

# Declaration of performance

№ 226/2023

**1. Unique identification code of the product-type:**

**Model number and Description:**

Natron WE-A Addressable fire alarm wireless expander module

**Approved Accessories:**

n/a

**Harmonized Product Type(s):**

Short-circuit isolators

Input/output device

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, NPZ Voenna Rampa, 1220 Sofia, Bulgaria

**4. Authorized representative:**

Teletek Electronics JSC

2 Iliyansko shose Str, NPZ Voenna Rampa, 1220 Sofia, Bulgaria

**5. System(s) of AVCP**

System 1

**6. Harmonized Standard(s)**

EN 54-17: 2005,

EN 54-17: 2005/ AC : 2007

EN 54-18: 2005,

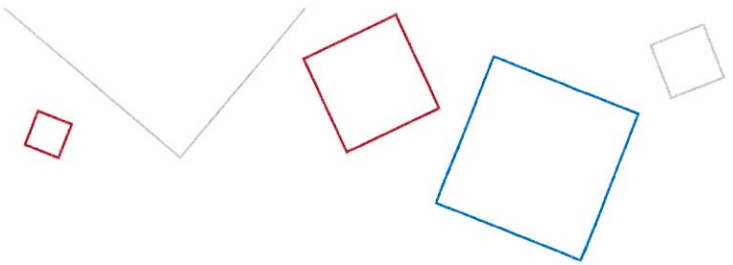
EN 54-18: 2005/ AC : 2007

EN 54-25:2008,

EN 54-25:2008/AC:2012

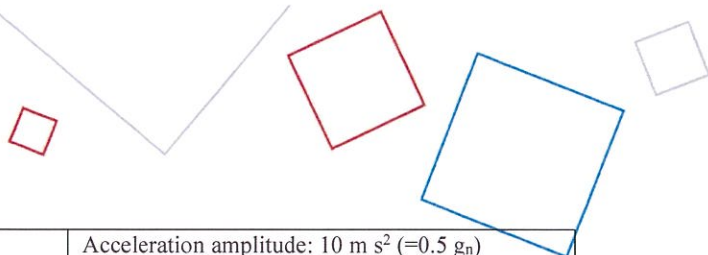
**Notified body/ies:**

EVPU a.s. (Notified Body 1293)



## 7. Declared performance

Essential characteristics	Clauses in EN 54-17: 2005, EN 54-17: 2005/ AC: 2007	Registers	Performance
Functional parameters under fire conditions: Reproducibility	5.2		Correct functioning of each specimen with the manufacturer's specifications.
Operational reliability: Requirements	4		Verifying that the short-circuit isolator has met the requirements of this clause by visual inspection or engineering assessment.
<b>Long-term stability of operational reliability; temperature resistance:</b>			
Dry heat (operational)	5.4		Temperature: (+55 ± 2) °C Duration: 16 h The specimen was monitored during the conditioning period to detect any change from the closed coordination.
Cold (operational)	5.5		Temperature: (-10 ± 3) °C Duration: 16 h The specimen was monitored during the conditioning period to detect any change from the closed coordination.
<b>Long-term stability of operational reliability; vibration and shock resistance:</b>			
Shock (operational)	5.9		Shock pulse time: Half sine Pulse duration: 6 ms Peak acceleration: 10 x (100-20M) m/s <sup>2</sup> (Where M is the specimen's mass in kg) Number of directions: 6 Pulses per direction: 3 No test is applied to specimens with a mass > 4.75 kg The specimen has remained in a closed condition during the conditioning period and the additional 2 min.
Impact (operational)	5.10		Impact energy (1.9 ± 0.1) J Hammer velocity (1.5 ± 0.13) m/s Number of impacts: 1 The specimen has remained in a closed condition during the conditioning period and the additional 2 min.
Vibration, sinusoidal (operational)	5.11		Frequency range: (10 to 150 Hz) Acceleration amplitude: 5 m s <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 The specimen has remained in a closed condition during the conditioning period.
Vibration, sinusoidal (endurance)	5.12		Frequency range: (10 to 150 Hz)

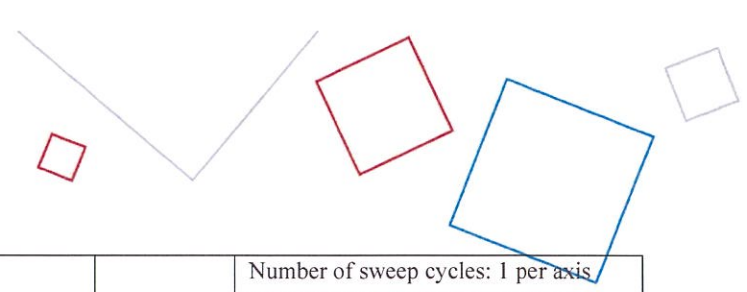


			<p>Acceleration amplitude: <math>10 \text{ m s}^{-2}</math> (<math>=0.5 \text{ g}_n</math>)</p> <p>Number of axes: 3</p> <p>Sweep rate: <math>20 \text{ octave min}^{-1}</math></p> <p>Number of sweep cycles: 1 per axis</p> <p>The specimen has remained in a closed condition during the conditioning period.</p>
<b>Long-term stability of operational reliability; damp resistance</b>			
Damp heat, cyclic (operational)	5.6		<p>Lower temperature: <math>(25 \pm 3) \text{ }^\circ\text{C}</math></p> <p>Upper temperature: <math>(40 \pm 2) \text{ }^\circ\text{C}</math></p> <p>Relative humidity:</p> <p>a) At a lower temperature <math>\geq 95 \%</math></p> <p>b) At upper temperature <math>(93 \pm 3) \%</math></p> <p>Number of cycles: 2</p>
Damp heat, steady state (endurance)	5.7		<p>Temperature: <math>(40 \pm 2) \text{ }^\circ\text{C}</math></p> <p>Relative humidity: <math>(93 \pm 3) \%</math></p> <p>Duration: 21 days</p> <p>The specimen are functioning correctly within the manufacturers specifications.</p>
Long-term stability of operational reliability; corrosion resistance: -Sulphur dioxide ( $\text{SO}_2$ ), corrosion (endurance)	5.8		<p>Temperature: <math>(40 \pm 2) \text{ }^\circ\text{C}</math></p> <p>Relative humidity: <math>(93 \pm 3) \%</math></p> <p>Duration: 21 days</p> <p>Immediately after the conditioning the specimen was subjected to a drying period of 16 h at <math>(40 \pm 2) \text{ }^\circ\text{C}</math>, <math>\leq 50 \%</math> RH, followed by a recovery period of at least 1 h at the standard laboratory conditions.</p>
<b>Long-term stability of operational reliability; electrical stability</b>			
Variation in supply voltage	5.3		At high ambient temperatures appropriate to the anticipated service environment the specimen was functioning correctly.
Electromagnetic Combability (EMC), Immunity tests (operational)	5.13		Detection of any change of state or faulty operation the specimen during the monitoring. Specimen has remained in the closest condition without any faulty operation during conditioning.

<b>Essential characteristics</b>	<b>Clauses in EN 54-18: 2005, EN 54-18: 2005/AC : 2007</b>	<b>Registers</b>	<b>Performance</b>
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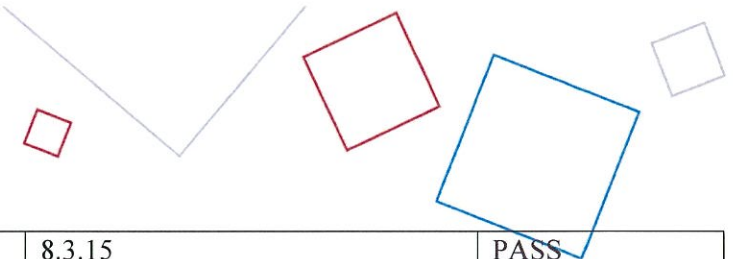


Performance and variation in supply parameters	5.2		Input/output device was functioning correctly with the manufacturer's specifications.
Performance under fire conditions and Operational reliability:	5.1.4		Activating each function by a suitable means in accordance with the manufacturer's specifications. Appropriate measurements are made to confirm the correct operation of the device.
<b>Durability of operational reliability: temperature resistance:</b>			
Dry heat (operational)	5.3		Temperature: (+55 ± 2) °C Duration: 16 h No unwanted or unspecified functioning has occurred during the monitoring.
Cold (operational)	5.4		Temperature: (-10 ± 3) °C Duration: 16 h No unwanted or unspecified functioning has occurred during the monitoring.
<b>Long-term stability of operational reliability; shock and vibration resistance:</b>			
Shock (operational)	5.8		Shock pulse time: Half sine Pulse duration: 6 ms Peak acceleration: 10 x (100-20M) m/s <sup>2</sup> (Where M is the specimen's mass in kg) Number of directions: 6 Pulses per direction: 3 No test is applied to specimens with a mass > 4.75 kg The specimen has remained in a closed condition during the conditioning period and the additional 2 min.
Impact (operational)	5.9		Impact energy (0.5± 0.04) J Number of impacts per point: 3 No unwanted or unspecified functioning has occurred during the conditioning period or the additional 2 min.
Vibration, sinusoidal (operational)	5.10		Frequency range: (10 to 150 Hz) Acceleration amplitude: 5 m s <sup>2</sup> (=0.5 g <sub>n</sub> ) Number of axes: 3 Sweep rate: 1 octave/ min Number of sweep cycles: 1 per axis No unwanted or unspecified function has occurred during the conditioning.
Vibration, sinusoidal (endurance)	5.11		Frequency range: (10 to 150 Hz) Acceleration amplitude: 10 m s <sup>2</sup> (=0.5 g <sub>n</sub> ) Number of axes: 3 Sweep rate: 1 octave/ min



			Number of sweep cycles: 1 per axis No unwanted or unspecified function has occurred during the conditioning.
Long-term stability of operational reliability; corrosion resistance: -Sulphur dioxide (SO <sub>2</sub> ), corrosion (endurance)	5.7		The specimen was supplied with power during the test. Temperature: (40±2) °C Relative humidity: (93±3) % Duration: 21 days Immediately after the conditioning the specimen was subjected to a drying period of 16 h at (40±2) °C, ≤ 50 % RH, followed by a recovery period of a least 1 h at the standard laboratory conditions.
<b>Long-term stability of operational reliability; electrical stability:</b>			
Performance and variation in supply parameters	5.2		The performance of each function of the input/output device is tested according to the manufacturer's specification, at the upper and lower limits of the supply parameter.
Electromagnetic compatibility (EMC), Immunity tests	5.12		No unwanted or unspecified function has occurred during the conditioning.

Essential characteristics	Harmonized technical specification EN 54-25:2008, 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

\*NA – not applicable

## 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.  
NPZ Voenna Rampa  
1220 Sofia, Bulgaria  
26.09.2023



Yuliy Iliev  
Quality Manager