Panasonic

PANASONIC FIRE ALARM SOLUTIONS

TECHNICAL DESCRIPTION

6295-6298

ENCLOSED HEAT DETECTOR

DOCUMENT INFORMATION

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TABLE OF CONTENTS

1. INTRODUCTION

This document describes the enclosed heat detectors, type number 6295-6298.
The document contains information about the product and instructions on how to mount and connect it.

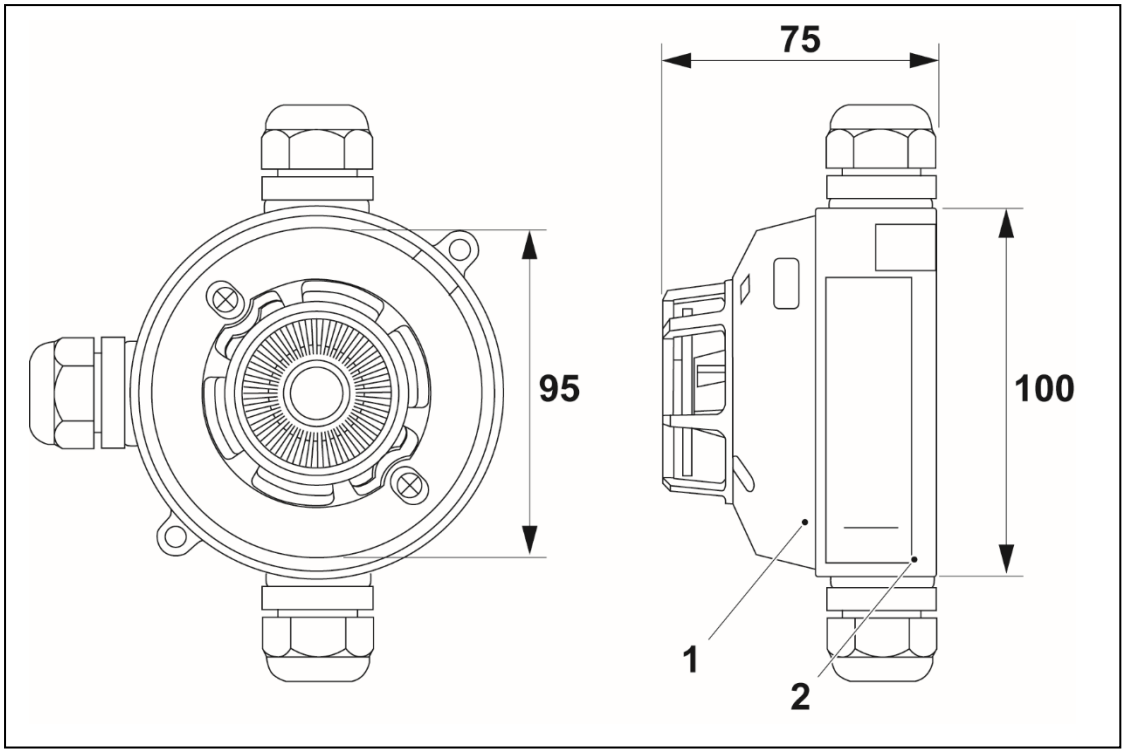
2. ABBREVIATIONS

c.i.e	Control and indicating equipment	(=Control Unit)
LED	Light Emitting Diode	

3. GENERAL DESCRIPTION

The heat detectors are conventional fixed temperature heat detectors. The detectors will give an alarm at a certain fixed temperature (57 °C / 72 °C / 87 °C / 117 °C).

The detector is intended for outdoor use or indoor use in high humidity premises.



(Measures in mm)

1) Detector
2) Connection box

3.1. DETECTOR

The sensing element is a heat pick-up shield and a bimetal switch.
The detectors will give an alarm within a response temperature range in accordance with EN54-5, see table below.

	Static response temperature	Class	Temperature range
6295	57 °C	A2 S	54 to 70 °C
6296	72 °C	B S	69 to 85 °C
6297	87 °C	C S	84 to 100 °C
6298	117 °C	E S	114 to 130 °C

3.1.1. LATCHING

The detector is latching. The detector will not be automatically reset if the temperature, after the alarm, falls below the detector's static response temperature. The detector's LED and a connected external LED will be lit until the detector is reset via the c.i.e.

3.1.2. EXTERNAL LED

One External Indicator (LED) can be connected to the screw terminals **E+** and **E-**:

- **E+** Ext. LED, for example Ext. indicator 2218; J2:2 (+)
- **E-** Ext. LED, for example Ext. indicator 2218; J2:3 (-)

NOTE! Do not connect an external indicator (LED) to terminals (E+, E-) when the detector is used as intrinsically safe detector in hazardous (Ex) areas.

3.2. CONNECTION BOX

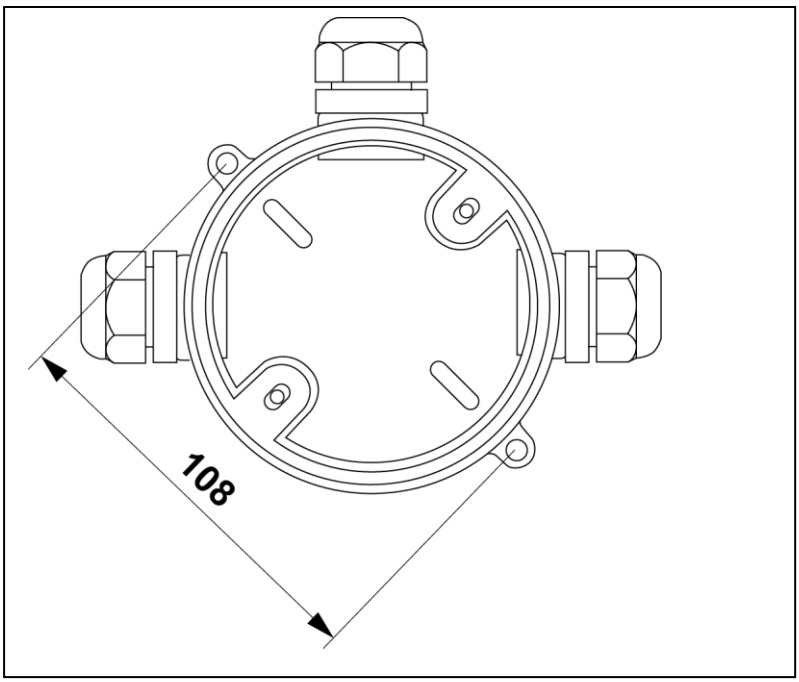
The connection box is prepared for required number of compression glands, one, two, or three.

3.3. ZONE LINE INPUT

The conventional detector is connected to a zone line input (for conventional detectors) in the c.i.e. The last unit on the zone line has an End-of-line device to be connected. The type of end-of-line device is depending on the c.i.e. and the type of zone line input.

4. MOUNTING

The connection box must be mounted in the ceiling. Screws are not supplied.

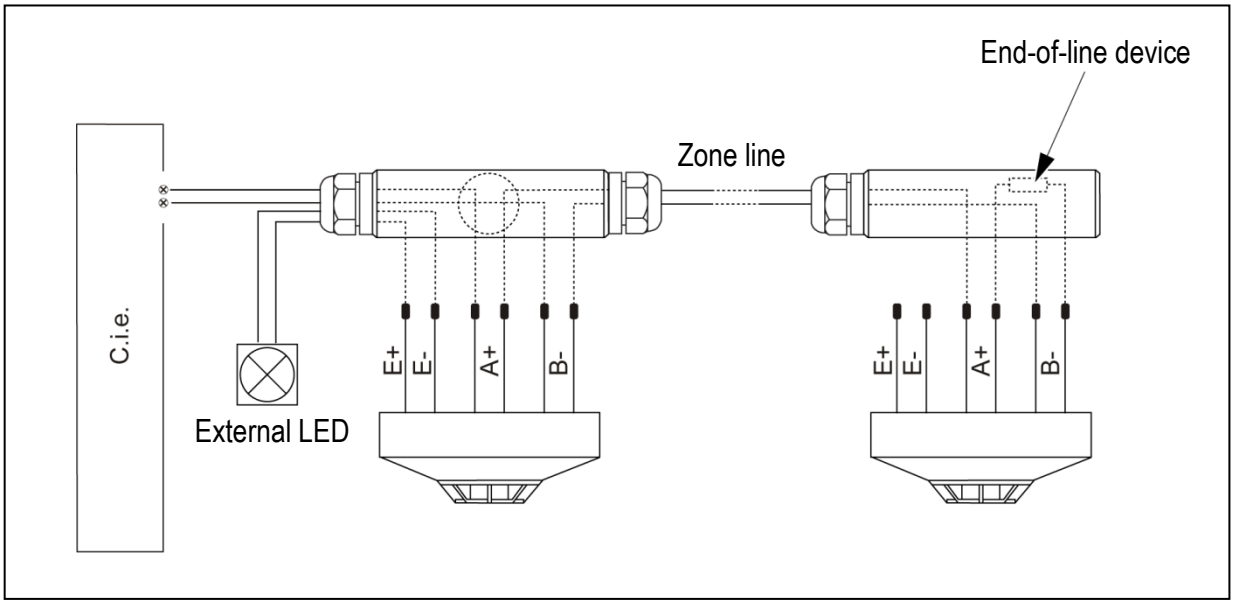


(Measures in mm)

a) Cut out the required number of knockouts and apply the compression glands. Tighten the compression glands firmly.
b) Mount the connection box in the ceiling.
c) Insert the cables in the compression glands.
NOTE! If the outer cable diameter is < 6 mm, insert the enclosed rubber tube before installation of the cable. If the outer cable diameter is ≥ 6 mm, do not use the enclosed rubber tube.
d) Tighten all compression glands with 4 Nm or more.
e) Connect the wires from the c.i.e to the A and B push-on connectors.
f) Connect the next unit or the end-of-line device to the other pair of SA and SB push-on connectors.
g) Mount the detector on the connection box with the two enclosed screws. Tighten the screws firmly with 1.4 Nm or more.

5. INSTALLATION AND WIRING

NOTE! Screen wire termination is not provided.



DATA

Wire size (Min)	Ø 0.6 mm (0.3 mm²)
Wire size (Max)	Ø 1.20 mm (1.13 mm²)

6. TECHNICAL DATA 6295

NOTE! All current consumptions are valid by nominal voltage and by 25 °C.

Voltage:	
Allowed	12-30V DC
Normal	24V DC (Zone line voltage)
Current:	
Quiescent	0 mA
Active	35 mA
Current limitation required when active	Must be minimum 6 and maximum 40 mA
Alarm resistance	400 Ω
Internal capacitance	3 nF
Internal inductance	0 nF
Short circuit isolator	No
Internal battery	No
Material	FR ABS and polycarbonate
Ambient temperature:	
Operating	-40 to +50 °C
Storage	-45 to +70 °C
Static response temperature	57 °C
Ambient humidity	Maximum 95, % RH (Non condensing)
Ingress protection rating	IP 67
ATEX classification	II 3 G Ex ic IIC T5 Gc, II 3 D Ex ic IIIC T100°C Dc -40°C ≤ T_a ≤ 50°C / EN 60079-0:2009, EN 60079-11:2012
Size:	
Ø x H	100 x 75 mm
Weight	82 g
Colour	Grey (N8, Munsell colour code)

7. TECHNICAL DATA 6296

NOTE! All current consumptions are valid by nominal voltage and by 25 °C.

Voltage:	
Allowed	12-30V DC
Normal	24V DC (Zone line voltage)
Current:	
Quiescent	0 mA
Active	35 mA
Current limitation required when active	Must be minimum 6 and maximum 40 mA
Alarm resistance	400 Ω
Internal capacitance	3 nF
Internal inductance	0 nF
Short circuit isolator	No
Internal battery	No
Material	FR ABS and polycarbonate
Ambient temperature:	
Operating	-40 to +65 °C
Storage	-45 to +70 °C
Static response temperature	72 °C
Ambient humidity	Maximum 95, % RH (Non condensing)
Ingress protection rating	IP 67
ATEX classification	II 3 G Ex ic IIC T5 Gc, II 3 D Ex ic IIIC T100°C Dc -40°C ≤ Ta ≤ 65°C / EN 60079-0:2009, EN 60079-11:2012
Size:	
Ø x H	100 x 75 mm
Weight	82 g
Colour	Grey (N8, Munsell colour code)

8. TECHNICAL DATA 6297

NOTE! All current consumptions are valid by nominal voltage and by 25 °C.

Voltage:	
Allowed	12-30V DC
Normal	24V DC (Zone line voltage)
Current:	
Quiescent	0 mA
Active	35 mA
Current limitation required when active	Must be minimum 6 and maximum 40 mA
Alarm resistance	400 Ω
Short circuit isolator	No
Internal battery	No
Material	FR ABS and polycarbonate
Ambient temperature:	
Operating	-40 to +80 °C
Storage	-45 to +70 °C
Static response temperature	87 °C
Ambient humidity	Maximum 95, % RH (Non condensing)
Ingress protection rating	IP 67
Size:	
Ø x H	100 x 75 mm
Weight	82 g
Colour	Grey (N8, Munsell colour code)

9. TECHNICAL DATA 6298

NOTE! All current consumptions are valid by nominal voltage and by 25 °C.

Voltage:	
Allowed	12-30V DC
Normal	24V DC (Zone line voltage)
Current:	
Quiescent	0 mA
Active	25 mA
Current limitation required when active	Must be minimum 6 and maximum 30 mA
Alarm resistance	680 Ω
Short circuit isolator	No
Internal battery	No
Material	FR ABS and polycarbonate
Ambient temperature:	
Operating	-40 to +110 °C
Storage	-45 to +70 °C
Static response temperature	117 °C
Ambient humidity	Maximum 95, % RH (Non condensing)
Ingress protection rating	IP 67
Size:	
Ø x H	100 x 75 mm
Weight	82 g
Colour	Grey (N8, Munsell colour code)

10. APPROVALS

ENCLOSED HEAT DETECTOR 6295

Applicable directive / Approvals	Applicable standards	Notified body
CPR	EN54-5	DBI No. 2531-CPR-232.1192
EMC	EN61000-6-3 (Emission) EN50130-4 (Immunity)	Self declaration
RoHS	EN50581	Self declaration

ENCLOSED HEAT DETECTOR 6296

Applicable directive / Approvals	Applicable standards	Notified body
CPR	EN54-5	DBI No. 2531-CPR-232.1193
EMC	EN61000-6-3 (Emission) EN50130-4 (Immunity)	Self declaration
RoHS	EN50581	Self declaration

ENCLOSED HEAT DETECTOR 6297

Applicable directive / Approvals	Applicable standards	Notified body
CPR	EN54-5	DBI No. 2531-CPR-232.1194
EMC	EN61000-6-3 (Emission) EN50130-4 (Immunity)	Self declaration
RoHS	EN50581	Self declaration

ENCLOSED HEAT DETECTOR 6298

Applicable directive / Approvals	Applicable standards	Notified body
CPR	EN54-5	DBI No. 2531-CPR-232.1195
EMC	EN61000-6-3 (Emission) EN50130-4 (Immunity)	Self declaration
RoHS	EN50581	Self declaration

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