

mastering electricity

### ELEO EML Energy Management Line

Smart Current Transformers and Easy Voltage Taps for Energy Measurement



## Energy Management Line

# ELEQ Split-core Current Transformer: compact split-core current transformers for cables (TQ)

#### Fast and simple current measurement

Superfast and accurate current measurement is the result of using our compact split-core current transformers. ELEQ's TQ-series is ideal for use in existing installations and in combination with digital measurement systems. Additionally, they are easy to install because of the colour-coded leads supplied with the current sensor. The transformers meet IEC61869-2, which guarantees accuracy. The burden and class specifications apply to the conditions at the end of the leads.

### Properties

- Compact and split-core
- Suitable for insulated conductor
- Colour-coded leads simplifying installation
- TQ50 top-part can be removed entirely

### Order specifications



	TQ30 (Ø18mm)		TQ40-B (Ø18mm)			TQ40-C (Ø28mm)		TQ50-E (Ø42 mm) TQ50-L (2xØ42mm)					
Ratio	Class	Burden	Article number	Class	Bur- den	Article number	Class	Burden	Article number	Class	Bur- den	Article number	
60/1A	3	0,2 VA	4Q3B02										
75/1A	3	0,2 VA	4Q3B03										
100/1A	3	0,2 VA	4Q3B05	1	0,2 VA	4Q4B05							
125/1A	3	0,2 VA	4Q3B07	1	0,2 VA	4Q4B07							
150/1A	3	0,2 VA	4Q3B08	1	0,2 VA	4Q4B08							
200/1A	1	0,2 VA	4Q3B09	0,5	0,2 VA	4Q4B09	1	0,2 VA	4Q4C09				
250/1A	1	0,2 VA	4Q3B10	0,5	0,2 VA	4Q4B10	1	0,2 VA	4Q4C10	1	0,5 VA	4Q5R10	4Q5M10
300/1A							1	0,2 VA	4Q4C11	1	0,5 VA	4Q5R11	4Q5M11
400/1A							1	0,2 VA	4Q4C12	0,5	0,5 VA	4Q5R12	4Q5M12
500/1A							0,5	0,2 VA	4Q4C13	0,5	0,5 VA	4Q5R13	4Q5M13
600/1A										0,5	0,5 VA	4Q5R14	4Q5M14
750/1A										0,5	0,5 VA	4Q5R15	4Q5M15
800/1A										0,5	0,5 VA	4Q5R16	4Q5M16
1000/1A										0,5	0,5 VA	4Q5R17	4Q5M17
150/5A				1	1 VA	4Q4B58							
200/5A				1	1 VA	4Q4B59							
250/5A				0,5	1 VA	4Q4B60	1	1 VA	4Q4C60				
300/5A							1	1 VA	4Q4C61			4Q5E61	4Q5L61
400/5A							1	1 VA	4Q4C62			4Q5E62	4Q5L62
500/5A							1	1 VA	4Q4C63			4Q5E63	4Q5L63
600/5A												4Q5E64	4Q5L64
750/5A										0,5	0,5 VA	4Q5E65	4Q5L65
800/5A												4Q5E66	4Q5L66
1000/5A										0,5	0,5 VA	4Q5E67	4Q5L67
250/333mV	1	2MΩ, 50pF	4P3B29										
400/333mV							1	2MΩ, 50pF	4P4C40				
part of a smart world()													

## ELEQ Split-core Current Transformer: suitable for low and medium voltage systems (TQ120)

#### Compact and accurate current measurement

TQ120 is a very compact split-core current transformer suitable for low voltage systems. The unit is easy to install while the top part can be removed entirely. This makes the unit also very suitable for use with isolated cables with conus connector in medium voltage systems. Also, the units are compact and can be mounted besides each other for a phase distance of 120 mm or more. The TQ120 can be used in new as well as in existing installations and its accuracy results in highly accurate current measurements.

### Properties

- For new as well as existing installations
- Suitable for prefabricated insulated conductor with conus connector
- Top-part can be removed entirely
- For low and medium voltage systems



### Order specifications

Ratio	Class	Burden (VA)	Article number
100-200/1A	5P10	2-4	4Q12F90
100-200/1A	1	1,5-4	4Q12F09
250/1A	0,5S	2,5	4Q12F10
300/1A	5P10	5	4Q12F92
400/1A	5P20	5	4Q12F93
400/1A	0,5	7,5	4Q12F12
600/1A	0,5	15	4Q12F14

These are options for a variable measurement class of the TQ120. Please contact sales@eleq.com.

## Energy Management Line

# ELEQ Power Sensor: current transformer with fused terminal (VCT)

#### For stand-alone current and voltage measurements

To measure power the voltage and current values of each phase are required. The ELEQ Power Sensor combines three functions in one product: the rail terminal, the current transformer and the fused voltage tap. So the VCT32 enables both an accurate current measurement and a voltage measurement in one product. Application of the VCT32 results in meeting higher safety requirements, reliable measurement, less required mounting space and lower installation costs.

### Properties

- Railterminal with integrated current transformer and fused voltage tap
- Easy to install
- Specially developed for power measurement up to 64A
- Suitable for fuse with breaking capacity up to 70kA

#### Order specifications

Ratio	Class	Burden <sup>1</sup>	Article number
16/1	3	0,1VA	5VCT01
35/1	1	0,2VA	5VCT02
64/1	0.5	0,2VA	5VCT03

1) Ext. cable losses = 0,014VA/m (2,5mm<sup>2</sup>)



## ELEQ Current Transformer: for use with three phase circuit breaker (RM27)

#### Most compact IEC transformer for accurate current measurement

Nowadays, a more detailed current measurement is required in many installations. Often this means less available space while measuring relatively low values. In addition, the accuracy of the measurement has to be sufficient (at least class 1).

The RM27 meets those requirements in one product. The very compact ELEQ RM27 current transformer is especially designed for connection to digital measurement systems. The main advantage of the RM27 is that the dimensions of this product are designed for use in a three phase circuit breaker with a fase distance of 17,5mm. The RM27 is supplied with a connector with clamp technology for easy installation of the secondary leads. Optional: screw mounting or mounting on a DIN-rail.

### Properties

- Meets IEC61869-2 requirements
- Ideal for detailed current measurements
- Connector with clamp technology
- Primary window suitable for cable Ø 7,5mm

### Order specifications

Ratio	Class	Burden <sup>1</sup>	Article number
35/1A	1	0,2VA	4R2746
64/1A	1	0,2VA	4R2747
Mounting Clip			411884



### Energy Management Line

# ELEQ Easy Voltage Tap for Busbar and Rail Mounting (UAK/ZK4)

ELEQ's easy voltage tap for busbar (UAK) or rail mounting (ZK4) can be used to make a safe and simple fused voltage tap in your distribution system.

The main advantage of the voltage tap is that the tap is directly fused on the voltage carrying rail. In this way both the measurement wiring and the object to connect are protected with the fuse. Fitting the UAK on the busbar and the ZK4-M6/M8 under an existing attachment point (M6 or M8 bolt) on the voltage rail is easy to carry out due to the "hook" construction. The products have a high short-circuit resistance, making them extremely suitable for several types of installations with a busbar.

#### Properties

- Safe tapping of voltage for measurement purposes
- All models with fuse directly on busbar and rail
- Perfectly suitable for use with power meters

Order specifications

- Easy and safe mounting
- Suitable for fuse with breaking capacity up to 70kA





ZK4-M6

### ZK4-M8

Description	Model	Article number
Fused phase terminal	UAK4Z	500040
Neutral terminal unfused	UAK16N	500042
Set (3x500040 & 1x500042)		500045
Fused voltage tap for fitting M6 bolts	ZK4-M6	500030
Fused voltage tap for fitting M8 bolts	ZK4-M8	500031



UAK16 UAK4Z

#### ELEQ Easy Voltage Tap for Wires: with or without fuse (UAD)

In existing installations there is rarely a fused terminal available for measurement purposes. The unique UAD tapping clamp allows you to tap a fused voltage from an insulated wire for measurement using one hand and without the need for additional tools. The fuse is mounted directly on the primary conductor, which results in an optimum degree of safety. This unique product is a breakthrough for fast and safe measurement in existing installations.

#### Properties

- Safe tapping of voltage for measurement purposes
- Easy and safe mounting
- Suitable for fuse with breaking capacity up to 70kA



#### Order specifications

Cable size	Description	Model	Article number
2,5-6mm2	Fused phase terminal	UAD6	500072
	Neutral terminal unfused	UADn	500073
	Terminal set (3x 500072 & 1x 500073)	UAD6 set	500074
10-16mm2	Fused phase terminal	UAD16	500070
	Neutral terminal unfused	UAD16n	500071
	Terminal set (3x 500070 & 1x 500071)	UAD16 set	500075



ELEQ designs and manufactures smart electrotechnical applications for protecting, measuring and connecting electrical energy and works worldwide for renowned power companies, system builders and installers. Together with our clients we anticipate on the future and on required innovations.

ELEQ is a true producer and partner of clients and relations who are professionally involved in energy and public lighting systems and who rely on continuous precision and high services.

ELEQ delivers all its products and applications in accordance to the high Dutch and German quality standards and serves markets in Europe and beyond from its locations in the Netherlands (Steenwijk) and Germany (Kerpen).

#### -part of a smart world–

ELEQ b.v. P.O. Box 12, 8330 AA Steenwijk Tukseweg 130, 8331 LH Steenwijk The Netherlands



Karl-Ferdinand-Braun-Straße 1 50170 Kerpen (Sindorf) Germany +49 (0) 22 73 / 988 70
info@eleq.com
www.eleq.com