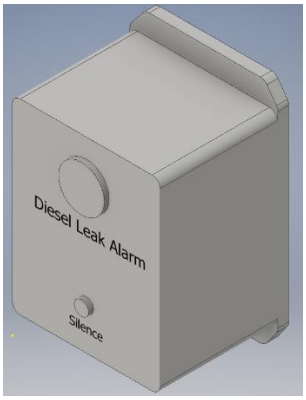
TRM Sensors LLC Data Sheet

TRM Remote Alarm Type-RO

Remote Buzzer with Output Relay Contacts



Product Description

The TRM Remote Alarm Type-RO is designed to work with TRM Relay Units Type CV and Type DA or any switched source of 12 Vdc. The Remote Alarm features a 95 dB sound alert and a relay controlled, dual set of Form-C relay contacts that can be used to daisy chain additional remote alarms or as a signal to Building Management Systems, PLCs or similar monitoring equipment.

When 12 volts is applied to the Remote Alarm (as for instance when a TRM sensor probe and TRM Relay Unit detect a fuel leak), a red lighted pushbutton switch illuminates and the buzzer begins sounding. Additionally, a relay with dual Form-C contacts (Normally Open, Common, Normally Closed) is energized and remains active until the 12Vdc is switched off. Pushing the red button acts as a local SILENCE switch, but the red lighted switch remains illuminated. Resetting the source of the 12 Vdc (as for instance when a leak detecting sensor is cleared), both the red lighted switch and the relay return to the off condition and the Remote Alarm resumes its normal standby condition.

Key Features

- Loud (95 dB) audio alarm suitable for security stations, control rooms or similar staffed locations.
- SILENCE push button that illuminates with red LED and stays illuminated as long as 12 Vdc is present
- Dual Form-C relay contacts rate at 250 Vac/10A
- Zero power consumption in standby mode
- 1.1 watts maximum power consumption

Product Specifications

- Power Source: 12 Vdc +/- 10% switched by monitoring device. (e.g. TRM Relay Unit)
- Current / Power consumption @ 12 Vdc:
  - 0 Ma / 0 W when in standby mode
  - 90 mA / 1.1 W when in alarm mode with Buzzer silenced
- Two wire connection to signaling device, polarity sensitive. Recommended connection is 12 Vdc voltage source switched by ALARM relay of TRM Relay Unit Type-CV or TRM Relay Unit Type-DA
- Sound level: 95 dB @ 30 cm with 12 Vdc applied
- Red lighted pushbutton switch acts as local SILENCE button. After button push, buzzer remains latched off until 12 Vdc is switched off and Remote Alarm returns to standby mode
- Red light in pushbutton remains ON as long as 12 Vdc is present at input terminals
- Dual Output Relay Contacts: Alarm relay energizes when 12 Vdc is applied to the Remote Alarm and relay remains energized as long 12 Vdc is applied (pushbutton has not impact on relay status)
- Relay Contacts
  - Dual Form-C (Normally Open, Common, Normally Closed)
  - Rating: 250 Vac / 10A
- Weight: Approx. 12 oz. (340 gm)
- Dimensions:
  - W: 3.5 in (89 mm)
  - H: 5.75 in (146 mm) – including flange
  - D: 3,5 in (89 mm)- including button
- Built in mounting flange for surface mounting on wall surface.
- Operating Temperature range: -20C to + 70C

TRM Sensors LLC Remote Alarm Type-RO

Installation and Wiring

Installation:

1. Install TRM Remote Alarm Type-RO in a location where the buzzer will be heard by the facility staff
2. The Type-RO enclosure is designed for surface mounting on a wall surface. A flange is built into the unit enclosure. Select mounting hardware (installer supplied) appropriate to the wall surface.
3. Remove cover (4 captive screws) and allow cover to hang from its inter-connecting cable.
4. Feed two wire cable from remote actuating device through the cable gland at the base of the unit and connect per the wiring diagram.
5. If the output relay will be used to control additional remote alarms or to signal a Building Management System, plan for and drill holes for additional conduit or cable glands (supplied by installer). In some installations, the cable supplying the 12 Vdc alarm actuation voltage may have additional spare conductors that can be used to carry voltage or relay contact status without having to add additional cable glands or conduit connections.
6. Replace cover, being careful to not pinch the inter-connecting cable

Wiring

1. Connect 12 Vdc actuating signal to the two position terminal block. **This connection is polarity sensitive, Observe polarity marking on the circuit board.** The 0V wire should be returned to the negative terminal of the power supply that is being used to energize the TRM Relay Unit Type-CV or TRM Relay Unit Type-DA. +12 Vdc sourced from the power supply will be switched through the Common and Normally Open relay contacts of the Relay Unit, then on to the +12V terminal of the Remote Alarm. In this configuration, a leak detection will activate the relay in the TRM Relay Unit Type CV or Type DA and thus switch on the 12 Vdc supply to the Remote Alarm.
2. Connection of external devices to the output relay is optional.
3. There are two independent sets of contacts that are activated by the same relay coil. This configuration is often designated as DPDT (double pole, double throw) or as dual Form-C. Each set of contacts has a Normally Open, Common and Normally Closed terminal for a total of six terminals. The installer is free to use these contacts in any way. Do not switch voltages higher than 250 Vac or current loads greater than 10A.
4. In some installations, the user may want to take advantage of the dual relay contacts but always silence the buzzer function. To permanently silence the buzzer, cut the green wire in the inter-connecting cable.