

MEASUREMENT AND CONTROL

TD, TQ & TQR

Transformers for
current measurement

A close-up photograph of copper busbars, which are used in electrical power distribution. The busbars are made of polished copper and are connected to each other using large, industrial-grade bolts. The bolts are arranged in a vertical line on a horizontal busbar. The background is blurred, showing more of the busbar structure. The lighting is soft, highlighting the metallic texture of the copper.

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

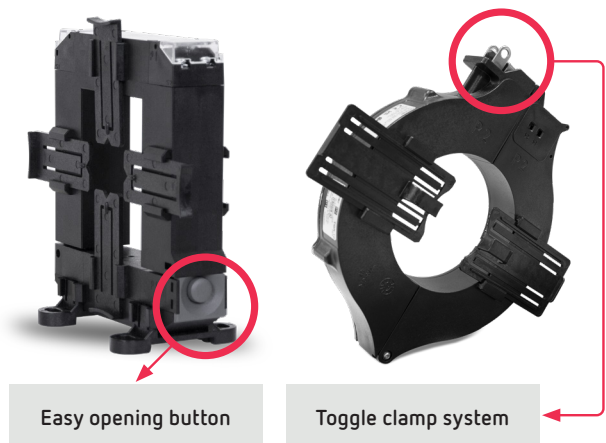
Thanks to our partnership with installers, our TD current transformers have a new and improved design to cover any need that may arise during their installation. The different models take into account aspects involving both their easy installation and their power optimisation when being connected to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



TQ and TQR transformers

Installation without interruption

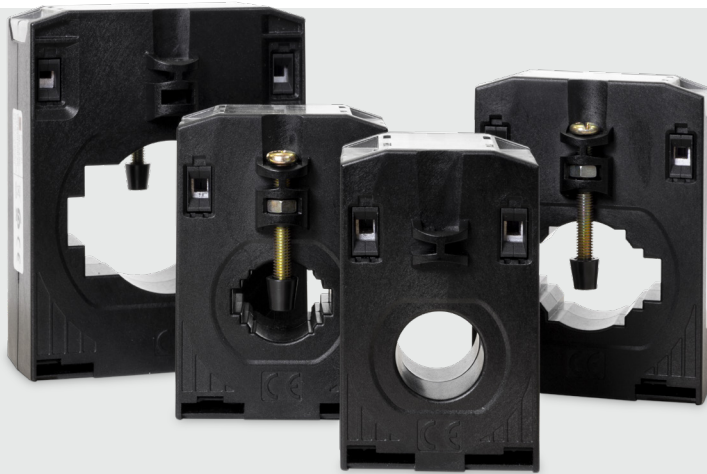
The split-core TQ and TQR transformers have been designed to be connected to installations already in operation. A simple, two-step process makes for easy installation that saves on indirect costs, avoiding to disconnect the supply before start-up.



TD. Narrow section transformers

Easier to install

- .../5 A
- .../1 A
- .../250 mA



TD4
40...200 A



TD5
50...250 A



TD5.2
100...600 A



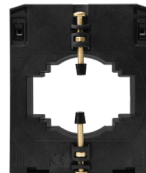
TD6
150...800 A



TD6.2
100...600 A



TD8
300...1600 A



TD10
600...3000 A



TD12
800...4000 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.



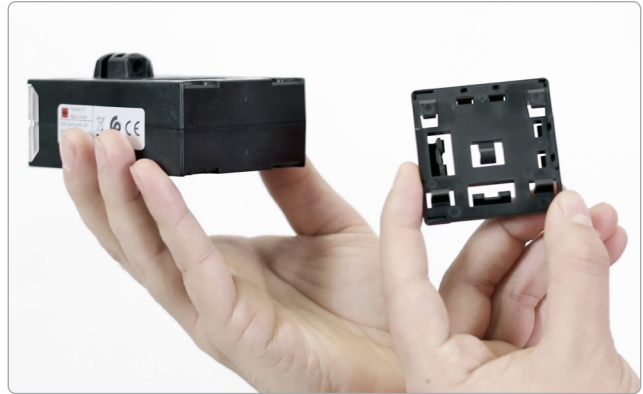
Versatile

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.

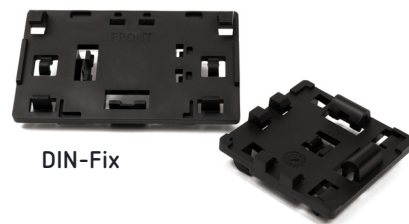


Accessories for TD current transformers

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

Model	Code	Description
DIN-FIX 50x50	M75102.	DIN rail fixing 50 x 50 mm (TD4, TD5, TD5.2, TD6, TD6.2)
DIN-FIX 50x84	M75103.	DIN rail fixing 50 x 84 mm (TD8, TD10)



DIN-Fix

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.

Referencias

Description	Code
TD4-COVER	M75111.
TD5/TD5.2-COVER	M75121.
TD6/TD6.2-COVER	M75141.
TD8-COVER	M75161.
TD10-COVER	M75171.
TD12-COVER	M75181.



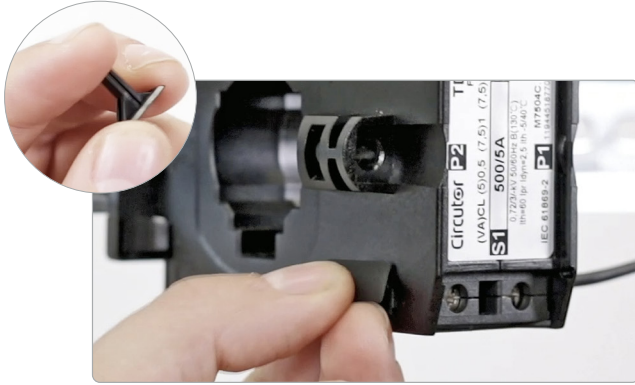
TD-Cover

Sealable

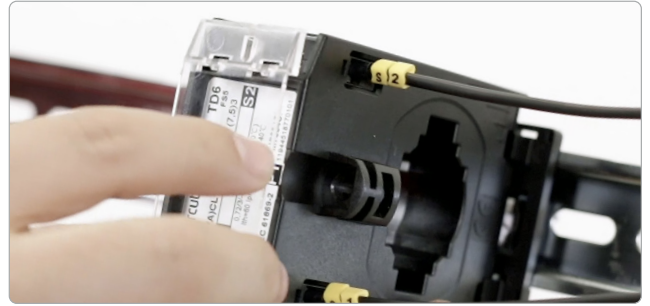
It has optional accessories for sealing the terminals and the transformer label.



Connect the secondary cables.



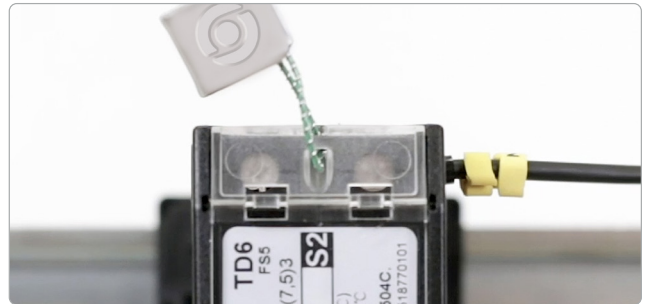
Place the anti-fraud laps.



Terminal cover disables access to fastening screws and product label.



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



Sealed device.

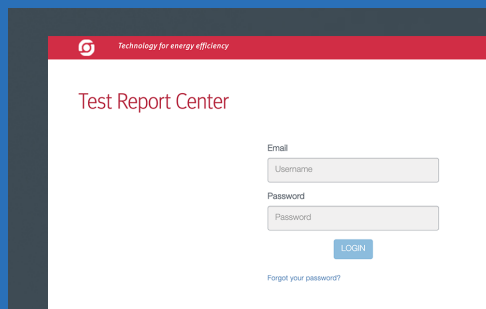
Test report online

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
Standards	Attachment to DIN rail	Yes
	IEC 61869-1, IEC 61869-2, UL94	


Codification table

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

References



Type	TD4	TD5	TD5.2	TD6												
Dimensions (mm) a x b x c	80 x 50 x 48	84 x 58 x 53	84 x 58 x 53	91 x 66 x 53												
Diameter Ø (mm)	21	21	22	30												
Plate (mm)	-	15 x 15 20 x 10 25 x 5	25 x 10 30 x 10 20 x 12	20 x 25 30 x 15 40 x 10												
VA A	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	-	-	1,25	M75011.												
50/5A	-	1	1,5	M75012.	-	0,5	1,5	M75022.								
60/5A	-	1,25	2,5	M75013.	-	1	2,5	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.	-	-	1	M750A5.				
125/5A	2,5	3,75	5	M75016.	1,5	2,5	3,75	M75026.	-	1	1,5	M750A6.				
150/5A	3,75	5	5	M75017.	1,5	2,5	3,75	M75027.	1	1,5	2,5	M750A7.	1	2,5	3,5	M75047.
200/5A	5	7,5	7,5	M75018.	2,5	3,75	5	M75028.	1,5	2,5	3,5	M750A8.	1,5	3,5	5	M75048.
250/5A					2,5	3,75	5	M75029.	2,5	3,5	5	M750A9.	2,5	5	5	M75049.
300/5A									2,5	3,5	5	M750AA.	2,5	5	5	M7504A.
400/5A									2,5	3,5	5	M750AB.	2,5	5	5	M7504B.
500/5A									5	7,5	10	M750AC.	5	7,5	7,5	M7504C.
600/5A									5	7,5	10	M750AD.	5	7,5	7,5	M7504D.
750/5A													5	7,5	10	M7504E.
800/5A													5	7,5	10	M7504F.

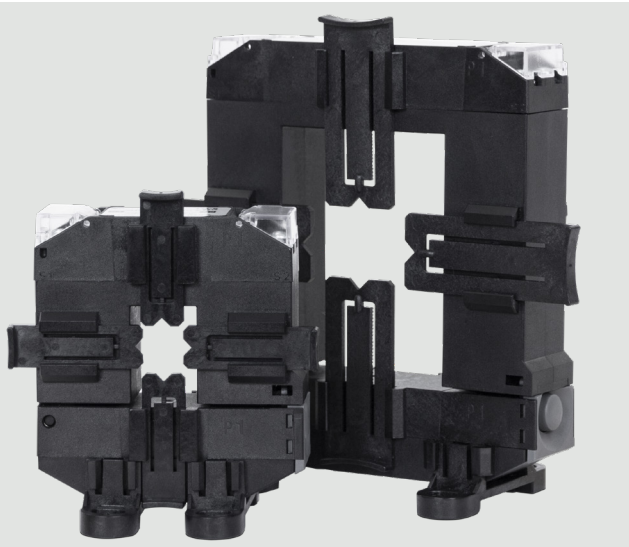


Type	TD6.2	TD8	TD10	TD12												
Dimensions (mm) a x b x c	91 x 66 x 53	109 x 85 x 59	108 x 131 x 69	134 x 151 x 69												
Diameter Ø (mm)	25	44	63	50												
Plate (mm)	25 x 12 30 x 10 20 x 20	50 x 30 60 x 12 12 x 45	50 x 50 60 x 30 80 x 30	100 x 50												
VA A	Class				Class				Class				Class			
	0,5	1	3	Code	0,5	1	3	Code	0,5	1	3	Code	0,5	1	3	Code
100/5A	1	2,5	3,5	M75055.												
125/5A	1,5	3,5	5	M75056.												
150/5A	2,5	3,5	5	M75057.												
200/5A	3,5	5	5	M75058.												
250/5A	3,5	5	5	M75059.												
300/5A	5	7,5	7,5	M7505A.	2,5	3,5	3,5	M7506A.								
400/5A	5	7,5	7,5	M7505B.	2,5	3,5	5	M7506B.								
500/5A	5	7,5	10	M7505C.	2,5	5	5	M7506C.								
600/5A	5	7,5	10	M7505D.	2,5	5	5	M7506D.	2,5	5	7,5	M7507D.				
750/5A					2,5	5	5	M7506E.	2,5	5	7,5	M7507E.				
800/5A					5	7,5	7,5	M7506F.	2,5	5	7,5	M7507F.	2,5	5	7,5	M7508F.
1000/5					5	7,5	10	M7506G.	2,5	5	7,5	M7507G.	2,5	5	7,5	M7508G.
1200/5					5	7,5	10	M7506H.	2,5	5	7,5	M7507H.	5	10	15	M7508H.
1250/5					7,5	10	10	M7506J.	2,5	5	7,5	M7507J.	5	10	15	M7508J.
1500/5					7,5	10	15	M7506K.	5	10	15	M7507K.	7,5	15	20	M7508K.
1600/5					7,5	10	15	M7506L.	5	10	15	M7507L.	7,5	15	20	M7508L.
2000/5									5	10	15	M7507M.	7,5	15	20	M7508M.
2500/5									5	10	15	M7507N.	10	20	25	M7508N.
3000/5									5	10	15	M7507P.	10	20	25	M7508P.
4000/5													15	20	25	M7508Q.

TQ. Split-core current transformers

Installation without interruption

- .../5A
- .../1A
- .../250 mA



Easy opening button



TQ-6
from 100 to 400 A



TQ-8
from 300 to 1000 A

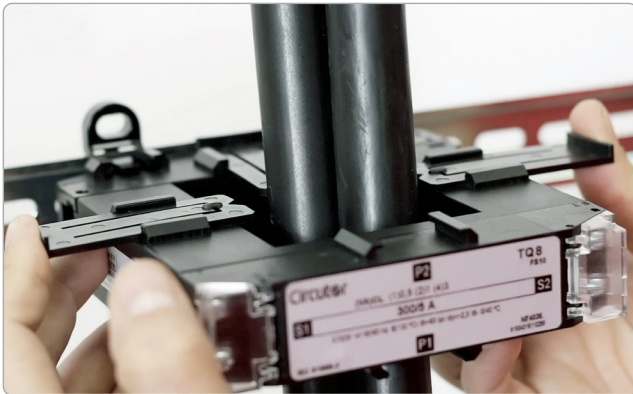
Push-button opening

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
	Highest voltage for the material	$0.72 kV_{ca}/cc$
Environmental characteristics	Operating temperature	Thermal class B (130° C)
	Enclosure	Self-extinguishing V0 plastic UL94
	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		a	141				
	b	80		b	120				
	c	28		c	28				
	VA	Class		Code	Class		Code		
A		0.5	1	3		0.5	1	3	
100/5	-	-	-	1	M74023.				
150/5	-	-	-	1	M74025.				
200/5	-	-	-	2	M74026.				
250/5	-	-	-	2	M74027.				
300/5	0,5	1	2	M74028.	-	1	2,5	M74035.	
400/5	1	2,5	4	M7402A.	1	1,5	3	M74037.	
500/5					2	5	7,5	M74039.	
600/5					2	5	8	M7403B.	
700/5					2	5	8	M7403D.	
750/5					2,5	5	10	M7403E.	
800/5					3	6	10	M7403F.	
1000/5					5	8	15	M7403I.	

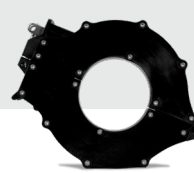
TQR. Split-core current transformers

Installation without interruption

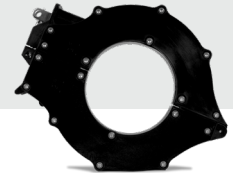
- .../5A
- .../1A
- .../250 mA



Toggle clamp system



TQR-8
from 400 to 2000 A



TQR-10
from 600 to 2000 A



Toggle clamp system

Simple installation with instant opening through toggle clamp 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.



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	V0 UL94 self-extinguishing plastic
	Safety factor	FS 10
	Protection Degree	IP 40 / IP 65 (only for TQR-8)
Standards	IEC 61869-2	

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.



References

Type	TQR-8	TQR-10
Diameter Ø (mm)	80 mm	105 mm

Dimensions (mm)

	a	173	199
	b	216	240
	c	43	43

VA	Class			Code	Class			Code
	0,5	1	3		0,5	1	3	
400	-	1,5	3	M76037.				
500	1	1,5	3	M76039.				
600	1,5	2	4	M7603B.	1,5	2	4	M7604B.
700	2	4	8	M7603D.	2	4	8	M7604D.
750	2,5	5	10	M7603E.	2,5	5	10	M7604E.
800	3	7	15	M7603F.	3	7	15	M7604F.
1000	5	8	16	M7603J.	5	8	16	M7604J.
1250	6	10	20	M7603L.	6	10	20	M7604L.
1500	6	10	20	M7603M.	6	10	20	M7604M.
2000	8	15	25	M7603N.	8	15	25	M7604N.

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



Codification table

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
		0
Certificate	Test Report (*)	1

(*) A certificate is attached for every transformer.



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