

#### Features:

- ► Intrinsically Safe-Thermocouple Temperature Sensors
- ► Two Digital Displays One for Temperature One for Location
- ► Rapid Automatic Scanning of 16 or more Monitcred
- ► Log Sheets Included for Maintenance Records
- ▶ Built in Alarm with Machinery Shut-Down Capability
- ▶ Double Insulated Housing Rated for Class 2, Div. 2, Groups F & G
- Optional Belt Alignment Sensors and Remote Annunciator

### **Description:**

The Model ES-16 Bearing Temperature Monitor is a complete System for tracking bearing temperature at regular intervals, sounding an alarm at a predetermined temperature set-point or even shutting equipment down when an elevated temperature is detected. Bearing failure or belt misalignment can now be detected long before it severely affects your operation.

## **Principle of Operation:**

The ES-16 Bearing Temperature Monitor is designed with safety in mind as it continuously scans and monitors

machinery temperature at 16 critical points, alarming the user if any point exceeds a predetermined set-point temperature. The reliable non-powered thermocouples sensor probes included with the system are placed in close proximity to the bearings in the typical conveyor or elevator. The control unit scans each probe location and continuously updates the machinery operator with digital temperature readings by location. The probes can quickly sense the rise in temperature in a bearing due to lack of lubrication, overloading or other problem. When a temperature above the set point is detected at the control unit, a red warning light illuminates and the panel meters lock on to the location of the problem and temperature at that point. A loud siren also sounds instantaneously to alert the operator. The alarm can then be silenced and the offending machinery attended to or shut down manually or automatically utilizing the control units built in S.P.D.T. dry relay contacts.

The ES-16 System also has optional brass rub plate sensors to detect belt misalignment. They utilize a similar type of thermocouple sensor embedded into the back of a brass plate. The brass rub sensor is 11/2" wide x 4" long and is designed to be mounted at the head and tail sections on each side of an elevator leg or conveyor. If the belt should stray out of alignment it will rub on the sensor, instantly generating heat which causes the control unit to annunciate an alarm condition.

ELECTRO . SENSORS

## Electro-Sensors, 16 Point Bearing Temperature Monitor, ES-16

#### Specifications:

Power Requirements ......120 Vac ± 10%, 60 Hz

Power Consumption . . . . . . . . 25 watts

Relay Output ......1-SPDT, 3 Ampere Form C

Contact

Input Signal ......Type T Thermocouple

Input Channels ......16

Indicator Lamps ...... Power on lamp & Alarm lamp

Enclosure ..... Double insulated fiberglass rated NEMA/CEMA 1,2,3,3R,3S,4,4X,12

Enclosure Dimensions . . . . . . Height: 12.5 inches

Width: 12.5 inches Depth: 8.0 inches

#### **Remote Alarm System**



- Installs In Minutes
- Fail-Safe Design
- Unlimited Application Possibilities
- Simple Remote Monitoring of Critical Processes
- ► Special Circuitry to Prevent Nuisance Alarming
- Wireless, Transmits Signal Using Existing Electrical Power Wiring as the Signal Carrier
- Guaranteed for One Year

## **Description:**

The Remote Alarm System provides economical and reliable "wireless" remote alarming for a wide variety of applications. The Remote Alarm is built to heavy-duty industrial standards and installs in minutes. It transmits and receives control signals over existing power lines, eliminating the need for new interconnecting conduits or wires. Remote monitoring of critical systems such as temperature alarms, speed switches or any process requiring supervision is now a simple procedure. Any number of transmitters may be used to monitor various locations notifying a single receiver of an alarm condition. It can also be used for remote control.

Installation does not have to be permanent and may be moved from process to process as seasonal operations may require. The alarm receiver may be connected to any audible or visual warning device or simply act as a control relay with dry contacts. The transmitter located at the process site is actuated by a contact closure from any type of process monitor such as a motion switch, etc.

## **Specifications**

#### Monitor:

Power Requirements ...........120/240/277Vac  $\pm$  10%, 60Hz,

200mA

Operating Temperature Range ... - 20°F to 140°F

10Amp, 277Vac

**Remote Transmitter:** 

Power Requirements ...........120/240/277Vac  $\pm$  10%, 60Hz,

200mA

Requirements to Actuate

# **Dimensional Drawings:**



