series 65

Series 65 **Heat Detector**



Product overview				
Product	Heat Detector A1R standard			
Part No.	55000-122			
Product	Heat Detector A1R with flashing LED			
Part No.	55000-121			
Product	Heat Detector BR standard			
Part No.	55000-127			
Product	Heat Detector BR with flashing LED			
Part No.	55000-126			
Product	Heat Detector CR standard			
Part No.	55000-132			
Product	Heat Detector CR with flashing LED			
Part No.	55000-131			
Product	Heat Detector CS standard			
Part No.	55000-137			
Product	Heat Detector CS with flashing LED			
Part No.	55000-136			

Compliance* CE (LPCB) FG

Note:* Not all detectors have all approvals. Refer to the product pages at www.apollo-fire.co.uk

Technical data

All data is supplied subject to change without notice. Specifications are typical at 24V, 25°C and 50% RH unless otherwise stated.

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Supply Wiring	Two wire monitored supply, polarity insensitive			
Terminal functions	L1 IN and L2	Supply in connections		
	L1 OUT and L2	Supply out connections		
	-R	Remote indicator negative connection		
Supply voltage	9 V to 33 V			
Ripple voltage	2 V peak to peak maximum at 0.1 Hz to 100 kHz			
Quiescent current	See Table 1			
Power-up surge current	as per Quiescent current			
Alarm voltage	6 V to 28 V dc			
Alarm current	See Table1			
Alarm indicator	Red light emitting diode			
Design alarm load	420 Ω in series with a 2 V drop			
Holding voltage	6 V			
Holding current	10 mA			
Minimum voltage required to light alarm indicator	12 V			
Remote output characteristics	Remote is a current sink to the negative lime limited to 17 mA			
Storage temperature	-30°C to +80°C			
Operating temperature	A1R: -20°C to +50°C BR: -20°C to +65°C CS/CR: -20°C to +80°C			
Humidity (no condensation or icing)	0% to 95% RH			
Effect of atmospheric pressure	None			
Designed to IP Rating	IP54			
Standards and approvals	CPR, LPCB, VdS, VNIIPO, SBSC, FG, BOMBA			
Dimensions	100mm di	iameter x 42 mm height		
Weight	80 g			
Materials	Housing: White flame retardant polycarbonate Terminals: Nickel plated stainless steel			

Product information

The Series 65 Heat Detectors monitor temperature by using either a dual thermistor network or a single thermistor network (CS versions) which provides a voltage output proportional to the external air temperature.

- Ideal for environments that are dirty or smoky under normal circumstances
- . Can be used for applications where smoke detectors are unsuitable
- Wide operating voltage

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Operation

The Series 65 Heat Detector has a moulded self-extinguishing white polycarbonate case. Inside the case a printed circuit board (PCB) holds the signal processing electronics.

In the A1R, BR and CR variants a pair of matched negative temperature co-efficient (NTC) thermistors are mounted on the PCB in such a way that one thermistor is exposed to give good thermal contact with the surrounding air while the other thermistor is thermally insulated.

Under stable conditions both thermistors are in thermal equilibrium and have the same value of resistance. If air temperature increases rapidly the resistance of the exposed thermistor becomes less than that of the insulated thermistor. The ratio of the resistance of the thermistors is monitored electronically and an alarm is initiated if the ratio exceeds a factory pre-set level. This feature determines the 'rate of rise' response of the detector.

CS variants use a single NTC thermistor network which as in dual versions provides a voltage output proportional to the external air temperature.

EMC Directive 2014/30/EU

The Series 65 Heat Detector complies with the essential requirements of the EMC Directive 2014/30/EU, provided that it is used as described in this data sheet.

A copy of the Declaration of Conformity is available from Apollo upon request.

Conformity of the Series 65 Heat Detector with the EMC Directive, does not confer compliance with the directive on any apparatus or systems connected to them.

Construction Products Regulation 305/2011/EU

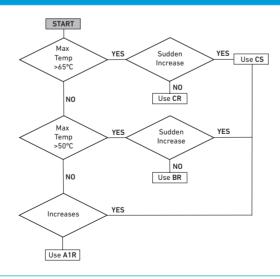
The Series 65 Heat Detector complies with the essential requirements of the Construction Products Regulation 305/2011/EU.

A copy of the Declaration of Performance is available from Apollo upon request.

Table 1: Series 65 Heat Detector typical current against voltage characteristics for quiescent and									
Supply voltage (V)	A1R Standard		A1R flashing LED		A1R flashing LED/magnetic test switch				
	Quiescent	Alarm	Quiescent	Alarm	Quiescent	Alarm			
24	45 µA	52 mA	55 µA	52 mA	55 µA	52 mA			
9	40 µA	17 mA	50 µA	17 mA	50 µA	17 mA			

Series 65 Heat Detector temperatures and part numbers Part Number Max static Max application Class response temperature ^oC Standard Flashing LED temperature °C A1R 50 65 55000-122 55000-121 65 55000-126 BR 85 55000-127 CR 80 55000-131 100 55000-132 CS 80 100 55000-137 55000-136

Choosing the correct heat detector



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