

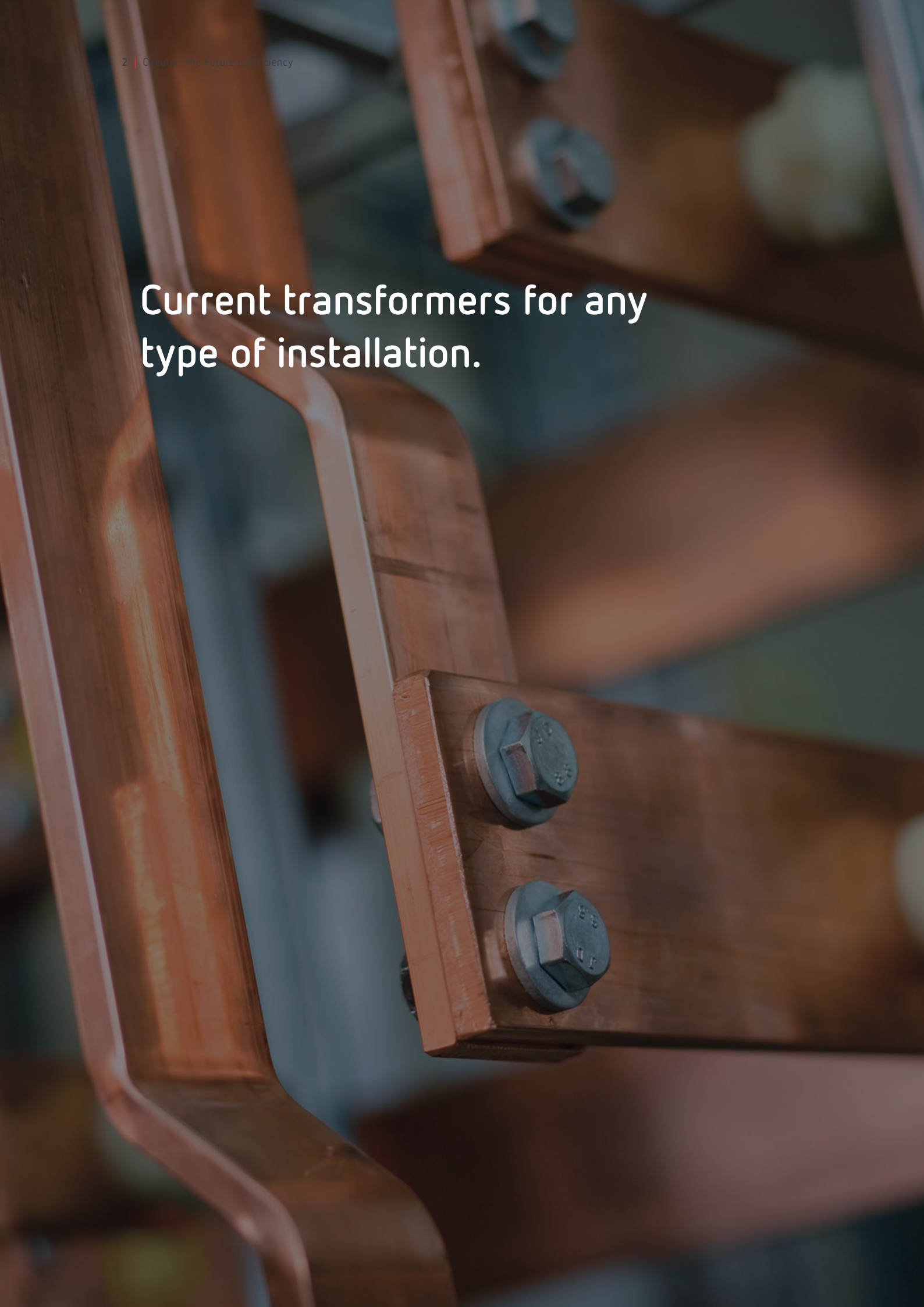


MEASUREMENT AND CONTROL

TD, TQ and TQR

Transformers for current measurement

Current transformers for any
type of installation.



Solutions for low-voltage current measurement

The installation of current transformers allows the different measuring devices to provide reliable and traceable data on the evolution of consumption and production processes in electrical installations.



Designed in collaboration
with installers

In the continuous process of improvement of our products, and thanks to the accumulated experience of our installers, we have designed this new range of current transformers to be installed quickly, easily and robustly. Meeting the most demanding expectations of the current market



Solutions for every type of installation

TD transformers

Easier to install

Thanks to our partnership with installers, our TD current transformers have a new and improved design to cover any need that may arise during their installation. The different models take into account aspects involving both their easy installation and their power optimisation when being connected to any electronic measurement device.



TQ and TQR transformers

Installation without interruption

The split-core TQ and TQR transformers have been designed to be connected to installations already in operation. A simple, two-step process makes for easy installation that saves on indirect costs, avoiding to disconnect the supply before start-up.



Easy opening button

TD. Narrow section transformers

Easier to install



TD4

from 40 to 200 A



TD5

from 50 to 250 A



TD6

from 150 to 800 A



TD8

from 300 to 1600 A



Attachment using ties

New tie fastening system built in at the transformer itself for an easy, fast and secure installation.



Encapsulation

The inside of the transformers can be encapsulated for installation in very humid or saline environments.



Low losses

Ideal for installation with any type of device, especially for low-energy electronic equipment.



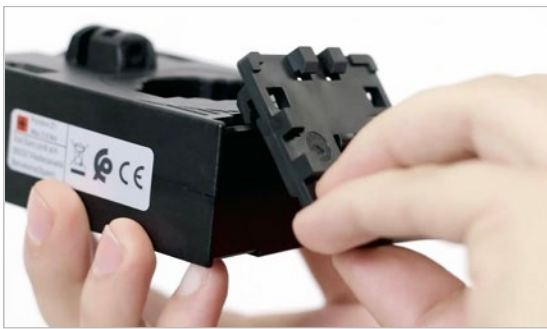
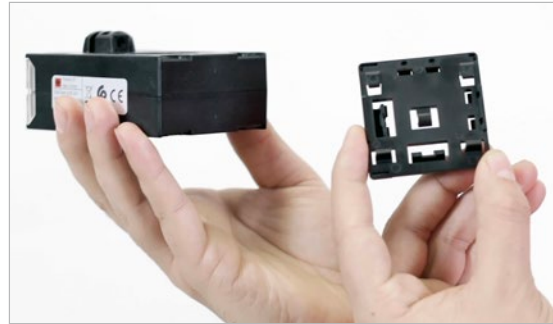
Accurate

Best measuring accuracy guaranteed when connected to any type of receiver.

Versatile

Multiple formats for connecting the transformer.

- **DIN rail:** Two-way fastening with an accessory for connecting to the DIN rail, whether connecting vertically or horizontally.
- **Panel:** The transformers have individual parts for installation at the bottom of a panel.
- **Busbar/Cable:** Enclosure with different window options for installing directly on a busbar or cable, using insulated-tip screws or ties, for secure fastening.



Accessories for TD current transformers

Accessory for installing TD transformers to DIN rail. We can bidirectionally fix the device to a DIN rail with just this accessory, as it provides the possibility of fixing it either horizontally or vertically.

References

| Description | Code |
|---------------|---------|
| DIN-FIX 50x84 | M75103. |
| DIN-FIX 50x50 | M75102. |



DIN-Fix

Sealable

It has optional accessories for sealing the terminals and the transformer label.



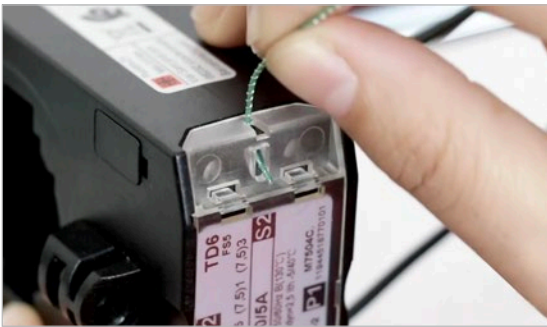
Connect the secondary cables.



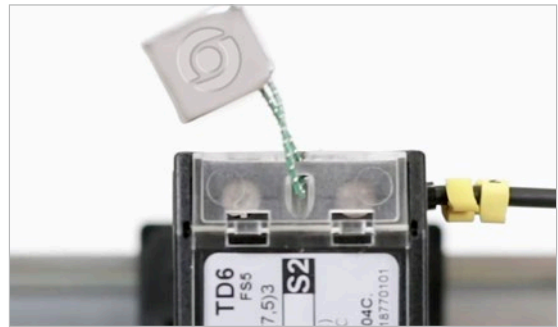
Terminal cover disables access to fastening screws and product label.



Place the anti-fraud laps.



Once the terminal cover has been placed, the transformer sealed.



Sealed device.

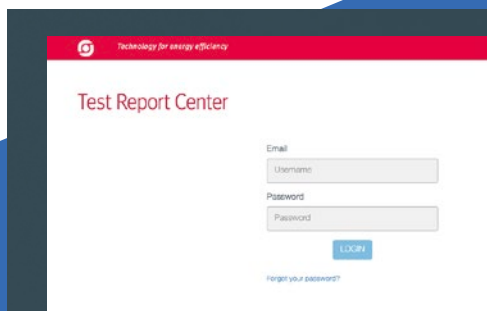
Test report online

Download the test reports for Circutor's TD transformers free of charge from:

<http://testreport.circutor.com>



SCAN ME

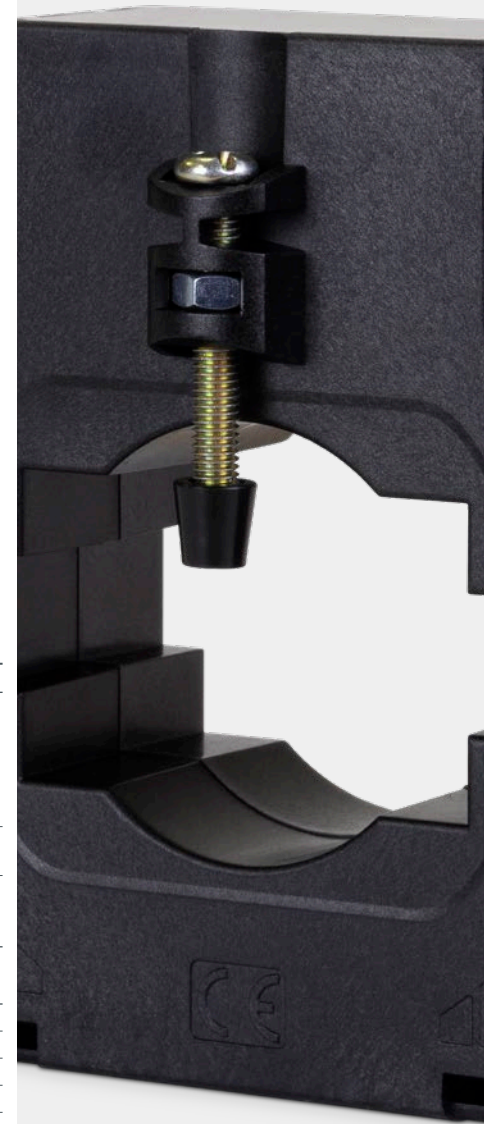


Technical specifications

| | | |
|-------------------------------|---|---------------------------------|
| Electrical characteristics | Frequency | 50 / 60 Hz |
| | Insulation voltage | 3 kV |
| | Thermal short-circuit current, I_{th} | 60 I_n |
| | Dynamic current, I_{dyn} | 2.5 I_{th} |
| | Accuracy class | See table |
| | Highest voltage for the material | 0.72 kV _{ca/cc} |
| Environmental characteristics | Operating temperature | Thermal class B (130° C) |
| | Enclosure | UL94 self-extinguishing plastic |
| | Safety factor | FS 5 |
| | Sealable secondary terminals | Yes |
| | Protection Degree | IP20 secondary terminals |
| | Attachment to DIN rail | Yes |
| Standards | IEC 61869-1, IEC 61869-2, UL94 | |

Referencias

| Tpe | TD4 | TD5 | TD6 | TD8 | | | | | | | | | | | | |
|------------------------------|--------------|------------------------------|-------------------------------|-------------------------------|-------|------|------|---------|-------|-----|-----|---------|---------|-----|-----|---------|
| Dimensions (mm) a x b x c | 80 x 50 x 48 | 84 x 58 x 53 | 91 x 66 x 53 | 109 x 85 x 59 | | | | | | | | | | | | |
| Diameter Ø (mm) | 21 | 21 | 30 | 44 | | | | | | | | | | | | |
| Busbar (mm) | - | 15 x 15 20 x 10 25 x 5 | 20 x 25 30 x 15 40 x 10 | 50 x 30 60 x 12 12 x 45 | | | | | | | | | | | | |
| A \ VA | Class | | | | Class | | | | Class | | | | Class | | | |
| | 0.5 | 1 | 3 | Code | 0.5 | 1 | 3 | Code | 0.5 | 1 | 3 | Code | 0.5 | 1 | 3 | Code |
| 40/5A | - | 0.5 | 1.25 | M75011. | | | | | | | | | | | | |
| 50/5A | - | 1 | 1.5 | M75012. | - | 0.7 | 3 | M75022. | | | | | | | | |
| 60/5A | - | 1.25 | 2.5 | M75013. | - | 1.25 | 3 | M75023. | | | | | | | | |
| 75/5A | - | 1.5 | 3.75 | M75014. | - | 1.5 | 3.5 | M75024. | | | | | | | | |
| 100/5A | 1.5 | 2.5 | 5 | M75015. | 1.5 | 2.5 | 3.75 | M75025. | | | | | | | | |
| 125/5A | 2.5 | 3.75 | 5 | M75016. | 1.5 | 2.5 | 3.75 | M75026. | | | | | | | | |
| 150/5A | 3.75 | 5 | 5 | M75017. | 1.5 | 2.5 | 3.75 | M75027. | 1 | 2.5 | 3.5 | M75047. | | | | |
| 200/5A | 5 | 7.5 | 7.5 | M75018. | 2.5 | 3.75 | 5 | M75028. | 1.5 | 3.5 | 5 | M75048. | | | | |
| 250/5A | | | | | 2.5 | 3.75 | 5 | M75029. | 2.5 | 5 | 5 | M75049. | | | | |
| 300/5A | | | | | | | | | 2.5 | 5 | 5 | M7504A. | 2.5 | 3.5 | 3.5 | M7506A. |
| 400/5A | | | | | | | | | 2.5 | 5 | 5 | M7504B. | 2.5 | 3.5 | 5 | M7506B. |
| 500/5A | | | | | | | | | 5 | 7.5 | 7.5 | M7504C. | 2.5 | 5 | 5 | M7506C. |
| 600/5A | | | | | | | | | 5 | 7.5 | 7.5 | M7504D. | 2.5 | 5 | 5 | M7506D. |
| 750/5A | | | | | | | | | 5 | 7.5 | 10 | M7504E. | 2.5 | 5 | 5 | M7506E. |
| 800/5A | | | | | | | | | 5 | 7.5 | 10 | M7504F. | 5 | 7.5 | 7.5 | M7506F. |
| 1000/5 | | | | | | | | | | 5 | 7.5 | 10 | M7506G. | | | |
| 1200/5 | | | | | | | | | | 5 | 7.5 | 10 | M7506H. | | | |
| 1250/5 | | | | | | | | | | 7.5 | 10 | 10 | M7506J. | | | |
| 1500/5 | | | | | | | | | | 7.5 | 10 | 15 | M7506K. | | | |
| 1600/5 | | | | | | | | | | 7.5 | 10 | 15 | M7506L. | | | |



Codification table

| | | | | | | | | |
|---------------|---|-------------|---|---|---|---|---|---|
| M | 7 | 5 | 0 | X | X | 0 | 0 | X |
| Internal code | | | | | | | | ↑ |
| Secondary | | Standard | | | | | | 0 |
| | | .../5 A | | | | | | 1 |
| | | .../1 A | | | | | | 1 |
| | | .../ 250 mA | | | | | | A |

Accessories for TD current transformers

Accessories for sealing TD series current transformers. The TD-Cover kit consists of a transparent cover that is placed at the top of the transformer, disabling access to the secondary connection terminals, and it can be sealed to avoid any manipulation. It also includes two caps, common to any TD series model, to prevent access to the secondary terminals that remain unused once the measurement devices are connected.

References

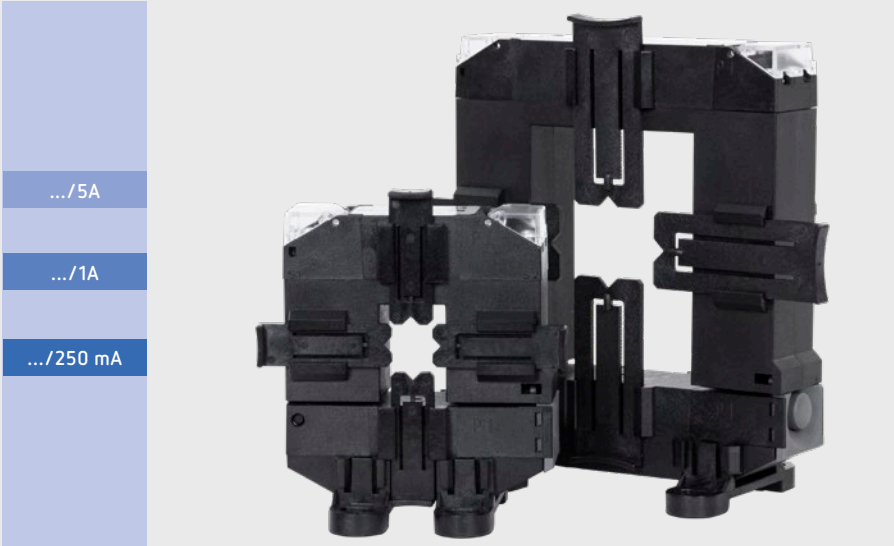
| Description | Code |
|-------------|---------|
| TD4-COVER | M75111. |
| TD5-COVER | M75121. |
| TD6-COVER | M75141. |
| TD8-COVER | M75161. |



TD-Cover

TQ. Split-core current transformers

Installation without interruption



Easy opening button



TQ-6
from 100 to 400 A



TQ-8
from 300 to 1000 A



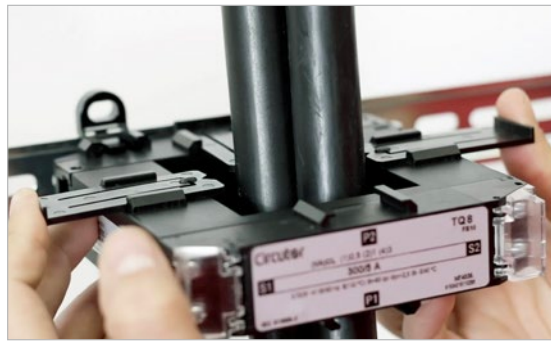
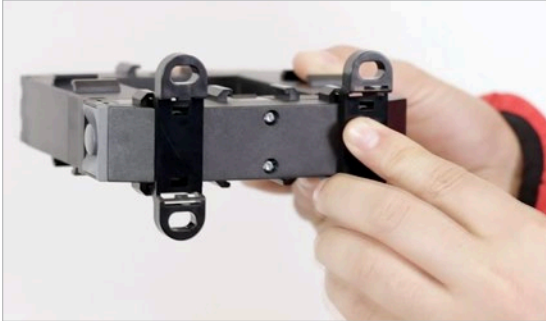
Push-button opening

Simple installation with instant opening using the push button, avoiding the use of removable parts.



Versatile

Installation to DIN rail or directly on conductors. Feature non-metallic parts to ensure fastening in busbars with plates.



Lightweight and compact

New design that reduces its weight and size for easier installation in any electrical panel.



Accurate

Guarantee the best measuring accuracy when connected to any type of receiver.

Low losses

Ideal for installation with any type of device, especially for low-energy electronic equipment.

Sealable

Prevents tampering with the electrical connections by sealing the terminal block of the current transformer.

Technical specifications

| | | |
|-------------------------------|---|---------------------------------------|
| Electrical characteristics | Frequency | 50 / 60 Hz |
| | Insulation voltage | 3 kV |
| | Thermal short-circuit current, I_{th} | $60 I_n$ |
| | Dynamic current, I_{dyn} | $2.5 I_{th}$ |
| | Accuracy class | See table |
| Environmental characteristics | Highest voltage for the material | $0.72 kV_{ca/cc}$ |
| | Operating temperature | Thermal class B (130° C) |
| | Enclosure | Self-extinguishing V0 plastic |
| | Safety factor | FS 10 |
| | Sealable secondary terminals | Yes |
| | Protection Degree | IP20 secondary terminals (opt. IP 54) |
| | Attachment to DIN rail | Yes |
| Standards | UNE 21031, IEC 61869-2 | |

References

| Type | TQ-6 | | | TQ-8 | | | |
|-----------------|------------|----|---|------------|---|----|---------|
| Busbar (mm) | 20 x 30 mm | | | 60 x 80 mm | | | |
| Dimensions (mm) | | | | | | | |
| | a | 91 | | 141 | | | |
| | b | 80 | | 120 | | | |
| | c | 28 | | 28 | | | |
| VA | Class | | | Class | | | |
| | 0.5 | 1 | 3 | 0.5 | 1 | 3 | |
| A | Code | | | Code | | | |
| 100/5 | - | 1 | 2 | M74023. | | | |
| 150/5 | - | 1 | 2 | M74025. | | | |
| 200/5 | 0.5 | 1 | 2 | M74026. | | | |
| 250/5 | 0.5 | 1 | 2 | M74027. | | | |
| 300/5 | 0.5 | 1 | 2 | 1 | 2 | 4 | M74035. |
| 400/5 | 1 | 2 | 4 | 1.5 | 2 | 4 | M74037. |
| 500/5 | | | | 3 | 4 | 8 | M74039. |
| 600/5 | | | | 3 | 4 | 8 | M7403B. |
| 700/5 | | | | 3 | 4 | 8 | M7403D. |
| 750/5 | | | | 5 | 8 | 16 | M7403E. |
| 800/5 | | | | 5 | 8 | 16 | M7403F. |
| 1000/5 | | | | 5 | 8 | 16 | M7403I. |

TQR. Split-core current transformers

Installation without interruption



Push-button opening

Simple installation with instant opening using the push button, avoiding the use of removable parts.



Attachment using ties

New tie fastening system for an easy, fast and secure installation.





Adjustable

Designed with a circular cross-section to fully adapt to the wiring cross-section, improving the measurement accuracy.



Low losses

Ideal for installation with any type of device, especially for low-energy electronic equipment.

Accurate

Guarantee the best measuring accuracy when connected to any type of receiver.

High IP rating

Transformers with high IP65 protection, thanks to a sealing joint that keeps particles out of the connection terminals.

Technical specifications

| | | |
|----------------------------|---|--------------------------------------|
| Electrical characteristics | Frequency | 50 / 60 Hz |
| | Insulation voltage | 3 kV |
| | Thermal short-circuit current, I_{th} | $60 I_{th}$ |
| | Dynamic current, I_{dyn} | $2.5 I_{th}$ |
| | Accuracy class | See table |
| | Highest voltage for the material | 0.72 kV _{ca/cc} |
| | Environmental characteristics | Operating temperature |
| Enclosure | | V0 UL94 self-extinguishing plastic |
| Safety factor | | FS 10 |
| Protection Degree | | IP 40/IP 65 (with protection gasket) |
| Standards | IEC 61869-2 | |

Referencias

| | | | | |
|-----------------|-------|-----|----|---------|
| Type | TQR-8 | | | |
| Diameter Ø (mm) | 80 mm | | | |
| Dimensions (mm) | | | | |
| | a | b | c | |
| | 185 | 152 | 33 | |
| VA | Class | | | Code |
| | 0.5 | 1 | 3 | |
| A | 0.5 | 1 | 3 | M76037. |
| 400 | 1 | 1.5 | 3 | M76039. |
| 500 | 1 | 1.5 | 3 | M76039. |
| 600 | 1.5 | 2 | 4 | M7603B. |
| 700 | 2 | 4 | 8 | M7603D. |
| 800 | 3 | 7 | 15 | M7603F. |
| 1000 | 5 | 8 | 16 | M7603J. |
| 1250 | 6 | 10 | 20 | M7603L. |
| 1500 | 6 | 10 | 20 | M7603M. |
| 2000 | 8 | 15 | 25 | M7603N. |

Visit Circutor's YouTube channel to see how our transformers are installed



Codification table

| TD, TQ, TQR | |
|---------------------|------------------------|
| Code | Internal code |
| M 7 X X X X 0 0 X X | |
| Secondary | Standard (... / 5 A) 0 |
| | ... / 1 A 1 |
| | ... / 250 mA (*) A |
| | ... / 333 mV (*) V |
| Certificate | - 0 |
| | Individual (**) 1 |

(*) For TQ and TRQ only, consult models.

(**) A certificate is attached for every transformer.



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C2M733-01

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