

## Three Phase Current Transformer

The **TA7261** series of toroidal current transformers are designed for applications where a high over-current measurement capability is a desirable feature. Typically used in 380VAC or 660VAC motor protection circuits, these CTs offer superior step-down transformation to typical microprocessor circuitry signal levels.

### Features:

**Rated Primary Current:** 25A, 50A or 100A

**Secondary Output:**

- 0.100V to 0.353V @ Rated Current, or
- mA, standard winding ratios –
  - 1:2000,
  - 1:3000

### 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: 5,000V (1.2/50 $\mu$ s standard shock wave)
- Secondary Load Resistance:
  - mV output:  $\geq$  100k Ohms.
  - mA output:  $\leq$  200 Ohms.
- Operating Temperature: -40°C to +85°C



**Primary Conductor Opening:** 20.0mm (0.79")

- Construction:
  - Epoxy encapsulated housing.
  - Case material – ABS or PBT, UL flame retardant rating 94 V-0.
- Lead Wire: 0.61m (2Ft), AWM 1015, twisted pair, 0.34mm<sup>2</sup> (22AWG), 600V, WHITE/ BLACK.
- Lead Wire Termination: Stripped & tinned.
- CE Certified
- RoHS Compliant



### Performance Options:

Rated Input (A)	Ratio	Accuracy Class (IEC 60044-1)	Over Current Multiple	Over Current Persistence Time (seconds)
25	1:2000	0.2	10	2
50		0.5		
100	1:3000	0.5	8	

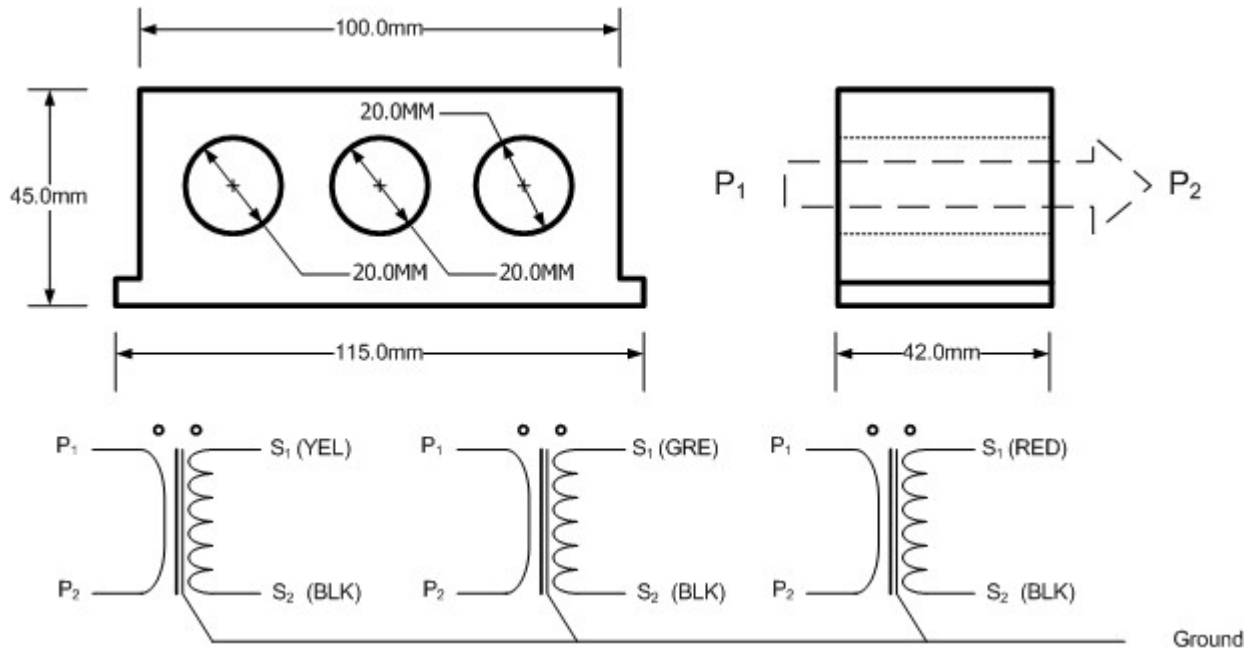
### Typical Performance TA7261-100A/ 40mA:

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  $\leq$  15 ohms, Accuracy Class = 0.2, from 5% to 800% of Rated Current (e.g.100A)
- Burden resistance  $\leq$  25 ohms, Accuracy Class = 0.2, from 5% to 700% of Rated Current (e.g.100A)
- Burden resistance  $\leq$  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(%)	-	-	-	0.009	0.017	0.018	0.030	0.044	0.040	0.041	0.049
	$\delta$ (')	20.8	12.8	9.09	8.9	8.5	8.1	7.3	5.4	5.1	6.7	8.7
25 Ohms	f(%)	-	-	-	-	-	-	0.010	0.017	0.024	0.031	
	$\delta$ (')	21.0	13.2	10.7	9.4	8.9	8.5	7.3	5.1	6.2	8.4	
50 Ohms	f(%)	-	-	-	-	-	-	-	-	-	-	
	$\delta$ (')	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](mailto:applicationengineering@tichenassociates.com) or the address below.