

**TEST LABORATORY**

## **TYPE TEST REPORT**

*QUALIFICATION TESTS OF  
SERVICE CABINET FOR PREPAYMENT METER SINGLE (F732)  
SERVICE CABINET FOR PREPAYMENT METER TRI (F733)  
SERVICE CABINET FOR PREPAYMENT METER SINGLE FOR MODULAR DISCONNECTOR (F734)  
SERVICE CABINET FOR PREPAYMENT METER TRI FOR MODULAR DISCONNECTOR (F735)*

*N° 130-21-40-06*

*20/11/2024*

**REQUESTED BY :** *MICHAUD SA's Research Department*

**INTRODUCTION :** *This document gathers the qualification tests of SERVICE CABINET FOR PREPAYMENT METER SINGLE (F732), SERVICE CABINET FOR PREPAYMENT METER TRI (F733), SERVICE CABINET FOR PREPAYMENT METER SINGLE FOR MODULAR DISCONNECTOR (F734) and SERVICE CABINET FOR PREPAYMENT METER TRI FOR MODULAR DISCONNECTOR (F735). Tested products are of MICHAUD's manufacture*

*The test procedures are the ones of the Standard NF EN 62262 dated April 2004 and NF EN 60529 dated October 1992*

**ISSUANCE :** *On 20/11/2024 - 1 original to UR (LE)  
- 1 original to MEX (Customer Filing)*

*Any copy of this test report is authorised only as its complete content after written authorisation from the Test Laboratory of MICHAUD SA. The test report hereafter concerns only the samples tested.*

*The French version is legally acceptable.*

*This document includes 6 pages (including this page 1).*

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**I) INTRODUCTION**

**1.1 Subject**

This document gathers the qualification tests of SERVICE CABINET (F732 - F733 - F734 - F735). Tested products are of MICHAUD's manufacture

The test procedures are the ones of the Standard NF EN 62262 dated April 2004 and NF EN 60529 dated October 1992  
For each test, there is a test sheet gathering the corresponding procedures and results.

**1.2 Tested products**

The tested products are SERVICE CABINET. These products are coming from an industrial series and have been received at the Test Laboratory on 19/11/2024.

DESIGNATION	CODE
SERVICE CABINET FOR PREPAYMENT METER SINGLE	F732
SERVICE CABINET FOR PREPAYMENT METER TRI	F733
SERVICE CABINET FOR PREPAYMENT METER SINGLE FOR MODULAR DISCONNECTOR	F734
SERVICE CABINET FOR PREPAYMENT METER TRI FOR MODULAR DISCONNECTOR	F735

**1.3 Order of tests**

Samples are numbered from 1 to 2 for each type of SERVICE CABINET

SAMPLES N°	TESTS
<b>1</b>	4.1 Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK Code)
<b>1</b>	4.2 Degrees of protection provided by enclosures (IP Code)

**II) STANDARD DOCUMENTS REFERRED TO IN THIS TEST REPORT**

**- French Standards**

**NF EN 62262** : April 2004,  
"Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK Code)"

**NF EN 60529** : October 1992,  
"Degrees of protection provided by enclosures (IP Code)"

**III) GENERAL CONDITIONS**

- **Temperature**

*The tests are performed at the room temperature of the Test Laboratory comprised between 20°C and 26°C.*

- **Conductors used**

*No conductors used on the tests of this report*

**IV) TESTS**

*On the following pages, the sheets of each performed test can be found.*

TEST DESCRIPTION : 4.1 Test for mechanical damage to the main conductor

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DATE : ON 20/11/2024

PLACE : MICHAUD Test Laboratory

OPERATOR : C. BEAUVOIR

N° OF SAMPLES : 1

TEST EQUIPMENTS :

- Degree of protection against mechanical impact

PROCEDURES

The sample is placed in the room at room temperature for at least 1 hour.

A vertical free-fall hammer, as defined in standard NF EN 62262 , is then used to apply (cabinet closed) :

- a 10 J impact (IK09) to the center of each external face of the enclosure, except to the face against support in conventional installation mode.

After testing, the equipment must retain its original IP rating and functionality (verified in the following test)

TEST RESULTS

CODE	SAMPLE N°	DEGREE IK	OBSERVATION	FOLLOWING TEST
F732	1	IK09 (10J)	No visible damage on the enclosure	4.2
F733	1	IK09 (10J)	No visible damage on the enclosure	4.2
F734	1	IK09 (10J)	No visible damage on the enclosure	4.2
F735	1	IK09 (10J)	No visible damage on the enclosure	4.2

TEST DESCRIPTION : 4.2 Degrees of protection provided by enclosures (IP Code)

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DATE : ON 20/11/2024

PLACE : MICHAUD Test Laboratory

OPERATOR : C. BEAUVOIR

N° OF SAMPLES : 1

TEST EQUIPMENTS :

- Degrees of protection provided by enclosures (IP code)

PROCEDURES

We check the IP 43 degrees of protection for the outer enclosure of the service cabinet according to NF EN 60529 :

Degree of protection IP 4x :

- Protection against a solid object  $\geq 1\text{mm}$  in diameter such as a wire

Degree of protection IP x3

- Protection against ingress of water: water raining down from the sprinkler head in a direction making an angle of 60° or less on either side of the vertical during at least 3 min must not have any harmful effects.

TEST RESULTS

CODE	SAMPLE N°	PREVIOUS TEST	IP PROTECTION DEGREE		CONCLUSION
			IP 4x	IP x3	
F732	1	4.1	Protected	No ingress of water	Satisfactory
F733	1	4.1	Protected	No ingress of water	Satisfactory
F734	1	4.1	Protected	No ingress of water	Satisfactory
F735	1	4.1	Protected	No ingress of water	Satisfactory