

Fireye SENTRYP[®] System Indicator 53SE3

53SE3 Model 1000
UL Recognized Component
Class MJAT2 File MH10808

Year 2000 Compliant in accordance with BSI document DISC PD2000-

DESCRIPTION

Sentryp-53SE3 system indicator is a versatile and compact twelve point “first out” fault annunciator which monitors the operation of commercial/industrial fuel burner systems or industrial process systems. Sentryp-53SE3 detects which of the twelve interlock switches are not closed during a start-up, and also which one opens first. If more than one interlock switch opens, Sentryp-53SE3 will annunciate the first one and when corrected, it will annunciate the second one. The “first out” annunciator utilizes solid state electronics for reliability and optical couplers for isolation. It connects directly to the interlock circuit being monitored, separate switches are not required. An integral five second delay is included to allow time for the interlock circuit to close on each start-up.

Sentryp-53SE3 includes an alarm circuit which is powered following a “first out” trip. Manual reset is required.

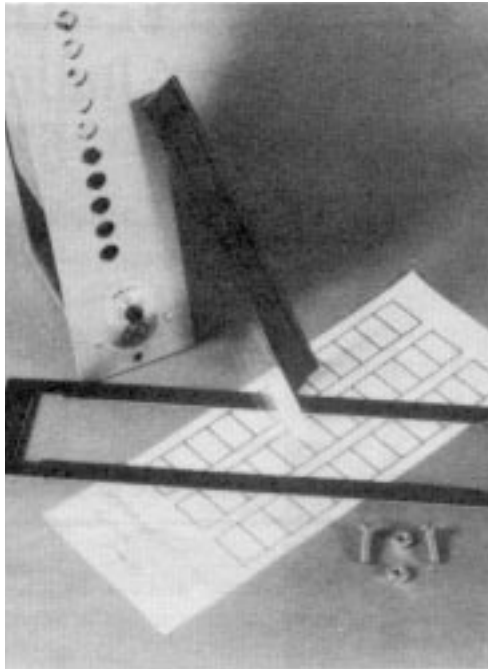
Sentryp-53SE3 has an attractive brushed aluminum finish, is designed for flush mounting, and is gasketed. A self adhesive nameplate strip is provided for the identification of each function. Sentryp-53SE3 may be permanently installed on a control panel, or used as a portable service tool.

The problem solving Sentryp-53SE3 provides operational information and reduces trouble-shooting time and expense. Contact any sales office of Fireye, Inc. for assistance with non-standard applications.

SPECIFICATIONS

Supply:	Model 1000 - 102 to 132V 50/60Hz.
Power Consumption:	2 VAC (excluding alarm)
Alarm Contact Rating:	125 VA Pilot Duty
First out indication:	LED (Red)
Ambient Limits:	Min. 25°F (-4°C), max. 125°F (52°C)
Humidity:	90%, non-condensing (max.)
Response Time:	16 milliseconds
Weight:	2 lbs. (900g)

INSTALLATION



The 53SE3 installs in a panel surface or on the front surface of an enclosure. The unit may be mounted in any position because there are no parts affected by gravity. Total power consumption of the device is less than 2 watts so very little heat is generated. A mounting kit is supplied with each unit, containing the following items:

Item	Qty.	Description
1	1	10-32 Mounting Screw
2	1	Neoprene Gasket
3	1	Label Holder
4	2	Label form (3 labels each)
5	1	Label Window

The Neoprene Gasket may be used for sealing between the front plate of the 53SE3 and the panel surface on which it is mounted. It is not necessary to use the gasket if sealing is not required. The plastic nameplate holding strip supplied is furnished with a self-adhesive strip on the back. The nameplate strip is positioned on the 53SE3 front plate so that the printed label aligns with the indicators. The name-

plate information is typed on a label within the printed guidelines, and after typing, the label strip is cut along the printed outline. The protective vinyl window and the typed nameplate strip are both slid into the plastic holder to complete the assembly.

OPERATION

SENTRYP-53SE3 provides the following operation when installed according to these instructions:

1. When power is applied to terminals L1, L2, a five-second delay is initiated to permit time to close all the interlock switches, and to accommodate any switches that bounce when they close.
2. Following the delay period, the Sentryp-53SE3 will annunciate any interlock switch that is not closed at that time, or opens at a later time. Annunciation is on a "first out" basis. Following any "trip," the alarm circuit is energized.
3. If more than one interlock switch is open, Sentryp-53SE3 will annunciate the one closest to the L1 supply first, and when that condition is corrected, it will annunciate the second one.
4. Manual reset is required following any trip. It may be accomplished by depressing the reset button, or by removing power from terminals L1, L2.

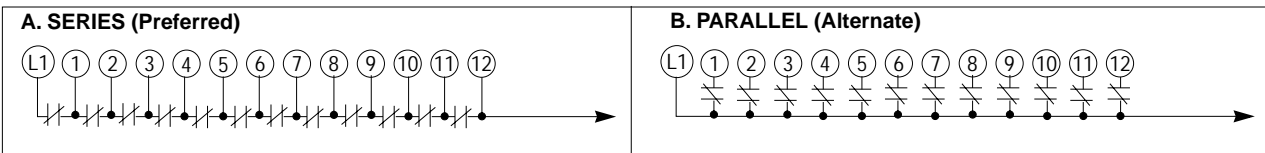
ACCESSORIES

The following parts are not supplied with the 53SE3 but are useful for some installations.

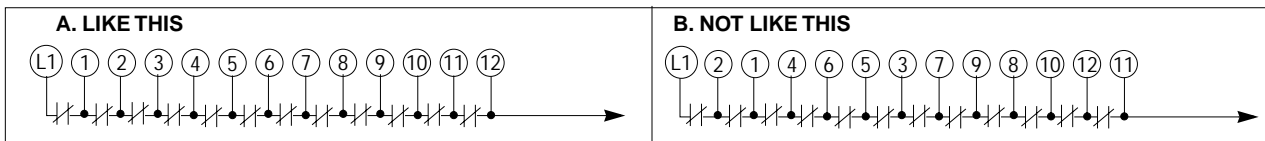
1. Weatherproof boot for reset switch. Fireye P/N 33-414.
2. Engraving plate-Fireye P/N 3-1705. This blank engraving plate is 1/16" thick. It matches the front plate of the 53SE3 and is mounted by the two 10-32 mounting screws of the 53SE3. The locknut for the reset switch must be removed to mount the plate and then replaced.

WIRING

1. The interlock switches may be connected in a series string (preferred), or in parallel. However, they must all be connected in a circuit that has the same supply as **L1, L2** of the 53SE3.
2. When interlock switches are wired in parallel, if two or more open simultaneously, or are open when the unit is first powered or reset, it is possible that Sentryp will annunciate both functions. A delay of 30 milliseconds between the opening of two switches will assure that only one function will be annunciated.
3. Jumper any unused interlock circuit.



4. When the interlock switches are connected in series, the first switch must be connected between terminals L1 and 1, the second switch between terminals 1 and 2, and so on. If the first switch is connected incorrectly between terminals L1 and 2, and the second switch connected between terminals 2 and 1 and so on, the annunciator will not operate correctly.



WIRING DIAGRAMS

FIGURE 1. Typical Arrangement for a Sentry 53SE3 Installation

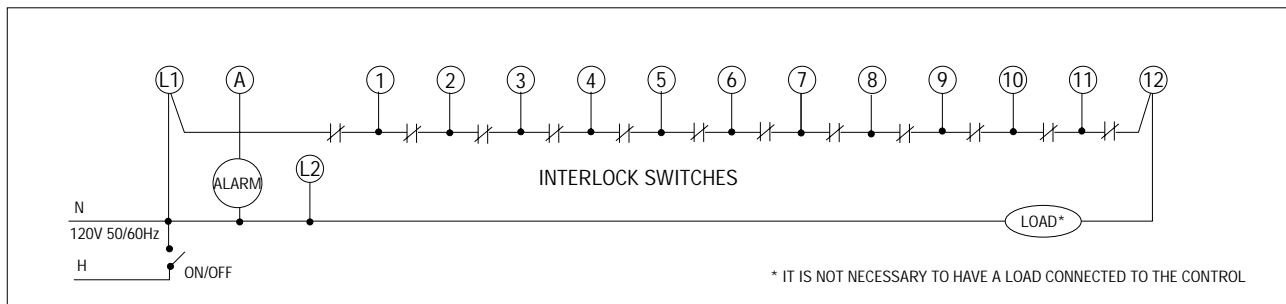




FIGURE 2. Typical Wiring Diagram for 2 System Indicators Type 53SE3 Connected for 24 Interlocks

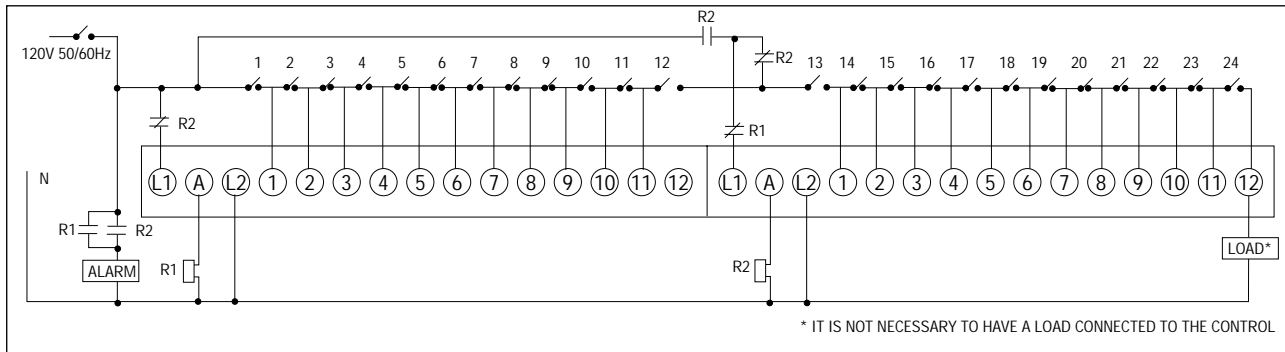
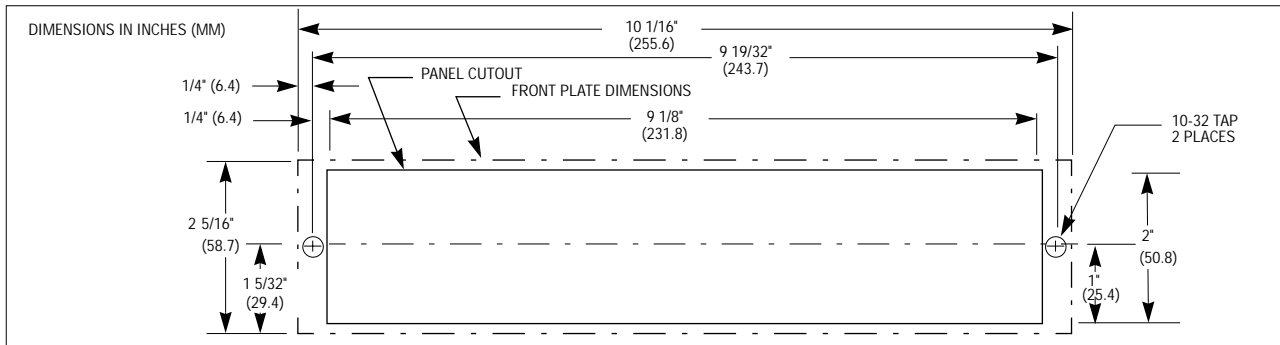


FIGURE 3. MOUNTING DIMENSIONS



NOTICE

When Fireye products are combined with equipment manufactured by others and/or integrated into systems designed or manufactured by others, the Fireye warranty, as stated in its General Terms and Conditions of Sale, pertains only to the Fireye products and not to any other equipment or to the combined system or its overall performance.

WARRANTIES

FIREYE guarantees for *one year from the date of installation or 18 months from date of manufacture* of its products to replace, or, at its option, to repair any product or part thereof (except lamps, electronic tubes and photocells) which is found defective in material or workmanship or which otherwise fails to conform to the description of the product on the face of its sales order. **THE FOREGOING IS IN LIEU OF ALL OTHER WARRANTIES AND FIREYE MAKES NO WARRANTY OF MERCHANTABILITY OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED.** Except as specifically stated in these general terms and conditions of sale, remedies with respect to any product or part number manufactured or sold by Fireye shall be limited exclusively to the right to replacement or repair as above provided. In no event shall Fireye be liable for consequential or special damages of any nature that may arise in connection with such product or part.



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