

DATA SHEET

Product: Phoenix System
Version: 200902/102



Detection

Description

The Linear Heat Detection Cable (LHDC) is a flexible, durable and cost-effective fixed-temperature fire detector, suitable for protecting a wide range of commercial and industrial fire applications.

LHDC is a small diameter cable capable of detecting heat over its entire length. The sensor cable consists of a twisted pair of 19 AWG copper coated steel conductors covered by a temperature sensitive insulation, and protected by a plastic jacket for various environmental applications.

Range

The LHDC operates within the Range 177 C to 189 C °

Life expectancy

20 years

Operation

The heat causes the LHDC's special insulation to melt at a specific temperature, allowing the two conductors to short together, thus creating an alarm condition on the Phoenix Control Panel. The LHDC's normal operating state is an open circuit with an "end of line" (EOL) resistor. The benefits of an EOL device is the manner in which the control panel will monitor the cable for defects and faults 24hrs, and so will alert the homeowner of any fault with the cable that may stop it detecting the heat rise.

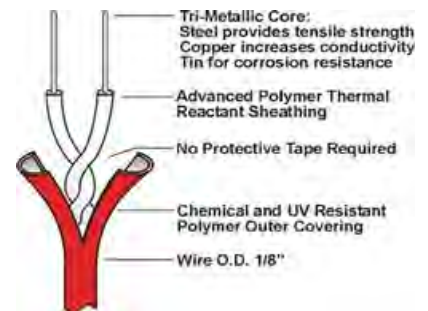
Control

Description

The Phoenix System control panel gives great flexibility with wired and wireless accessories and is compliant with the essential requirements and other relevant provisions of Directive 1995/5/EC. Housed within the polycarbonate casing is a digital communicator to enable remote monitoring of the system. GSM, GPRS, RS232 and LAN connections can be made via add on wired accessories.

Range

2 wired zone, 28 wireless zones.



Life expectancy
10-20 years

Operation

All daily operations are carried out by associated keypads using 4 or 6 digit PIN codes or by use of Remote Keyfobs. The system can support numerous wireless applications including Wireless Panic Buttons, full up/downloading, remote signal transmission and line monitoring. The wired zone offers the flexibility of having an "end of line" (EOL) resistor to monitor the cable for defects and faults 24hrs, and so will alert the homeowner of any fault with the cable.

DETECTION SYSTEM

Alarm Temperature	350°F (176°C)
Ambient Storage Temp. *	Up to 221°F (105°C)
Min. Installation Temp.	32°F (0°C)
Min. Operating Temp. **	-40°F (-40°C)
Application	Indoor/Outdoor
Approved Spacing	Proximity Detection
Flame Detection	20 seconds (max)
Outer Jacket Material	PVC
Outer Jacket Colour	Red
Conductor Insulation	Polypropylene
Conductor Colour	1 Black 1 Black/White
External Diameter	0.171 inch (4.35 mm)
Electrical Rating	1 Amp maximum, 110 Vdc maximum
Conductor Resistance	30.48 ohms/1000 ft. @ 68°F (100 ohms/1000 m) @ 20°C
Conductor Capacitance	17.52 pF/ft. (57.48 pF/m)
Insulation Rating	1000 megohm per 3280 ft. (1000 m) after 1 minute @ 500 Vdc Minimum
Weight	12.67 lb./1000 ft. (18.85 kg/km)

* Do not store in direct sunlight. ** When not subjected to vibration.

Original manufacture design test @ Factory Mutual in Norwood MA USA

Cables responded within the required +/-3% of rated temperature when ambient temperature was increased at a rate of less than 2oF (1.1°C) per minute
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H8069 responded to an average temperature of 350°F 177°C

The H8069 cable was subjected to a temperature 10% below the rated operating temperature, 157°C for a test period of 24hrs an the cables did not false alarm during that period

Dielectric testing was carried out withy test voltages of 500vrms and 500 vdc were applied between the conductors and no arcing or dielectric breakdown occurred during the tests of 1 minute

The cable is a continuous line type open circuit detector that short circuits when in alarm condition



CONTROL SYSTEM

Electrical Characteristics

System Power	100 to 240 VAC, 0.5A / 12.5VDC / 1.6A
Current Consumption (Standby / Maximum)	140mA minimum / 1200mA maximum
Backup Battery	1x 7.2VDC, 1300mAh, NiMH (for 24 hour backup) 1x 9.6VDC, 1800mAh, NiMH (for 48 hour backup)
Compliant with	FCC, CE and EN50131 grade 2
Physical Characteristics	
Dimension	266mm x 206mm x 63mm
Weight (with battery)	1.44Kg / 51oz

Wireless Characteristics

RF system	Two-way +diversity antenna
Frequency	868 MHz
Total wireless zones	28
Wired zones	2
Partitions / areas	3
User codes	8
Programmable Outputs	2
Total Keyfobs	6
Programmable private telephone numbers	4

The Phoenix control panel complies with

EN50131-1 Security Grade II
EN50131-1 Environmental Class I (Tested -10°C to 55°C)
PD 6662:2010
DD 243:2004

Accessories

Wireless PIR detector 868MHz
Wireless PIR detector with Pet Immunity 868MHz
Wireless door contact/universal transmitter (white/brown) 868MHz
Wireless door contact transmitter (white/brown) 868MHz
Wireless shock detector (white/brown) 868MHz
Wireless optical smoke detector 868MHz
Wireless carbon monoxide detector 868MHz
Wireless natural gas detector 868MHz
Wireless break glass detector 868MHz
Wireless flood detector 868MHz
Wireless panic button 868MHz
Wireless keypad 868MHz
Wireless repeater 868MHz
Wireless 2 channel shutter/universal tnsmitter 868MHz
Wireless 4 button rolling code transmitter 868MHz
Wireless 4 channel button zone button transmitter 868MHz
Wireless internal sounder 868MHz
Wireless external sounder 868MHz
GSM card full voice/sms/gprs/data
GSM card GPRS version sms/gprs/data
LAN adapter card

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