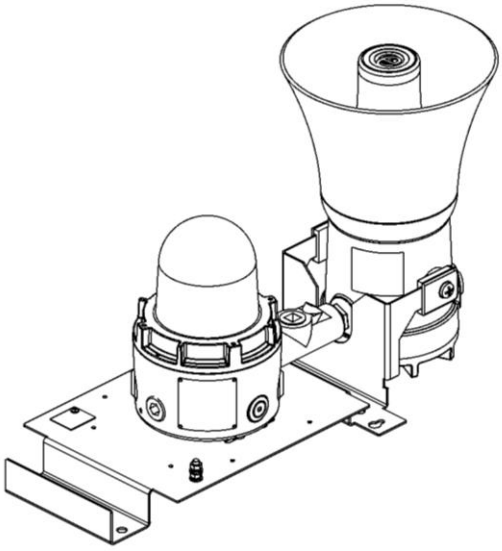
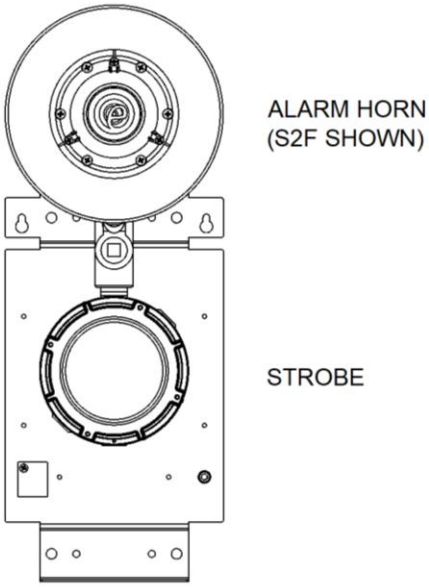
INSTRUCTION MANUAL
D1xCF Combined Horn Strobe for Fire Alarm in Explosionproof Areas





1) Warnings

Please see individual product instruction manual. See Table 1 for Instruction Manual Document Number.

2) Rating & Marking Information

Please see individual product instruction manual. See Table 1 for Instruction Manual Document Number.

All individual unit ratings must be suitable for the installation.

3) Type Approval Standards

Please see individual product instruction manual. See Table 1 for Instruction Manual Document Number.

4) Installation Requirements

Please see individual product instruction manual. See Table 1 for Instruction Manual Document Number.

5) Special Conditions of Use

Please see individual product instruction manual. See Table 1 for Instruction Manual Document Number.

Component Part Code Reference	Component Description	Document Number
D1xB2XH1	UL1971 Xenon Strobe – 10 Joules	D191-00-261-IS
D1xB2XH2	UL1971 Xenon Strobe – 21 Joules	D191-00-251-IS
D1xS1F	UL464 Alarm Horn – 115dB(A)	D190-00-001-IS
D1xS2F	UL464 Alarm Horn – 123dB(A)	D190-00-101-IS

Table 1: Product Instruction Manual Reference

6) Part Coding

Part Code:	Identifier - Description
Product Type	D1xCF - Combined Horn Strobe
Strobe Type	6C - D1xB2XH1* 86.37cd Xenon Strobe 7C - D1xB2XH2* 190.00cd Xenon Strobe * Clear lens only, no guard
Alarm Horn	S1F - D1xS1F Alarm Horn 106dB(A) @ 10ft S2F - D1xS2F Alarm Horn 111/114dB(A) @ 10ft
Cable Entries [e]	M - 1 x 3/4" NPT + 1 x M20x1.5mm – Default B - 2 x 1/2" NPT (Adaptors) C - 1 x 3/4" NPT + 1 x 3/4" NPT (Adaptor) F - 1 x 3/4" NPT + 1 x 1/2" NPT (Adaptor)
Stopping Plug / Adaptor Material [m]	N - Nickel Plated Brass
Tag Material [s]	1 - 316 St/St Equipment Tag
	3 - 316 St/St Equipment Tag & Duty Label
Product Version [v]	C - UL/cUL/ULC Class I Division 1, Class I Zone 1
Product Option [o]	1 - Standard Wiring W - Special Wiring
Assembly Colour [x]	R - Red

7) Location and Mounting

The location of the Horn Strobe should be made with due regard to the area over which the warning signal must be audible/visible. They should only be fixed to surfaces that can carry the weight of the unit.

The D1xCF Combined Horn Strobe should be secured to any flat surface using six Ø7mm fixing holes in the mounting plate. See figure 1.

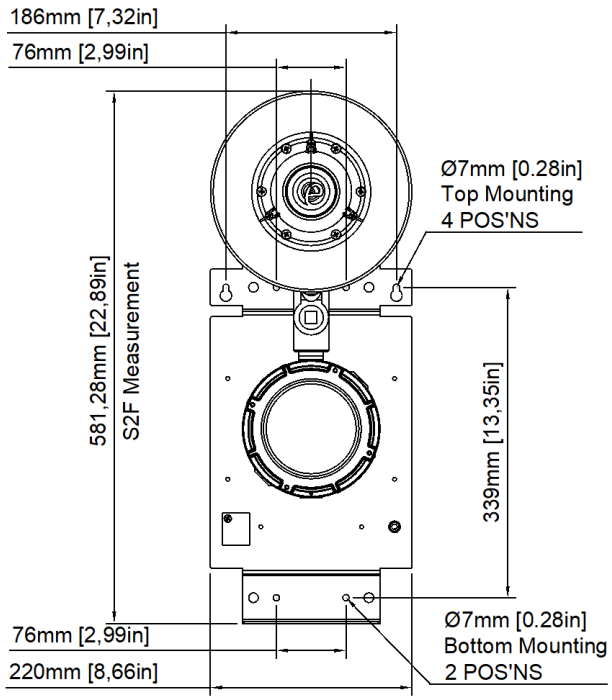


Fig.1: Mounting Detail and Dimensions for
D1xCF Combined Horn Strobe – S2F shown.

Alternatively, the unit can be pole mounted. For pole mounting detailed instructions, see drawing D226-00-025.

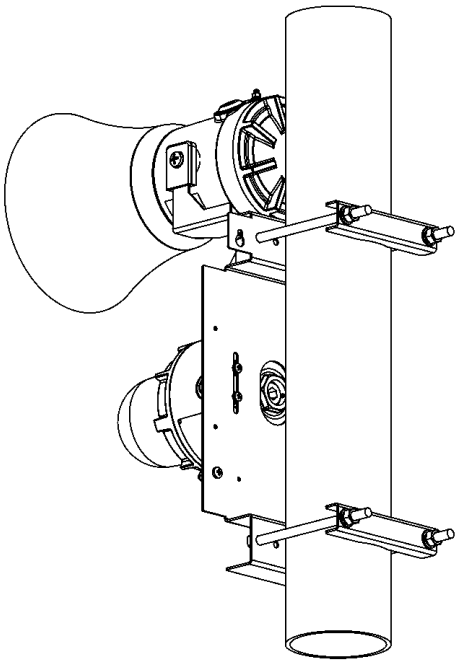


Fig. 2: Pole Mounted Stack - Max. Pole size NPS 4”
(OD: Ø114.3mm / 4.5in)

8) Access to the Enclosure



Warning – Hot surfaces. External surfaces and internal components may be hot after operation, take care when handling the equipment.

In order to connect the electrical supply cables to the Horn Strobe, it is necessary to open the explosion proof enclosure of the Strobe. Loosen the locking grub screw in the cover and then remove the glass dome cover assembly to gain access to the chamber. This can be achieved by unscrewing the glass dome cover, taking extreme care not to damage the threads when doing so.

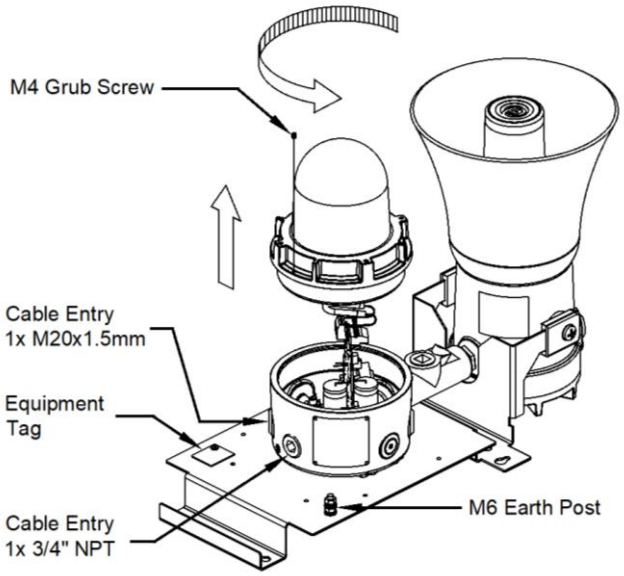


Fig. 3: Access to Enclosure, PCBA & Terminals.
Optional adaptor/s available for the cable entries described.

9) Power Supply Selection

For Voltage ranges of complete units, take the highest Minimum value and lowest Maximum value in the ranges of the component units. For Nominal Current ratings of complete units, add the ratings from the component units.

E.g. D1x[CF] [6C] [S1F]…:

Unit Type	D1xB2XH1	D1xS1F	**D1XCF Total**
Voltage Range	20-28Vdc	11.5-54Vdc	**20-28Vdc**
Nominal Current	635mA	185mA	**820mA**

Please see individual product instruction manual for Voltage Range & Nominal Current values.

10) Selection of Cable, Cable Glands, Blanking Elements & Adapters

Please see individual product instruction manual.

NOTE: Stopping plugs cannot be fitted into adaptors.

11) Earthing

The Horn Strobe is provided with an M6 earth screw on the mounting plate. Earthing connections should be made to the M6 earth screw, using a ring crimp terminal to secure the earth conductor.

Please see individual product instruction manual for details of earthing the Strobe and the Alarm Horn.

12) Cable Connections

Electrical connections are to be made into the terminal block and PCBA located in the Strobe. See section 8 of this manual for access to the enclosure. See also individual manuals for detail on wiring into PCBA terminals.

Electrical Connections are to be made using solid or stranded wire, sizes 0.5-2.5mm2 / AWG 20-14. Wire insulation needs to be stripped 6-7mm. Wires may be fitted securely with crimped ferrules. Terminal screws need to be tightened down with a tightening torque of 0.4 Nm / 3.5 Lbin.

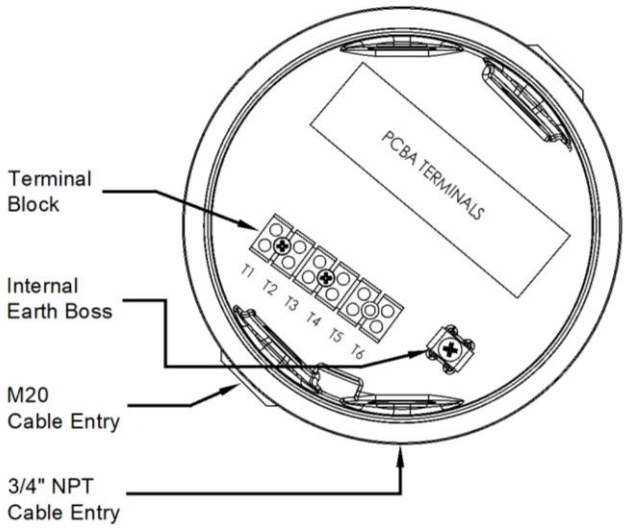


Fig. 4: Entry Unit - Strobe Internal Detail & Terminal Block

13) Wiring

Common Connection to All Signals (Default Configuration)

The Combined Horn Strobe is factory wired with common connections to both the Alarm Horn and the Strobe. When power is applied to the terminal block (see figure 4), the audible and visual signals will trigger simultaneously.

For wiring diagram, see schematic document D226-06-325.

For units with product codes where Product Option = W, please see special wiring schematic supplied with the unit documentation.

Independent Wiring to All Signals (Alternative Configuration)

Alternatively, independent wiring to the Alarm Horn and the Strobe can be achieved by removing the Linking Wires connected between the Strobe pcba and the terminal block in the base:

Unscrew T5 and T6 to remove one end of the Linking Wires (see Fig. 5.1). Tighten the screws after removing the wire.

Unscrew the other end of the Linking wires from the Strobe PCBA terminals. Tighten the screws after removing the wire.

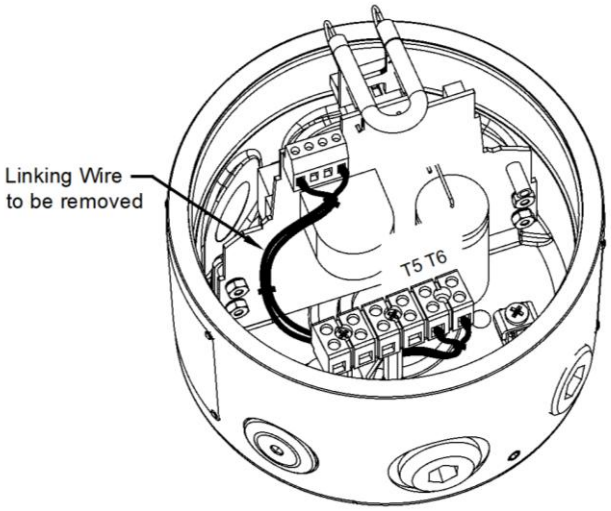


Fig. 5.1: Linking Wires removal for Independent Wiring

Cable connections to the Strobe are to be made directly into the PCBA terminals of the Strobe..

Cable connections to the Alarm Horn are to be made into T1/T2 and T3/T4 terminals of the terminal block in the base.

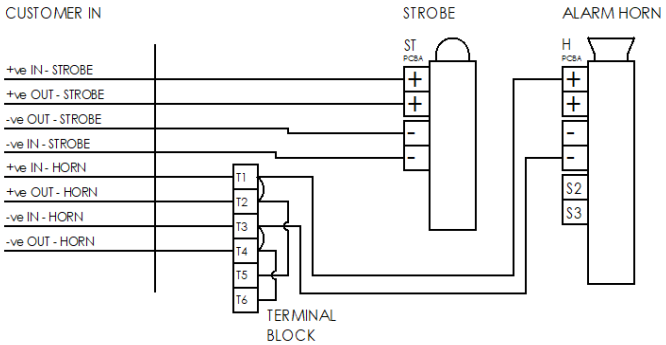


Fig. 5.2: Independent wiring schematic after Linking Wires are removed

14) Supervisory Resistors

Optional Supervisory Resistors can be installed in the Combined Horn Strobe, connected across the +ve and the -ve of the PCBA terminals.

For common connections to the Alarm Horn and Strobe signals (factory wiring), 1-off resistor can be installed in the Horn chamber.

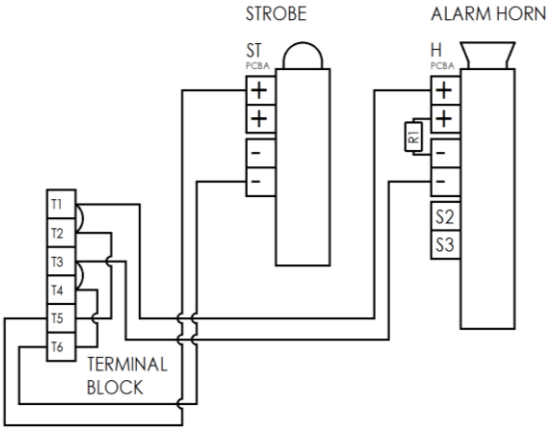


Fig. 6.1: Supervisory Resistor position for common connections to Horn and Strobe.

For independent connections to the Alarm Horn and Strobe signals (alternative wiring), 1-off resistor can be installed in each of the Horn and the Strobe chambers.

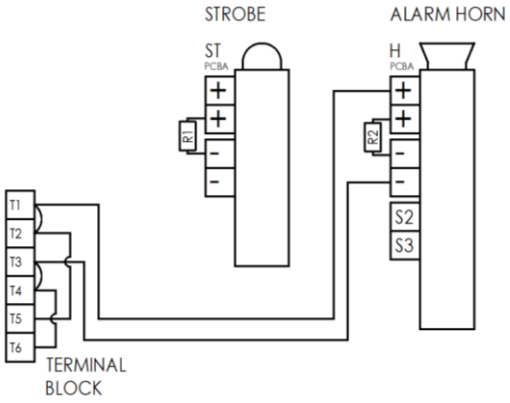


Fig. 6.2: Supervisory Resistor positions for independent connections to Horn and Strobe.

Refer to the unit instructions (see Table 1) for guidelines for access to enclosure and resistor installation.

Optional Supervisory Resistors must have a minimum resistance value of:

Minimum Resistance 3k3 ohms Minimum Power 0.5W
Minimum Resistance 500 ohms Minimum Power 2W

15) Alarm Horn Tone and Strobe Flash Pattern

The Horn Strobe is factory set to the following signalling configurations:

Horn set to tone 13, NFPA Temporal Code. See Alarm Horn tone table (D221-95-001-IS) for additional descriptions.

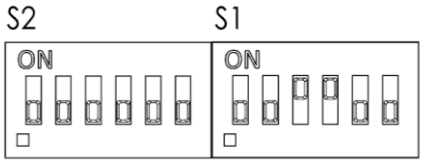


Fig. 7: Alarm Horn tone 13 DIP switch settings.

Strobe set to 1Hz flash pattern.

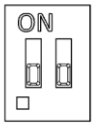


Fig. 8: Strobe 1Hz flash pattern DIP switch settings.

Refer to the individual instruction manual (list in Table 1) for additional descriptions.

16) Spare Parts

Optional duty label is available for the Strobe. See figure 9 for default factory arrangement with metal hex spacers.

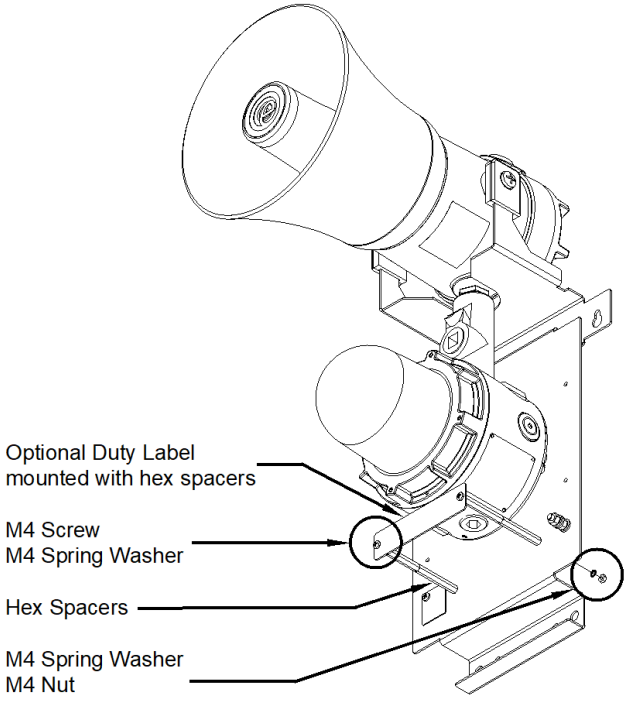


Fig. 9: Duty label assembly with hex spacers

As an alternative to the factory arrangement, the duty label can be flat mounted on the backplate. Shown in figure 8, unscrew the M4 fasteners and remove the metal hex spacers.

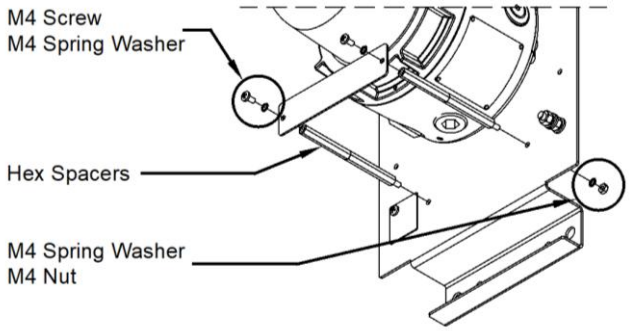


Fig. 10: Duty label disassembly

Fit the duty label flush to the backplate with the M4 screws and spring washers inserted into holes. Place spring washers over the spacer threads on the underside of the plate and tighten the M4 hex nuts fully.

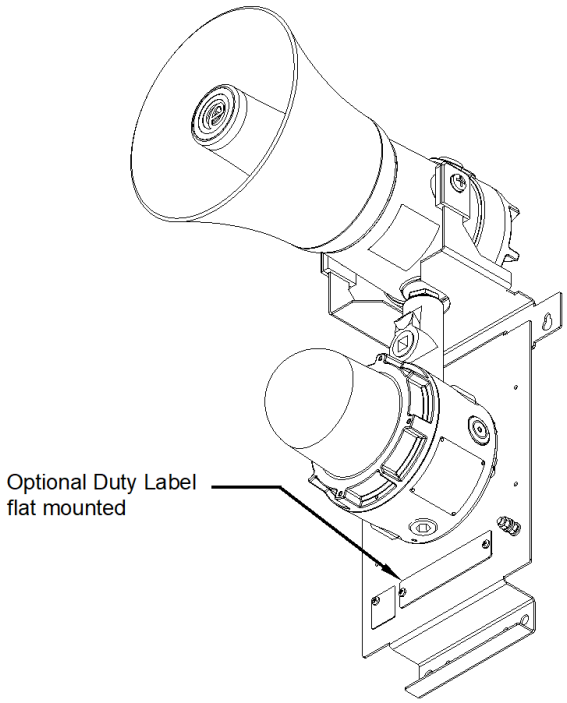


Fig. 11: Duty label flat mounted

17) Maintenance, Overhaul and Repair

Please see individual product instruction manual. See Table 1 for Instruction Manual Document Number.

ISSUE	MOD No.	REASON - INITIAL - DATE
1		Introduction. MA - 08/04/2025

E2S PART NO
D1xCF[XX][SXX]

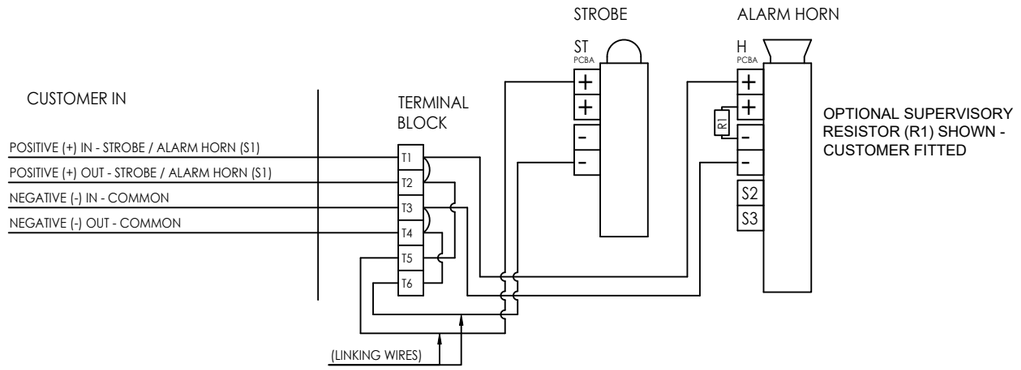
DESCRIPTION
D1xCF COMBINED HORN STROBE FOR FIRE ALARM IN EXPLOSIONPROOF AREAS

Note: Alternative wiring configurations may be available on request - contact E2S sales

CONFIG. 1

24 VDC VOLTAGE SUPPLY

STROBE AND ALARM HORN STAGE 1 LINKED



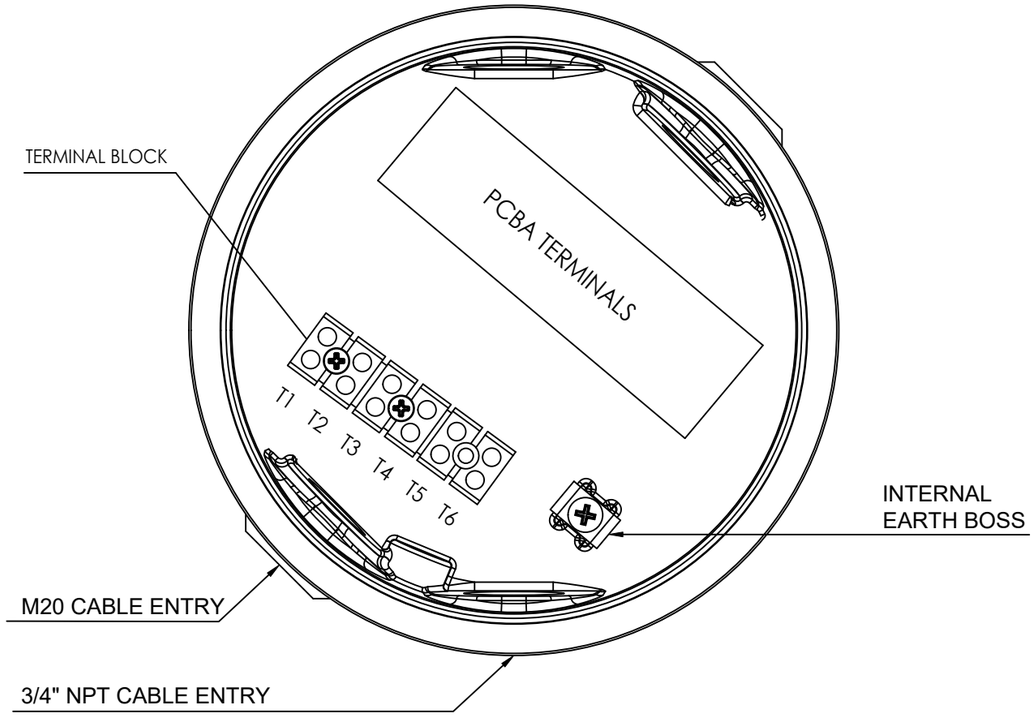
NOTES:

When power is applied across terminals T1/T2 and T3/T4, the Strobe is triggered simultaneously with the Alarm Horn S1.

Optional independent connections to the Strobe and the Alarm Horn is available by removing the linking wire in the Strobe enclosure.
Refer to D226-00-325-IS for the procedure to convert to independent wiring.

To open the Strobe, refer to the selected unit's Instruction Manual for guidelines for access to enclosure.
To open the Alarm Horn, refer to D190-00-001-IS for guidelines for access to enclosure.

ENTRY TERMINALS



DRAWING TO BS8888:2000 GEOMETRIC TOLERANCES TO ISO1101:1983 LINEAR DIMENSIONAL TOLS ANGULAR DIMENSIONAL TOLS	DRAWN M.ABALOS DATE 08/04/2025	SURFACE FINISH	WEIGHT (Kg)
STANDARDS D1xCF	CHECKED R.N.POTTS DATE 08/04/2025	MATERIAL	
	APPROVED R.N.POTTS DATE 08/04/2025	ALTERNATIVE MATERIAL	

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TITLE D1xCF 24 VDC COMBINED HORN STROBE - WIRING SCHEMATIC

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