Certificate No.: 8504-UKCA-CPR-UKCSP10274

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/84-KIT, BD-200PT/100-KIT, BD-200PT/120-KIT, BD-200PT/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**
EN 54-17:2005+AC:2007	:	**Fire detection and fire alarm systems — Part 17: Short circuit isolators**

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 2025-11-03 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product, the AVCP methods nor the manufacturing conditions in the plant are modified significantly, unless suspended or withdrawn by the notified product certification body.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: **2025-11-03**

Kenneth Maronie
Responsible for evaluation

Merete Poulsen
Responsible for certification decision

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UKAS PRODUCT CERTIFICATION
No. 23333

Annex 1

EXTENT

Model Reference:
BD-200PT/84-KIT, BD-200PT/100-KIT, BD-200PT/120-KIT, 116-BD-200PT/140-KIT

Model name	Description	EN 54-5 Category
BD-200PT/84-KIT	Heat detector kit with sensor and interface box for alarm temperature 84 °C	CS
BD-200PT/100-KIT	Heat detector kit with sensor and interface box for alarm temperature 100 °C	DS
BD-200PT/120-KIT	Heat detector kit with sensor and interface box for alarm temperature 120 °C	ES
BD-200PT/140-KIT	Heat detector kit with sensor and interface box for alarm temperature 140 °C	FS
BD-200PT-I/84	Heat detector interface box for alarm temperature 84 °C	-
BD-200PT-I/100	Heat detector interface box for alarm temperature 100 °C	-
BD-200PT-I/120	Heat detector interface box for alarm temperature 120 °C	-
BD-200PT-I/140	Heat detector interface box for alarm temperature 140 °C	-
BD-200PT-S	Heat detector sensor for temperature 84 °C, 100 °C, 120 °C and 140 °C	-

Description:
High-temperature heat detector for detection of rise in environment temperature caused by a fire. The detector is designed for use with Autronica's interactive fire detection systems. With additional test for Suffix S detectors.

Operating Voltage:
16V-26 V DC

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

Table 1

Variant	Detector Category (Heat Class):	Typical Application Temperature	Maximum Application Temperature °C	Minimum Static Response Temperature °C	Maximum Static Response Temperature °C
84	CS	55	80	84	100
100	DS	70	95	99	115
120	ES	85	110	114	130
140	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		Uper 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 (tjek Annex ZA.1 I relevant standard)

Essential characteristics	Clauses in EN 54-5:2017/ A1:2018	Regulatory classes	Performance
Operational reliability:		A1,A2,B,C,D ,E,F,G	
Position of heat sensitive element	4.2.1		The heat sensitive element(s) or at least part of it, except elements with auxiliary functions (e.g.characteristic correctors), are a distance ≥15mm from the mounting surface of the point heat detector.
Individual alarm indication	4.2.2		Category A1, A2,B,C, or D The heat detector is provided with an integral red visual indicator and can remain identified until the alarm is reset. The visual indicator is visible from a distance of 6 m directly below the point heat detector,in an ambient light intensity up to 500 lx. 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. **See note:1**
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 maufacture´s settings expept 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		a)The detector is provided with a provision for an onsite adjustment of the response behavior and the manufacturer declares a corresponding class and adjustment setting.
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^{-1} exceeds 7 min 13 s and the response time at 20 K min^{-1} 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^{-1}, Lower limit, 1 min 20 s and upper limit 16 m. 20 K min^{-1}, Lower limit, 12 s and upper limit 3 m 13 s.
Reproducibility	4.3.6		The response times of the point heat detectors lie between the lower ad upper response time limits specified in Table 2 above.
Response delay (response time):			
Additional test for suffix S point heat detectors	4.4.1		Suffix S point heat detector did not exceed the lower limits of response time during the transer period or during the 10 min exposure below.

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^{-1}	Lower Limit response time	
	Min	S
3	9	40
5	5	48
10	2	54
20	1	27
30		58

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 depent 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^{-1} 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^{-1} 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 Point heat detector category / Conditioning Temperature °C C: 80 ±2 D: 95 ±2 E: 110 ±2 F: 125 ±2 G: 140 ±2 <u>For resettable point heat detector</u>

			Response time at 3 K min^{-1} 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. All others: 20 K min^{-1} was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6
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) % For resettable point heat detector Response time at 3 K min^{-1} 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. All others: 20 K min^{-1} was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6
Damp heat, steady-state (endurance)	4.6.2.2		No fault signal was given on reconnection attributable to the endurance conditioning. Conditioning Temperature : 40 ±2 °C Relative Humidity: 93 ±3 % Duration : 21 days For resettable point heat detector Response time at 3 K min^{-1} 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^{-1} was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6
Corrosion resistance			
Sulphur dioxide (SO_2) corrosion (endurance)	4.6.3		No fault signal was given on reconnection attributable to the endurance conditioning. Conditioning Temperature : 25 ±2 °C Relative Humidity: 93 ±3 % SO2 concentration: 25 ±5 ppm (by volume) Duration : 21 days For resettable point heat detector

			Response time at 3 K min^{-1} 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^{-1} was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6
Vibration resistance			
Shock (operational)	4.6.4.1		No alarm or fault signal was given during the conditioning period or an additional 2 min. For specimen with a mass ≤ 4,75 kg : Shock pulse type: Half sine Pulse duration : 6 ms Peak acceleration: 10X (100-20M) ms-2 (M is specimen mass in Kg) Number of directions: 6 Pulses per direction: 3 <u>For resettable point heat detector</u> Response time at 3 K min^{-1} 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. <u>A1</u>: 20 K min^{-1} was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6 20 K min^{-1} was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6
Impact (operational)	4.6.4.2		No alarm or fault signal was given during the conditioning period or an additional 2 min. Conditioning: Impact energy: 1,9 ±0,1 J Hammer velocity: 1,5 ±0,13 ms^{-1} Number of impacts: 1 <u>For resettable point heat detector</u> Response time at 3 K min^{-1} 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^{-1} was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6
Vibration, sinusoidal (operational)	4.6.4.3		No fault signal was given during the conditioning Conditioning: Frequency range: 10 to 150 Hz Acceleration amplitude: 5 ms^{-2}(≈0,5 g_n) Number of axes : 3 Sweep rate: 1 octave min^{-1} Number of sweep cycles: 1 per axis <u>For resettable point heat detector</u>

			Response time at 3 K min^{-1} 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. A1: 20 K min^{-1} was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6 20 K min^{-1} was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6
Vibration, sinusoidal (endurance)	4.6.4.4		No fault signal was given on reconnection attributable to the endurance conditioning. Conditioning: Frequency range: 10 to 150 Hz Acceleration amplitude: 10 ms^{-2}(≈1,0 g_n) Number of axes : 3 Sweep rate: 1 octave min^{-1} Number of sweep cycles: 20 per axis For resettable point heat detector Response time at 3 K min^{-1} 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. A1: 20 K min^{-1} was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6 20 K min^{-1} was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6
Electrical stability EMC immunity (operational)	4.6.5		Compliance in EN 50130-4:2011 and No fault signal was given during the conditioning. For resettable point heat detector Response time at 3 K min^{-1} 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. A1: 20 K min^{-1} was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6 20 K min^{-1} was not less than 1 min and did not exceed 30 s compared with the time obtained in 4.3.6

Essential characteristics	Clauses in EN 54-17:2005	Performance
Performance under fire conditions	5.2 1)	Pass
Operational reliability	4	Pass
Durability of operational reliability; temperature resistance	5.4, 5.5	Pass
Durability of operational reliability; vibration resistance	5.9 to 5.12	Pass
Durability of operational reliability; humidity resistance	5.6, 5.7	Pass
Durability of operational reliability; corrosion resistance	5.8	Pass

Durability of operational reliability; electrical stability	5.3, 5.13	Pass
1) This is assuming that the effect of the fire is to cause a short circuit in the transmission path that is protected by these devices		

Note 1: Performance not declared for CS and DS.

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/84 .1 .2	2025-10-07
BOM	116-BD-200PT-I/100 .1 .2	2025-10-07
BOM	116-BD-200PT-I/120 .1 .2	2025-10-07
BOM	116-BD-200PT-I/140 .1 .3	2025-10-07
BOM	116-BD-200PT-S .1 .2	2025-06-30
Schmatics PT100 AL_Com Heat detector BDA-1001	Doc-1016879, rev. 4	2025-02-04
Drawing PCB 116-100002544.1	M6927, Doc-1017453, rev. 4	2025-02-05
Schmatics BDA-1003 Sensor Board	Doc-1028731, rev.1	2024-12-11
PCB Specification BDA-1020 Heat Detector PT100	116-100002544.1, DOC-1028733, rev. 1	2024-09-24
PCB Specification BDA-1030 Small Sensor Board	116-100002604.1, DOC-1029032, rev. 1	2024-12-18