

Three Phase Current Transformer

The TA7161 series of toroidal current transformers are designed for applications where a high over-current capability is a desirable feature. Typically used in 380VAC or 660VAC protection circuits, these CTs offer superior step-down transformation to typical microprocessor circuitry levels.

Performance:

- Rated Output: mA secondary output dependent upon the primary to secondary ratio selected.
Optional: 0.100V to 0.353V @ rated current.

Specifications:

- Frequency: 50 to 400 Hz
- Dielectric Resistance: 1,000 M ohms @ 500 Vdc
- Isolation Voltage: 2500 Vrms for 1 minute, 0.5mA

- Surge withstand potential: 5000V
- Secondary burden resistance: $\geq 100k$ Ohms
- Operating Temperature: -25°C to +55° C
Optional: -40°C to +85° C)
- Construction:
 - PBT or ABS Resin case, UL 94 V-0 rated.
 - Epoxy encapsulated.
- Lead: 26AWG (0.12mm²), RVVP4, 0.6m (2FT)
- RoHS Compliant



Performance Options:

Rated Input (A)	Ratio	Accuracy Class (IEC 60044-1)	Over Current Multiple	Over Current Persistence Time (seconds)
2	1:2000 1:3000	0.2	10	2
5				
6.3				
10				
25				
50	0.5			

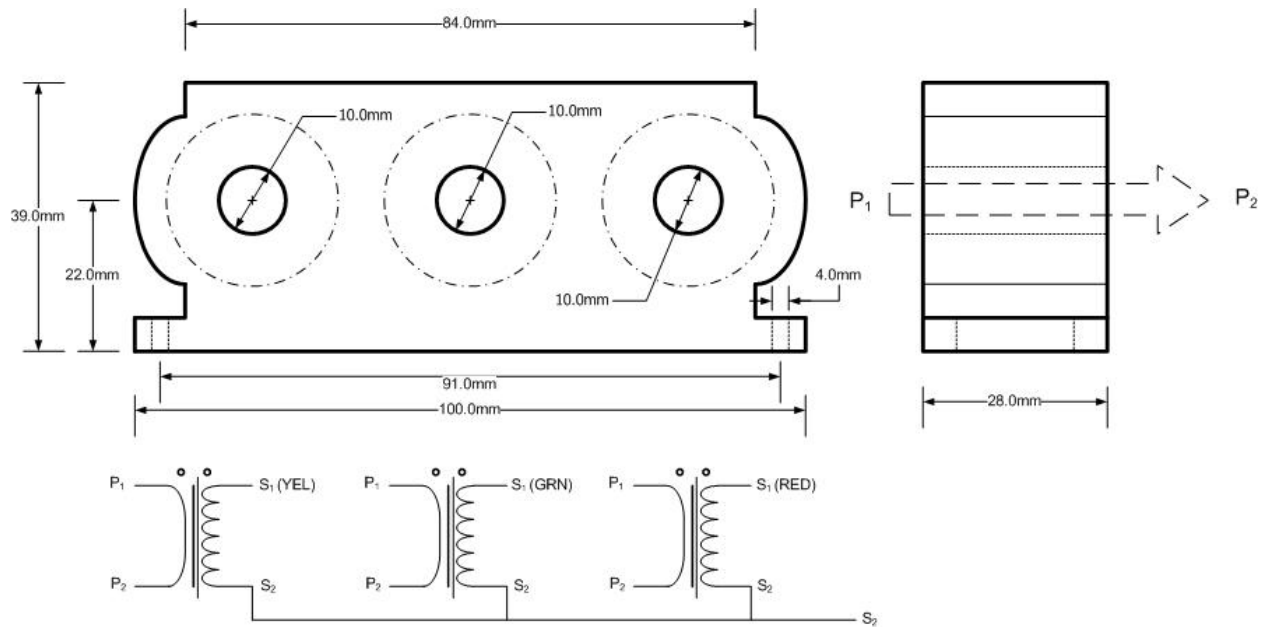
Typical Performance TA7261-100A/ 40mA:

The accuracy of the current transformer is a function of the secondary burden impedance and the operating range. The lower the secondary burden impedance, the better the accuracy performance. The typical performance of the TA7261-100A/ 40mA is;

- Burden resistance ≤ 15 ohms, Accuracy Class = 0.2, from 5% to 800% of Rated Current (e.g.100A)
- Burden resistance ≤ 25 ohms, Accuracy Class = 0.2, from 5% to 700% of Rated Current (e.g.100A)
- Burden resistance ≤ 50 ohms, Accuracy Class = 0.2, from 5% to 600% of Rated Current (e.g.100A)

Burden Impedance		% of Rated Current Input										
		5%	20%	50%	80%	100%	120%	200%	400%	600%	700%	800%
15 Ohms	f(%)	-0.190	-0.044	-0.033	0.009	0.017	0.018	0.030	0.044	0.040	0.041	0.049
	$\delta(^{\circ})$	20.8	12.8	9.9	8.9	8.5	8.1	7.3	5.4	5.1	6.7	8.7
25 Ohms	f(%)	-0.212	-0.057	-0.027	-0.013	-0.004	-0.002	0.010	0.017	0.024	0.031	
	$\delta(^{\circ})$	21.0	13.2	10.7	9.4	8.9	8.5	7.3	5.1	6.2	8.4	
50 Ohms	f(%)	-0.242	-0.100	-0.051	-0.039	-0.033	-0.030	-0.021	-0.020	-0.028	-0.411	
	$\delta(^{\circ})$	22.1	14.4	11.2	10.1	9.5	9.0	7.2	4.8	6.1	44.9	

Outline Drawing:



Custom current transformer designs are available to meet the specific application requirements. For a no obligation technical evaluation, please provide the specific performance requirements to applicationengineering@tichenassociates.com or the address below.