

DC Coil Resistance (ohms)	Standard Telecode Relays		
	With Capacitor		Without Capacitor
	V AC	V AC	V DC
1000	100-115	105-115	18
1600	140-170	170-200	24
2500	200-230	200-230	30
3000	220-277	220-277	40

Cat No.	Description
PANEL MOUNT UNITS	
B-8313-P-1000*	Without Capacitor, Normally Open
B-8325	One Mfd. Capacitor with Bracket
PRESSED STEEL UNITS	
B-8315-P-1000*	Without Capacitor, Normally Open
B-8316-P-1000*	With Capacitor, Normally Open
WEATHERPROOF UNITS	
B-8322-P-1000*	Without Capacitor, Normally Open
B-8323-P-1000*	With Capacitor, Normally Open
HAZARDOUS LOCATION UNITS	
B-8319-P-1000*	Without Capacitor, Normally Open
B-8320-P-1000*	With Capacitor, Normally Open
NOTE: Units with capacitors are FCC certified. *1600, 2500, and 3000 ohm coils available. To order, change 1000 in Cat No. to appropriate resistance.	

Two shading coils prevent armature chatter. Relay coil windings are rated in ohms. Wire size and number of turns vary with resistance requirements.

Capacitance of units is 1 uF at 400V, except panel mount units which require remote capacitors. AC relays and relays used on common battery circuits require capacitors. DC relays do not require capacitors unless energized by a common battery.

Contacts are made from tungsten and are rated at .8 amps at 110V DC.

Connection to Communications Circuits

Cat. Series B-8313, B-8315, and B-8316, B-8319 and B-8320, and B-8322 and B-8323 are intended for installations where one of the following conditions apply:

- The product is electrically isolated from cable extending outside the building.
- Cable that this product is not electrically isolated from is not outside a building for more than 1000 meters and is in conduit that is buried underground in a trench has been separated from power lines.
- The product is installed as a component of a communications system network that is (i) UL Listed to UL 1950 or CSA Certified to C22.2 No. 950 (as deemed acceptable to the authorities having jurisdiction) and (ii) installed according to the applicable Listing and/or Certification.

Cat. Series B-8319, B-8320, B-8322 and B-8323 are also intended for installations where the product is not isolated from cable outside the building and either the product itself or the communications system network that the product is part of is protected by Protectors that (i) limit cur-

rent energy to no greater than 100 A²-s and limit current to no greater than 1.3A and (ii) are UL Listed to either standard UL 497A or CSA Certified to C22.2 No. 226 (as deemed acceptable to the authorities having jurisdiction). The enclosures of the B-8319, B-8320, B-8322 and B-8323 series are Fire Enclosures as defined in UL Standard 1950, *Safety of Information Technology Equipment*, that can be opened by turning the threaded cover counterclockwise to loosen and remove or closed by turning the threaded cover clockwise to tighten and secure.

Installation



WARNING

Do not connect units without capacitor to telephone lines.

See Figures 2 through 4 for relay dimensions.

- Refer to Table 1 for voltage selection.
- Wire telephone line to relay as shown in Figure 1.
- Verify operability of mechanical relay.

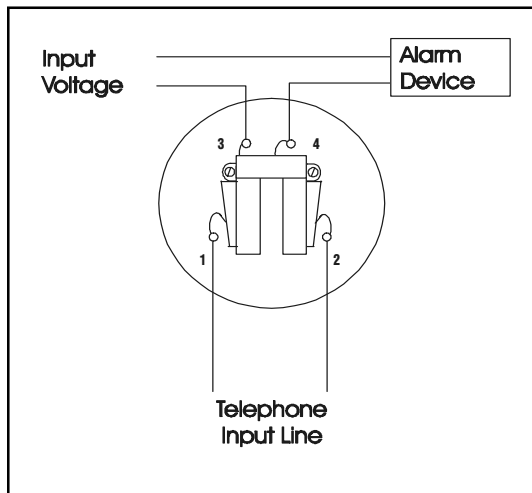


Figure 1. Wiring Diagram
(Screw terminals accept 26-12 AWG wire size)

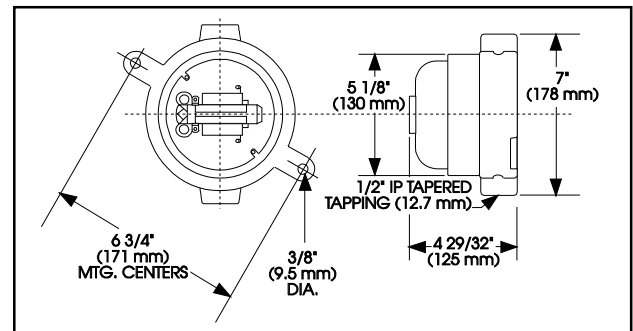


Figure 2. Weatherproof and Explosion Proof Units

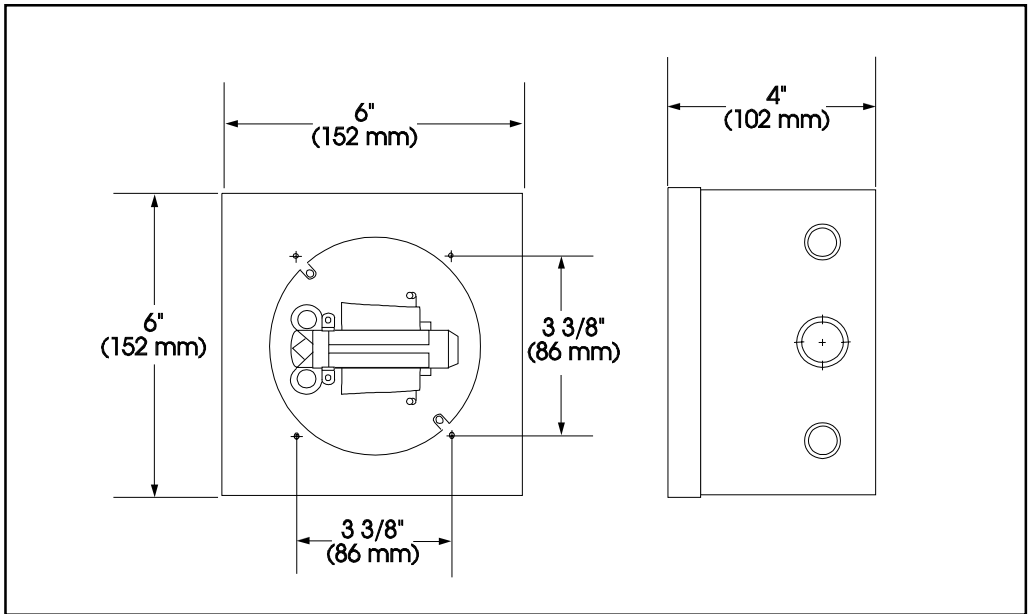


Figure 3. Relay in Pressed Steel Enclosure

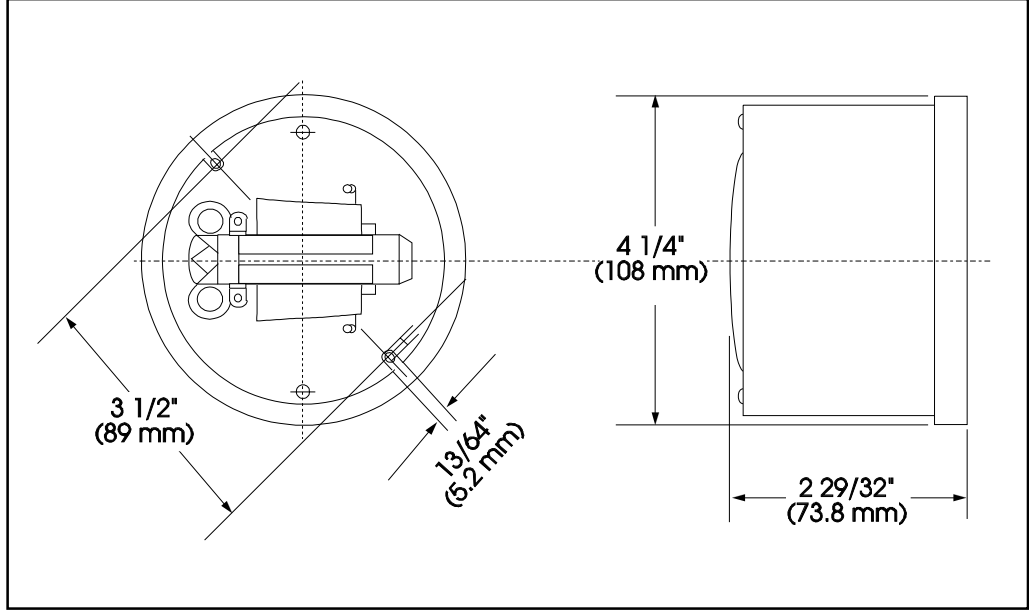


Figure 4. Panel Mount Relay

P-047550-1616 OFFSET SPEC

INSTALLATION INSTRUCTIONS FOR B-8313, B-8315, B-8316, B-8319, B-8320, B-8322, B-8323 and B-8325 MECHANICAL TELEPHONE RELAYS

(1) 11 X 17" SHEET PRINTED BOTH SIDES. FOLD THREE TIMES TO DIMENSIONS SHOWN WITH PART NUMBER ON THE OUTSIDE.

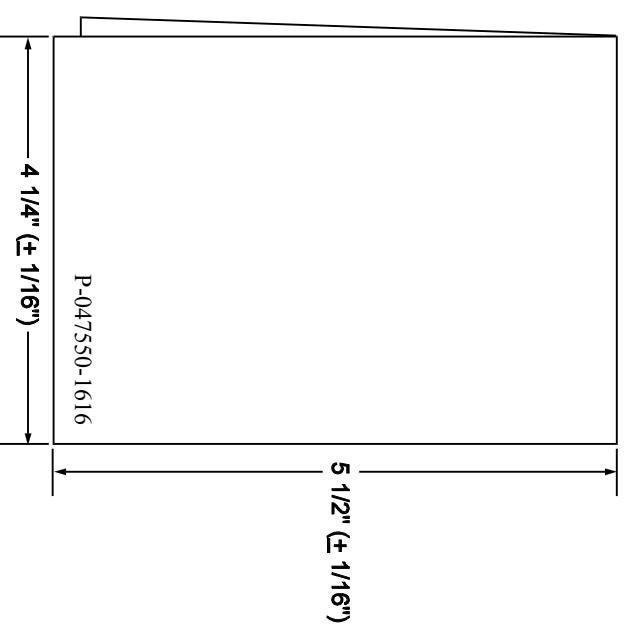
MATERIAL: STANDARD WHITE OFFSET STOCK

CHARACTERS: TO BE BLACK ON WHITE BACKGROUND

NOTE: MECHANICALS HAVE ALREADY BEEN REDUCED TO ACTUAL SIZE.

RETURN MECHANICAL TO:
TECHNICAL WRITING
EDWARDS SIGNALING
90 FIELDSTONE COURT
CHESHIRE, CT 06410

ECO: 01-C1533
FILENAME: FCH304
ISSUE: 3
APPROVAL: GM



FOLD DETAIL REFERENCE ONLY