DC-9404(IS)
Intrinsically Safe Conventional Sounder
DC-9403(IS)
Intrinsically Safe Conventional Sounder Strobe

Features

✧ High bright red LEDs are used as light source.
✧ Sound level: 85dB (A weighted, 3m in front).

Description

DC-9404(IS) Intrinsically Safe Conventional Sounder and DC-9403(IS) Intrinsically Safe Conventional Sounder Strobe (hereinafter called the sounder/sounder strobe) is a kind of audible/audible and visual alarm device used to warn people in field when fire occurs. It's applicable to zone 1 and zone 2 of areas with explosion-proof requirement in petroleum and chemical industries. It can match with I-9333 Interface.
Base with 25.5mm high are available.

Connection & Wiring
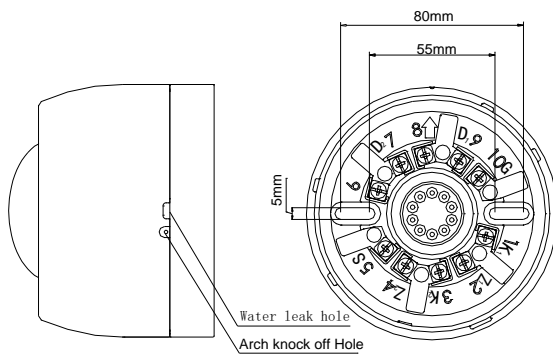
Terminals on the base are shown in Fig. 2.

Fig. 1   Fig. 2

D1+ (9), D2- (7): Connected with I-9333 Interface, polarized.
Intrinsic Safety Parameters for D1/D2: U_i=28V，I_i=93mA，C_i=0，L_i=0，P_i=0.65W
D1 is connected with (3) of the safety barrier and D2 to (4).

Recommended Wiring

Intrinsically safe cable with cross section not less than 1.5mm^2, subject to local codes.。

Installation

Warning: Before installing the device, disconnect the power from the loop.

✧ Before installation, make sure the enclosure is in good condition and marking complete.
✧ When the sounder/sounder strobe is surface mounted, it should be placed 0.2m from the ceiling for normal space height. When conduit is embedded, the base can be mounted on the electrical box. Its mounting method is shown in Fig. 3. Water leak hold should installed downward.
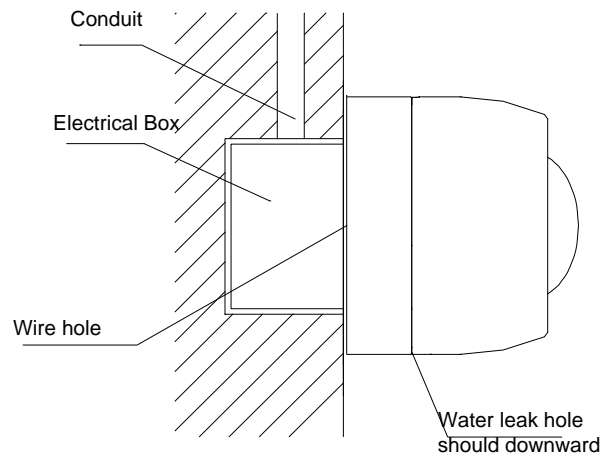

Fig. 3

✧ The base and the sounder/sounder strobe are twisted together. When mounting, remove the sounder strobe, thread cables through the cable entry in the base and connect with corresponding terminals, then twist the sounder/sounder strobe onto the base.
✧ If the sounder/sounder strobe is required anti-removal, knock down the arch knock-off hole as shown in Fig. 1 and fix it with ST2.9×6.5 tapping screws (in this case, it must be removed by a special tool).

Application

The sounder/sounder strobe can match I-9333 Interface to form an intrinsically safe system. The system wiring is shown in Fig. 4.
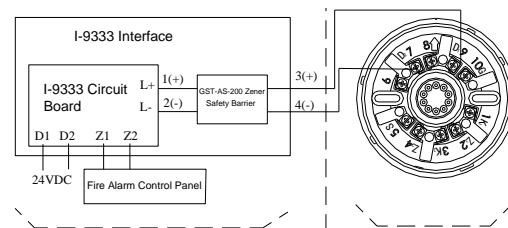

Fig. 4

Cautions

1. I-9333 Interface should be installed in safety area, the wires of "Safety Area" should be separated from those of "Hazardous Area", and be kept a certain distance (at least 50mm).

2. The safety barrier should be well grounded. The screws should not be loose. Ground resistance should not be over 1Ω. The parameters assigned in the intrinsically safe loop should not be over the specified value, that is, the capacity assigned among cables should not be over 0.083μF, the inductance assigned not over 4.1mH.

3. During maintenance, products passing the explosion-proof test should not be replaced and parts and structure affecting explosion-proof functions should not be modified.

Limited Warranty

GST warrants that the product will be free from defects in design, materials and workmanship during the warranty period. This warranty shall not apply to any product that is found to have been improperly installed or used in any way not in accordance with the instructions supplied with the product. Anybody, including the agents, distributors or employees, is not in the position to amend the contents of this warranty. Please contact your local distributor for products not covered by this warranty

Specification

Power Loop voltage when activating	24VDC（16VDC～28VDC）
Power Loop voltage in standby state	7VDC（5VDC～8VDC）
Standby current	≤5mA
Active current	≤50mA
Wiring	Polarized two-wire with I-9333 Interface
Sound Level	Sound level: 85dB~115dB (A weighted in 3m front).
Flashing Frequency	1.4×(1±20％)Hz（DC-9403(IS)）
Tone Modification Period	0.7s±20％
Explosion-proof marking	Exib ⅡCT6 Gb
Explosion-proof Certificate Number	CE17.2192 (DC-9404(IS)) CE17.2190 (DC-9403(IS))
Security Barrier Parameters GST-AS-200	$U_0＝28V$, $I_0＝93mA$
Ingress Protection Rating	IP33
Operating Temperature	-10℃～+55℃
Relative Humidity	≤95%, non condensing
Application	Indoor
Material and Color of Enclosure	ABS, red. $10^7\Omega$≤surface resistance≤$10^9\Omega$, plexiglass in front
Dimension (D×H)	φ110mm×95.9mm
Mounting Hole Spacing	55mm～80mm
Weight	DC-9404(IS)：About 312.2g DC-9403(IS)：About 322.2g

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This Data Sheet is subject to change without notice. Please contact GST for more information or questions.