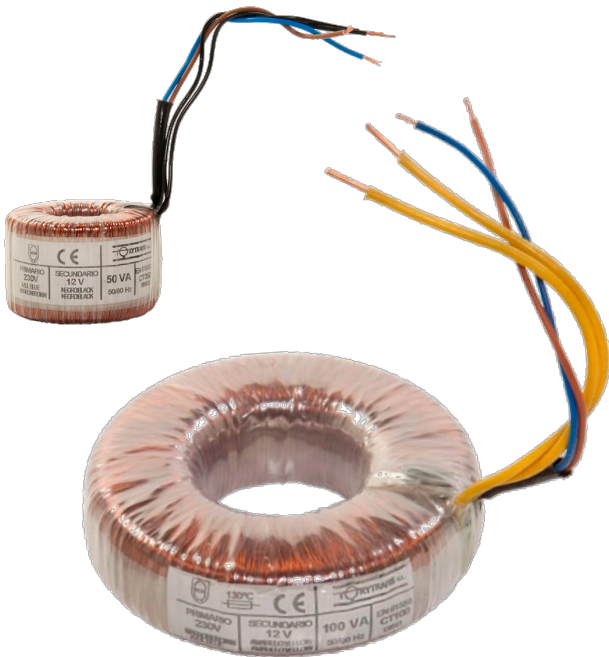


# Toroidal Transformers




Single phase safety transformer with galvanic isolation between primary and secondary for light and low voltage devices (12 V).

Optimized design that provides it with electrical and mechanical advantages by comparison with conventional transformers, such as:

- Higher efficiency
- Minimal no-load losses
- Lower magnetic stray field
- Very low noise field
- Vibrations free
- Lower heat losses
- Reduced dimensions and weight
- Easier mounting
- Flexible design
- Direct output with winding wire.

On request it could be supplied with potted centre hole or potted in polyamide housings. Moreover, it can be mounting in a polyamide enclosure protection.

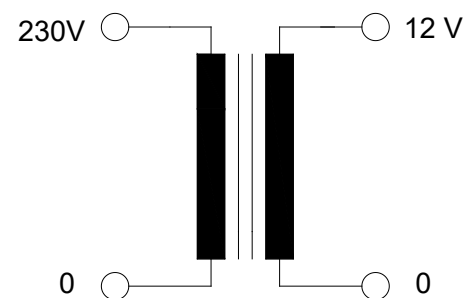
## Technical characteristics

Power rating	50 ÷ 600 VA
Input voltage	230 V
Output voltage	12 V
Frequency	50/60 Hz
Ambient temperature	40 °C
Insulation class	B (130 °C)
Protection degree	IP-00
Safety class	Class II 
Connection type	Connecting leads
Accessories	Mounting kit (optional)
Test voltage	4 kV
Standards	IEC/UNE-EN 61558-1



IEC/UNE-EN 61558-2-6

## Electrical diagram



# SERIES TOR

Torytrans S.L., as specialized and flexible manufacturer of toroidal transformers, designs and produces custom-made products under the customer's requirements.

Its installations count with its own toroidal magnetic cores production, essential component to assure the most reliable use of the transformer.

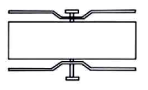
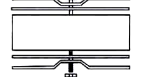
Manufactured by high quality grain-oriented electrical steel core (Fe-Si alloy) and processed in updated thermal process. In particular, our toroidal cores are designed with very low losses and optimized working induction.

Rating VA	Reference	Diameter mm	Height mm	Weight Kg
50	TOR050	60	42	0,6
100	TOR100	115	35	1,2
150	TOR150	115	42	1,6
200	TOR200	120	44	1,8
250	TOR250	120	50	2,4
300	TOR300	130	50	2,9
400	TOR400	140	51	3,6
500	TOR500	150	52	4,2
600	TOR600	166	56	4,9

\* Other features, power, voltage, etc., on request.

\* Torytrans reserves the right to modify the information in any time and without prior notice.

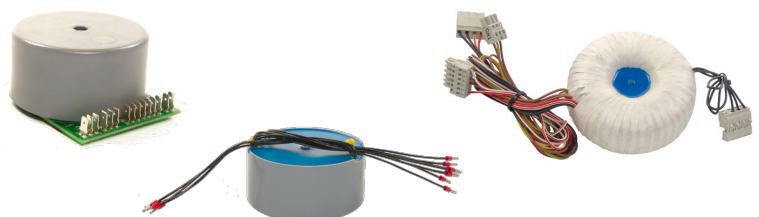
## Mounting kit (optional)

	Reference	Accessories
	TORxxx-1	2 Nylon discs (screw included)
	TORxxx-2	2 isolation washers 2 metal discs (screw included)

\* Other mounting accessories on request

## Customized designs (on request)

- Full resin encapsulation
- Potted center hole
- Polyamide plastic housing
- Metal sheet cabinet IP-23
- Connections by terminal blocks
- Thermal protection and fuses
- Electrostatic shield for earth connection
- Longer length cables and custom colours
- Strip and clamp fast connectors



It is recommended a protection against short circuits via fuse, installed in series at the primary circuit.

Inrush current of a toroidal transformer is higher than a conventional transformer due its air gaps absence in the core.

It is recommended a fuse at the secondary side of the transformer according to the load to protect it against overload. Its type selection must be according to the load and size must be next lower than nominal current of the transformer label.

