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#### **TESTS REPORT**

3E02444ST Issue 1

This test report supersedes our report 3E02444ST of 06/09/2018

# FREE FALL DROP TEST Environmental structures for electronic requirement – Outdoor enclosures – Part 3: Equipment requirements, tests and safety aspects

**COMPANY: nVent** 

Certified accurate for SOPAVAL MARLY 24/09/2018

> DUHEM Guillaume Ingénieur d'affaire

This test report only concerns equipment submitted for testing.



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## 1. GENERAL PART

#### 1.1 ORDER ISSUER

nVent Z.I. 4 RUE DU MARAIS 67660 BETSCHDORF

#### 1.2 ORDER NUMBER AND ORDER DATE

Reference 3E02444ST Issue 1: order No. 4502273669 of 2018-07-09

#### 1.3 <u>TEST PERFORMANCE DATE</u>

Tests performed on 16/08/2018

#### 1.4 COMMERCIAL CONTACT

Your commercial contact for this affair is Sandrine MENARD

Tel: 03 27 21 59 84

Email: sandrine.menarddelencre@sopaval.fr



# 2. EQUIPMENT PRESENTED FOR TESTS

DESIGNATION	PART NUMBER	SERIAL NUMBER
See report in appendix 1E31741M1 Issue 1 of 20/09/2018		

Description: Modular Bay

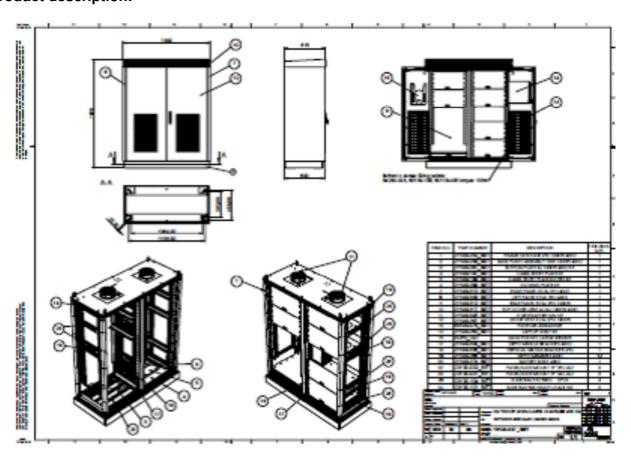
Manufacturer: nVent

Model: Outdoor modulaire 10149-337





## **Product description:**





# 3. TEST PROGRAM AND SUMMARY RESULTS

The test program, designated by the representatives of nVent, is defined in IEC 61963-3 (table 5d class 1).

TESTS	RESULTS	PARAGRAPH
Free fall drop tests	Tests are fully performed according to prescriptions. No observation on the equipment was reported during the tests.	4.3



## 4. FREE FALL DROP TESTS

#### 4.1 TEST PROGRAM

See report in appendix 1E31741M1 Issue 1 of 20/09/2018

#### 4.2 TEST RESULTS

See report in appendix 1E31741M1 Issue 1 of 20/09/2018

#### 4.3 **CONCLUSION**

#### 4.3.1. TEST PROGRAM CARRIED OUT

Tests are fully performed according to prescriptions.

« Insérer les courbes de pilotage avec les gabarits d'essais permettant de justifier la conclusion sur le respect du programme »

#### 4.3.2. PERFORMANCE OF THE EQUIPMENT SUBMITTED FOR TESTING

No observation on the equipment was reported during the tests.



## **APPENDICES**

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## **APPENDIX 1**

Test report 10458421-001-2 of 17092018



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#### **TESTS REPORT**

1E31741M1 Rev 1

This test report supersedes our report 1E31741M1 of 30/08/2018

# FREE FALL DROP TEST Environmental structures for electronic requirement – Outdoor enclosures – Part 3 : Equipment requirements, tests and safety aspects

**COMPANY: SOPAVAL** 

Certified accurate for SOPEMEA VELIZY- VILLACOUBLAY 20/09/2018

DUMONT Brigitte
Test Engineer

This test report only concerns equipment submitted for testing.



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## 1. GENERAL PART

#### 1.1 ORDER ISSUER

SOPAVAL RUE ANTOINE LAURENT DE LAVOISIER - ZAE LES DIX MUIDS 59770 MARLY

#### 1.2 ORDER NUMBER AND ORDER DATE

Reference 1E31741M1 Rev 1: order No. 70027027 of 2017-12-22

#### 1.3 <u>TEST PERFORMANCE DATE</u>

Tests performed on 16/08/2018

#### 1.4 COMMERCIAL CONTACT

Your commercial contact for this affair is Damien RIFFAUD

Tel: 01 45 37 64 68

Email: riffaud@sopemea.fr



# 2. EQUIPMENT PRESENTED FOR TESTS

DESIGNATION	PART NUMBER	SERIAL NUMBER
Outdoor Modular cabinet 29U	10149-337 (*)	-

(\*) Part Number provided by the customer but not noticed by SOPEMEA.



# 3. TEST PROGRAM AND SUMMARY RESULTS

The test program, designated by the representatives of SOPAVAL, is defined in IEC 61963-3 (table 5d class 1).

TESTS	RESULTS	PARAGRAPH
Free fall drop tests	Tests are fully performed according to prescriptions. No observation on the equipment was reported during the tests.	<u>4.3</u>



## 4. FREE FALL DROP TESTS

#### 4.1 TEST PROGRAM

#### 4.1.1. DROPS

STANDARD/METHOD OF REFERENCE: CEI 60068-2-32.

Drop height: 0.1 m and 0.25 m

Drop area: concrete
Number of drops: 2 by height

Drop side: 1 (normal rest surface)

#### Configuration

The equipment is not powered during the tests.

#### **Checks**

Checks are carried out by the technician of SOPEMEA



#### 4.2 PROCEDURE

#### 4.2.1. TEST EQUIPMENT USED

#### **Test facility**

DESIGNATION	MANUFACTURER	ТүрЕ
DROP AREA	SOPEMEA	CONCRETE

#### 4.2.2. TEST CONDITIONS

#### 4.2.2.1 Mounting

During the drop tests, the equipment is placed directly on the drop area. The set is attached to an unloader by means of straps.

#### 4.2.2.2 <u>Drops</u>

The drops are defined by:

- the configuration of the specimen in space before the drop,
- the height of the drop in m.

When released, the specimen falls freely on the drop area.

The drops are carried out successively according to all the configurations specified by the test program.



## 4.3 <u>TEST RESULTS</u>

#### Personnel conducting the tests:

NAME	FUNCTION
CALMELS Patrick	Test technician

#### 4.3.1. CHECKS BEFORE TESTS

DATE	COMMENTS
16/08/2018	Visual checks, nothing to report

#### 4.3.2. TESTS SCHEDULE

DATE	COMMENTS
16/08/2018	Two successive drops at 0.1m of height, nothing to report.
	After having informed the representative of nVent, it is decided by the customer
	not to carry out the drops at 0.25m.

#### 4.3.3. CHECKS AFTER TESTS

DATE	COMMENTS
16/08/2018	Visual checks, nothing to report



#### 4.3.4. PHOTOGRAPHS OF THE TESTS



Photograph n°1: General view on drop area



Photograph n°2: Underside of the cabinet 29U after drop at 0.1m





Photograph n°3: Underside of the cabinet 29U after drop at 0.1m



Photograph n°4: Underside of the cabinet 29U after drop at 0.1m



#### 4.3.5. CONCLUSION

#### 4.3.5.1 Test program carried out

Tests are fully performed according to prescriptions.

### 4.3.5.2 Performance of the equipment submitted for testing

No observation on the equipment was reported during the tests.



End of test report



End of test report