

# D-243 DC heat alarm

# Description

D-243 DC heat alarms provide battery powered heat detection and alarm functions within a single unit.

Electronic thermistor sensing and microprocessor control delivers reliable performance and low maintenance.

D-243 DC heat alarms are powered by a long-life lithium-ion battery and do not require a mains supply. Models with either user-replaceable and non-replaceable batteries are available.

Interconnectable D-243 DC heat alarms use a wireless transmission path. Configuration into a closed group ensures that other units within radio signal range are not affected by a test or fire alarm occurring within the configured group.

D-243 DC heat alarms are suitable for general residential applications where smoke or gas detectors may cause unwanted alarms (such as cooking areas or parking garages)<sup>1</sup>. The D-243 DC heat alarm provides home owners and installers with an easy-to-install, long-life solution for property protection applications.

#### Features

- Fixed temperature and rate-of-rise operation using electronic thermistors with microprocessor control
- Loud 85 dB sounder to alert occupants
- Integrated indicator provides visual indication of an alarm condition
- Test and Hush features in a single button
- Test and Hush visual indicator
- Test button verifies battery and alarm operation
- Hush function temporarily silences unwanted alarms
- Heat sensor fault audible and visual indication
- Hush function temporarily silences heat sensor fault indication
- Low battery audible and visual warning indication
- Hush function temporarily silences low battery audible indication
- Interconnectable heat alarms configurable into a closed group
- No limit for interconnectable units using the wireless transmission path
- Up to 10 years operation under normal conditions
- User-replaceable battery and non-replaceable battery models available
- Surface-mount device (SMD) circuit board design
- Attractive housing design, available with alternative top-cover styles
- Easy installation
- Low maintenance

#### Compliance

D-243 DC heat alarms have the following compliance<sup>a</sup>.

	<b>-</b> .		
	BS 5446-2 <sup>b</sup>	CE °	
D-243-07H	✓	✓	
D-243-07HWi	✓	✓	
D-243-07HTR	✓	✓	

<sup>a</sup> Third-party conformance assessment has not been undertaken.

<sup>b</sup> BS 5446-2 *Fire detection and fire alarm devices. Specification for heat alarms* <sup>c</sup> Conformité Européenne





D-243 DC heat alarm

#### Compatibility

The D-243-07HWi interconnectable heat alarm is compatible with the following devices.

Description	Part number	Datasheet
Smoke/heat alarm, wireless interconnect	D-243-07SHWi	31-0095

#### Accessories

The following accessories are compatible with D-243-07HWi DC heat alarms with wireless interconnection.

Description	Part number	Datasheet
Alarm remote control	D-243-07R	31-0084

requirement in the event of a fire, smoke, gas or combination alarms usually provide earlier warning than heat alarms alone.

<sup>&</sup>lt;sup>1</sup> **WARNING** – Hazardous levels of smoke and toxic gas can build up before a heat alarm might operate. Where life safety is the primary

### **Specifications**

Power Supply	D-243-07H D-243-07HTR	D-243-07HWi	
Power source	DC	3 V	
Quiescent current	2 μΑ	5 μΑ	
Quiescent condition indication <sup>a</sup>	Flashing red I	LED every 40 s	
Battery life expectancy	10 years	5 years	
Low battery indication	Short audible signal every 40 s, synchronized	with a single flash of the red LED, for 30 days	
Low battery hush indication <sup>b</sup>	Flashing red I	Flashing red LED every 20 s	
Low battery hush time	1	0 h	
Alarm Condition			
Alarm response threshold (rate-of-rise)	< 20 °	C / min	
Alarm response threshold (fixed temperature)	57	7 °C	
Alarm condition audible indication output <sup>a</sup>	≥ 85 dB @ 3 m (0	0.5 s on / 0.5 s off)	
Alarm condition visual indication <sup>a</sup>	Flashing red	LED every 1 s	
Alarm condition current	50 mA	65 mA	
Alarm condition hush indicator	Device entering the Alarm condition: Flashing red LED every 1 s Interconnected devices configured as a closed group: Flashing red LED every 6 s		
Alarm condition hush time	9 min		
Test Condition			
Test condition audible indication output <sup>c</sup>	≥ 85 dB @ 3 m (0.5 s on / 0.5 s off)		
Test condition visual indication	Device under test: Flashing red LED every 1 s Interconnected devices configured as a closed group: Flashing red LED every 40 s		
Fault Condition			
Heat sensor fault indication	Short audible signal every 40 s and a single flash of the red LED midway between the audible indications		
Fault hush indication	Flashing red l	LED every 20 s	
Fault hush time	1	0 h	
Wireless Interconnection			
Wireless radio interconnection operating frequencies	_	433 MHz, 868 MHz, 915 MHz	
Number of interconnected devices	_	No limit within signal range	
Maximum distance between interconnected devices d	_	500 m	
Group mode configuration indication on master device	_	Flashing red LED every 0.5 s followed by a short audible signal	
Group mode connection indication on slave device(s)	-	Flashing red LED every 0.5 s followed by a short audible signal	
Group mode cancellation indication	_	Double flash of red LED together with two short audible signals	
Group mode configuration timeout	—	50 s	
Environmental			
Operating temperature	(0 ~ +	(0 ~ +55) °C	
Operating humidity	(10 ~ 95) % RH, non-condensing		
Storage temperature	(-25 ~ +80) °C		
Storage humidity	(0 ~ 98) % RH, non-condensing		
Miscellaneous			
Dimensions	Φ 100 mr	n × 45 mm	

<sup>a</sup> Including all wireless interconnect devices configured in the same closed group.

<sup>b</sup> Wireless interconnection feature is disabled during a low battery condition. Each unit will continue to function independently as a stand-alone heat alarm.
<sup>c</sup> Following completion of a Test, the audible test signal from interconnected devices may take up to 10 s to silence.

d Distance in free air.

## **Ordering Information**

	Non-Replaceable Lithium Battery	Replaceable Lithium Battery	Wireless Interconnection
D-243-07H	1	—	—
D-243-07HWi	—	1	1
D-243-07HTR	—	1	—

View the complete range of products at www.demcoalarm.com

