



TSE DENEY ve KALİBRASYON MERKEZİ BAŞKANLIĞI

Elektroteknik ve Makine Laboratuvar Grup Başkanlığı (Gebze)

Elektroteknik Laboratuvarı Gebze Müdürlüğü

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ELECTROTECHNICAL LABORATORY (GEBZE)

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233717

10-14

MUAYENE VE DENEY RAPORU TEST REPORT

| | | |
|---|---|--|
| Deneyi Talep Eden (Adı,Adresi,Şehir vb.) | : | TEMPA PANO SAN. TİC. A.Ş. |
| Customer (Name,Address,City etc.) | : | Makine ve İmalat Sanayicileri Organize Sanayi Bölgesi 2. Cad. No. 1 Demirciler Köyü Dilovası --KOCAELİ) |
| Deney Talep Tarihi/No Order Date / No | : | 13.10.2014 / 116288 |
| Numunenin Tanımı (Cins, Marka, Tip, Tür, Model vb.) | : | BİNA DIŞI BOŞ MUHAFAZA, TEMP A PANO , AS , - , - , 0,00 - |
| Sample Description (Type,Mark,Model etc.) | : | OUTDOOR EMPTY ENCLOSURE,TEMP A PANO,AS,..,0,00 - |
| Numune Kabul Tarihi Test Item Receipt Date | : | 13.10.2014 |
| Deneylerin Yapıldığı Tarih Date of Test | : | 20.10.2014 - 20.10.2014 |
| Uygulanan Standard / Metod Applied Standard/Method | : | TS EN 62208:2014-04 Boş mahfazalar - Alçak gerilim anahtarlama ve kontrol düzenleri için – Genel kurallar TS EN 62208:2014-04 Empty enclosures for low-voltage switchgear and controlgear assemblies - General requirements |
| Raporun Sayfa Sayısı Number of pages of the report | : | 7 |
| Açıklamalar Remarks | : | This report is translation of the Turkish report which is issued at 28.08.2014 and the number of 228819 and based on this report. No additional tests were done. |

Yukarıda tanımlanan numune için laboratuvarımızda yapılan muayene ve deneylerden OLUMLU sonuç alınmış olup, ölçüm sonuçları müteakip sayfalarda verilmiştir.
The sample described above Passed the applied tests. The test results are given on the following pages.

Bu rapor özel deney talebine istinaden düzenlenmiş olup, Standartlara Uygunluk Belgesi niteliğinde değildir. Partiyi temsil etmez, ayrıca ilan, reklam ve ihalelerde uygunluk belgesi niteliğinde kullanılamaz.
This test report was prepared upon customer's request, can not be used as certificate of conformity to standards, does not represent a batch and can not be used as conformity document for advertisements and procurements .



Mühür
Seal

Tarih
Date

Deney Sorumlusu
Person in charge of tests

Kontrol Eden
Reviewer

Onaylayan
Approved by

20.10.14

Bilgehan BİLDİK
Mühendis

Safiye DEMİR
Teknik Şef

Hilmi AKDOĞAN
Laboratuvar Müdürü

Bu rapor, hazırlayan laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. İmzasız ve mühürsüz raporlar geçersizdir.

Bu rapor, sadece deneyi yapılan numune için geçerlidir ve "Ürün Belgesi" yerine geçmez.

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This test report represents only tested sample(s), and shall not be used as Product Certificate



MUAYENE - DENEY SONUÇLARI TEST RESULTS

| TEST REPORT | |
|--|--|
| IEC 62208 | |
| Empty enclosures for low-voltage switchgear and controlgear assemblies – General requirements | |
| Report Number.: | 233717 |
| Date of issue.....: | 20.10.2014 |
| Total number of pages | 7 |
| Applicant's name | Tempa Pano San. ve Tic. A.Ş. |
| Address | Makine ve İmalat Sanayicileri Org. San. Bölgesi 2. Cad. No.1 Demirciler Köyü Dilovası/KOCAELİ |
| Deney spesifikasyonları | |
| Standard | IEC 62208:2011 (Second Edition) |
| Test procedure | TSE |
| Non-standard test method..... | N/A |
| Test Rapor Form No..... | IEC62208B |
| Test Rapor Form(s) Originator | OVE |
| Master TRF..... | Dated 2013-01 |
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| If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed. | |
| This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02. | |
| Test item description | Outdoor Empty enclosures |
| Trade Mark | Tempa Pano |
| Manufacturer | Tempa Pano San. ve Tic. A.Ş. |
| Model/Type reference | AS |
| Ratings | IP 55; 600 mm x 600 mm x 200 mm |





MUAYENE - DENEY SONUÇLARI TEST RESULTS

| | |
|---|---|
| Summary of testing: | |
| Tests performed (name of test and test clause): Clause 9.8- Degree of protection (IP-Code) | Testing location: TSE DKMB Elektroteknik Laboratuvarı Gebze Müdürlüğü |

| | |
|------------------------------------|------------------|
| Test item particulars | : Classification |
| Type of material..... | : metallic |
| Intended location..... | : Outdoor |
| Degree of protection..... | : IP 55 |

| | |
|---|------------|
| Possible test case verdicts: | |
| - test case does not apply to the test object | : N/A |
| - test object does meet the requirement..... | : P (Pass) |
| - test object does not meet the requirement..... | : F (Fail) |

| | |
|---|--|
| General remarks: | |
| The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory. "(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report. | |
| Throughout this report a <input type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator. | |

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MUAYENE - DENEY SONUÇLARI TEST RESULTS

| IEC 62208 | | | |
|-----------|--|-----------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |
| 9 | TYPE TESTS | | |
| 9.8 | Degree of protection (IP-Code) | | |
| 9.8.1 | Degree of protection against access to hazardous parts and against the ingress of solid foreign objects indicated by first characteristic numeral | | |
| 9.8.1.1 | Protection against access to hazardous parts | | |
| | Subclauses 12.1 and 12.2 of IEC 60529 apply | IP 55 | P |
| | Access probe shall not enter the protected space | | P |
| 9.8.1.2 | Degree of protection against the ingress of solid foreign objects | | |
| | For enclosures IP2X, IP3X, IP4X, 13.2 and 13.3 of IEC 60529 apply. | | -- |
| | For IP 5X enclosures, 13.4, category 2 (without vacuum pump) and 13.5 (without vacuum pump) of IEC 60529 apply. Ingress of talcum powder into protected space is verified as described | | P |
| | For enclosures IP6X, 13.6 of IEC 60529 apply. No talcum powder shall be observable inside the enclosure at the end of the test | | -- |
| 9.8.2 | Degree of protection against ingress of water as indicated by the second characteristic numeral | | |
| | Test according to clauses 14.1 and 14.2 of IEC 60529 | | P |
| | After the test, water has not ingressed into the protected space | | P |
| 9.8.3 | Degree of protection against hazardous parts as indicated by additional letter. | | |
| | Test according to clause 15 of IEC 60529 | | -- |
| | The access probe does not touch the surface of the protected space. | | -- |
| 9.13 | Resistance to corrosion | | |
| 9.13.1 | General | | |
| | Metallic enclosures and external metallic parts of insulating and combined enclosures are tested to verify that they ensure protection against corrosion | | P |
| | In all cases hinges, locks and fastenings have to be tested | | P |
| 9.13.2 | Test procedure | | |
| 9.13.2.1 | Severity test A | | |
| | This test is applicable to: | | |
| | - metallic indoor enclosures | | -- |
| | - external metallic parts of indoor enclosures | | -- |
| | - internal metallic parts of indoor and outdoor enclosures upon which intended mechanical operation may depend | | -- |
| | The test consists of: | | |
| | - 6 cycles of 24 h each to damp heat cycling test according to IEC 60068-2-30 (Test Db) at (40 ± 3) °C and relative humidity of 95 % | | -- |





MUAYENE - DENEY SONUÇLARI TEST RESULTS

| IEC 62208 | | | |
|-----------|--|-----------------|---------|
| Clause | Requirement + Test | Result - Remark | Verdict |
| | - 2 cycles of 24 h each to salt mist test according to IEC 60068-2-11; (Test Ka: Salt mist), at a temperature of (35 ± 2) °C | | -- |
| 9.13.2.2 | Severity test B | | |
| | This test is applicable to: | | |
| | - metallic outdoor enclosures | | -- |
| | - external metallic parts of outdoor enclosures | | -- |
| | The test comprises two identical 12 day periods | | |
| | Each 12 day period comprises: | | |
| | - 5 cycles of 24 h each to damp heat cycling test according to IEC 60068-2-30 (Test Db) at (40 ± 3) °C and relative humidity of 95 % | | -- |
| | - 7 cycles of 24 h each to salt mist test according to IEC 60068-2-11; (Test Ka: Salt mist), at a temperature of (35 ± 2) °C | | -- |
| 9.13.3 | Results to be obtained | | |
| | After the test, the enclosure or samples shall be washed in running tap water for 5 min, rinsed in distilled or demineralized water then shaken or subjected to air blast to remove water droplets. The specimen under test shall then be stored | | -- |
| | Compliance is checked by visual inspection to determine that: | | |
| | - there is no evidence of iron oxide, cracking or other deterioration more than that allowed by ISO 4628-3 for a degree of rusting Ri1 | | -- |
| | - the mechanical integrity is not impaired | | -- |
| | - seals are not damaged | | |
| | - doors, hinges, locks, and fastenings work without abnormal effort | | -- |

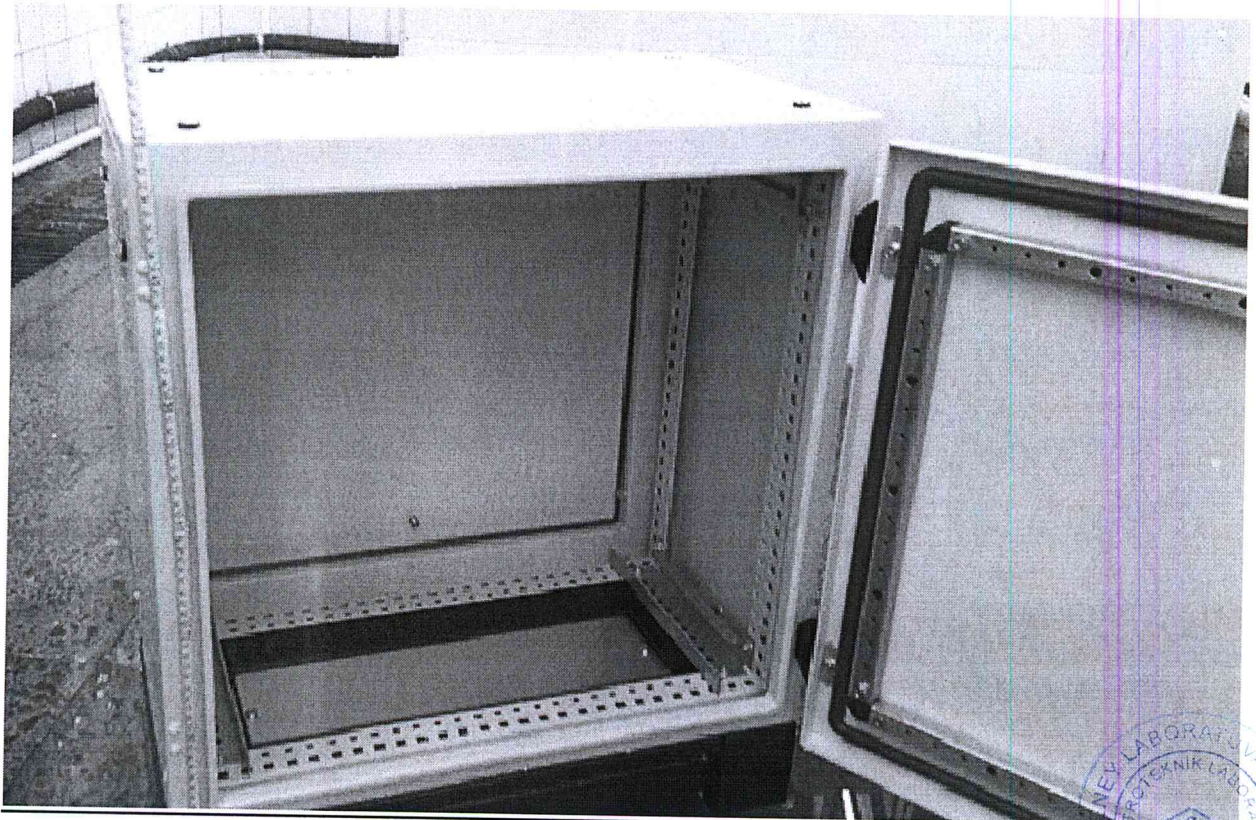
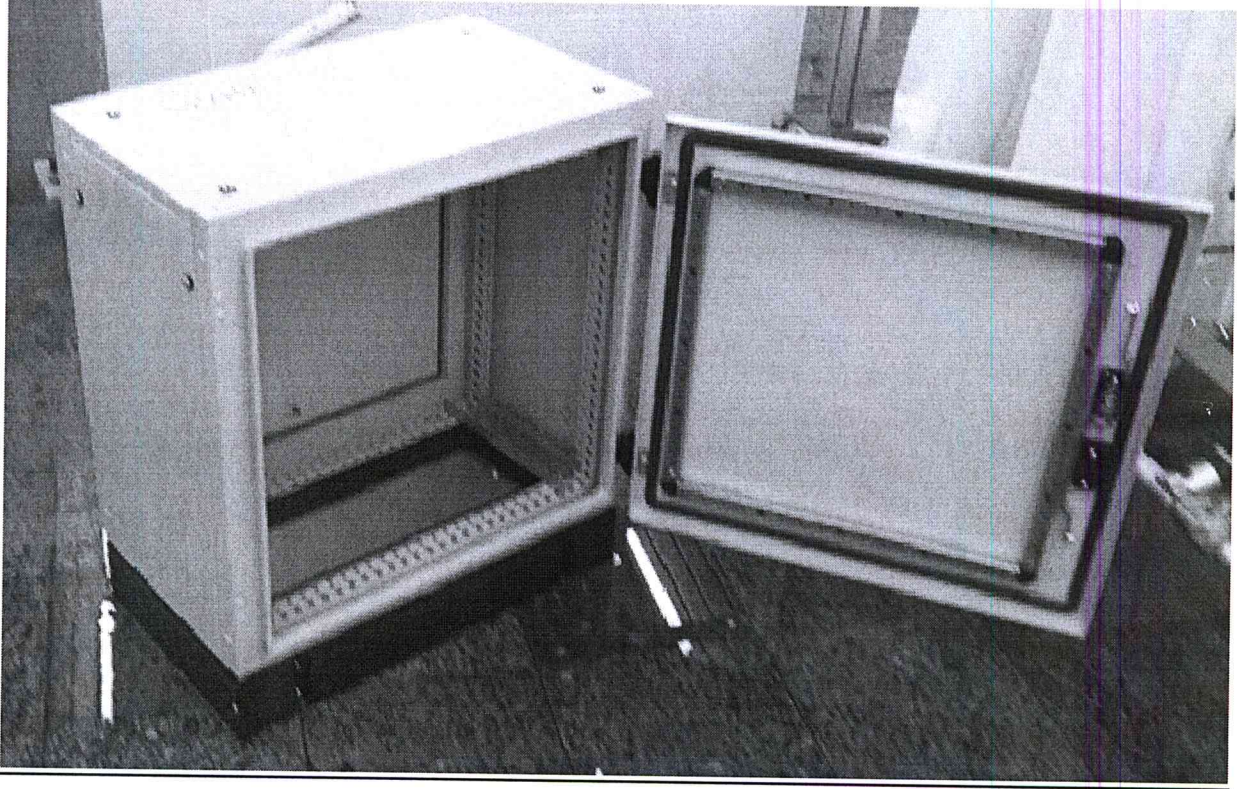


MUAYENE - DENEY SONUÇLARI TEST RESULTS

IEC 62208

| Clause | Requirement + Test | Result - Remark | Verdict |
|--------|--------------------|-----------------|---------|
|--------|--------------------|-----------------|---------|

Photos:



MUAYENE - DENEY SONUÇLARI TEST RESULTS

IEC 62208

| Clause | Requirement + Test | Result - Remark | Verdict |
|--------|--------------------|-----------------|---------|
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