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## TESTLA

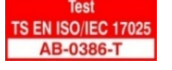
Elektrik Laboratuvarları Tic. Ltd. Şti.

Kuzuluk Mah. Ankara Cad. No:34

Akyazı / SAKARYA TÜRKİYE

+90 264 437 97 70

laboratuvar@testla.com.tr



AB-0386-T

2012.04.01/00

29.01.2021

### TEST REPORT

Client Name/Address	VTEK ELEKTRİK İTH. İHR. SAN. VE TİC. LTD. ŞTİ. Merkez Mah. Aldemir Çk. Sok. No: 6/3 Gaziosmanpaşa / İSTANBUL		
Name and Identity of Test Item	TK120 Current Transformer		
Order No.	2012.04	Sample Acceptance Date	11.01.2021
Num. Of Pages of The Report	9 + 14 pages of annexes 23 pages in total	Test Date(s)	12.01.2021-13.01.2021
Test Standard(s) Rating(s)	IEC 61869-2: 2012 Clause: 7.2.2, 7.2.6, 7.2.201, 7.3.1, 7.3.4 (Ipr): 6300A, (Isr): 5A, (fR): 50Hz, (Ith): 60kA/1sec., Idyn: 150kA, Class/VA: CI 02SFS6 40VA Detail(s) is/are given at the page 3		
Test Result(s)	POSITIVE / Details, are given on the following pages which are part of this report.		

#### Remarks

TESTLA Elektrik Laboratuvarları accredited by TÜRKAK under registration number AB-0386-T for TS EN ISO/TS EN 17025:2017 as test laboratory.

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.

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.

Seal

Date

Person in Charge of Test

Approval  
Date



29.01.2021

Mehmet ŞUMNU

Caner EREN  
Laboratory Manager

This report shall not be reproduced other than in full except with the permission of the laboratory. Testing reports without signature is not valid.

Date format: dd.mm.yyyy

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## 1. Participants of Tests

Sequence No.	Name, Last Name	Position	Company
1.	Caner Eren	Head of Laboratory	TESTLA
2.	Mehmet Şumnu	Laboratory Chief / Test Personnel	
3.	Mehmet Kalyoncu	Test Personnel	
4.	Selçuk Aygün	Technical Reporting Supervisor	

## 2. Performed Tests

Sequence No.	Test name	IEC 61869-1 IEC 61869-2 Clause	Result
1.	Temperature-rise test	7.2.2	P
2.	Test for accuracy	7.2.6	P
3.	Short-time current tests	7.2.201	P
4.	Power-frequency voltage withstand tests on primary terminals	7.3.1	P
5.	Power-frequency voltage withstand tests on secondary terminals	7.3.4	P

The test details are given in the following pages (Chapter 5).

## 3. General Ambient Conditions

Ambient temperature (°C)	Ambient Humidity (RH%)	Atmospheric pressure (mbar)
20,7-23,8	49-54	1009-1011

Laboratory Indoor ambient conditions are climatically controlled and registered. Special ambient conditions are specified separately in relevant test.

## 4. Rated Values of Test Item

Brand	VTEKE
Type	TK120
Rated primary current (I <sub>pr</sub> ) / Rated secondary current (I <sub>sr</sub> )	6300/5A
Class/VA	02SFS6 40VA
Rated insulation level	0,72/3/-kV
Rated frequency (f <sub>R</sub> )	50Hz
Serial number	201103810
Rated short-time thermal current (I <sub>th</sub> )	60 kA/1sec.
Rated dynamic current (I <sub>dyn</sub> )	150kA



## 5. Test Result

### Explanations on the presentation and reporting of results.

#### In line with customer requests,

Tests according to IEC 61869-1 and IEC 61869-2 standards were shown as follows in the table in the column of the test standard, as "(IEC 61869-1) IEC 61869-2"

(IEC 61869-1) IEC 61869-2			
Clause	Required-Requirement	Measured-Observed	Result

#### In this table,

##### 1. Column: **Clause**

The clause number of the standard specified in the top line. (The clauses of the test standard cited to the other standards are specified under the Requirement-Necessity section-column)

##### 2. Column: **Required -Requirement**

Structural requirements-conditions-guidelines for the described tests to determine the suitability of the sample described in the relevant standard clause and the property defined in the relevant standard clause of this sample.

##### 3. Column: **Measured-Observed**

The results of measurements and observations (if any, are made in the NOTES section of this section and / or in the last-bottom section of the relevant test page, if the customer requests, technical or other reasons are omitted)

##### 4. Column: **Result**

#### Display of decisions in Possible Tests Results:

— Non-applicable for the sample	:	<b>NA</b>	(Not Apply)
— Sample meets the requirements	:	<b>P</b>	(Pass) (if any) *
— Sample does not meet the requirements	:	<b>F</b>	(Fail) (if any) *
— Given information and topics	:	--	Out of Assessment

#### It is signed as above.

#### (\* ) Situations in which the "passed" / "failed" evaluation can not be made with regard to the tests made:

- This report applies only to samples for which tests have been carried out.
- Tests marked in this test report (#) are not within the scope of accreditation obtained from TÜRKAK.
- Since the test sample was provided by the customer, the contribution resulting from sampling was not included in the measurement uncertainty. The test sample was tested as received.
- Once a declaration of conformity (appropriate or non-compliant) is given regarding the test results, defined rule is used if a rule is defined in the legislation, standard, specification, and if not, our laboratory uses the wrong acceptance (consumer rule) rule. When the uncertainty of measurement affects the upper limit, the uncertainty of measurement ( $k=2$  within the 95% confidence interval) is added to the test result and subtracted when the lower limit affects the conformity assessment.



(IEC 61869-1) IEC 61869-2

Clause	Required-Requirement	Measured-Observed	Result
--------	----------------------	-------------------	--------

7.2.2	<b>Temperature-rise test</b>		
	IEC 61869-1, 7.2.2 is apply.		--
(7.2.2)	<b>Temperature-rise test</b>		--
	For this test, the transformer shall be mounted in a manner representative of the mounting in service.	--	--
	The temperature rise of windings shall, when practicable, be measured by the increase in resistance method, but for windings of very low resistance, thermocouples may be employed.	See "Resistance measurement table"	--
	Instrument transformers shall be considered to have attained a steady-state temperature when the rate of temperature rise does not exceed 1 K/h.	--	--
	Class of insulation	F	--
	Test current	6300A	--
	Limit values according to insulation class of solid or gas insulated transformers. • Class Y 45 K • Class A 60 K • Class E 75 K • Class B 85 K • Class F 110 K • Class H 135 K	The measurement results are given in the table below.	--

Temperature-rise table					
Measuring Points		Data-1 (°C)	Difference (K)	Limit (K)	Result
Average Outdoor Temperature		23,82			
Outdoor (Oil) Temperature -1		22,52			
Outdoor (Oil) Temperature -2		24,24			
Outdoor (Oil) Temperature -3		24,69			
TK120 6300/5A Current Transformer	Secondary 1	74,46	50,64	75,00	POSITIVE
	Secondary 2	72,25	48,44	75,00	POSITIVE
	Body	54,48	30,66	75,00	POSITIVE
	Terminal Cover	44,02	20,20	75,00	POSITIVE

7.3.201	<b>Determination of the secondary winding resistance</b>		
---------	--	--	--

Resistance measurement table			
Measurement point	Before Temperature-rise test (mΩ)	After Temperature-rise test (mΩ)	K
S1-S2	1010	1380	95

The temperature rises of the windings measured by the resistance increase method are within the limits.

Notes:



## (IEC 61869-1) IEC 61869-2

Clause	Required-Requirement	Measured-Observed	Result
7.2.6	<b>Test for accuracy</b>		
	The results are given in the list of annexes.	See the list of annexes.	P
7.2.201	<b>Short-time current tests</b>		
	For the short time (I <sub>th</sub> ) current tests, CT should be in a temperature between 10 and 40 °C before test	Temperature= 20,7°C Humidity= 54RH%	--
	This test should be performed by according to; (I <sup>2</sup> t) will not be less then (I <sup>2</sup> t) <sub>th</sub> , predicted t duration will be in between 0,5 second and 5 second and during the t duration seconder units will be short circuit at the I Current	t= 1000ms	--
	Dynamic test should be performed with primer current which should be more than (I <sub>dyn</sub> ) and seconder unit should be short circuit.	60kA RMS 150kA Peak	--
	Dynamic test may be combined to thermal test with the condition that first I Peak should be more than (I <sub>dyn</sub> )	--	--
	The transformer shall be deemed to have passed these tests if, after cooling to ambient temperature (between 10 °C and 40 °C), it satisfies the following requirements:		--
	a) There should be no visible damage,	Yes	P
	b) Limits of error after the current is cut off and magnetized; should not differ from the values recorded before the experiment by more than half of the error limits corresponding to their own accuracy class,	See the list of annexes.	P
	c) It should be withstand to dielectric test according to clause 7.3.1, 7.3.3 and 7.3.4, but test current and voltage should be decreased %90 of the values	Primary= 2,7kV Secondary= 2,7kV	P
	d) In the examination, there shouldn't be a deformation on the cover of conductive	Yes	P

**Notes:**


**(IEC 61869-1) IEC 61869-2**

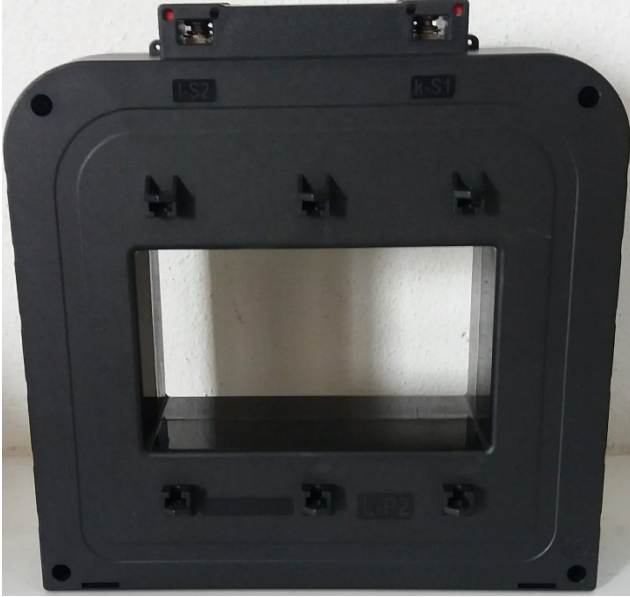
Clause	Required-Requirement	Measured-Observed	Result
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<b>7.3.1</b>	<b>Power-frequency voltage withstand tests on primary terminals</b>			
	This clause of IEC 61689-1 is applicable with the addition of the following:			--
	The test voltage shall be applied between the short-circuited primary winding and earth.	--		--
	The short-circuited secondary winding(s), the frame, case (if any) and core (if there is a special earth terminal) shall be connected to earth.	--		--
<b>(7.3.1)</b>	<b>Power-frequency voltage withstand tests on primary terminals</b>			
	The power-frequency withstand test shall be performed in accordance with IEC 60060-1.	--		--
	<b>Table 2 - Rated primary terminal insulation levels for instrument transformers</b>			
	<b>Highest voltage tor equipment Um kV</b>	<b>Rated power-frequency withstand voltage kV</b>	<b>Rated lightning impulse withstand voltage kV</b>	<b>Rated switching withstand voltage kV</b>
	0,72	3	-	
	1,2	6	-	
	3,6	10	20 40	
	7,2	20	40 60	
	12	28	60 75	
	17,5	38	75 95	
	24	50	95 125	
	36	70	145 170	
	52	95	250	
	The test voltage shall have the appropriate value given in Table 2, depending on the highest voltage tor equipment.	Um= 0,72kV Test voltage= 3kV		--
	The duration shall be 60 s, unless otherwise specified.	Test duration= 60 secs.		--
	The secondary terminals, the frame, case (if any) and core (if there is a special earth terminal) shall be connected to earth.	--		--
	The test voltage shall be applied: - between the primary terminals and earth, - between primary terminals, where applicable.	Test voltage= 3kV Leakage current = 0,17mA		P
	Repeated power-frequency tests on primary terminals should be performed at 80 % of the specified test voltage.	--		NA
<b>(7.3.4)</b>	<b>Power-frequency voltage withstand tests on secondary terminals</b>			
	The frame, case (if any), core (if there is a special earth terminal), and all the other terminals shall be connected to earth.	Applied		--
	The test voltage according to 5.3.5 shall be applied far 60 s in turn between the short-circuited terminals of each winding and earth.	5.3.5 was applied.		--
<b>(5.3.5)</b>	<b>Insulation requirements for secondary terminals</b>			
	The rated power-frequency withstand voltage for secondary insulation shall be 3 kV.	Test voltage= 3kV Test duration= 60 secs.		P

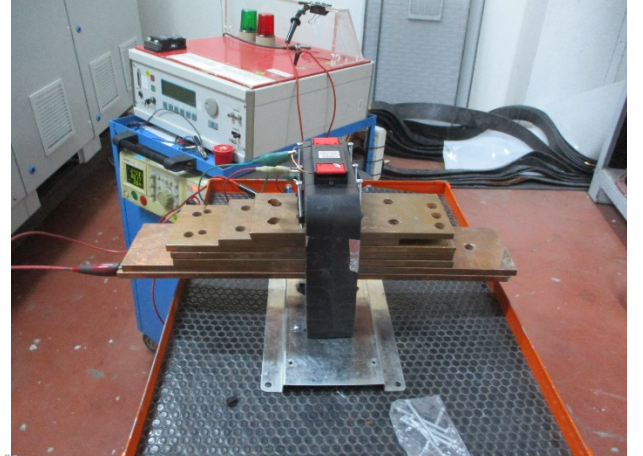
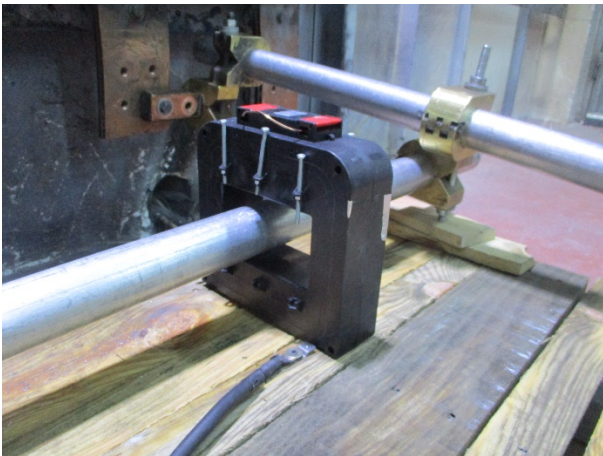
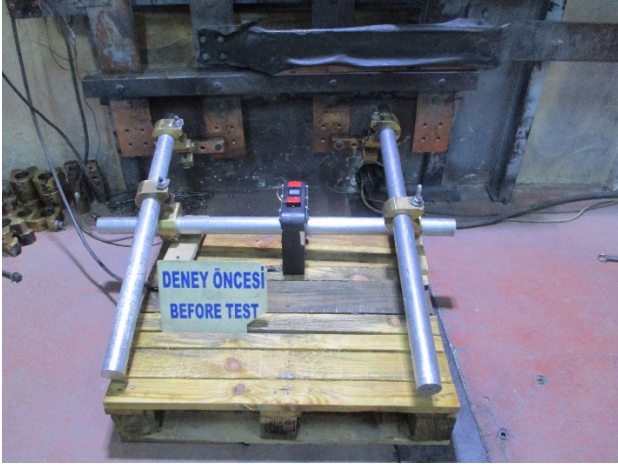
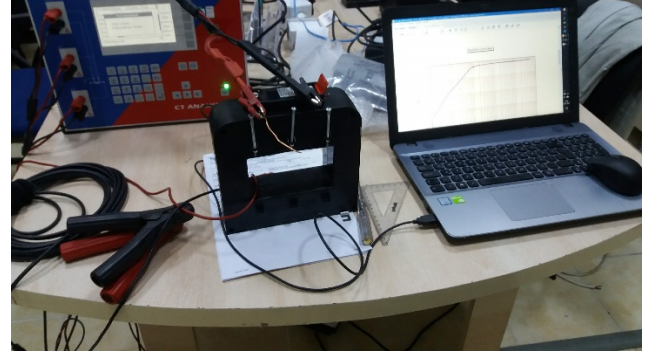
Notes:



## 6. Photograph of the Test Sample



## 7. Test Assembly and Test Item Photographs

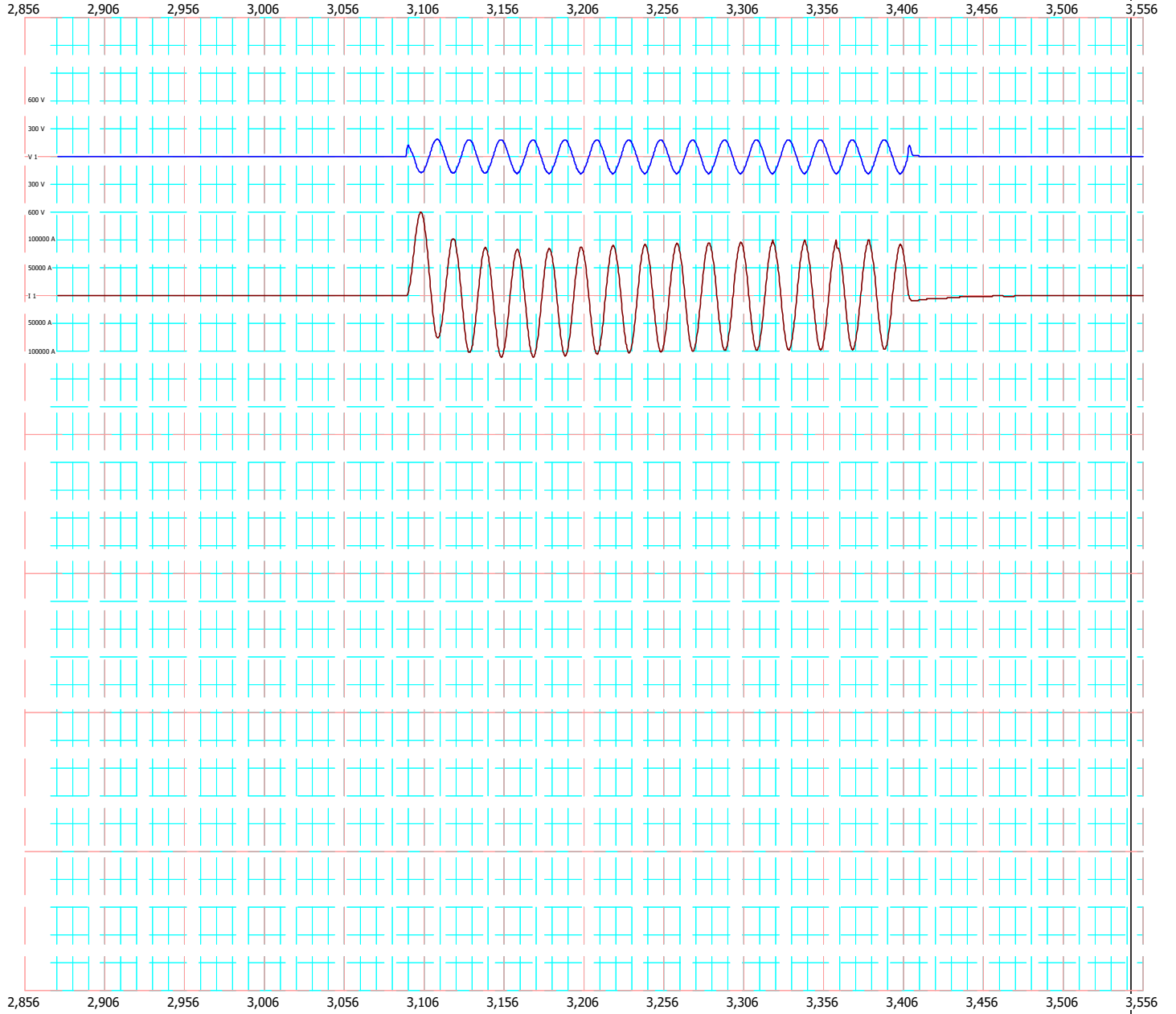


## 8. List of Annexes

- 2 pages oscillogram.
- 4 pages measurement of limits of error.
- 8 pages technical document.



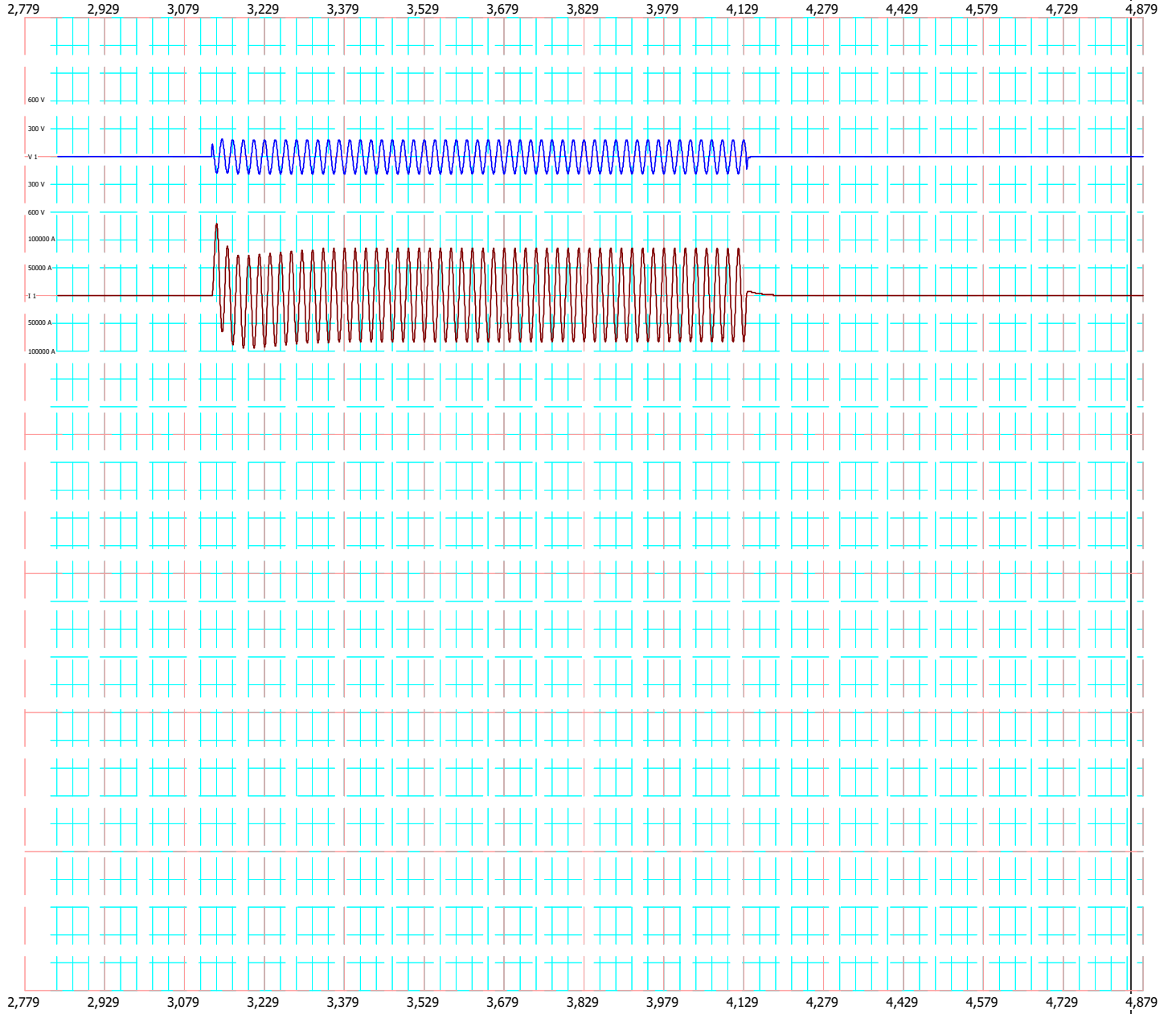
**END OF REPORT**



V 1	V 2	V 3	I 1	I 2	I 3
130,550 V			65.159,774 A		
Cos Phi 1	Cos Phi 2	Cos Phi 3	I1 time	I2 time	I3 time
0,182			309 msec		
I1 Peak	I2 Peak	I3 Peak	I1 Joul	I2 Joul	I3 Joul
151.253,108 A			1.309.828,096 kA <sup>2</sup> sn		

Osc. No :	2012.04-75525	Test Date :	13.01.2021
Company :	VTEK Elektrik İth. İhr. San. ve Tic. Ltd. Şti.		
Test Current :	60kA RMS+150kA Peak		
Test Maneuvers :	Idyn=150kA Peak		
Tip/Model :	TK120 6300-5 40VA LV Current Transformer		
Sample No :	2012.04.01		





V 1	V 2	V 3	I 1	I 2	I 3
131,495 V			60.586,936 A		
Cos Phi 1	Cos Phi 2	Cos Phi 3	I1 time	I2 time	I3 time
0,188			1.001 msec		
I1 Peak	I2 Peak	I3 Peak	I1 Joul	I2 Joul	I3 Joul
130.004,201 A			3.675.365,315 kA <sup>2</sup> sn		

Osc. No :	2012.04-75526	Test Date :	13.01.2021
Company :	VTEK Elektrik İth. İhr. San. ve Tic. Ltd. Şti.		
Test Current :	60kA RMS		
Test Maneuvers :	İth=60kA RMS, 1sec.		
Tip/Model :	TK120 6300-5 40VA LV Current Transformer		
Sample No :	2012.04.01		



Company Name:
Company Address:
Order Number:



**General test information:**

Date/Time: 2021-01-07, 10:09:40

Test device:	CT-Analyzer	Device Serial No.:	LF491J
File name:	C:\Users\mehme\OneDrive\Documents\OMICRON\CTAnalyzer\RemoteEFL\TEMP\XMLData(1).xml		
Assessments:	OK		

**Used test settings:**

I-pn:	6300,0 A	Location:		Object:	
I-sn:	5,0 A	Company:	VTEK	Manufacturer:	VTEK
Rated burden:	40,0 VA / 0,8	Country:	TR	Type:	TK120
Operating burden:	40,0 VA / 0,8	Station:	TESTLA	Serial number:	201103810
Applied standard:	IEC 61869-2	Feeder/Bay:		Core number:	6300/5
Core type (P/M):	M	Phase:		Tap:	S1-S2
Class:	0.2S	IEC-ID	61869-2	Optional:	SC BEFORE
FS:	6,0	ext (lcth):	120 %		
f:	50,0 Hz	max. Rct:	1,228 Ω		

**Resistance test:**

Rmeas (25°C):	1,02972 Ω
Rref (75°C):	1,22813 Ω

**Burden test:**

Burden:	cos φ:	Z:
Vmeas:	Imeas:	

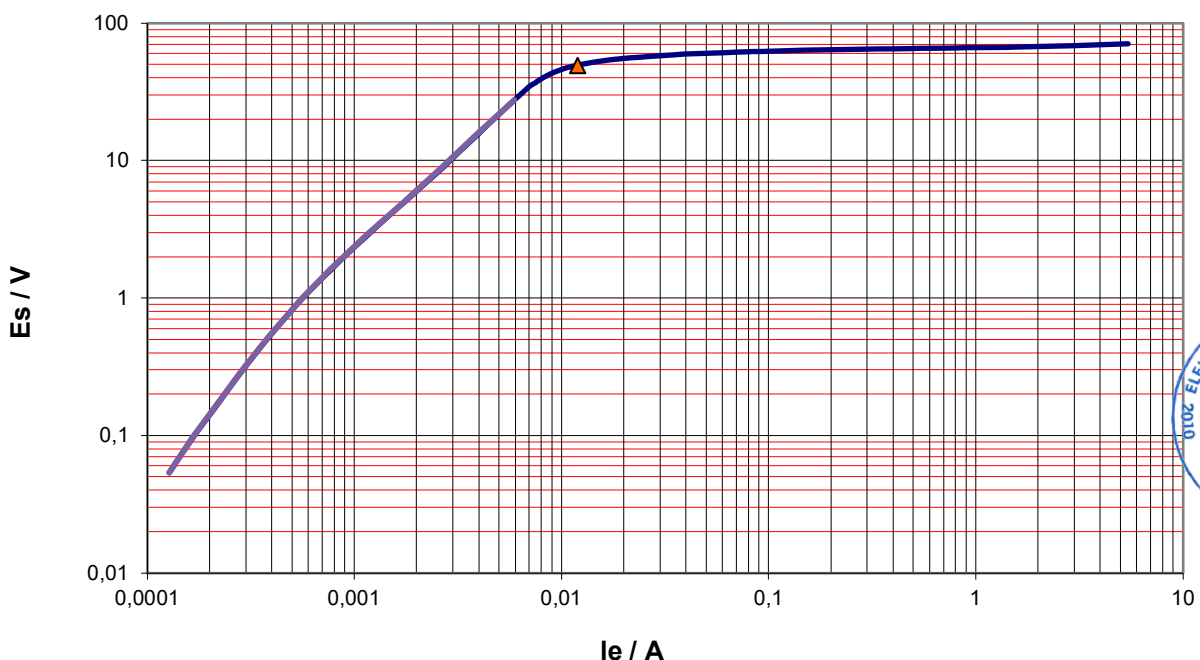
**Excitation test:**

V-kn:	49,647 V	I-kn:	0,011975 A	Result with rated burden:		Result with operating burden:					
V-kn 2:	#YOK	I-kn 2:	#YOK	FS:	5,48	FSi:	5,09	FS:	5,48	FSi:	5,09
Ls:	0,0015995H	Lm:	16,7186H	Ts:	6,666s			Ts:	6,666s		
Kr:	86,12 %										

**Ratio test:**

Ratio:	6300,0	:	5,00057	ε:	0,0115 %	Δφ:	0,85 min	Polarity:	OK	N:	1259,06
				ε <sub>c</sub> :	0,0285 %						

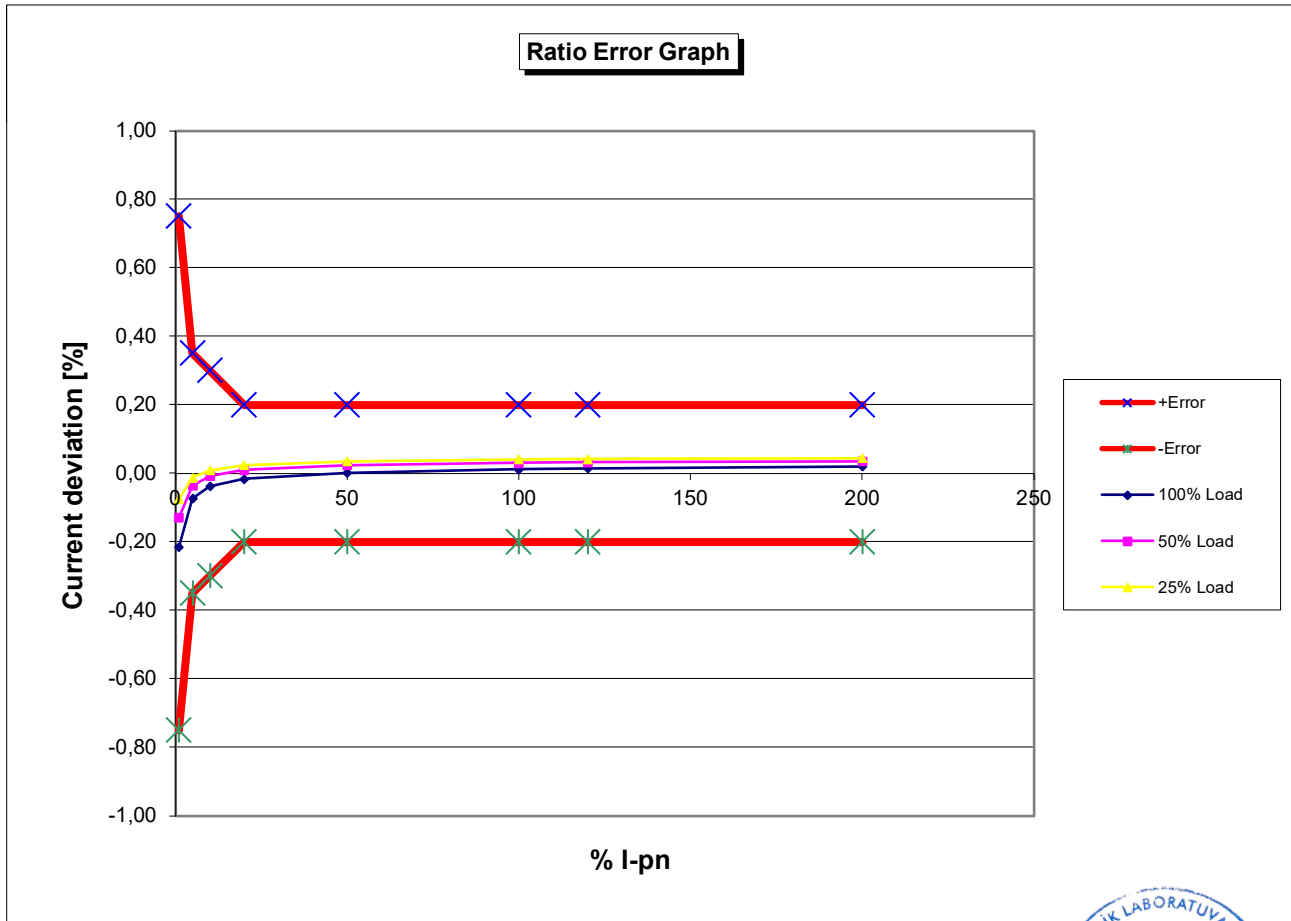
**Excitation curve data**



— Seri1	—▲ (I-kn, V-kn)	—▲ (I-kn2, V-kn2)	— Series2
---------	-----------------	-------------------	-----------

VA/cosPhi	Current ratio error in % at % of rated current							
	1	5	10	20	50	100	120	200
40 VA/ 0,8	-0,215	-0,073	-0,038	-0,017	0,001	0,012	0,014	0,021
20 VA/ 0,8	-0,130	-0,036	-0,009	0,009	0,023	0,030	0,031	0,036
10 VA/ 0,8	-0,075	-0,013	0,008	0,023	0,035	0,040	0,041	0,044
5 VA/ 0,8	-0,043	0,000	0,018	0,031	0,041	0,046	0,047	0,049
VA/								

VA/cosPhi	Phase displacement in [min] at % rated current							
	1	5	10	20	50	100	120	200
40 VA/ 0,8	8,352	2,974	2,189	1,721	1,243	0,848	0,742	0,489
20 VA/ 0,8	8,330	2,977	2,111	1,612	1,209	0,914	0,836	0,620
10 VA/ 0,8	8,344	3,025	2,106	1,577	1,176	0,932	0,865	0,677
5 VA/ 0,8	8,277	3,045	2,107	1,565	1,157	0,934	0,873	0,703
VA/								



Company Name:
Company Address:
Order Number:



**General test information:**

Date/Time: 2021-01-13, 14:50:35

Test device:	CT-Analyzer	Device Serial No.:	LF491J
File name:	C:\Users\mehme\OneDrive\Documents\OMICRON\CTAnalyzer\RemoteEFL\TEMP\XMLData(1).xml		
Assessments:	OK		

**Used test settings:**

I-pn:	6300,0 A	Location:		Object:	
I-sn:	5,0 A	Company:	VTEK	Manufacturer:	VTEK
Rated burden:	40,0 VA / 0,8	Country:	TR	Type:	TK120
Operating burden:	40,0 VA / 0,8	Station:	TESTLA	Serial number:	201103810
Applied standard:	IEC 61869-2	Feeder/Bay:		Core number:	6300/5
Core type (P/M):	M	Phase:		Tap:	S1-S2
Class:	0.2S	IEC-ID	61869-2	Optional:	SC AFTER
FS:	6,0	ext (lcth):	120 %		
f:	50,0 Hz	max. Rct:	1,22 Ω		

**Resistance test:**

Rmeas (25°C):	1,02288 Ω
Rref (75°C):	1,21997 Ω

**Burden test:**

Burden:	cos φ:	Z:
Vmeas:	Imeas:	

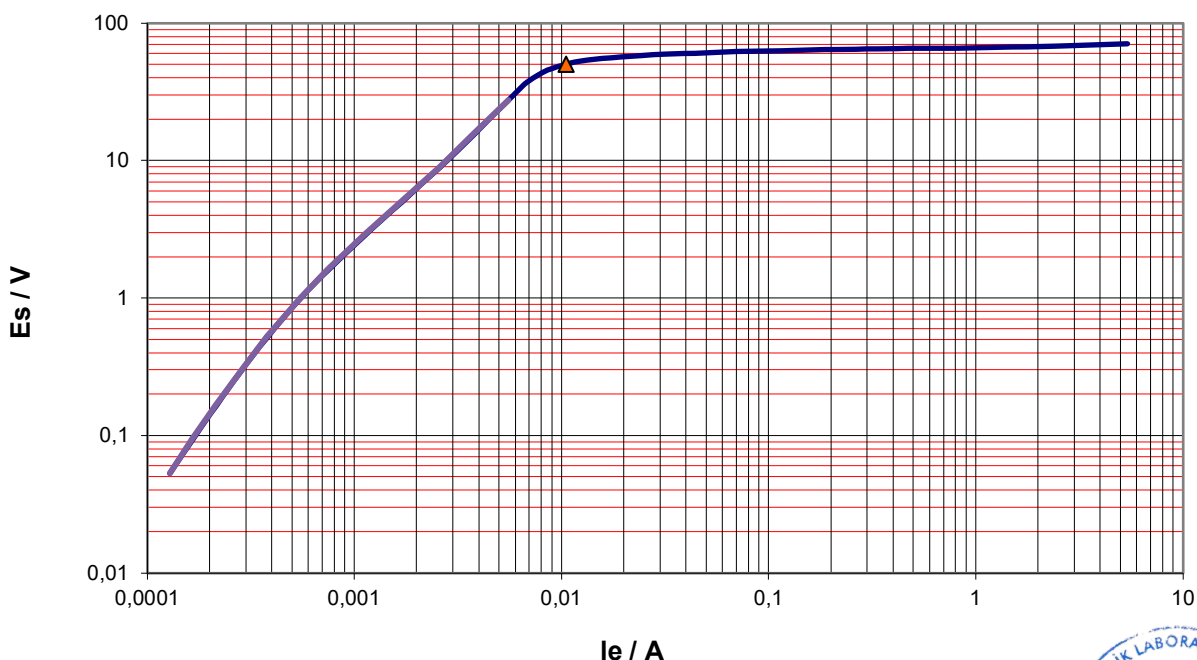
**Excitation test:**

V-kn:	50,34 V	I-kn:	0,010481 A	Result with rated burden:		Result with operating burden:					
V-kn 2:	#YOK	I-kn 2:	#YOK	FS:	5,5	FSi:	5,11	FS:	5,5	FSi:	5,11
Ls:	0,0015948H	Lm:	17,4589H	Ts:	6,984s			Ts:	6,984s		
Kr:	91,26 %										

**Ratio test:**

Ratio:	6300,0	:	5,00057	ε :	0,0114 %	Δφ:	0,76 min	Polarity:	OK	N:	1259,08
				ε <sub>c</sub> :	0,0258 %						

**Excitation curve data**

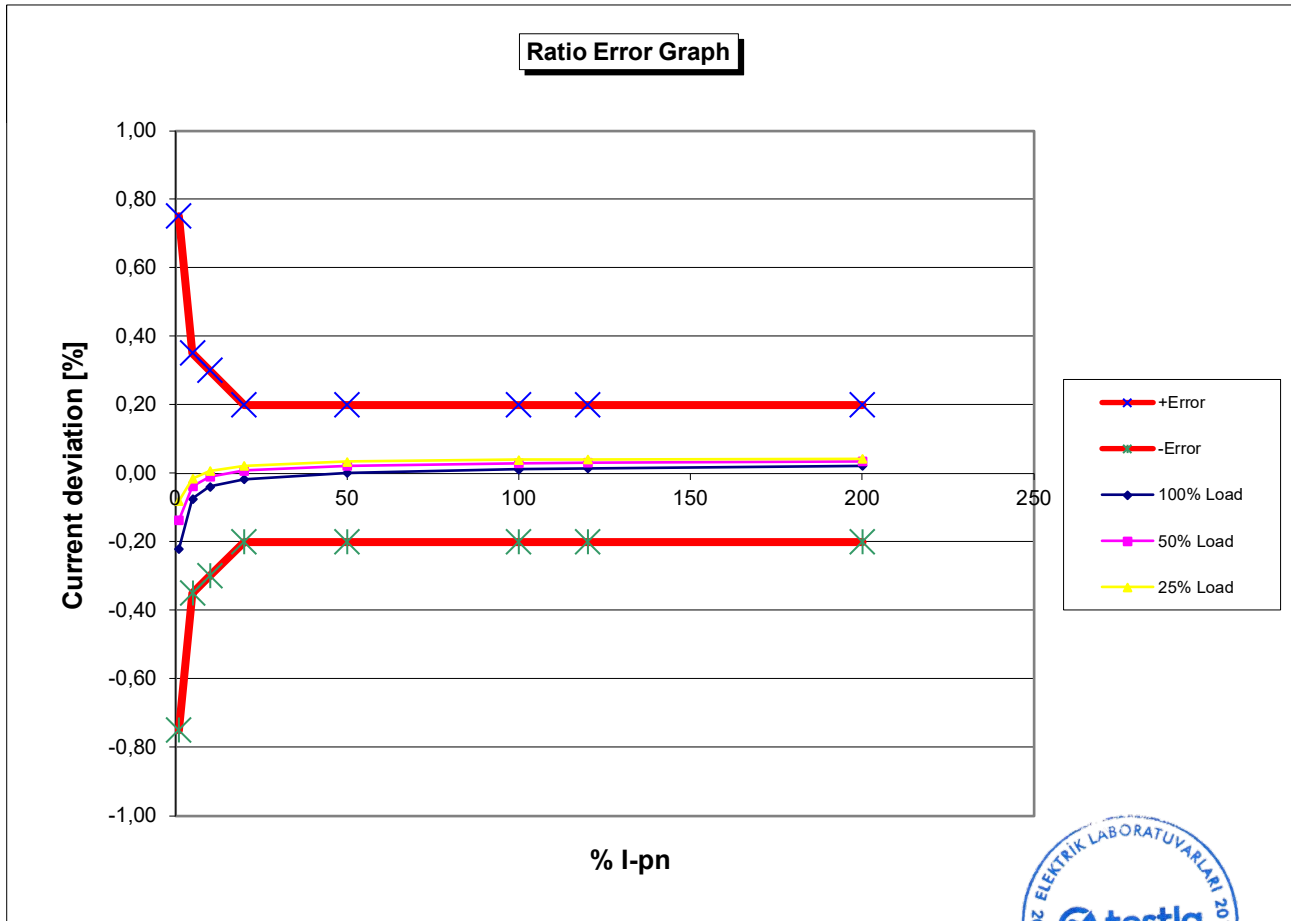


— Seri1    ▲ (I-kn, V-kn)    ▲ (I-kn2, V-kn2)    — Series2



VA/cosPhi	Current ratio error in % at % of rated current							
	1	5	10	20	50	100	120	200
40 VA/ 0,8	-0,221	-0,075	-0,039	-0,017	0,001	0,011	0,014	0,022
20 VA/ 0,8	-0,137	-0,038	-0,010	0,008	0,022	0,029	0,031	0,035
10 VA/ 0,8	-0,081	-0,016	0,006	0,022	0,033	0,039	0,040	0,043
5 VA/ 0,8	-0,050	-0,003	0,016	0,029	0,040	0,044	0,045	0,048
VA/								

VA/cosPhi	Phase displacement in [min] at % rated current							
	1	5	10	20	50	100	120	200
40 VA/ 0,8	8,180	2,811	2,033	1,593	1,139	0,760	0,649	0,381
20 VA/ 0,8	8,246	2,855	1,992	1,514	1,122	0,852	0,772	0,547
10 VA/ 0,8	8,277	2,924	2,014	1,491	1,103	0,872	0,811	0,621
5 VA/ 0,8	8,222	2,957	2,028	1,486	1,092	0,878	0,822	0,654
VA/								



4

3

2

1

F

F

E

E

D

D

C

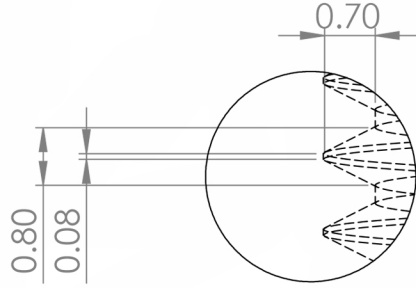
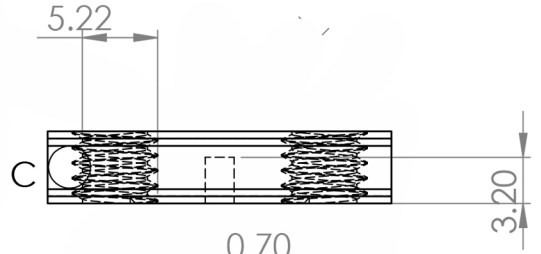
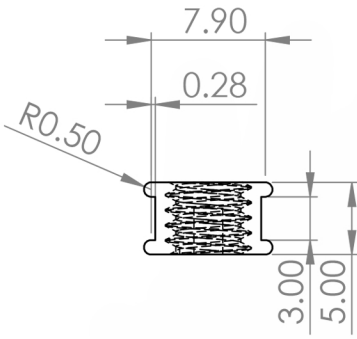
C

B

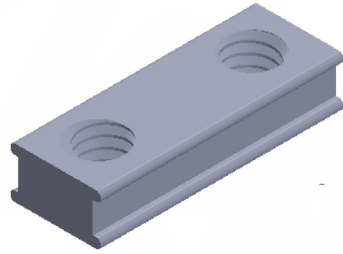
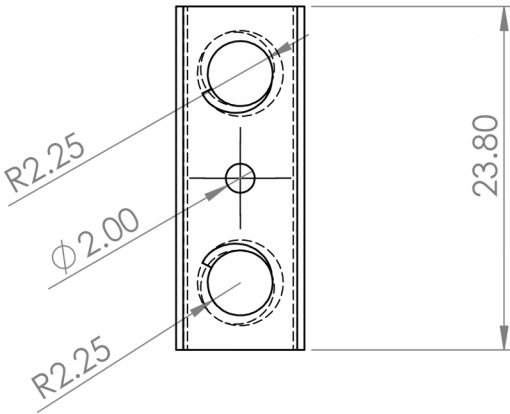
B

A

A



DETAIL C  
SCALE 10 : 1



TEKNİK RESMİ ÖLÇEKLENDİRMEYİN

REVİZYON: R.0

RESİM NO.

1004.2

BAŞLIK:

Klemens 24 mm

	İSİM	İMZA	TARİH
ÇİZEN	Burak ÖNLÜTAŞ		08.08.2018
DENET.	Ramazan ÖZCAN		08.08.2018
ONAY.	Abdulmoniem Saleh		
ÜRET.	Ahmet Hariri		
KALİTE	Onur Çolak		

MALZEME:

Pirinç

**VTEKE**

A4

GENEL TOLERANS: DIN ISO 2768 mm

AĞIRLIK:

ÖLÇEK:1:1

SAYFA 1 / 1

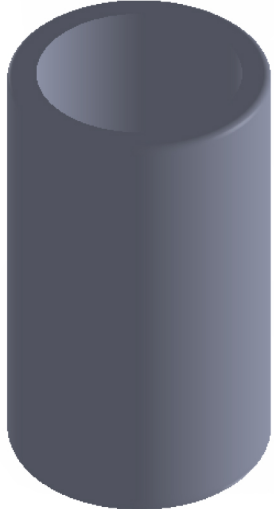
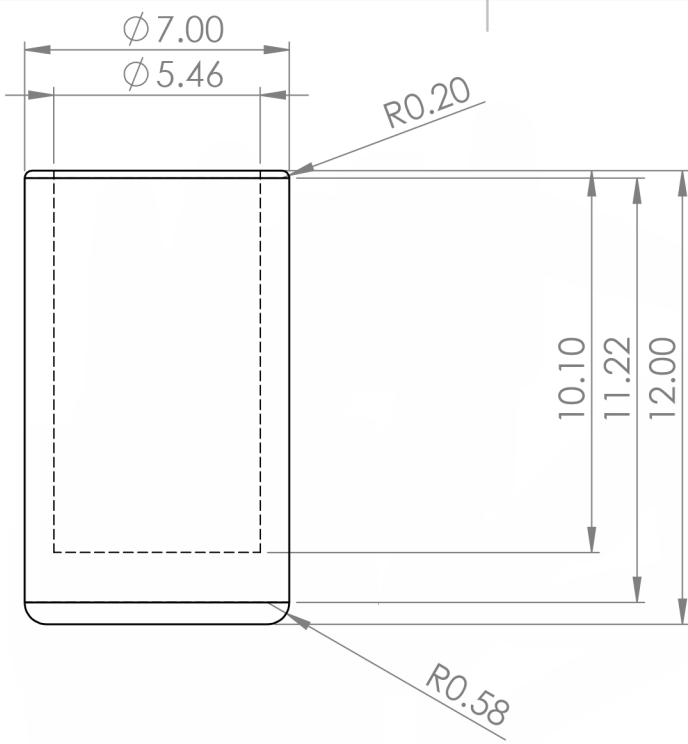
4

3

2

1

4 3 2 1



TEKNİK RESMİ ÖLÇEKLENDİRMEYİN

REVİZYON: R.0

RESİM NO.

BAŞLIK:

Vida Başı

	İSİM	İMZA	TARİH
ÇİZEN	Burak ÖNLÜTAŞ		08.08.2018
DENET.	Ramazan ÖZCAN		08.08.2018
ONAY.	Abdulmoniem Saleh		
ÜRET.	Ahmet Hariri		
KALİTE	Onur Çolak		

MALZEME:  
ABS Yanmaz

**VTEKE**

A4

GENEL TOLERANS: DIN ISO 2768 mm

AĞIRLIK:

ÖLÇEK:1:1

SAYFA 1 / 1

4 3 2 1

4

3

2

1

F

F

E

E

D

D

C

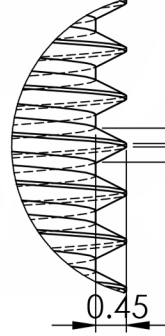
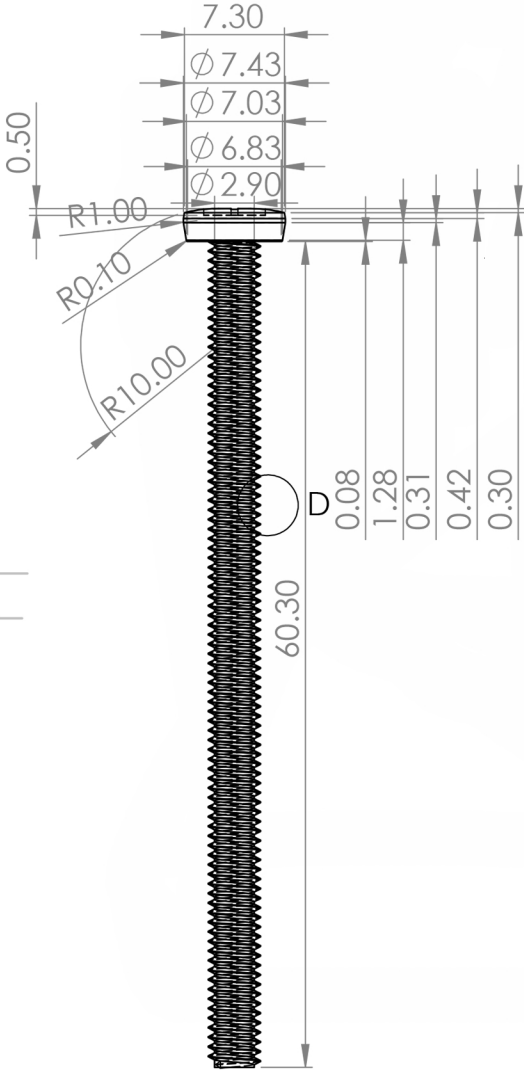
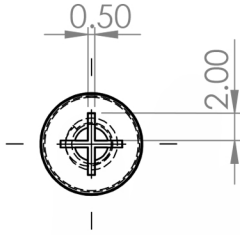
C

B

B

A

A



DETAIL D  
SCALE 10 : 1



TEKNİK RESMİ ÖLÇEKLENDİRMEYİN

REVİZYON: R.0

RESİM NO.

1008.2

BAŞLIK:

Yan vida 4\*60 ysb

**VTEKE**

A4

GENEL TOLERANS: DIN ISO 2768 mm

AĞIRLIK:

ÖLÇEK:1:1

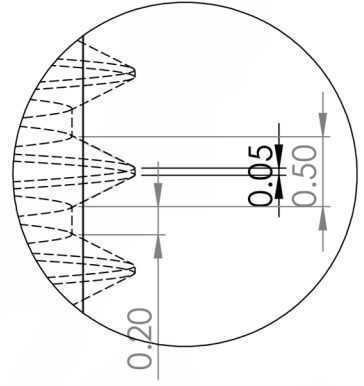
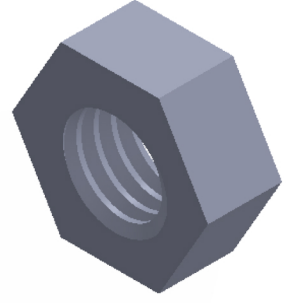
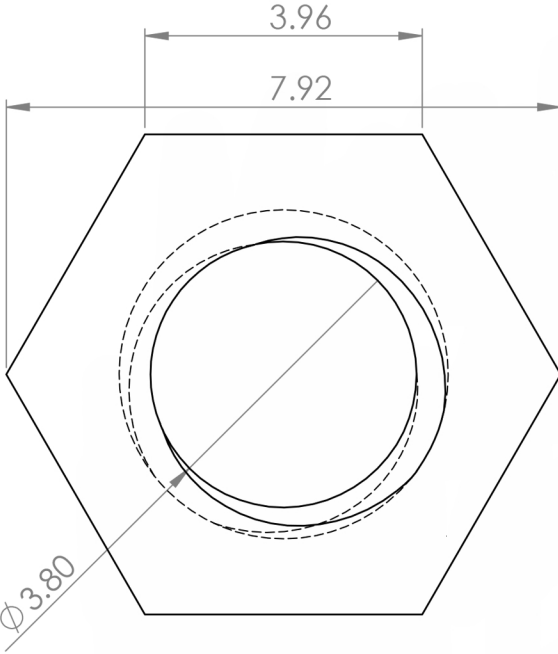
SAYFA 1 / 1

4

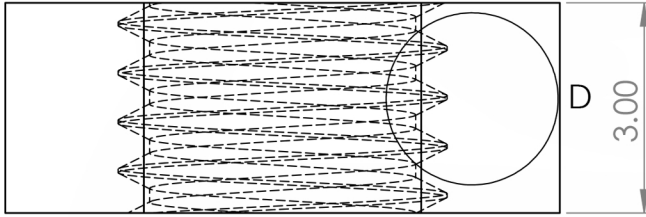
3

2

1



DETAIL D  
SCALE 20 : 1



TEKNİK RESMİ ÖLÇEKLENDİRMEYİN

REVİZYON: R.0

RESİM NO.

1008.4

BAŞLIK:

Somun

	İSİM	İMZA	TARİH
ÇİZEN	Burak ÖNLÜTAŞ		08.08.2018
DENET.	Ramazan ÖZCAN		08.08.2018
ONAY.	Abdulmoniem Saleh		
ÜRET.	Ahmet Hariri		
KALİTE	Onur Çolak		

MALZEME:

**VTEKE**

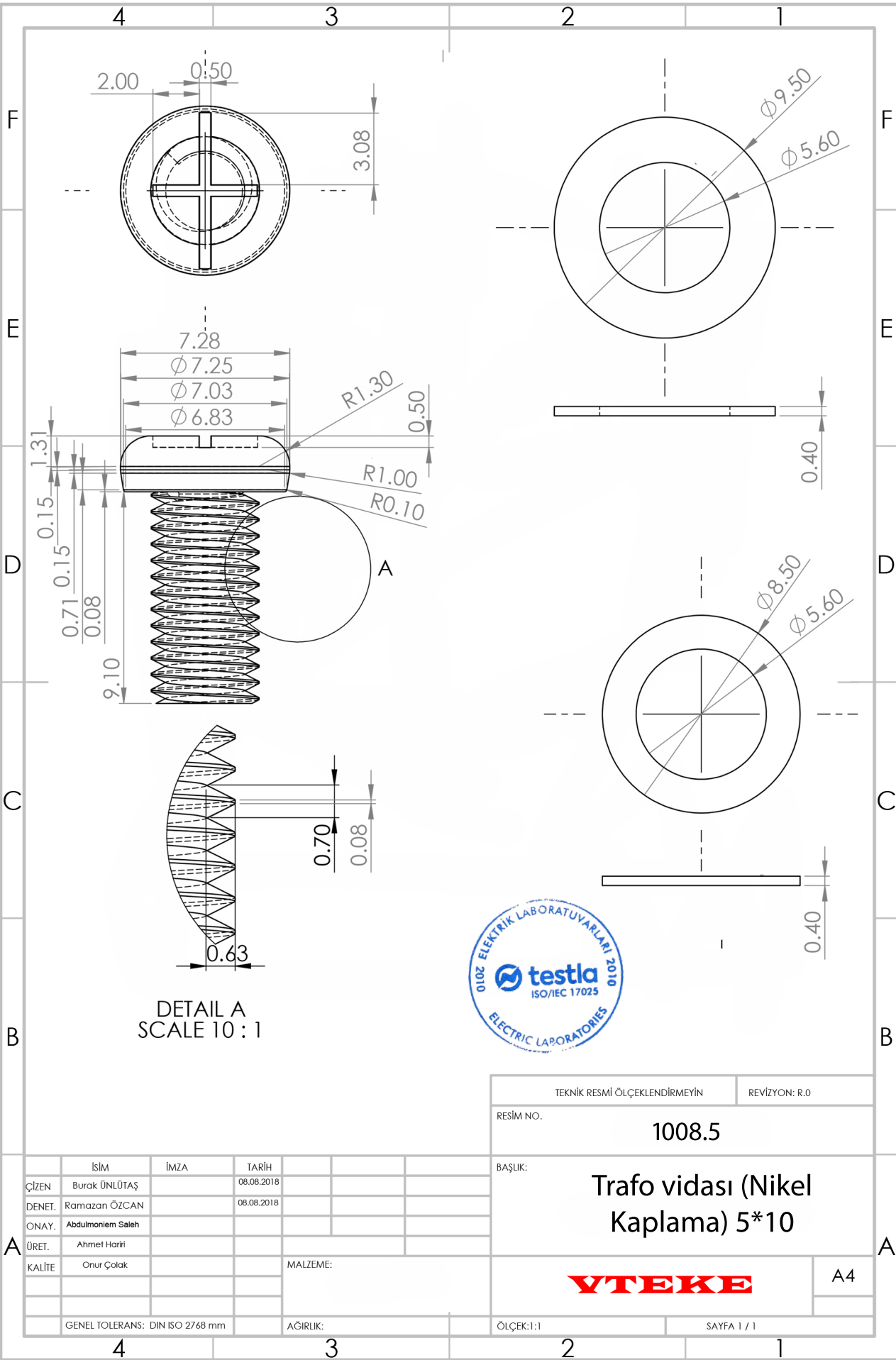
A4

GENEL TOLERANS: DIN ISO 2768 mm

AĞIRLIK:

ÖLÇEK:1:1

SAYFA 1 / 1



DETAIL A  
SCALE 10 : 1



TEKNİK RESMİ ÖLÇEKLENDİRMEYİN		REVİZYON: R.0
RESİM NO.	1008.5	
BAŞLIK:	Trafo vidası (Nikel Kaplama) 5*10	
MALZEME:		A4
GENEL TOLERANS: DIN ISO 2768 mm		AÇIRLIK:
ÖLÇEK: 1:1	SAYFA 1 / 1	

A

A

B

B

C

C

D

D

E

E

F

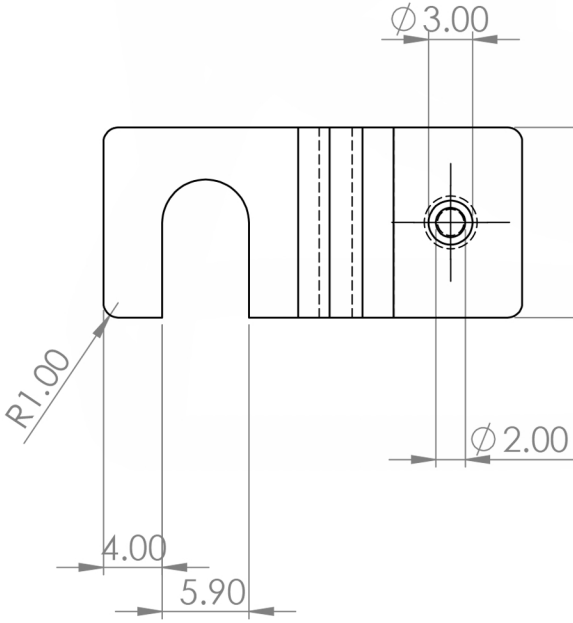
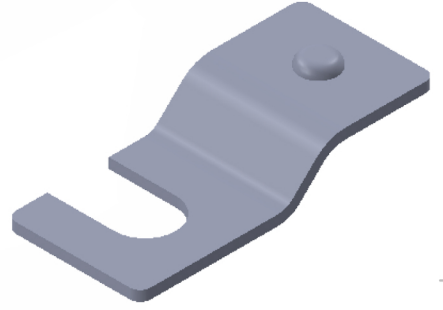
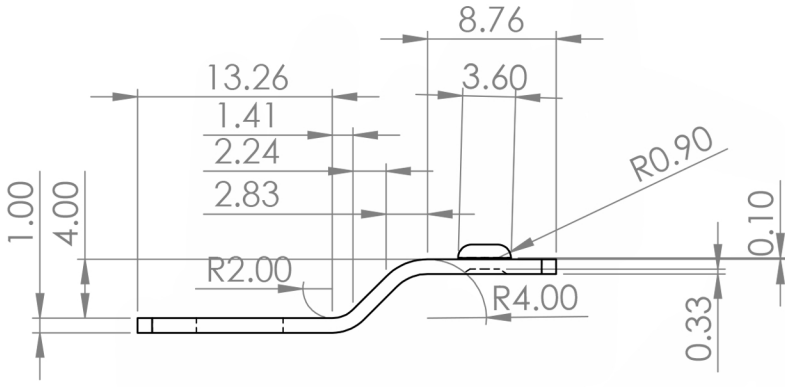
F

4

3

2

1



TEKNİK RESMİ ÖLÇEKLENDİRMEYİN	REVİZYON: R.0
RESİM NO.	1008.6
BAŞLIK:	Sac ayak
<b>VTEKE</b>	
A4	

	İSİM	İMZA	TARİH
ÇİZEN	Burak ÖNLÜTAŞ		08.08.2018
DENET.	Ramazan ÖZCAN		08.08.2018
ONAY.	Abdulmoniem Saleh		
ÜRET.	Ahmet Hariri		
KALİTE	Onur Çolak		

MALZEME:

GENEL TOLERANS: DIN ISO 2768 mm

AĞIRLIK:

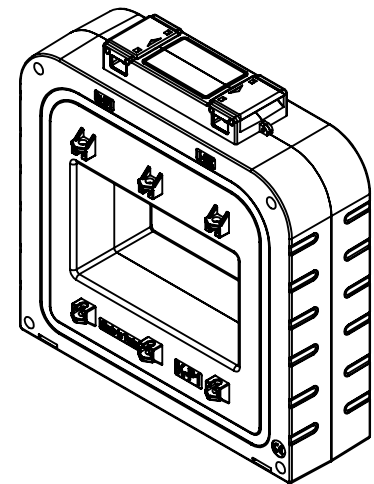
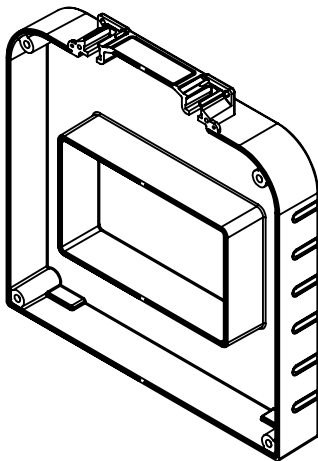
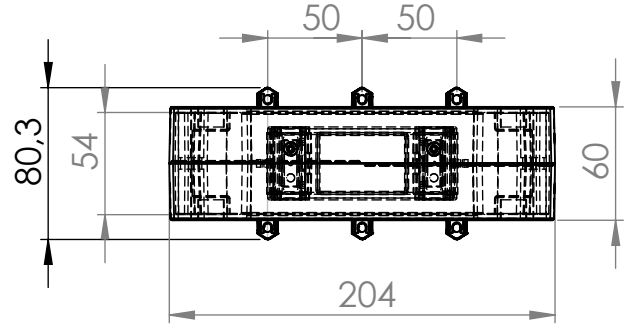
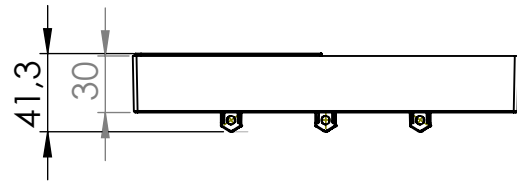
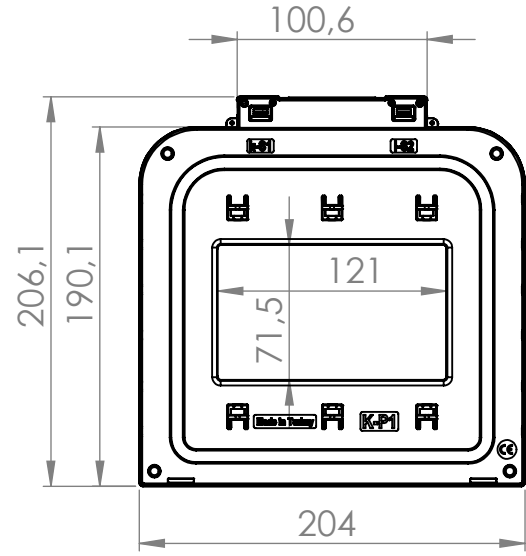
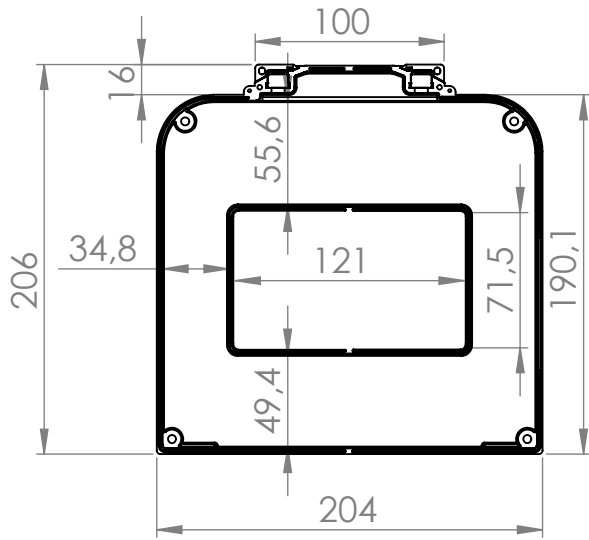
ÖLÇEK: 1:1

SAYFA 1 / 1

4 3 2 1

YARI MAMUL

MONTAJ



TEKNİK RESMİ ÖLÇEKLENDİRMEYİN

REVİZYON: R.0

RESİM NO.

TK120 GÖVDE

BAŞLIK:

TK120 GÖVDE

İSİM	İMZA	TARİH
ÇİZEN	Halim TELCİ	11/06-2020
DENET.	Ramazan ÖZCAN	11/06-2020
ONAY.	Abdulmoniem Saleh	
ÜRET.	Ahmet Hariri	
KALİTE	Onur Çolak	

MALZEME:  
Alev Geciktiricili Yanmaz  
ABS

GENEL TOLERANS: DIN ISO 2768 mm

AĞIRLIK:

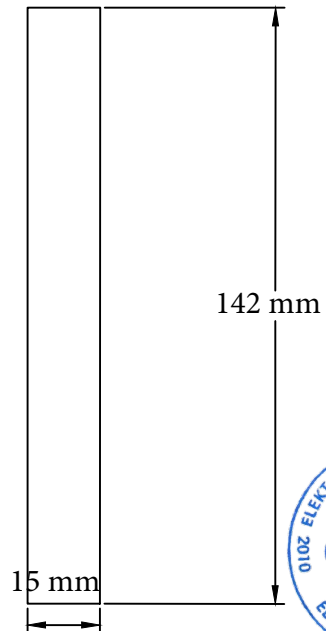
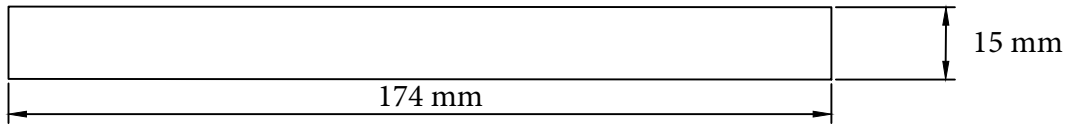
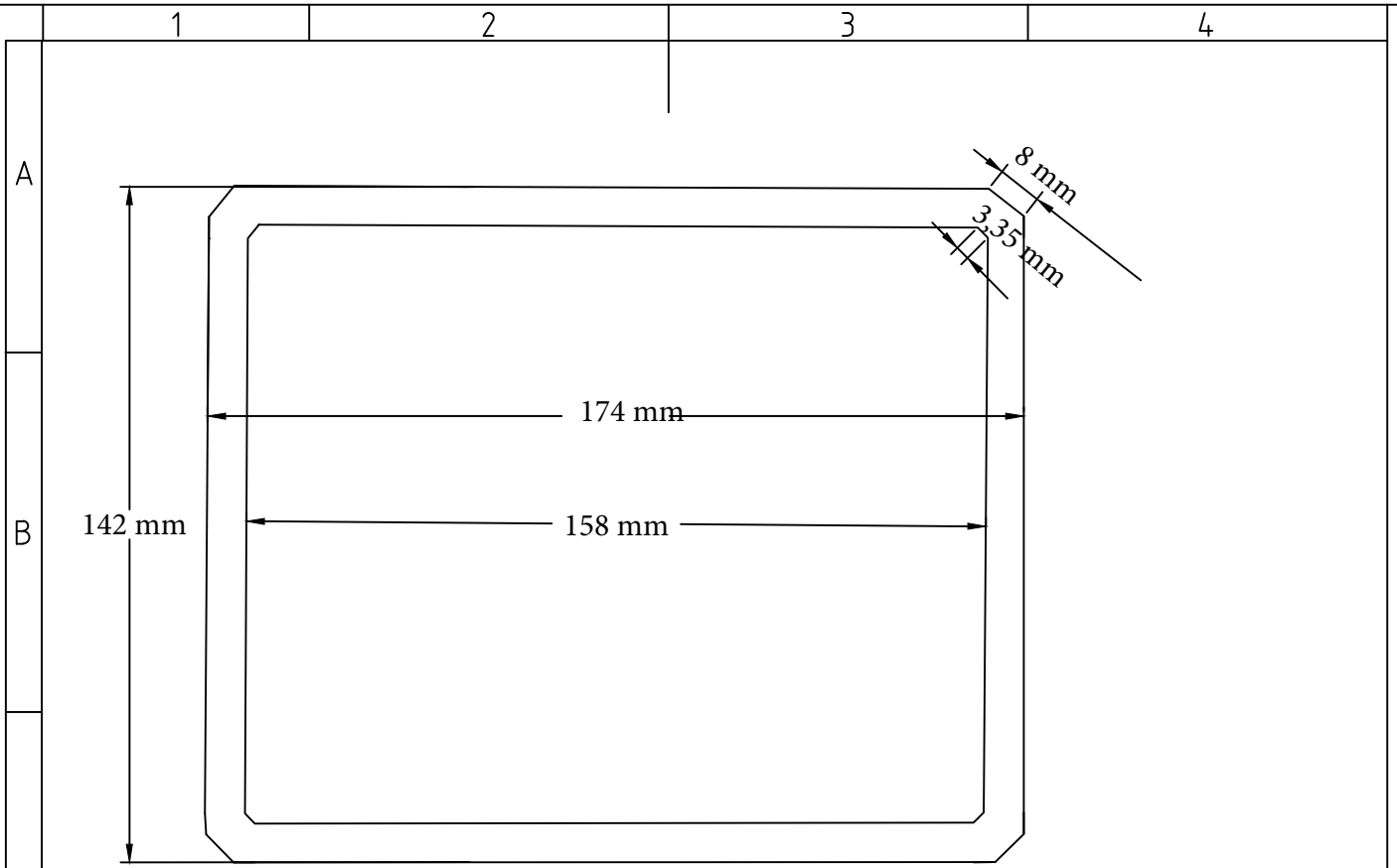
**VTEKE**

A4

ÖLÇEK:1:5

SAYFA 1 / 1

4 3 2 1



				TEKNİK RESMİ ÖLÇEKLERNDİRMEYİN	
				RESİM NO. TK120 NÜVE	
				BAŞLIK: TK120 NÜVE	
F	İSİM	TARİH	İMZA		
	Çizen	Onur ÇOLAK			
	Denet	Onur ÇOLAK			
	Onay	Abdulmoniem SALEH			
	Üret.	Ahmed Al HARİRİ			
	Kalite	Onur ÇOLAK		MALZEME SAC	
GENEL TOLERANCE:DIN ISO 2768 mm			AĞIRLIK: 528 GR		SAYFA 1/1



A4