

Single phase compact control transformers



Single phase control transformer with separated windings by galvanic isolation between primary and secondary.

Compact and modular design, therefore reduced dimensions than a conventional one, providing a space-saving installation into electrical cabinets mounting.

DIN Rail mounting or screw fixing.

Overtemperature and overload protection via bimetal thermal resetting relay.

Power "ON" indicated by LED.


Enclosure is a self-extinguishable V-0 technical polyamide; free of halogens and phosphorus.

Its safe cover protects users from the risk of electrical shocks and connections contact are not accessible by the user.

Connections by screws with self-lifting supporting washers.

Output voltage selection by supplied voltage links.

Technical characteristics

Power rating	25, 40, 63 and 100 VA
Input voltage	230 - 400 V
Output voltage	12 - 24 V 115 - 230 V
Frequency	50/60 Hz
Ambient temperature	40 °C
Insulation class	B (130 °C)
Protection degree	IP-20
Safety class	Class II 
Test voltage	4 kV
Standard	IEC/UNE-EN 61558-1



IEC/UNE-EN 61558-2-2

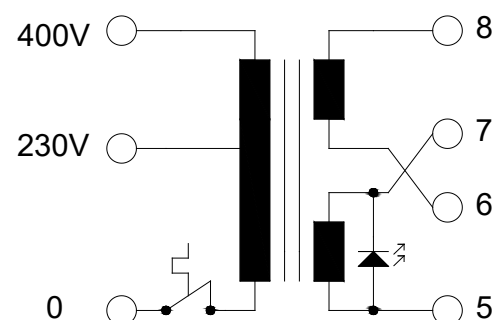


Output voltage < 50 V:
IEC/UNE-EN 61558-2-6



Output voltage > 50 V:
IEC/UNE-EN 61558-2-4

Electrical diagram



- For general applications, select output power rating according to the load and power factor:

$$VA = W / \cos \varphi$$

- To be used as control transformer for relays, contactors, timers, electro-valves, etc:

1° Sum all maintenance powers of elements.

2° Multiply value by 4.

Nominal power rating **VA** is obtained.

Check that instantaneous power of the selected transformer (see table below) is higher than the simultaneous powers of the control elements.

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

Following we indicate the recommended fuses to put at the primary side of the transformer according to the input voltage and rating.

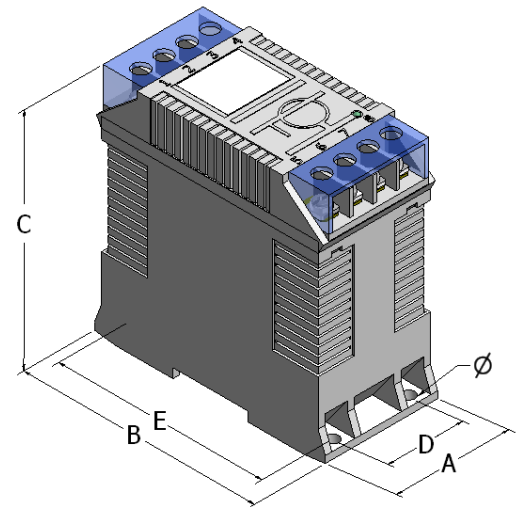
Rating VA	Input voltage	
	230V	400V
25	T 125mA	T 80mA
40	T 200mA	T 125mA
63	T 315mA	T 200mA
100	T 500mA	T 315mA

Inrush current of a transformer can reach about 20-30 times I nominal during 5-10 ms. For this reason, fuses selected must be slow-blow or time-delay types.

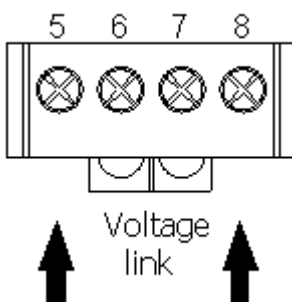
Rating VA		Reference		Dimensions mm						Weight kg
Nominal	(Inst.)	Sec. 12-24 V	Sec. 115-230 V	A	B	C	D	E	Ø	
25	(45)	TC025-1	TC025-3	54	112	112	37	100	6	0,6
40	(70)	TC040-1	TC040-3	54	112	112	37	100	6	0,8
63	(100)	TC063-1	TC063-3	54	112	112	37	100	6	1,0
100	(150)	TC100-1	TC100-3	54	112	112	37	100	6	1,5

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

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



Output Series Connection.
Higher value: 24 V or 230 V accord. to model



Output Parallel Connection.
Lower value: 12 V or 115 V accord. to model

