

**CERTIFICATE OF CONSTANCY OF PERFORMANCE**

Issued by DBI Certification-UK, approved body No. 8504.

In compliance with UK STATUTORY INSTRUMENT 2020 No. 1359 Construction Products Regulation 2011 (retained EU law EUR 305/2011) as amended by the Construction Products (Amendment etc.) (EU Exit) Regulations 2019 and the Construction Products (Amendment etc.) (EU Exit) Regulations 2020, this certificate applies to the construction product

**BD-200PT-RL/140-KIT**

The product fulfils the essential characteristic:

**See Annex 1**

Intended use:

Applications related to automatic fire alarm systems

Placed on the market under the name or trade mark of:

**Autronica Fire and Security AS  
Bromstadvegen 59  
NO-7047 Trondheim  
Norway**

and produced in the manufacturing plant:

**CPA10058**

This attests that all provisions concerning the performance described in Annex ZA of the standard(s)

**EN 54-5:2017+A1:2018** : **Fire detection and fire alarm systems — Part 5: Heat detectors — Point heat detectors**

under system 1 for the performance set out in this certificate are applied and that the factory production control conducted by the manufacturer is assessed to ensure the

**CONSTANCY OF PERFORMANCE OF THE CONSTRUCTION PRODUCT.**

This certificate was first issued on 2025-10-31- and will remain valid as long as neither the harmonised standard, the construction product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.

The attached annexes form part of this certificate.

Date of issue: **2025-10-31**



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Kenneth Maronie  
Responsible for evaluation



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Merete Poulsen  
Responsible for certification decision

**DBI Certification-UK Ltd.**

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Annex 1

EXTENT

Model Reference:  
HIGH-TEMPERATURE HEAT DETECTOR BD-200PT-RL/140-KIT

Model name	Description	EN 54-5 Category
BD-200PT-RL/140-KIT	Heat detector kit with sensor and interface box for alarm temperature 140 °C	FS
BD-200PT-I-RL/140	Heat detector interface box for alarm temperature 140 °C	-
BD-200PT-S-ENCLOSURE	Heat detector sensor with enclosure for temperature 140 °C	-

Description:  
High-temperature heat detector for detection of rise in environment temperature caused by a fire. The detector is designed for use in existing installations of Autronica’s interactive fire detection systems, as a replacement for the obsolete sauna heat detector SWM-1KL 140.  
With additional test for Suffix S detectors.

Operating Voltage:  
24V DC

Heat Response Category:  
\*For detector categories with the suffix S or R, additional requirements are needed see 4.4.1 or 4.4.2

Table 1

Detector Category (Heat Class):	Typical Application Temperature	Maximum Application Temperature °C	Minimum Static Response Temperature °C	Maximum Static Response Temperature °C
FS	100	125	129	145

Table 2- Response time limits

Rate of rise of air temperature K min-1	Cat A2, B, C, D, E, F and G			
	Lower limit		Upper limit	
	Min	S	Min	S
1	29	0	46	0
3	7	13	16	0
5	4	9	10	0
10	2	0	5	30
20	1	30	3	13
30		40	2	25

Performance (check Annex ZA.1 I relevant standard)

Essential characteristics	Clauses in EN 54-5:2017/ A1:2018	Regulatory classes	Performance
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Operational reliability:			
Position of heat sensitive element	4.2.1	A1,A2,B,C,D ,E,F,G	The heat sensitive element(s) or at least part of it, except elements with auxiliary functions (e.g.characteristic correctors), are a distance $\geq 15\text{mm}$ from the mounting surface of the point heat detector.
Individual alarm indication	4.2.2		Category E, F, or G The heat detector is provided with either an integral red indicator, or with another means for locally indicating the alarm status of the point heat detector.
Connection of ancillary devices	4.2.3		Open or short circuit failures of connection to ancillary device do not prevent the correct operation of the detector
Monitoring of detachable point heat detectors	4.2.4		A fault condition is signaled when the detector is removed from the mounting base.
Manufacturer's adjustments	4.2.5		It is not possible to change the manufacture's settings except by special means (e.g. a special code or tool, or by breaking or remove a seal).
Onsite adjustments of response behavior	4.2.6		No change can be made
Software controlled detectors (when provided)	4.2.7		The software documentation and the software design complies supplied by the manufacturer with the requirements of this standard.
Nominal activation conditions/Sensitivity:			
Directional dependence	4.3.1		The response time of the point dectetor do not unduly depend on the direction of airflow around the point heat detector.
Static response temperature	4.3.2		The response temperatures of the point heat detectors lie between the minimum and maximum static response temperatures, according to the category of the point heat detector in Table 1 above.
Response times from typical application temperature	4.3.3		The response times of the point heat detector lie between the lower and upper response time limits for the appropriate point heat detector category in Table 2 above.
Response times from 25 °C	4.3.4		The response time at 3 K min <sup>-1</sup> exceeds 7 min 13 s and the response time at 20 K min <sup>-1</sup> exceeds 1 min 0 s.
Response times from high ambient temperature	4.3.5		No alarm or fault signal was given at high ambient temperatures appropriate to the anticipated service temepratures.  3 K min <sup>-1</sup> , Lower limit, 1 min 20 s and upper limit 13 m 40 s. 20 K min <sup>-1</sup> , Lower limit, 12 s and upper limit 2 m 20 s.

Reproducibility	4.3.6		The response times of the point heat detectors lie between the lower and upper response time limits specified in Table 2 above.																																															
Response delay (response time):																																																		
Additional test for suffix S point heat detectors	4.4.1		<p>Suffix S point heat detector did not exceed the lower limits of response time during the transfer period or during the 10 min exposure below.</p> <table border="1"> <thead> <tr> <th>Point heat detector category</th> <th>Conditioning Temperature °C</th> <th>Airflow Temperature °C</th> </tr> </thead> <tbody> <tr><td>A1S</td><td>5 ±2</td><td>50 ±2</td></tr> <tr><td>A2S</td><td>5 ±2</td><td>50 ±2</td></tr> <tr><td>BS</td><td>20 ±2</td><td>65 ±2</td></tr> <tr><td>CS</td><td>35 ±2</td><td>80 ±2</td></tr> <tr><td>DS</td><td>50 ±2</td><td>95 ±2</td></tr> <tr><td>ES</td><td>65 ±2</td><td>110 ±2</td></tr> <tr><td>FS</td><td>80 ±2</td><td>125 ±2</td></tr> <tr><td>GS</td><td>95 ±2</td><td>140 ±2</td></tr> </tbody> </table> <table border="1"> <thead> <tr> <th rowspan="2">Rate of rise of air temperature K min<sup>-1</sup></th> <th colspan="2">Lower Limit response time</th> </tr> <tr> <th>Min</th> <th>S</th> </tr> </thead> <tbody> <tr><td>3</td><td>9</td><td>40</td></tr> <tr><td>5</td><td>5</td><td>48</td></tr> <tr><td>10</td><td>2</td><td>54</td></tr> <tr><td>20</td><td>1</td><td>27</td></tr> <tr><td>30</td><td></td><td>58</td></tr> </tbody> </table>	Point heat detector category	Conditioning Temperature °C	Airflow Temperature °C	A1S	5 ±2	50 ±2	A2S	5 ±2	50 ±2	BS	20 ±2	65 ±2	CS	35 ±2	80 ±2	DS	50 ±2	95 ±2	ES	65 ±2	110 ±2	FS	80 ±2	125 ±2	GS	95 ±2	140 ±2	Rate of rise of air temperature K min <sup>-1</sup>	Lower Limit response time		Min	S	3	9	40	5	5	48	10	2	54	20	1	27	30		58
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Additional test for suffix R point heat detectors	4.4.2		N/A																																															

Tolerance to supply voltage:															
Variation in supply parameters	4.5		The point heat detector does not unduly depend on variation in the supply parameters and lie between the lower and upper response time limits specified in Table 2 above.												
Durability of nominal activation conditions/Sensitivity:															
temperature resistance															
Cold (operational)	4.6.1.1		No alarm or fault signal was given during the transition to the conditioning temperature or during the period at the condition temperature  <u>For resettable point heat detector</u> Response time at 3 K min <sup>-1</sup> was not less than 7 min 13 s and did not exceed 2 min 40 s compared with the time obtained in 4.3.6.  20 K min <sup>-1</sup> was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6												
Dry heat (endurance)	4.6.1.2		No fault signal was given on reconnection attributable to the endurance conditioning  <table border="1"> <thead> <tr> <th>Point heat detector category</th> <th>Conditioning Temperature °C</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>80 ±2</td> </tr> <tr> <td>D</td> <td>95 ±2</td> </tr> <tr> <td>E</td> <td>110 ±2</td> </tr> <tr> <td>F</td> <td>125 ±2</td> </tr> <tr> <td>G</td> <td>140 ±2</td> </tr> </tbody> </table> <u>For resettable point heat detector</u> Response time at 3 K min <sup>-1</sup> was not less than 7 min 13 s and did not exceed 2 min 40 s compared with the time obtained in 4.3.6.  20 K min <sup>-1</sup> was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6	Point heat detector category	Conditioning Temperature °C	C	80 ±2	D	95 ±2	E	110 ±2	F	125 ±2	G	140 ±2
Point heat detector category	Conditioning Temperature °C														
C	80 ±2														
D	95 ±2														
E	110 ±2														
F	125 ±2														
G	140 ±2														
Humidity resistance															
Damp heat, cyclic (operational)	4.6.2.1		No alarm or fault signal was given during the conditioning.  Lower temperature: (25±3) °C Upper temperature: (40±2) °C  Relative humidity: At lower temperature :≥ 95 % At upper temperature : (93 ±3) %												

		<p><u>For resettable point heat detector</u> Response time at 3 K min<sup>-1</sup> was not less than 7 min 13 s and did not exceed 2 min 40 s compared with the time obtained in 4.3.6.</p> <p>20 K min<sup>-1</sup> was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6</p>
Damp heat, steady-state (endurance)	4.6.2.2	<p>No fault signal was given on reconnection attributable to the endurance conditioning.</p> <p>Conditioning Temperature : 40 ±2 °C Relative Humidity: 93 ±3 % Duration : 21 days</p> <p><u>For resettable point heat detector</u> Response time at 3 K min<sup>-1</sup> was not less than 7 min 13 s and did not exceed 2 min 40 s compared with the time obtained in 4.3.6.</p> <p>20 K min<sup>-1</sup> was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6</p>
Corrosion resistance		
Sulphur dioxide (SO <sub>2</sub> ) corrosion (endurance)	4.6.3	<p>No fault signal was given on reconnection attributable to the endurance conditioning.</p> <p>Conditioning Temperature : 25 ±2 °C Relative Humidity: 93 ±3 % SO<sub>2</sub> concentration: 25 ±5 ppm (by volume) Duration : 21 days</p> <p><u>For resettable point heat detector</u> Response time at 3 K min<sup>-1</sup> was not less than 7 min 13 s and did not exceed 2 min 40 s compared with the time obtained in 4.3.6.</p> <p>20 K min<sup>-1</sup> was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6</p>
Vibration resistance		
Shock (operational)	4.6.4.1	<p>No alarm or fault signal was given during the conditioning period or an additional 2 min.</p> <p>For specimen with a mass ≤ 4,75 kg :</p> <p>Shock pulse type: Half sine Pulse duration : 6 ms Peak acceleration: 10X (100-20M) ms<sup>-2</sup> (M is specimen mass in Kg) Number of directions: 6 Pulses per direction: 3</p> <p><u>For resettable point heat detector</u></p>

		<p>Response time at 3 K min<sup>-1</sup> was not less than 7 min 13 s and did not exceed 2 min 40 s compared with the time obtained in 4.3.6.</p> <p>20 K min<sup>-1</sup> was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6</p>
Impact (operational)	4.6.4.2	<p>No alarm or fault signal was given during the conditioning period or an additional 2 min.</p> <p>Conditioning:                      Impact energy: 1,9 ±0,1 J                      Hammer velocity: 1,5 ±0,13 ms<sup>-1</sup>                      Number of impacts: 1</p> <p><u>For resettable point heat detector</u>                      Response time at 3 K min<sup>-1</sup> was not less than 7 min 13 s and did not exceed 2 min 40 s compared with the time obtained in 4.3.6.</p> <p>20 K min<sup>-1</sup> was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6</p>
Vibration, sinusoidal (operational)	4.6.4.3	<p>No fault signal was given during the conditioning</p> <p>Conditioning:                      Frequency range: 10 to 150 Hz                      Acceleration amplitude: 5 ms<sup>-2</sup>(≈0,5 g<sub>n</sub>)                      Number of axes : 3                      Sweep rate: 1 octave min<sup>-1</sup>                      Number of sweep cycles: 1 per axis</p> <p><u>For resettable point heat detector</u>                      Response time at 3 K min<sup>-1</sup> was not less than 7 min 13 s and did not exceed 2 min 40 s compared with the time obtained in 4.3.6.</p> <p>20 K min<sup>-1</sup> was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6</p>
Vibration, sinusoidal (endurance)	4.6.4.4	<p>No fault signal was given on reconnection attributable to the endurance conditioning.</p> <p>Conditioning:                      Frequency range: 10 to 150 Hz                      Acceleration amplitude: 10 ms<sup>-2</sup>(≈1,0 g<sub>n</sub>)                      Number of axes : 3                      Sweep rate: 1 octave min<sup>-1</sup>                      Number of sweep cycles: 20 per axis</p> <p><u>For resettable point heat detector</u>                      Response time at 3 K min<sup>-1</sup> was not less than 7 min 13 s and did not exceed 2 min 40 s compared with the time obtained in 4.3.6.</p> <p>20 K min<sup>-1</sup> was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6</p>

Electrical stability EMC immunity (operational)	4.6.5		<p>Compliance in EN 50130-4:2011 and No fault signal was given during the conditioning.</p> <p><u>For resettable point heat detector</u> Response time at 3 K min<sup>-1</sup> was not less than 7 min 13 s and did not exceed 2 min 40 s compared with the time obtained in 4.3.6.</p> <p>20 K min<sup>-1</sup> was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6</p>

Annex 2

**TEST DOCUMENTATION**

Accredited Laboratory	Report no.	Date
CNBOP-PIB	832/BA/24	2025-08-29

**TECHNICAL BASIS**

Title	Number	Date
BOM	116-BD-200PT-I-RL/140 .1 .2	2025-10-07
BOM	116-BD-200PT-S-ENCLOSURE .1 .2	2025-10-07
Schematic PT100 Relay Heat detector BDA-1002	Doc-1016902, rev. 4	2025-02-04
Schematic BDA-1003 Sensor Board	Doc-1028731, rev. 1	2024-12-11
PCB Specification BDA1020 Heat Detector PT100	116-100002544.01, Doc-1028733, rev. 1	2024-09-24
Drawing M6927	PCB 116-100002544-01, Doc-1017454, rev. 4	2025-02-05
PCB Specification BDA1030 Small Sensor Board	116-100002604.01, Doc-1029032, rev. 1	2024-12-18
Heat Detector assembly	Doc-1029252, rev. 1	2025-02-28
Product datasheet	Doc-1029514 Rev. 3	2025-09-21



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