



### AC5296

### XP95 Heat Detector

#### Operation

The XP95 Heat Detector has a common profile with the XP95 optical smoke detectors but has a low air flow resistance case made of white polycarbonate. The device monitors heat using a single thermistor network which provides a voltage output proportional to the external air temperature.

#### Electrical description

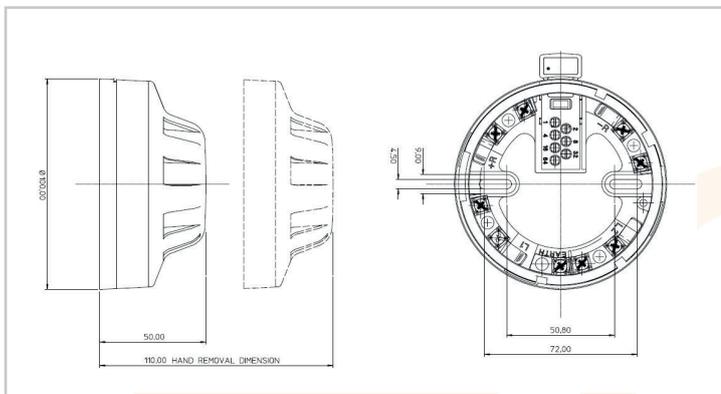
The Heat Detector is designed to be connected to a two wire loop circuit carrying both data and a 17 V to 28 V dc supply.

The detector is connected to the incoming and outgoing supply via terminals L1 and L2 in the mounting base.

A remote LED indicator requiring not more than 4 mA at 5V may be connected between the +R and -R terminals.

An earth connection terminal is also provided. The detector is calibrated to give an analogue value of  $25 \pm 5$  counts at 50C. This value increases with rising temperature. A count of 55 corresponds to the EN 54 alarm sensitivity level.

When the detector is energized the ASIC regulates the flow of power and controls the data processing. The thermistor provides an output over normal operating ranges that is proportional to the external air temperature. The voltage output is processed in the analogue to digital converter and stored by the communications ASIC. It is transmitted to the control equipment when the device is interrogated. When a count of 55 is exceeded the alarm flag is initiated and the device address is added to the data stream every 32 polling cycles from its last polling for the duration of the alarm level condition, except when an alarming device is being interrogated. This can provide a location identified alarm from any device on the loop in approximately two seconds



#### Technical Specification

Dimensions	Diameter 100 mm Depth 42mm
Operating Temperature	-20°C to +70° C
Voltage Range	17-28V DC from panel
Operating current	Quiescent 250 uA
Detection Principal	Photo electrical detection of scattered light
Sampling Frequency	Once per second
Digital Comms	XP95, Discovery & Core Protocol
Supply Wiring	2 wire supply- polarity insensitive
Weight	105gm



**5-AC5296-2022-V1**