

REPORT No 11655

Date of issue: March 5, 2026

Status: FINAL REPORT

IEC 60884-1

SOCKET-OUTLETS FOR HOUSEHOLD AND SIMILAR PURPOSES

Program: SQO-EM6 Round 13

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Prepared by:	Reviewed by:	Approved by:
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1. FOREWORD

This report summarizes the results of the **SQO-EM6 (Round 13)** proficiency testing program on the determination of proper functionality of socket-outlets. This program is carried out under a simultaneous participation format, according to the A.3.1 classification of the ISO 17043 standard ("Model 2 - Figure A.1").

South Quality conducted the testing program from November 2025 to January 2026 with the aim of the program assessing the laboratory's ability to competently perform the designated tests.

2. ORGANIZATION

Program Coordinator:	Eng. Esteban Di Marco
Assistant Technician:	Valentyn Kravchenko
Statistic:	Lic. Manuel Tozaki
Supervision:	Eng. Emiliano Medina

3. OBJECTIVE

The objective of this proficiency testing program is to perform the following tests:

- Terminals (Clause 12);
- Construction of fixed socket-outlets (Clause 13);
- Force necessary to withdraw the plug (Clause 22);
- Resistance to abnormal heat and to fire (Clause 28.1).

These tests are performed using the following standard:

Standard
IEC 60884-1: 2022

To verify this, batches of socket-outlets have been selected.

Participants in this program have not been previously informed about the expected results of the samples they receive.

4. PARTICIPANTS

In the present round, 19 companies have participated with the following details:

CODE	Country	ISO 17025 accredited	Results delivered
01	Brazil	Yes	Yes
02	England	Yes	Yes
03	Spain	Yes	Yes
04	Netherlands	Yes	Yes
05	Brazil	Yes	Yes
06	Argentina	Yes	Yes
07	France	Yes	Yes
08	England	Yes	Yes
09	Italy	Yes	Yes
10	Mexico	Yes	Yes
11	China	Yes	Yes
12	Canada	Yes	Yes
13	Portugal	Yes	No
14	Pakistan	No	No
15	South Africa	No	Yes
16	Mexico	No	No
17	Türkiye	Yes	Yes
18	Malaysia	Yes	No
19	Colombia	Yes	Yes

5. HOMOGENEITY

Several batches were prepared by South Quality personnel in an identical way.

Subsequently, a homogeneity study was conducted with an ISO 17025 accredited laboratory.

The control process followed ISO 33405: 2024, clauses 7.4.1.1 / 7.4.1.2. Stratified random sampling was applied, and the samples were selected using random-number-generation software.

The results of this test are presented below:

Size of each batch: **400 units**

Tested samples from each batch: **40 units**

IEC 60884-1 CLAUSE NO	SAME RESULTS IN TESTED SAMPLES		
	BATCH: LEM3246	BATCH: LEM3247	BATCH: LEM3248
12	YES	NO	YES
13	YES	YES	YES
22	YES	YES	YES
28	YES	YES	NO

Samples for this program are taken from the selected batch identified as **LEM3246**.

The analysis of the test data indicated that the selected samples exhibited sufficient homogeneity for the program. Therefore, the results of participants identified as outliers cannot be attributed to sample variability.

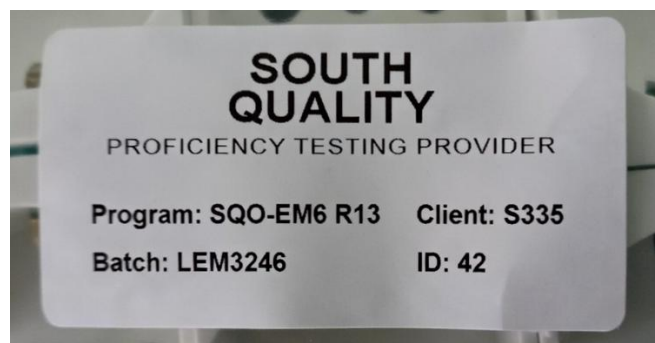
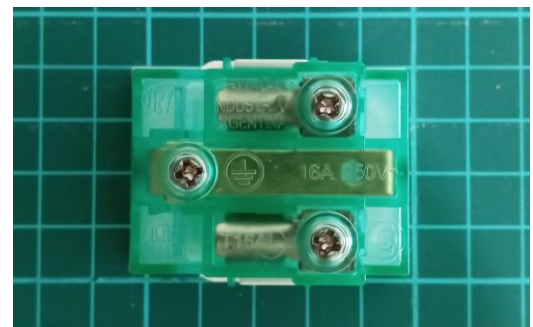
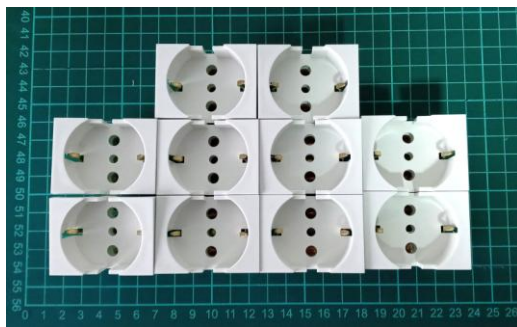
6. SAMPLE INFORMATION

The following sample was sent for testing (Participant **Code 17**):

Batch:	LEM3246
Sample ID:	42
Characteristics:	Socket-outlet 250V-16A - 10 units Format: CEE 7/3 - AKA "Schuko" Trademark: CAMBRE Model: T16AL

7. IMAGES

SAMPLE



8. ASSIGNED VALUES

The assigned values are obtained from the results reported by all participants (**Consensus values**).

9. STATISTICS

The results must be treated as qualitative.

For qualitative results, the comparison will be made directly against the assigned values, so any difference will be evaluated as **Unsatisfactory**.

The comparison is made by assigning to each chapter of the results of each participant, a compliance verdict (PASS or FAIL). A single clause with a FAIL verdict, imposes a FAIL verdict on the corresponding chapter.

10. PARTICIPANTS' RESULTS

CLAUSE	REQUIREMENT	LABORATORY CODE															CONSENSUS VALUE
		01	02	03	04	05	06	07	08	09	10	11	12	15	17	19	
12	Terminals	F	F	F	F	F	F	F	F	F	P	F	F	F	F	F	F
13	Construction of fixed socket-outlets	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
22	Force necessary to withdraw the plug	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
28.1	Resistance to abnormal heat and to fire	P	P	P	P	F	P	P	P	P	P	F	P	P	P	P	P

References:

P: PASS
F: FAIL

NOTE: Any differences in the test method (voltage or test intensity, cycles, torque, etc.), even if the result matches the assigned value, will be indicated in **Annex B** for the participating laboratory's review.

11. EVALUATION OF PERFORMANCE

Laboratory Code 01: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 02: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 03: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 04: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 05: The laboratory has obtained an **UNSATISFACTORY** result in the verification of clause 28.1 (Resistance to abnormal heat and to fire). However, it achieved **SATISFACTORY** results for the other clauses.

Laboratory Code 06: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 07: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 08: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 09: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 10: The laboratory has obtained an **UNSATISFACTORY** result in the verification of clause 12 (Terminals). However, it achieved **SATISFACTORY** results for the other clauses.

Laboratory Code 11: The laboratory has obtained an **UNSATISFACTORY** result in the verification of clause 28.1 (Resistance to abnormal heat and to fire). However, it achieved **SATISFACTORY** results for the other clauses.

Laboratory Code 12: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 13: The laboratory has not sent the results before the deadline.

Laboratory Code 14: The laboratory has not sent the results before the deadline.

Laboratory Code 15: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 16: The laboratory has not sent the results before the deadline.

Laboratory Code 17: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

Laboratory Code 18: The laboratory has not sent the results before the deadline.

Laboratory Code 19: The laboratory has obtained **SATISFACTORY** results in the verification of all clauses.

12. CONCLUSIONS

The overall performance in the **SQO-EM6 (Round 13)** program, based on expected results from the participating laboratories, was as follows:

- Participants Codes **01, 02, 03, 04, 06, 07, 08, 09, 12, 15, 17** and **19** have obtained a **SUFFICIENT** performance according to the expected results and should not take action;
- Participants Codes **05, 10** and **11** have obtained an **INSUFFICIENT** performance in accordance with the expected results and must take action in the clauses where they have obtained a different result than expected (See annex B).

The criteria used for the evaluation of the overall performance is the following:

- **SUFFICIENT** performance: No unsatisfactory results were obtained.
- **INSUFFICIENT** performance: An unsatisfactory result was obtained.

APPENDIX A

A1 - PARTICIPANT DATA

Company: **INTERTEK TEST HİZMETLERİ A.Ş.**
Laboratory: Electrical Laboratory
Country: Türkiye
Client ID: S335
Contact person: Çiğdem Çalışkan (Quality Supervisor)
cigdem.caliskan@intertek.com

A2 - INSTRUCTIONS

 **SOUTH
QUALITY**
PROFICIENCY TESTING PROVIDER

INSTRUCTIONS

PROGRAM:	Socket-outlets for household and similar purposes
CODE:	SQO-EM6
ROUND:	13
STANDARD:	IEC 60884-1
COORDINATOR:	Eng. Esteban Di Marco (edimarco@ptsouthquality.com)

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1 - General

This document serves as a guide for managing the results of the **SQO-EM6 (Round 13)** program.

2 – Standard

IEC 60884-1: 2022

3 - Participant

INTERTEK TEST HİZMETLERİ A.Ş. Electrical Laboratory	CODE 17
--	---------

4 - Tests involved

TEST	SUBTEST
Determination of proper functionality of socket-outlets	- Terminals (Clause 12) - Construction of fixed socket-outlets (Clause 13) - Force necessary to withdraw the plug (Clause 22) - Resistance to abnormal heat and to fire (Clause 28.1)

5 - Samples

CODE	SAMPLE	QUANTITY
LEM3246-42	Socket-outlet 250V - 16A Format: CEE 7/3 - AKA "Schuko" Trademark: CAMBRE Model: T16AL	10

6 - Notes

- The deadline for the delivery of results is **December 30, 2025**.
- Participants must submit the results using the usual report employed by their laboratory. The report must include all verdicts corresponding to each clause and subclause specified for verification.
- The samples are to be handled as routine lab samples, with all testing, documentation, and reporting adhering to IEC 60884-1.
- Samples must be retained until the end of the program, which concludes with the submission of the final report.
- To review the results, test images would be appreciated. Images can be attached at the end of this document or sent by email.

PHOTOGRAPHS

DSQ-012

- REV 06 -

SQO-EM6 R13

October 2025

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A3 - PARTICIPANT RESULTS (TEST REPORT #202600035IST)

Form LFT-EMEA-TR-OP-07g/ Rev.4/30.01.2023

SOUTH QUALITY TEST REPORT

SCOPE OF WORK

Testing of socket-outlets according to IEC 60884-1:2022 for clauses Cl.12, Cl.13, Cl.22 and Cl.28.1

REPORT NUMBER

202600035IST

ISSUE DATE

23.01.2026

PAGES

25

PROJECT NUMBER

IST26Q.0073.00

NAME OF TESTING LABORATORY PREPARING THE REPORT

INTERTEK TEST HİZMETLERİ A.Ş. ELECTRIC LABORATORY

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Form LFT-EMEA-TR-OP-07g/ Rev.4/30.01.2023

TEST RAPORU
/TESTING REPORT

Proje No: /Project Number	IST26Q.0073.00
Hizmet: /Service	Testing of socket-outlets according to IEC 60884-1:2022 for clauses Cl.12, Cl.13, Cl.22 and Cl.28.1
Ürün: /Product	Socket-outlet 250V - 16A Format: CEE 7/3 - AKA "Schuko" Trademark: CAMBRE Model: T16AL
Ürün Tanımı: /Product Description	Socket-outlet
Firma İsmi: /Company Name	SOUTH QUALITY
Firma Adresi: /Company Address	Pareja 3981 - Villa Devoto (C1419GVG) Ciudad Autónoma de Buenos Aires - ARGENTINA
Kontak Kişi: /Contact	Eng. Esteban Di Marco

Deney laboratuvarı olarak faaliyet gösteren Intertek Test Hizmetleri A.Ş. TÜRKAK'tan AB-0823-T ile yukarıda belirtilen standartlara göre akredite edilmiştir.

Intertek Test Hizmetleri AS was accredited by TÜRKAK under registration number AB-0823-T for standards specified above as test laboratory.

Türk Akreditasyon Kurumu(TÜRKAK) deney raporlarının tanınırlığı konusunda Avrupa Akreditasyon Birliği (EA) ile Çok Taraflı Anlaşma ve Uluslararası Laboratuvar Akreditasyon Birliği (ILAC) ile karşılıklı tanıma anlaşması imzalamıştır.
Turkish Accreditation Agency (TURKAK) is a signatory to the European co-operation for Accreditation (EA) Multilateral Agreement (MLA) and to the International Laboratory Accreditation Cooperation (ILAC) Mutual Recognition Arrangement (MRA) for the recognition of test reports.

Deney ve/veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metodları bu sertifikanın tamamlayıcı kısmı olan takip eden sayfalarda belirtilmiştir.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following pages which are part of this report.

Aksi talep edilmediği sürece Intertek Türkiye Elektrik Laboratuvarı Paylaşılan Risk Karar Kuralını (Basit Kabul Kuralı) uygulamaktadır.
The Intertek Turkey Electrical Laboratory applies the Shared Risk Decision Rule (Simple Acceptance Rule) unless otherwise requested.

Kuralın Tanımı: Eğer ürün veya test metodu, laboratuvar raporunda uygunluk bildirimi zorunlu kılar, ancak ilgili standartlarda veya mevzuatta uygunluğun değerlendirilmesinde, güven düzeyinin ve ölçme belirsizliğinin etkilerine ilişkin herhangi bir bilgi yok ise Laboratuvar, güven düzeyi ve ölçüm belirsizliğini göz önünde bulundurmaksızın elde edilen test sonucunun yalnızca belirtilmiş sınırlar içinde olup olmadığına karar vererek uygun veya uygun değildir şeklinde değerlendirmesini yapabilir. Bu kural dünya çapında en fazla kullanılan kuraldır. Bu kural uygulandığında test metodlarına ait toplam belirsizlikler rapor üzerinde belirtilmez.

Intertek Electric Laboratory applies the Shared Risk Decision Rule (Simple Acceptance Rule). If the product or test method requires a declaration of conformity in the laboratory report, however, if there is no information whatsoever regarding the effects of the confidence level and measurement uncertainty in terms of the evaluation of conformity in the relevant standards or legislation, the laboratory may consider the test result obtained without considering the confidence level and measurement uncertainty and decide whether it remains within the specified limits and evaluate it as appropriate or not appropriate. This rule is the most used rule worldwide. When this rule is applied, the total uncertainties of the test methods are not indicated on the report.

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Sonuçlar, yaklaşık %95'lik bir güven düzeyi veren 2 kapsama faktörü ($k=2$) kullanılarak hesaplanan genişletilmiş bir belirsizlikle rapor edilir.
The results are reported with an expanded uncertainty calculated using a coverage factor $k=2$, which gives a level of confidence of approximately 95%

İmzasız raporlar geçersizdir. Bu rapor laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz, üçüncü şahıslarla paylaşılamaz ve reklam aracı olarak kullanılamaz.

Testing reports without signature are not valid. This report cannot be partially copied and reproduced, shared with third parties and used as an advertising tool without the written permission of the laboratory.

Numune müşteri tarafından sağlanmıştır ve raporda verilen ölçüm sonuçları sadece test edilen numune için geçerlidir.
Sample has been provided by the customer and measurement results are only valid for the appliance which are tested.

Bu test raporunda (*) ile işaretlenen testler , bu laboratuvarın TÜRKAK akreditasyon kapsamında yer almamaktadır.
Tests marked with () in this test report are not within the scope of TÜRKAK accreditation of this laboratory.*

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BÖLÜM 1 /SECTION 1

BAŞVURU SAHİBİ TARAFINDAN SAĞLANAN MÜHENDİSLİK NUMUNELERİNE İLİŞKİN BİLGİLER: /INFORMATIONS FOR ENGINEERING SAMPLES PROVIDED BY APPLICANT

Test /Testing	
Test Numunesi Geliş Tarihi /Date of receipt of test item	13.11.2025
Test Numunesi Kabul No /Test item receipt number	S25.1550, S25.1551, S25.1552, S25.1553, S25.1554, S25.1555, S25.1556, S25.1557, S25.1558, S25.1559
Test Numunesi Seri No /Test item serial number	-
Test Tarihi /Date (s) of performance of tests	19.01.2026-22.01.2026

Standartlar /Standards	
1-	IEC 60884-1:2022

İŞARETLEME ETİKETLERİ: /MARKING PLATES



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BÖLÜM 2

/SECTION 2

TEST METODU VE YAPILIŞ:

/TEST METHOD AND APPLICATION

12.2.5

Terminals with screw clamping shall be so designed and constructed that they clamp the conductor(s) without undue damage to the conductor(s). Compliance is checked by the following test.

The terminal is placed in the test apparatus according to Figure 13 and fitted with rigid solid, rigid stranded and/or flexible conductor(s), according to Table 4 first with the smallest and then with the largest nominal cross-sectional area, the clamping screw(s) or nut(s) being tightened with the torque according to Table 7. A mass as specified in Table 10 is suspended from the end of the conductor. The duration of the test is approximately 15 min. During the test, the conductor shall neither slip out of the clamping unit nor break near the clamping unit, nor shall the conductor be damaged in such a way as to render it unfit for further use. In the case of the flexible conductor, the breakage of a few wires shall not be taken into account provided it does not exceed 15 % of the original number of wires.

Table 4 – Relationship between rated current and connectable nominal cross-sectional areas of copper conductors

Current and type of accessory	Rigid (solid or stranded) copper conductors		Flexible copper conductors	
	Nominal cross-sectional area	Diameter of the largest conductor	Nominal cross-sectional area	Diameter of the largest conductor
	mm ²	mm	mm ²	mm
6 A	–	–	From 0,75 up to 1,5 inclusive	1,73
10 A 3P + N + ⊕ (fixed accessory)	From 1 up to 2,5 inclusive ^a	2,13	From 1 up to 2,5 inclusive ^a	2,21
10 A 3P + N + ⊕ (portable accessory)	–	–	From 0,75 up to 1,5 inclusive	1,73
10 A and 13 A 2P and ⊕ (fixed accessory)	From 1 up to 2,5 inclusive ^{a b}	2,13	From 1 up to 2,5 inclusive ^{a b}	2,21
10 A and 13 A 2P and ⊕ (portable accessory)	–	–	From 0,75 up to 1,5 inclusive	1,73
13 A 2P and ⊕ (fixed accessory) (Socket-outlets for fused plugs)	From 1,5 up to 3 × 2,5 ^b From 1,5 up to 2 × 4 ^b	2,72	From 1,5 up to 3 × 2,5 ^b From 1,5 up to 2 × 4 ^b	2,9
13 A 2P and ⊕ (portable accessory) (fused plugs)	–	–	From 0,5 up to 1,5	1,73
16 A 2P and ⊕ (fixed accessory)	From 1,5 up to 2 × 2,5 inclusive	2,13	From 1,5 up to 2 × 2,5 inclusive	2,21

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Dimensions in millimetres

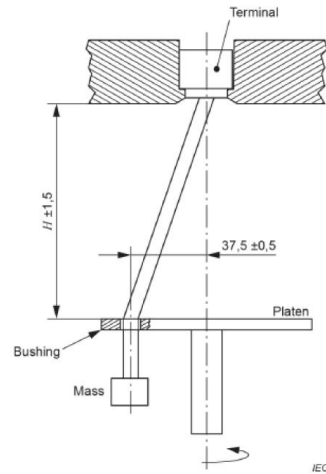


Table 10 – Values for flexing under mechanical load test for copper conductors

Nominal cross-sectional area of conductor ^a	Diameter of bushing hole ^b	Height H	Mass for conductor
mm ²	mm	mm	kg
0,5	6,5	260	0,3
0,75	6,5	260	0,4
1,0	6,5	260	0,4
1,5	6,5	260	0,4
2,5	9,5	280	0,7
4,0	9,5	280	0,9
6,0	9,5	280	1,4
10,0	9,5	280	2,0

^a Approximate relationship between mm² and AWG sizes can be found in Annex D.

^b If the bushing-hole diameter is not large enough to accommodate the conductor without binding, a bushing having the next larger hole size may be used.

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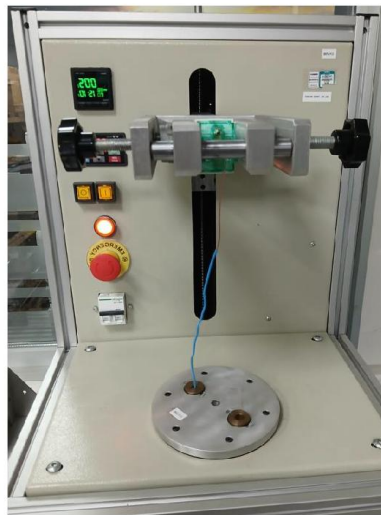


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2.5mm² (Rigid solid) (FAIL)



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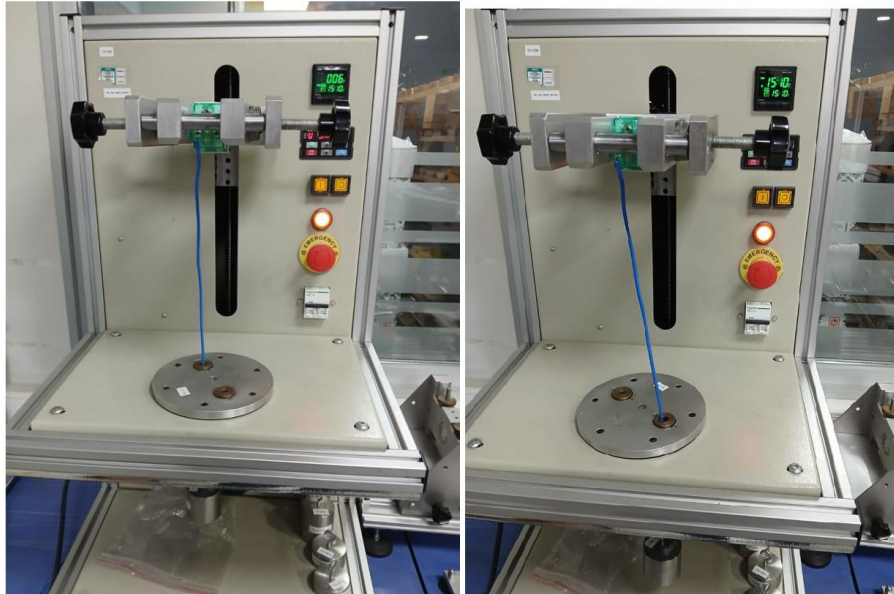
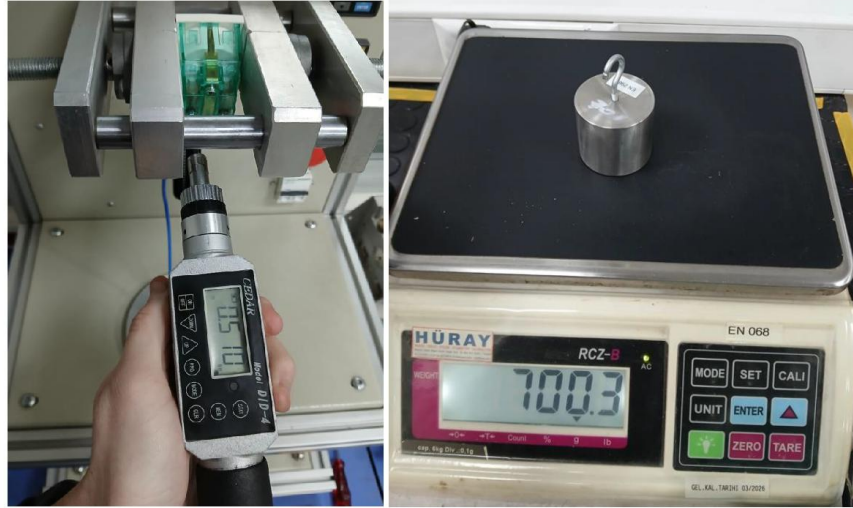


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2.5mm² (Flexible conductors) (PASS)



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1.5mm² (Rigid solid) (PASS)



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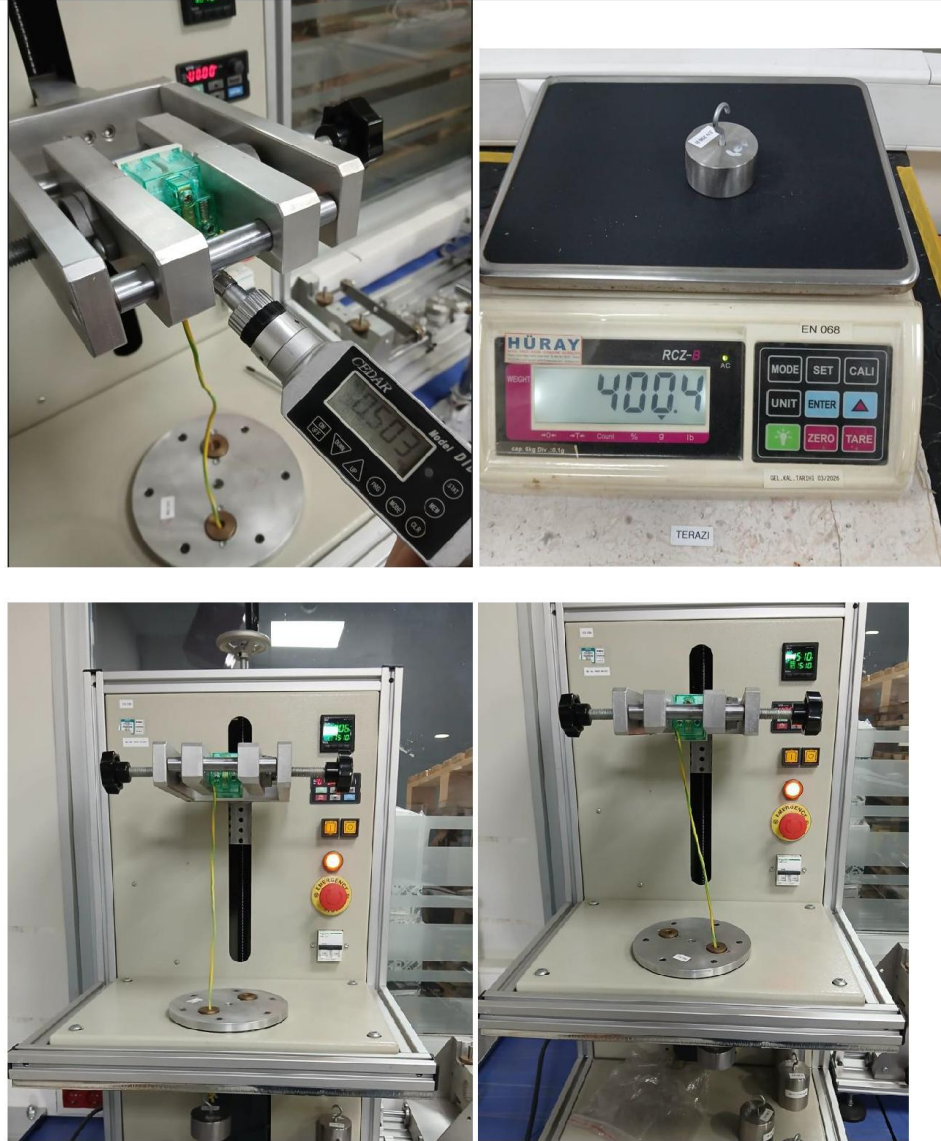


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1.5mm² (Flexible conductors) (PASS)



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12.2.6

Terminals with screw clamping shall be so designed that they clamp the conductor reliably between metal surfaces. Compliance is checked by inspection and by the following test.

Terminals suitable for rigid and flexible conductors according to Table 4 are checked with rigid solid or rigid stranded conductors and on a new set of specimens with flexible conductors.

The terminals are fitted first with conductors of the smallest and then with conductors of the largest cross-sectional area specified in Table 4, the terminal screws being tightened with a torque equal to two-thirds of the torque shown in the appropriate column of Table 7.

If the screw has a hexagonal head with a slot, the torque applied is equal to two-thirds of the torque shown in column 3 of Table 7. Each conductor is then subjected to a pull as specified in Table 5, applied without jerks, for 1 min, in the direction of the axis of the conductor space.

During the test, the conductor shall not move noticeably in the terminal.

Table 7 – Tightening torques for the verification of the mechanical strength of screw-type terminals

Nominal diameter of thread mm	Torque Nm		
	1 ^a	2 ^b	3 ^c
Up to and including 2,8	0,2	0,4	–
Over 2,8 up to and including 3,0	0,25	0,5	–
Over 3,0 up to and including 3,2	0,3	0,6	–
Over 3,2 up to and including 3,6	0,4	0,8	–
Over 3,6 up to and including 4,1	0,7	1,2	1,2
Over 4,1 up to and including 4,7	0,8	1,8	1,2
Over 4,7 up to and including 5,3	0,8	2,0	1,4

^a Column 1 applies to screws without a head if the screw, when tightened, does not protrude from the hole and to other screws which cannot be tightened by means of a screwdriver with a blade wider than the diameter of the screw.

^b Column 2 applies to other screws which are tightened by means of a screwdriver and to screws and nuts which are tightened by means other than a screwdriver.

^c Column 3 applies to nuts of mantle terminals which are tightened by means of a screwdriver.

Table 5 – Values for pull test for screw-type terminals

Nominal cross-sectional area of conductors accepted by the terminal mm ²	Pull N
Above 0,75 up to 1,5 inclusive	40
Above 1,5 up to 4 inclusive	50
Above 4 up to 6 inclusive	60
Above 6 up to 10 inclusive	80



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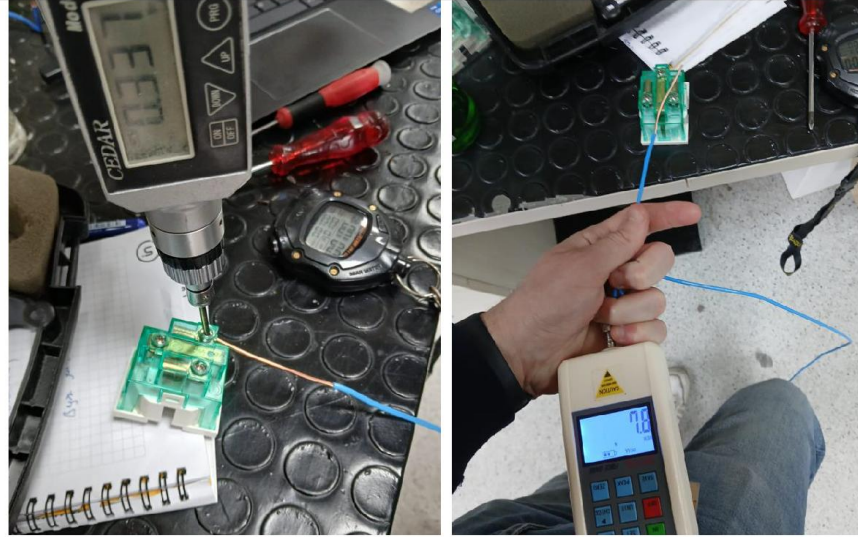


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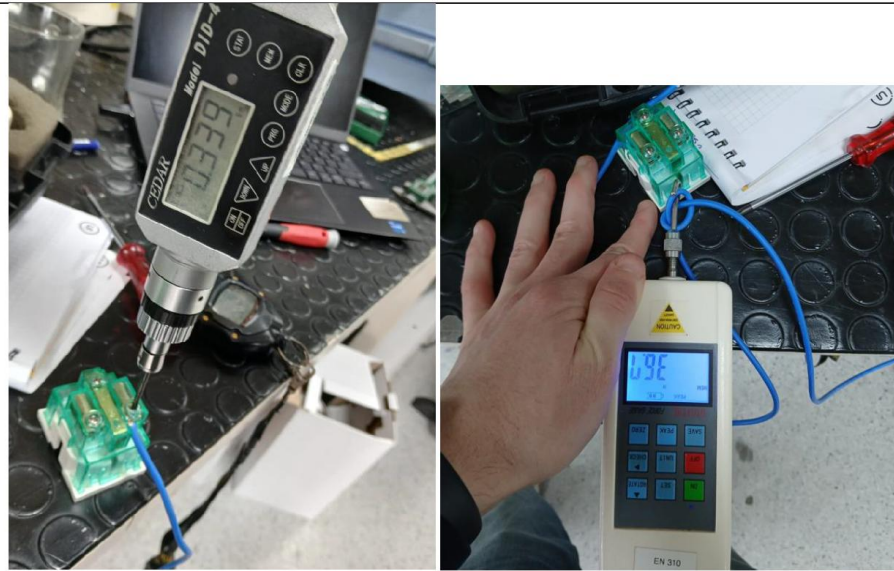
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2.5mm² (Flexible conductors) (FAIL)



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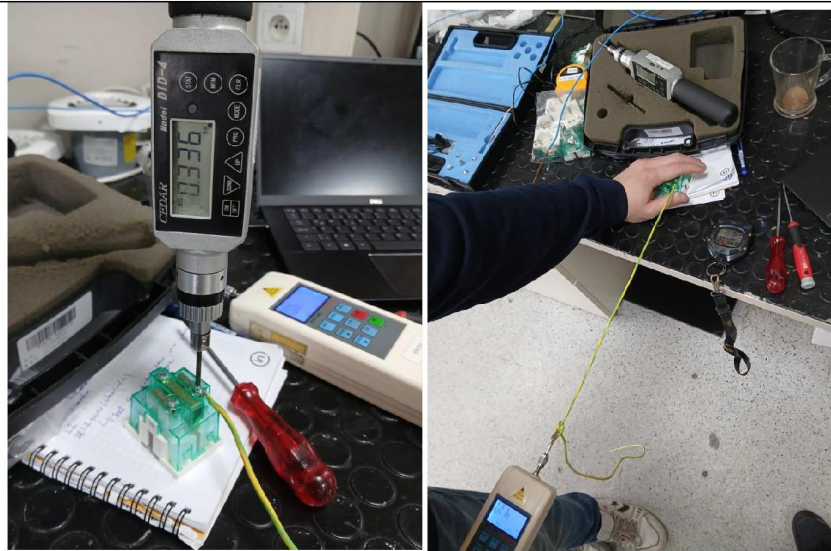
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1.5mm² (Rigid solid) (PASS)



1.5mm² (Flexible conductors) (PASS)



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12.2.7

Terminals with screw clamping shall be so designed or placed that neither a rigid solid conductor nor a wire of a stranded conductor can slip out while the clamping screws or nuts are tightened.

Compliance is checked by the following test.

The terminals are fitted with conductors having the largest nominal cross-sectional area specified in Table 4. Terminals suitable for rigid and flexible conductors according to Table 4 are checked with rigid solid or rigid stranded conductors and on a new set of specimens with flexible conductors. Terminals suitable for flexible conductors only (rewirable portable accessories) are checked with flexible conductors. Terminals intended for the looping-in of two or three conductors are checked, being fitted with the permissible number of conductors.

The terminals are fitted with conductors having the composition shown in Table 6. The clamping screw is then tightened with a torque equal to two-thirds of the torque shown in the appropriate column of Table 7. For flexible conductors the test is repeated with a new conductor which is twisted as before, but in the opposite direction.

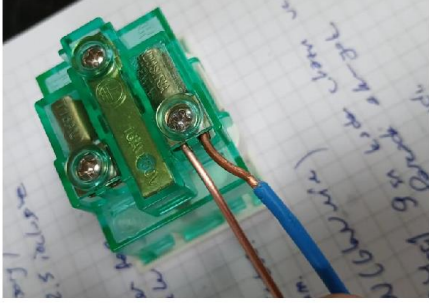
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2.5mm ² (Rigid solid) (PASS)	2.5mm ² (Flexible conductors) (PASS)
	

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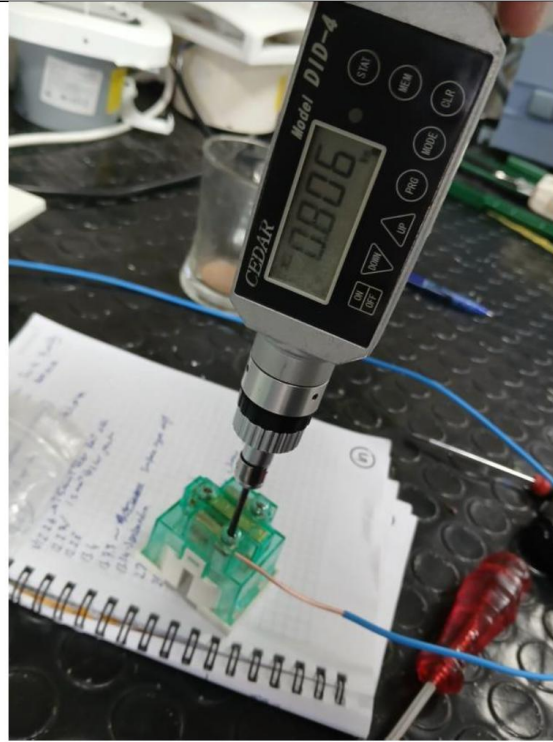
12.2.8

Terminals with screw clamping shall be so fixed or located within the accessory that, when the clamping screws or nuts are tightened or loosened, the terminals shall not work loose from their fixing to accessories.

A rigid solid copper conductor or a rigid stranded conductor of the largest nominal cross sectional area specified in Table 4 is placed in the terminal. Screws and nuts are tightened and loosened five times by means of a suitable test screwdriver or spanner, the torque applied when tightening being equal to the torque shown in the appropriate column of Table 7 or in the table of the appropriate Figure 9, Figure 10 or Figure 11, whichever is the greater.

The conductor is moved each time the screw or nut is loosened.

2.5mm² (Rigid solid) (PASS)



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13.5 Engagement of plugs

Socket-outlets shall be so designed that full engagement of associated plugs is not prevented by any projection from their engagement face.

Compliance is checked by determining that the gap between the engagement face of the socketoutlet and the plug does not exceed 1 mm when the plug is inserted into the socket-outlet as far as it will go.

PASS



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13.14 Lateral strain imposed by equipment

Socket-outlets shall withstand the lateral strain imposed by equipment likely to be introduced into them.

NOTE See 14.22.2 for the maximum strain applied by equipment to socket-outlets.

For socket-outlets having ratings up to and including 16 A and 250 V, compliance is checked by means of the device shown in Figure 16.

Each specimen is mounted on a vertical surface with the plane through the socket-contacts horizontal. The device is then fully engaged and a weight hung on it such that the force exerted is 5 N.

The device is removed after 1 min and the socket-outlet is turned through 90° on the mounting surface.

The test is carried out four times, the socket-outlet being turned through 90° after each engagement.

PASS



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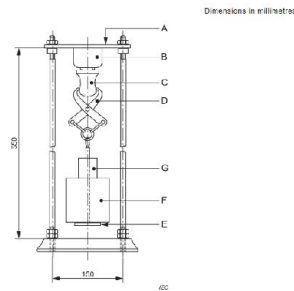
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22.2.1 Test for socket-outlets

The socket-outlet is fixed to the mounting plate A of an apparatus as shown in Figure 25, so that the axes of the socket-contacts are vertical and the entry holes for the pins of the plug face downwards.



- Components
 A Mounting plate
 B Specimen
 C Test plug
 D Clamp
 E Carrier
 F Principal weight
 G Supplementary weight

PASS



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28.1 Resistance to abnormal heat and to fire

28.1.1 General

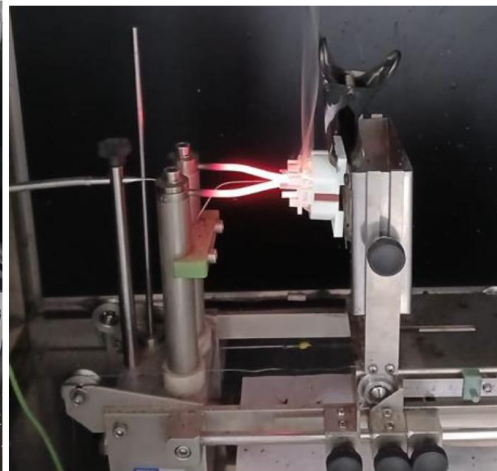
Parts of insulating material which might be exposed to thermal stresses due to electric effects, and the deterioration of which might impair the safety of the accessory, shall not be unduly affected by abnormal heat and by fire. Compliance is checked by the test of 28.1.2.

28.1.2 Glow-wire test

The test is performed according to IEC 60695-2-10:2021 and IEC 60695-2-11:2021 under the following conditions:

– for parts made of insulating material necessary to retain current-carrying parts and parts of the earthing circuit of fixed accessories in position, by the test carried out at 850 °C, with the exception of parts of insulating material needed to retain the earth terminal in position in a box, which shall be tested at a temperature of 650 °C.

TABLE: Resistance to heat and fire - Glow wire tests		P
Object/ Part No./ Material	Glow wire test (GWT); (°C)	Verdict
	850	
White plastic	No flame.	Pass
Green plastic	After the part was detached, the plastic remaining at the tip of the flame continued to burn for about 9 seconds. No flame was observed on the product.	Pass



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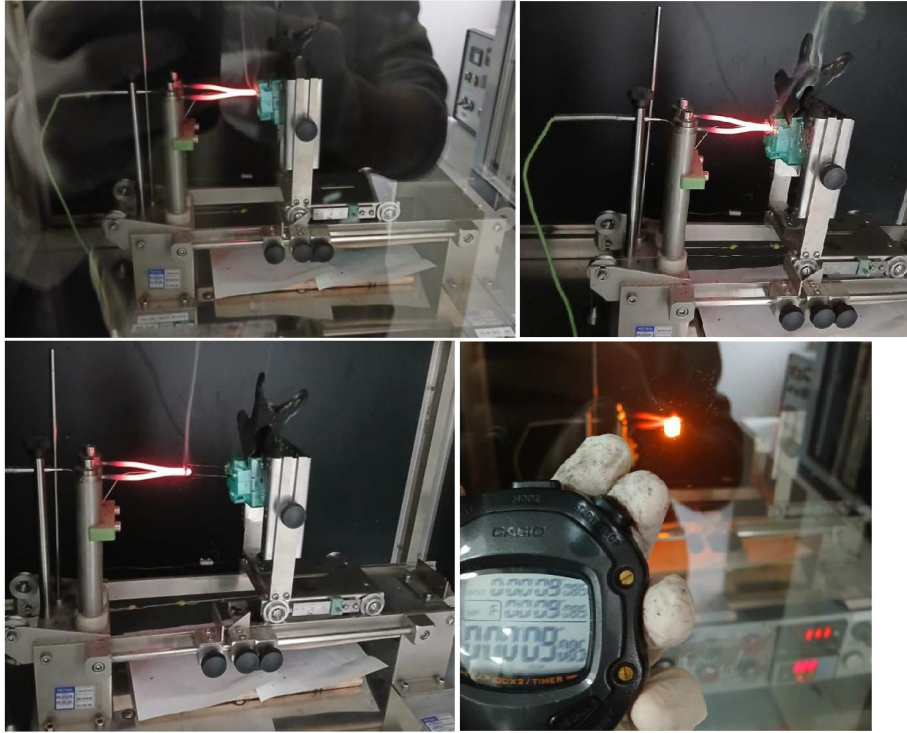
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BÖLÜM 3
/SECTION 3

TEST SONUÇLARI:
/TEST RESULTS

Ortam Şartları /Ambient Conditions	23.4°C, 52%Rh
--	---------------

Madde /Clause	Tanım /Description	Sonuç /Result
12	Terminals and terminations	F
13	Construction of fixed socket-outlets	P
22	Force necessary to withdraw the plug	P
28.1	Resistance of insulating material to abnormal heat, to fire and to tracking	P

Supplementary Information: /Ek Bilgi:	
P: Uygun / Conformed F: Uygunsuzluk / Non-Conformity N/A: Uygulanabilir değil / Not Applicable	

Testi Gerçekleştiren:
/Completed by

Ahmet Samed YORULMAZ

Ünvan:
/Title

Senior Project Engineer

İmza:
/Signature



Tarih:
/Date

23.01.2026

Onaylayan:
/Reviewed by

Hüseyin YAMAN

Ünvan:
/Title

Team Leader

İmza:
/Signature



Tarih:
/Date

23.01.2026

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BÖLÜM 4
/SECTION 4

TEST EKİPMANLARI:
/TEST EQUIPMENT

Ekipman Adı /Equipment Name	Üretici /Manufacturer	Ekipman /ID	Kalibrasyon Tarihi /Calibration Date	Sonraki Kal. Tarihi /Next Cal. Date
Cable Swing Tester	Güney Elektrik	EN 298	09.2025	09.2026
Scale	Hüroy Rcz-B	EN 068	03.2025	03.2026
Digital calliper	INSIZE 1108-150	EN 372	08.2025	08.2026
Chronometer	CASIO HS-80TW	EN 113	02.2025	02.2026
Glow Wire Test Apparatus	TESTING EUROPE T4-08	EN 043	07.2025	07.2026
Tape	Ceta Form P05-0316	EN 040	11.2025	11.2028
Torque Screwdriver	Imada	EN 018	10.2025	10.2026

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BÖLÜM 5
/SECTION 5

FOTO DOKÜMANTASYON:
/PHOTO DOCUMENTATION



Photo 1. General view of models



Photo 2. Rear view of models

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APPENDIX B

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----- END OF REPORT -----