

Declaration of performance

№ 211/2023

1. Unique identification code of the product-type:

Model number and Description:

Natron TD - Wireless addressable fire alarm heat detector

Approved Accessories:

n/a

Harmonized Product Type(s):

Heat Detectors

Components using radio links

2. Intended use/es:

Fire detection and fire alarm systems installed in and around buildings

3. Manufacturer

Teletek Electronics JSC

2 Iliyansko shose Str, 1220 Sofia, Bulgaria

4. Authorized representative:

Teletek Electronics JSC

2 Iliyansko shose Str, 1220 Sofia, Bulgaria

5. System(s) of AVCP

System 1

6. Harmonized Standard(s)

EN 54-5: 2017 + A1: 2018

EN 54-25:2008,

EN 54-25:2008/AC:2010,

EN 54-25:2008/AC:2012

Notified body/ies:

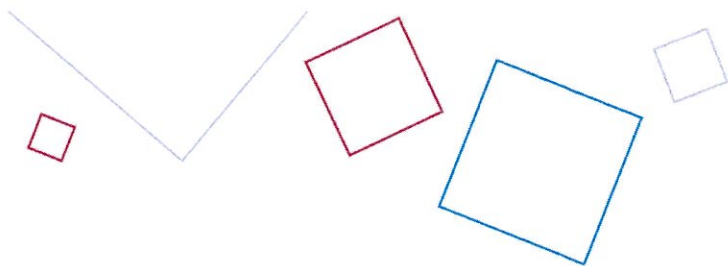
Fire Certification and Inspection Ltd. (Notified Body 2918)

European assessment document: n/a

European technical assessment: n/a

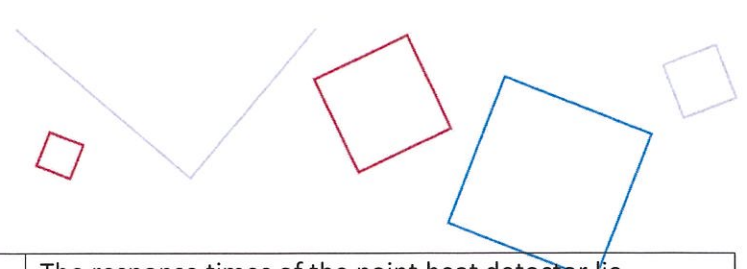
Technical assessment Body: n/a

Notified body/ies: n/a

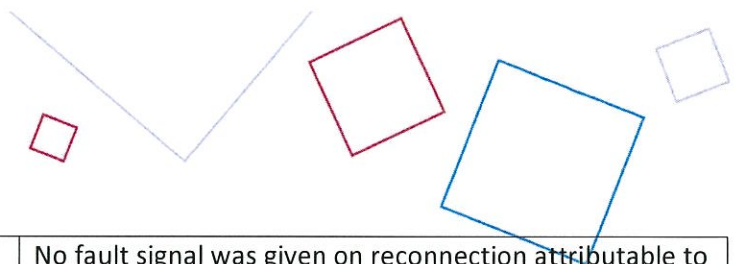


7. Declared performance

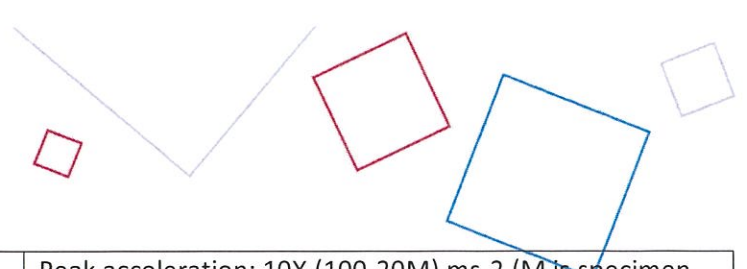
Essential characteristics	Clauses in EN 54-5: 2017/ A1:2018	Regulatory classes	Performance
Operational reliability:		A1R	
Position of heat sensitive element	4.2.1		The heat sensitive element(s) or at least part of it, except elements with auxiliary functions (e.g. Characteristics correctors), are a distance $\geq 15\text{mm}$ from the mounting surface of the point heat detector.
Individual alarm indication	4.2.2		Category A1R 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.
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 manufacturer'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		N/A
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 detector 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 (p.9 in Standard).	



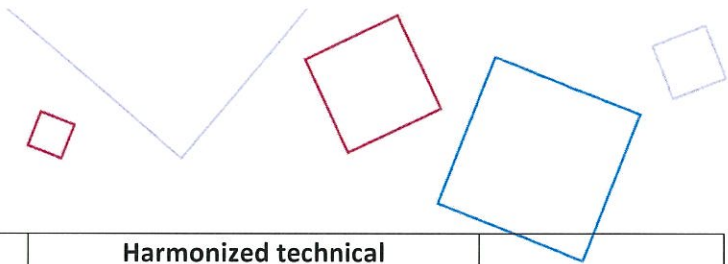
Response times from typical application temperature	4.3.3	The response times of the point heat detector lie between the lower and upper response time limits for the appropriate point heat detector category in Table 2 (p.17 in Standard).
Response times from 25 °C	4.3.4	The response time at 3 K/min exceeds 7 min 13 s and the response time at 20 K/min 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 temperatures. A1R 3 K/min, Lower limit, 1 min 20 s and upper limit 13m 40s. 20 K/min, 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 (p.17 in Standard).
Response delay (response time):		
Additional test for suffix S point heat detectors	4.4.1	N/A
Additional test for suffix R point heat detectors	4.4.2	Suffix R, the point heat detector maintains the response requirements of its category, in table 2 above, for high rates of rise of temperature from an initial temperature below the typical application temperature applicable to the category marked on it. Point heat detector category = A1R Point heat detector category Initial conditioning temperature = 5°C ±2°C
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 (p.17 in Standard).
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 A1R: 20 K/min was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6



Dry heat (endurance)	4.6.1.2		<p>No fault signal was given on reconnection attributable to the endurance conditioning</p> <p>A1R: 20 K/min was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6</p>
Humidity resistance			
Damp heat, cyclic (operational)	4.6.2.1		<p>No alarm or fault signal was given during the conditioning.</p> <p>Lower temperature: (25±3) °C Upper temperature: (40±2) °C Relative humidity: At lower temperature: ≥ 95 % At upper temperature: (93 ±3) %.</p> <p>A1R: 20 K/min was not less than 30 s 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>A1: 20 K/min was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6</p>
Corrosion resistance			
Sulphur dioxide (SO ₂) 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 % SO₂ concentration: 25 ±5 ppm (by volume) Duration: 21 days</p> <p>A1R: 20 K/min was not less than 30 s 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: Shock pulse type: Half sine Pulse duration: 6 ms</p>



		<p>Peak acceleration: 10X (100-20M) ms⁻² (M is specimen mass in Kg)</p> <p>Number of directions: 6</p> <p>Pulses per direction: 3</p> <p>A1R: 20 K/min was not less than 30 s 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:</p> <p>Impact energy: 1,9 ±0,1 J</p> <p>Hammer velocity: 1,5 ±0,13 ms⁻¹</p> <p>Number of impacts: 1</p> <p>A1R: 20 K/min was not less than 30 s 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:</p> <p>Frequency range: 10 to 150 Hz</p> <p>Acceleration amplitude: 5 ms⁻² (≈0,5 g n)</p> <p>Number of axes: 3</p> <p>Sweep rate: 1 octave min⁻¹</p> <p>Number of sweep cycles: 1 per axis</p> <p>A1R: 20 K/min was not less than 30 s 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:</p> <p>Frequency range: 10 to 150 Hz</p> <p>Acceleration amplitude: 10 ms⁻² (≈1,0 g n)</p> <p>Number of axes: 3</p> <p>Sweep rate: 1 octave min⁻¹</p> <p>Number of sweep cycles: 20 per axis</p> <p>A1R: 20 K/min was not less than 30 s 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>A1R: 20 K/min was not less than 30 s and did not exceed 30 s compared with the time obtained in 4.3.6</p>



Essential characteristics	Harmonized technical specification EN 54-25:2008, EN 54-25:2008/AC:2010, EN 54-25:2008/AC:2012	Performance
Performance parameters under fire conditions:	4.1, 4.2.2, 5.2, 8.3.7	PASS
Response delay (reaction time to fire):	8.2.3, 8.2.6	PASS
Operational reliability:	4.2.1, 4.2.3 to 4.2.7, 5.3, 5.4	PASS
Documentation and marking	6, 7	PASS
System tests	8.2.2, 8.2.4, 8.2.5, 8.2.7, 8.2.8, 8.2.9, 8.3.1, 8.3.3, 8.3.4, 8.3.5, 8.3.6	PASS
Durability of operational reliability, Temperature resistance:	8.3.9 to 8.3.11	PASS
Durability of operational reliability, Vibration resistance:	8.3.16 to 8.3.19	PASS
Durability of operational reliability, Humidity resistance:	8.3.12 to 8.3.14	PASS
Durability of operational reliability, Corrosion resistance:	8.3.15	PASS
Durability of operational reliability, Electrical stability:	8.3.20	PASS

8. Online Display Location

This document can be viewed online at <https://teletek-electronics.com/>

The performance of the product identified above is in conformity with the set of declared performance/s. This declaration of performance is issued, in accordance with Regulation (EU) No 305/2011, under the sole responsibility of the manufacturer identified above.

Signed for and on behalf of the manufacturer by:

2, Iliyansko shose str.
1220 Sofia, Bulgaria
23.06.2023

Yuliy Iliev
Quality Manager