



TÜRK STANDARDLARI ENSTİTÜSÜ
TURKISH STANDARDS INSTITUTION

EC - TYPE EXAMINATION CERTIFICATE

2014/32/EU Measuring Instruments Directive

1783-MID-019

In accordance with Measuring Instruments Directive dated February 26, 2014 and numbered 2014/32/EU of the European Union Parliament and "Ölçü Aletleri Yönetmeliği (Measuring Instruments Directive)" numbered 2014/32/AB which was published in Official Journal of Turkish Republic dated 29.06.2016 and numbered 29757:

Manufacturer : KÖHLER ELEKTRİK SAYAÇLARI SANAYİ VE TİCARET A.Ş.

Akçaburgaz Mh. 3055. Sokak No:3 Esenyurt / İSTANBUL

Essential requirements Applied : MID Annex I and Annex MI-003

Name of Measuring Instrument : Active Electrical Energy Meters

Type : AEL.TF.32 / AEL.TF.32-1

Environmental Classes

- Climatic -40 °C / +70 °C
- Mechanic M1
- Electromagnetic E2

Project Number : 979-16/399240

Comformity Assessment Report : 979-MID-019/2016-01, 979-MID-019/2017-01

Date of issue : 24.08.2017 (First Issue Date:17.10.2016)

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Volkan GÜLEÇ
Deputy Director of Directives

Ankara, 24.08.2017 Rev.01

This certificate is only valid with annex and TSE-Notified Body 1783 seal.

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1. General Information about Electrical Energy Meter

1.1 Designation

Electronical electric meter measuring active electrical energy and maximum power and showing these data on the LCD Display, auto-correcting day light saving time in summer and winter, keeping the intended data and programs in memory, getting a line on these data when required.

1.2 Design

Essential Parts of the Meter

- Electronic (circuit) card
- Lower cover-housing
- Upper cover
- Terminal cover

1.3 Metrological Characteristic

Measurement of the electrical energy

1.4 Software

PROG:0008

1.5 Supplementary equipments

Not applicable

1.6 Equipments out of the scope of MID

Not applicable





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2. Technical data

Type	AEL.TF.32 / AEL.TF.32-1
Definition	3 phase, 4 wired, 4 tariff, with deman meter, outdoor, active electronic electrical meter
Accuracy Class	A or B
Software Version No	PROG:0008
Place	İstanbul
Meter Location	Outdoor
Sayaç Integrity	Meter integrity is preserved by seal and intervention from the outside is inhibited
Sealing Type	Plastic Pounding Seal
Temperature Interval	-40 °C / +70 °C
Circuit Type	Directly Connected
Frequency	50 Hz ±%5
Current Interval (A)	0,25-5(100) A 0,25-5(85) A 0,25-5(80) A 0,25-5(60) A
Voltage Interval (V)	3x230 / 400 V

3. Marking

The following data shall be marked on the water meter

- manufacturer's name and/or registered trademark,
- phase number and connection cable number
- year of production and serial number,
- current gauging interval, minimum current (I_{min}), reference current (I_{ref}), maximum current (I_{max})
- reference frequency (Hz),
- meter constant
- accuracy class
- electric security class güvenlik sınıfı (double square mark for meters with insulating lining)
- operating temperature interval or environmental class)
- nominal voltage (primary and secondary voltage if with transformer),
- EC-type examination certificate number,
- conformity marking according to the regulation in regards to the measuring instruments



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3.1 Registered trademark of the manufacturer

The manufacturer uses the following figure inscription commercial trademark on the electrical energy meters



4. Sealing

Lower housing of the meter and upper cover are screwed together and it is stamped by attaching a plastic seal on the gap above the screw. Terminal cover is sealed by authorised personnel after the meter has been mounted.

5. Terms of Production, putting into use and usage

5.1 Production

- no special terms identified for production

5.2 Putting into use

- electrical energy meters must be installed in the plumbing as mentioned in installation instructions and/or user's manual of the manufacturer.
- type tests of the meter were carried out according to EN 50470-1:2006 and EN 50470-3:2006

5.3 Requirements for usage

- must be used in accordance with the terms of the user's manual given by the manufacturer.

6. Documentation used within the scope of assessment

- Testing report dated 05.04.2016 and EL 16-0005 issued by Eldaş Elektrik, Elektronik San. ve Tic. A.Ş.
- Manufacturer's technical file, technical drawings, component lists





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7. Standards and regulations used within the scope of assessment

7.1 Regulations, harmonised standards and mandatory normative documents

- Measuring Instruments Directive numbered 2014/32/AB published in the Official Journal dated 29.06.2016 and number 29757
- EN 50470-1:2007
- EN 50470-2:2007
- EN 50470-3:2007
- OIML R 46:2012

7.2 Reference documents

- WELMEC Guide 7.2

8. Conclusion

Structural, technical and metrological parameters of the meter must be compatible with the documentation submitted with this Type Examination Certificate. The meter must meet the requirements of the Measuring Instruments Directive numbered 2014/32/EU of the European Union Parliament and the Council and the Measuring Instruments Directive numbered 2014/32/AB published in the Official Journal dated 29.06.2016 and number 29757 of Turkish Republic.

9. Annexes

Annex-1: Illustrative pictures of the water meter

Annex-2: Demonstration of Sealing

Annex-3: Marking





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Annex-1:

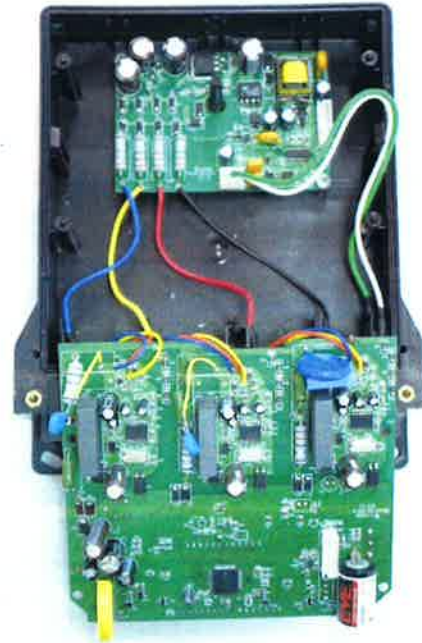
AEL.TF.32 Frontal photograph of the meter



Photograph of the interval view of the meter



Frontal view of the electronic card



Rear view of the electronic card



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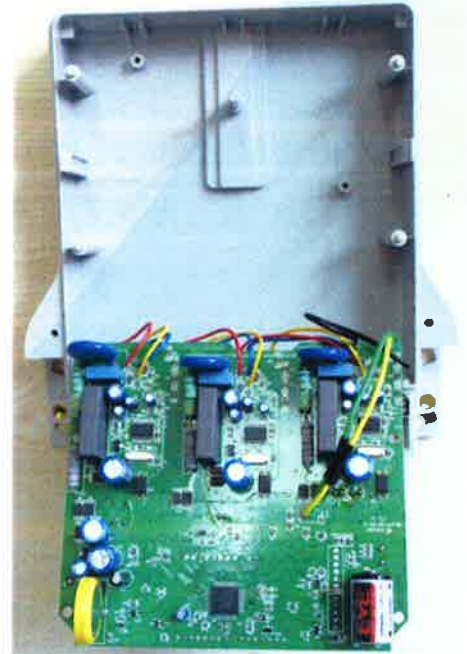
AEL.TF.32-1 Sayacın önden fotoğrafı



Photograph of the interval view of the meter



Frontal view of the electronic card



Rear view of the electronic card





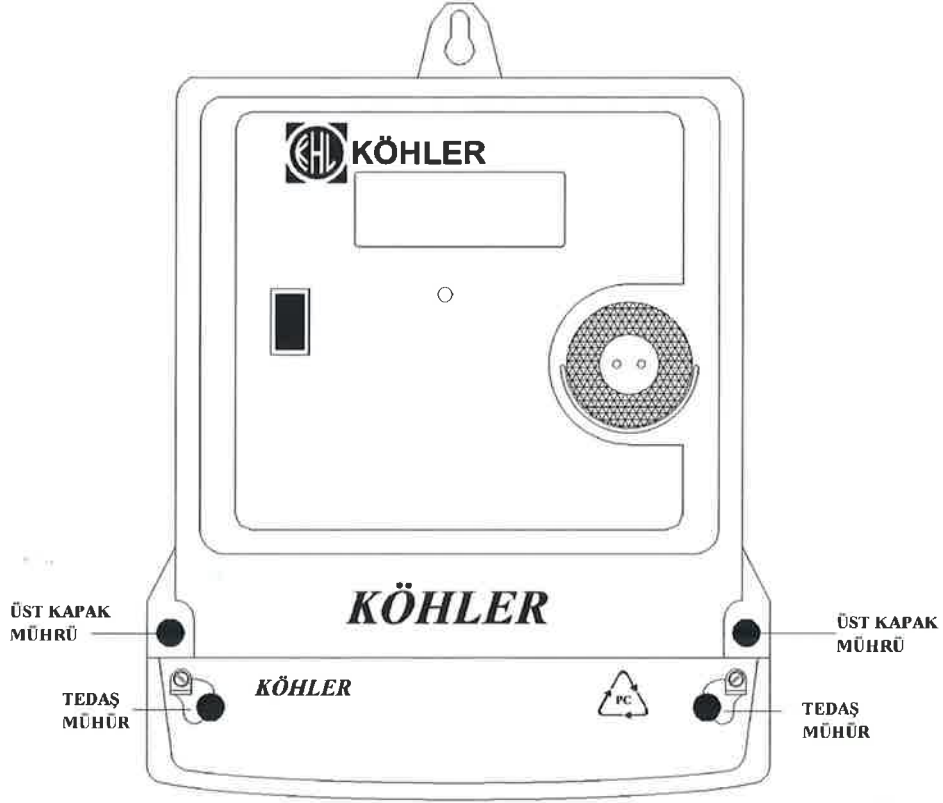
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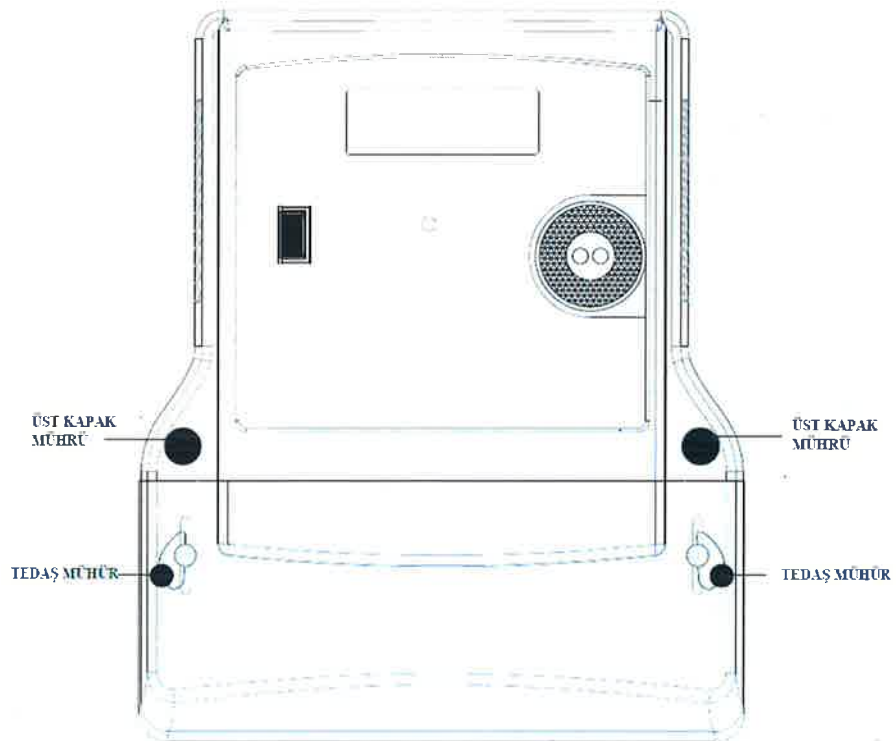
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Annex-2:

AEL.TF.32 Sealing



AEL.TF.32-1 Sealing





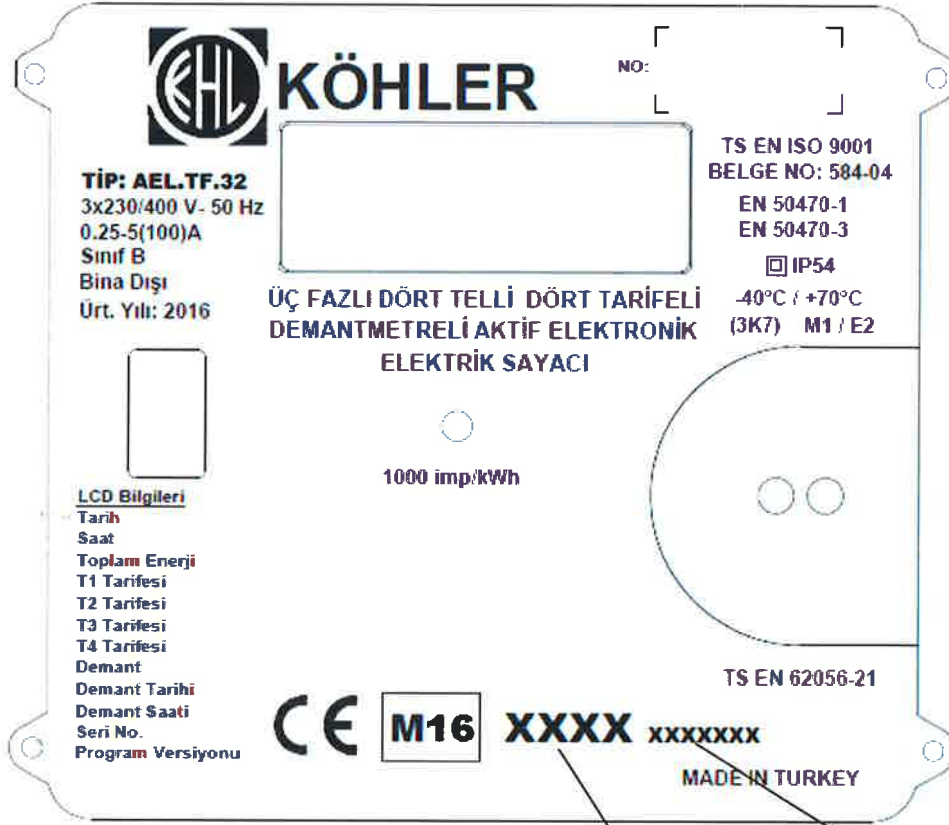
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Annex-3:

AEL.TF.32 Marking



EC Type (Modul B)
Examination
Certificate Number

Notified Body
Number (Modul D)



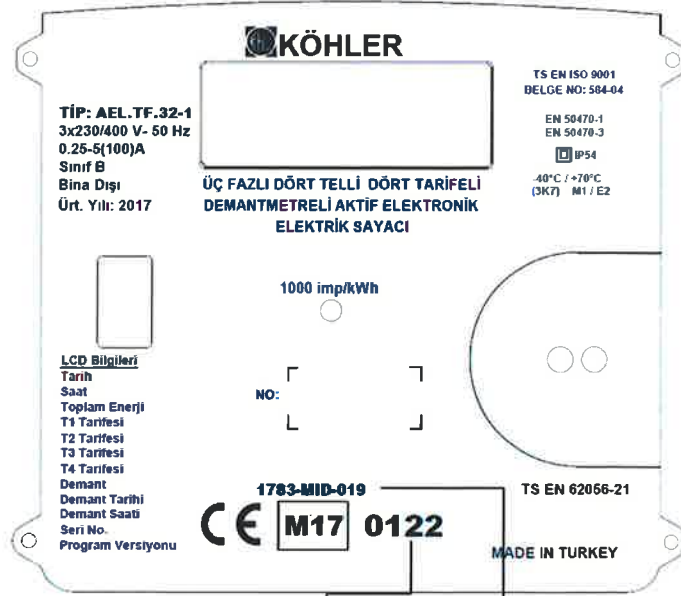


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AEL.TF.32-1 Marking



Notified Body
Number (Modul D)

EC Type (Modul B)
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