

FDS300 VISUAL FLAME DETECTOR

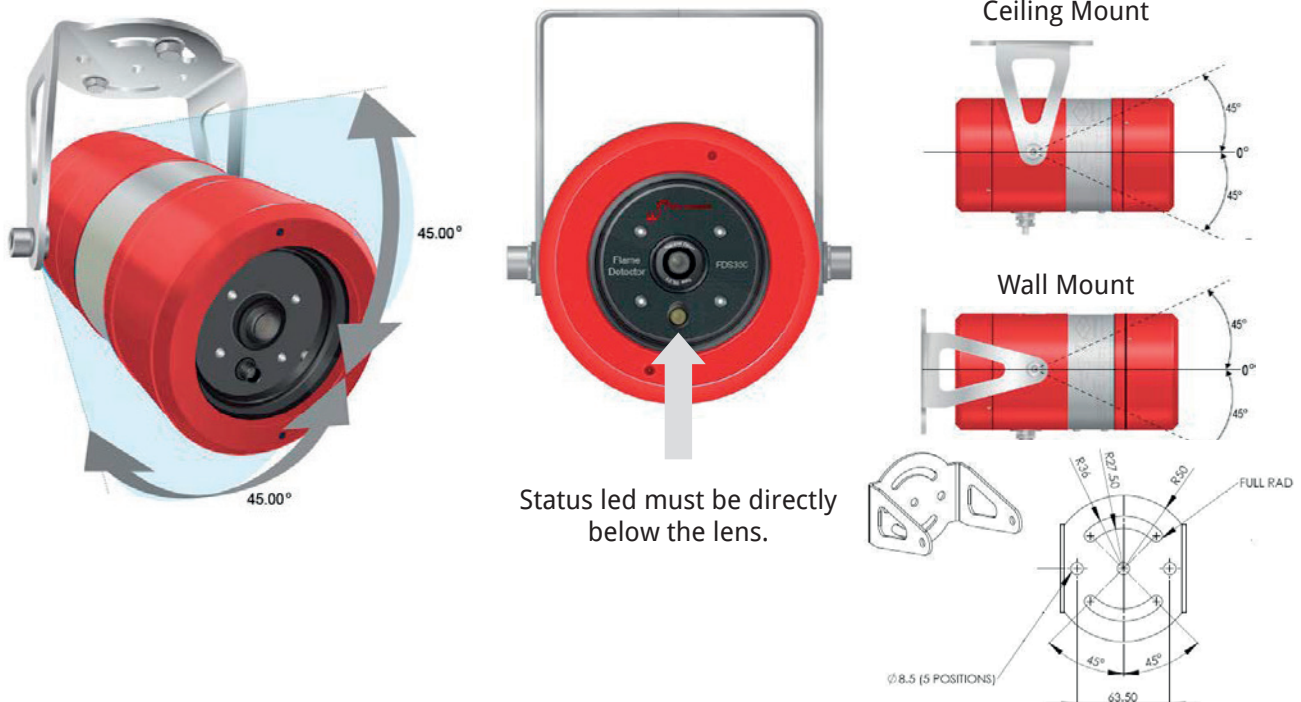
Ref - 2401.6003 Rev - 2.0

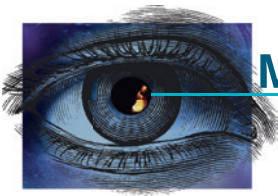
Mechanical Installation Guide

Listed below are installation guidelines for trouble free operation of optical systems.

1. The detector should be attached to comparatively rigid, vibration free mountings. Glands should be torqued between 15 to 20 N·m (11 to 15 lbf·ft).
2. The detector orientation shall be as detailed in **figure 1** below to ensure:
 - a. The IP rating of the detector is not affected.
 - b. The 120° horizontal field of view is maintained.
3. The front and rear enclosure covers shall be fully screwed onto the enclosure body and the grub screws tightened to ensure the hazardous area certification is maintained.
4. In the case of an offshore vessel or platform, the detector should ideally be placed facing inwards towards the plant and with minimal view of the horizon.

Figure 1: FDS300 Orientation





FDS300 VISUAL FLAME DETECTOR

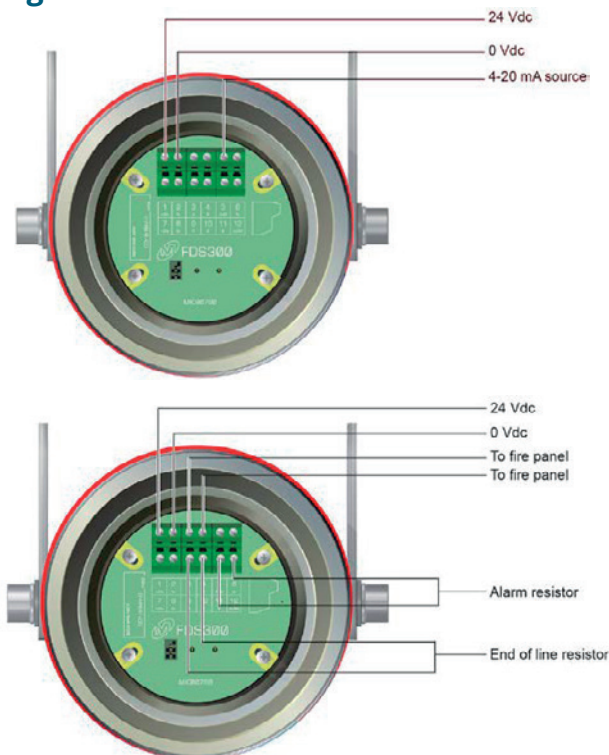
Ref - 2401.6003 Rev - 2.0

Electrical Installation Guide

The wiring terminals are located in the rear section of the detector enclosure and are accessible by removal of the end cap.

1. The detector enclosure is to be connected to a local earth and the detector cable screens (shields) should be cut back to the crotch and not terminated within the detector.
2. The terminal schematic (figure 2) detailed below shows the view looking inside the detector following removal of the end cap.
3. The detector can be configured for two types of alarm output:
 - a. 4-20mA current source
 - b. Standard Relay (Alarm & Fault)

Figure 2: FDS300 Orientation



a. 4-20mA Configuration

Terminal	Description	Terminal	Description
1	+24Vdc	2	0Vdc
3	Not Used	4	Not Used
5	4-20mA Signal	6	0Vdc
7	+24Vdc	8	0Vdc
9	Not Used	10	Not Used
11	Not Used	12	Not Used

b. Standard Relay Configuration

Terminal	Description	Terminal	Description
1	+24Vdc	2	0Vdc
3	To Fire Panel	4	To Fire Panel
5	Not Used	6	Not Used
7	+24Vdc	8	0Vdc
9	EOL Resistor	10	EOL Resistor
11	Alarm Resistor	12	Alarm Resistor

If further details are required, full wiring details are available from: FDS300 SAFETY & TECHNICAL MANUAL - Ref: 2401.6000