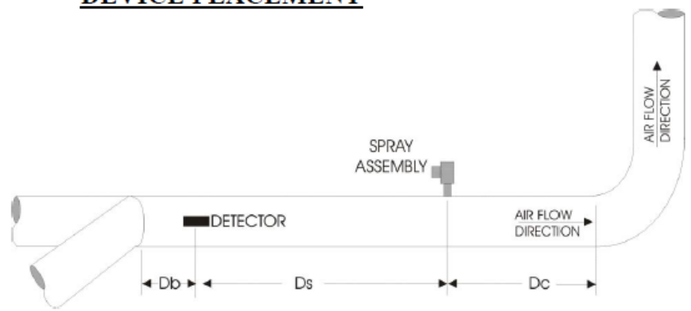
DEVICE PLACEMENT



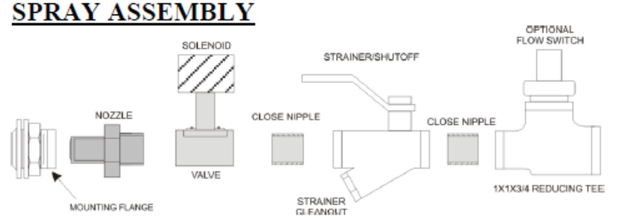
CALCULATION FOR EQUIPMENT PLACEMENT **(MINIMUM DISTANCES)**	
VOLUME OF MATERIAL BEING CONVEYED (C.F.M.)	
DIAMETER OF DUCT	
GIVEN VELOCITY, (ft/min)	
Minimum Distance DETECT TO SPRAY DISTANCE (Ds)	
SPRAY CONE DISTANCE(Dc)	
BRANCH TO DETECTOR DISTANCE ($2^1/_2$ X LAST BRANCH DIAMETER)	
TOTAL DISTANCE REQUIRED (Ds + Dc +$2^1/_2$ X LAST BRANCH DIAMETER	

ACCEPTANCE _____

BILL OF MATERIAL

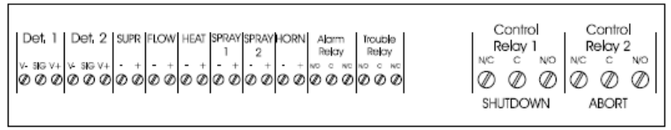
ITEM	PART#	DESCRIPTION	QTY
1	AN100	One Zone Control Panel	
2	120-1	Infra-red Spark Detector	
2A	121-2S	High Temp Spark Detector	
3	910-1	24 Volt Alarm Horn	
3A	910-2	24 Volt Horn with Strobe	
4	901-1S	Nozzle/Valve Spray Assembly	
5	940-1	4.5 Amp Hour Batteries	
5A	940-2	7.2 Amp Hour Batteries	
6	930-1	Thermal Detector – 190°	
7	920-1	Water Flow Switch	

SPRAY ASSEMBLY

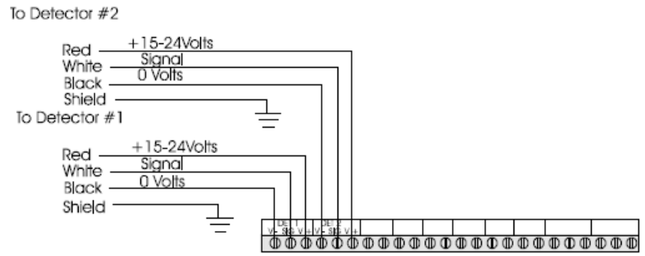


Nozzle Placement

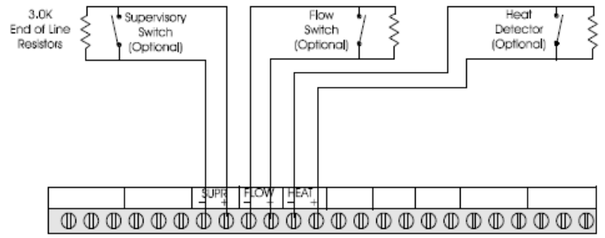
WIRING



DETECTOR WIRING

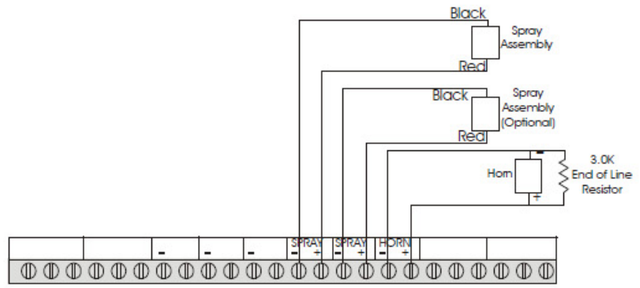


INPUT WIRING

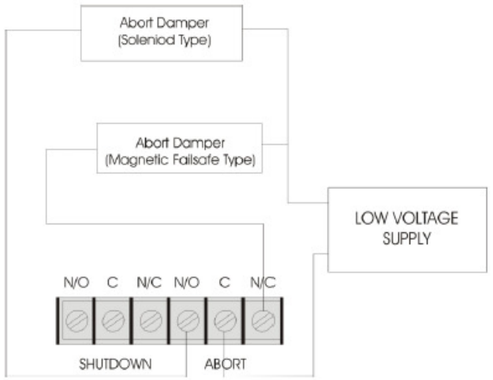


HANSENTEK

OUTPUT WIRING



ABORT GATE WIRING



GENERAL ELECTRICAL NOTES

1) No branching of wires permitted on supervised circuit. End of Line resistors must be at the last device in order to detect an open circuit. Remove any temporary End of Line resistors in the control panel when any input or output circuit is connected.

2) Field wiring must be checked for shorts or grounds before connecting Control panel. DO NOT MEGGAR LINES.

3) Detector input wires shall be run in separate conduit away from all high voltage wiring. Spray nozzle wiring may be in the same conduit.

4) All wiring shall be as per all local and National electrical codes. An earth ground is required regardless of local code requirements.

5) All panels, Enclosures, Conduit and Devices shall be grounded to a good Earth ground

6) Wiring minimum sizes: Power input – 14 AWG 600 Volts; IR Detectors – 18 AWG Stranded 3 conductor shielded cable; Extinguishing Solenoid – 14 AWG; Alarm Horn – 18AWG

7) Notes to be read in conjunction with installation and user manual.

GENERAL NOTES

1) All wiring to meet National Electrical Codes.

2) All wiring to be 14 AWG run in conduit except Spark Detectors and Horn must be 18 AWG and run in conduit

3) The water pressure at the valve must be minimum 50 PSI and must not exceed 100 PSI. The water supply must deliver a minimum of 19 US gallons per minute per nozzle. A pressure reducer must be used if water pressure is greater than 100 PSI.

4) Water pipe, strainers, valves and nozzles installed outside must be heat traced and insulated. Heat tracing and insulation must be adequate to withstand the temperature extremes and environmental conditions of the area where it is installed. **Note:** A Glycol loop must not be used.

5) Piping must be Schedule 40 black or galvanized coated steel conforming to ASTM standards A-53 or A-120 and NFPA.

6) Pipe fittings must conform to NFPA.

7) Approved by the Authority Having Jurisdiction.

8) Dust collecting or conveyance duct velocities MUST be confirmed prior to Spark Detection installation.

9) All 24 Volt wiring to Detectors, Horn and Spray Assembly must be run at least 24" away from high voltage lines (above 400 volts).

10) All wiring to abort dampers and starters must be taken from a separate electrical circuit. No electrical needs can be sourced from the circuit breaker that is being used by the Spark Detection Panel.

11) A clean uninterrupted source of 115 VAC must be used. The circuit breaker must be dedicated to the Spark Detection System and must be lockable.

HANSENTEK

CUSTOMER:	> www.lev-co.com • 1.888.862.5356	lev-co	The device depicted and described hereon embodies proprietary information owned by the manufacturer. All design, manufacturing, reproduction, sales and patent rights regarding this device or drawing reserved except where explicit right is guaranteed in writing. We reserve the right to make design changes.
CUSTOMER P.O.:			
PROJECT:			
ENGINEER:			
SALES REP.:			
IDENTIFICATION / TAGGING:			

Drawn by:	Dan
Date:	7/8/2011
Scale:	NTS
Weight:	N/A

(04-12) AN 100
Spark Detection System
Specification Drawing

Drawing No.: -	File Name: AN100 Spark Detection system
Material: -	Sheet: 2/2