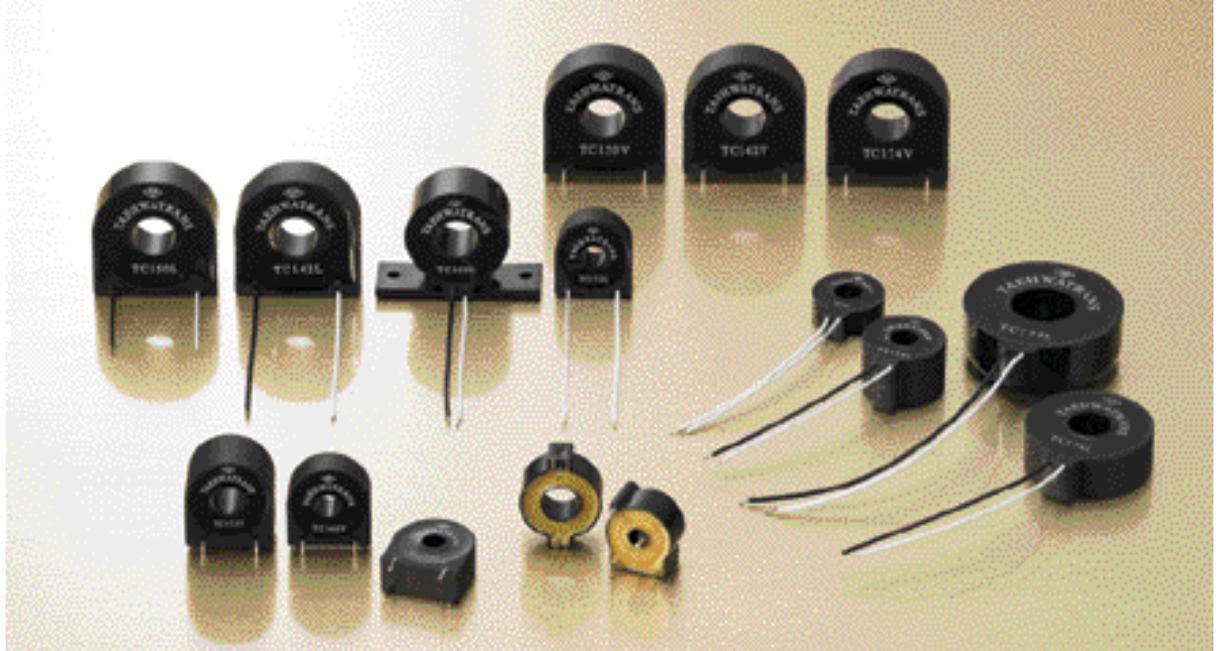


High Precision Current Transformer



Application

- Accuracy power monitoring
- High-end digital protection relay
- Power transducer
- High-end UPS periphery relay
- High-end industrial power sensor
- Inverter controlling
- Precision motor protection relay

Features

- High precision & Stability
- High saturation induction
- Excellent linearity
- Excellent thermal properties
- High potential voltage of 2.5KV-4.0KV/min
- RoHS compliant

Standard Accuracy : 3.0 Class

Model & Specification

(f=50Hz, Rb=1, PF=1.0, unit: percent / minute)

Model No	Current Ratio	DCR ±6%	Im Rb=1	Im Rb=20	Im Rb=500	Rnv Rb=0, 1-20A	Pnv Rb=0, 1-20 A	Phase Shift at 1V
TC1V TC1L	1000 : 1	74	70A	56A	6A	1.5%	190	106
TC148V TC148L	2000 : 1	98	212A	188A	32A	0.7%	75	29
TC149V TC149L	1500 : 1	46	324A	259A	28A	1.0%	50	24
TC150V TC150L	2000 : 1	40	416A	336A	64A	2.0%	85	39

Definition of Terms

Im : Max rated current Rnv : Nominal variation of ratio error at the mentioned primary current range Pnv : Nominal variation of phase error at the mentioned primary current range Rb : Burden resistance PF : Power factor DCR : DC Resistance of secondary winding

Remark : The data of maximum current, ratio and phase error on 60Hz testing would be around 20% better than that of above 50Hz

Model & Specification

(f=50Hz, Rb=1, PF=1.0, unit: percent / minute)

Model No	Current Ratio	DCR ±6%	Im Rb=1	Im Rb=20	Im Rb=500	Rnv 1-20A, Rb=0	Pnv 1-20A Rb=0	Phase Shift at 1V
TC140V TC140L	1000 : 1	34	123A	76A	6A	1.2%	70	88
TC141V TC141L	1000 : 1	29	212A	156A	12A	0.7%	60	65
TC142V TC142L	1000 : 1	19	392A	224A	16A	2.2%	90	34
TC143V TC143L	4000 : 1	154	570A	510A	210A	1.5%	86	13

(f=50Hz, Rb=1, PF=1.0, unit: percent / minute)

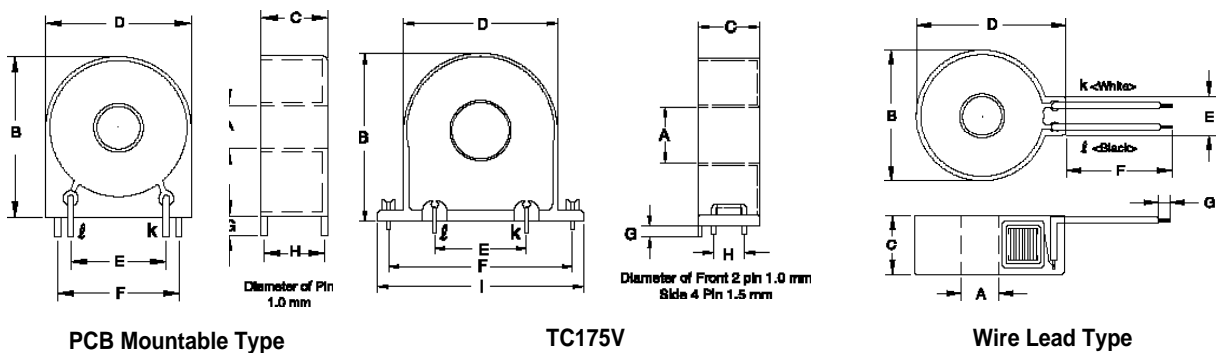
Model No	Current Ratio	DCR ±6%	Im Rb=1	Im Rb=20	Im Rb=500	Rnv 1-20A, Rb=0	Pnv 1-20A Rb=0	Phase Shift at 1V
TC172V TC172L	2500 : 1	129	208A	180A	40A	1.0%	55	62
TC173V TC173L	2500 : 1	187	250A	220A	65A	1.2%	62	28
TC174V TC174L	2500 : 1	51	570A	477A	90A	1.3%	100	13
TC175V TC175L	2000 : 1	26	580A	540A	60A	1.4%	95	11

Definition of Terms

Im : Max rated current Rnv : Nominal variation of ratio error at the mentioned primary current range Pnv : Nominal variation of phase error at the mentioned primary current range Rb : Burden resistance PF : Power factor DCR : DC Resistance of secondary winding

Remark : The data of maximum current, ratio and phase error on 60Hz testing would be around 20% better than that of above 50Hz

Drawing



High Precision Current Transformer

Dimension

PCB Mountable type

(unit : mm/inch)

Model No	A(min)	B(max)	C(max)	D(max)	E(±0.3)	F(±0.3)	G(±0.5)	H(±0.3)	I
TC1V TC148V TC140V TC172V	6.8 0.268	25.0 0.984	11.0 0.433	23.5 0.925	15.1 0.594	19.1 0.752	3.0 0.118	9.1 0.358	
TC149V TC141V TC173V	8.9 0.350	27.5 1.083	17.0 0.670	25.3 0.996	15.1 0.594	19.1 0.752	3.0 0.118	15.1 0.594	
TC150V TC142V TC143V TC174V	12.9 0.508	39.3 1.547	14.0 0.551	38.0 1.496	25.2 0.992	32.8 1.291	3.0 0.118	12.1 0.476	
TC175V	18.6 0.732	55.5 2.185	20.3 0.799	50.5 1.988	30.0 1.181	60.0 2.362	4.0 0.157	10.0 0.394	67.6 2.661

Wire lead type

(unit : mm/inch)

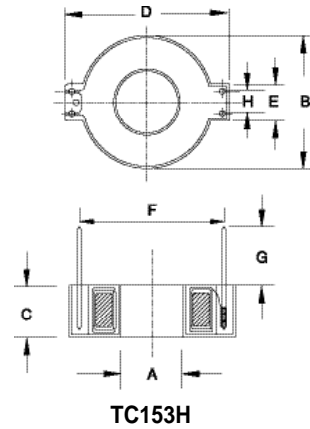
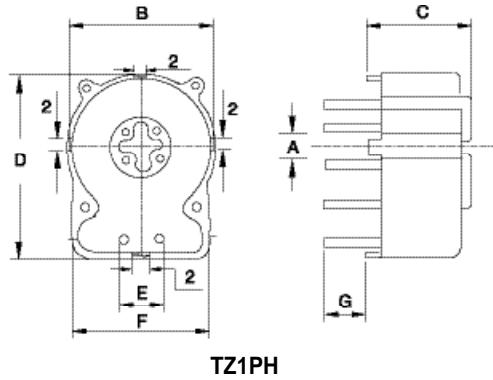
Model No	A(min)	B(max)	C(max)	D(max)	E(max)	F(±3.0)	G(±1.0)
TC1L	8.9 0.350	22.0 0.866	9.0 0.354	25.0 0.984	7.0 0.276	73.0 2.874	3.0 0.118
TC172L	6.9 0.272	23.6 0.930	11.0 0.433	26.8 1.055	7.1 0.280	71.0 2.795	3.0 0.118
TC148L TC140L	6.9 0.272	23.6 0.930	11.0 0.433	26.8 1.055	7.1 0.280	81.0 3.189	3.0 0.118
TC149L TC141L	8.9 0.350	24.8 0.976	17.0 0.669	28.4 1.118	7.6 0.299	73.0 2.874	3.0 0.118
TC173L	8.9 0.350	25.0 0.984	17.0 0.669	28.4 1.118	7.7 0.303	65.0 2.559	3.0 0.118
TC150L	12.9 0.508	37.5 1.476	14.0 0.551	41.3 1.626	10.3 0.406	77.0 3.031	3.0 0.118
TC142L TC143L TC174L	12.9 0.508	37.5 1.476	14.0 0.551	41.3 1.626	10.3 0.406	68.0 2.677	3.0 0.118
TC175L	19.6 0.772	47.8 1.882	19.2 0.756	52.0 2.047	12.2 0.480	110.0 4.331	5.0 0.197

Specialty Transformer for Bidet & Leakage Protection

Application & Feature

- Instantaneous water heater
- Bidet (Monitoring & Leakage protection)
- Refrigerator

Drawing



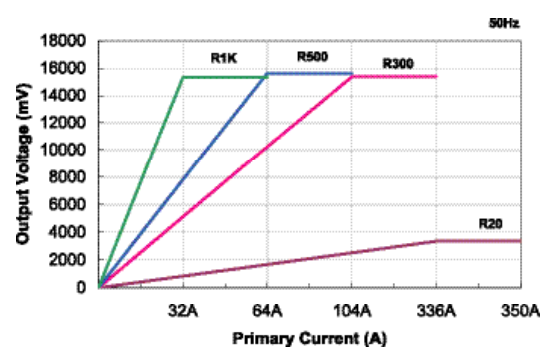
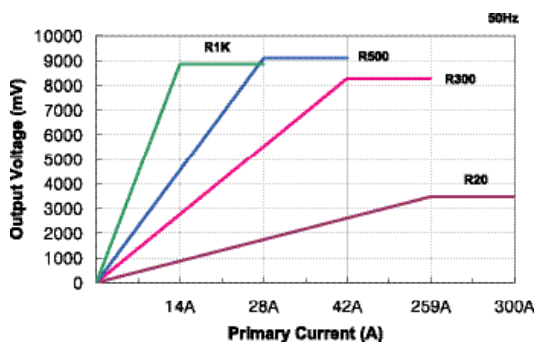
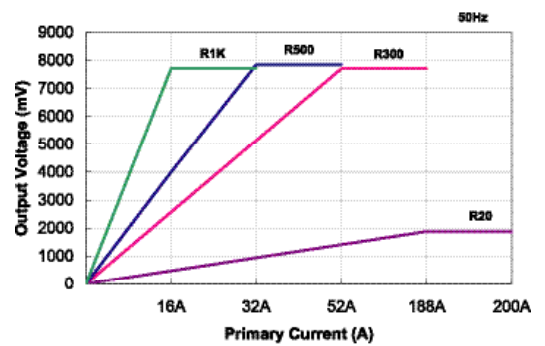
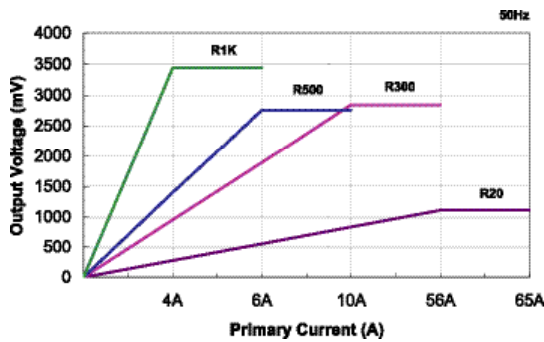
Dimension

Horizontal type

(unit : mm/inch)

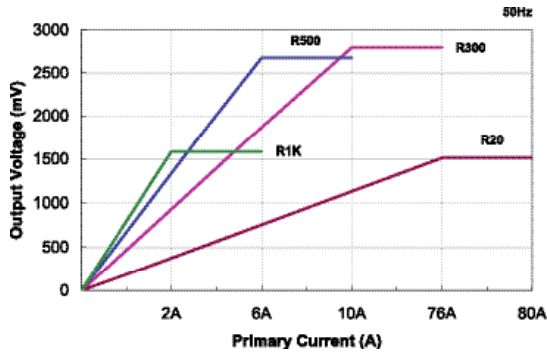
Model No	A(min)	B(max)	C(max)	D(max)	E	F	G	H	Rdc
TZ1PH	5.0 0.197	19.0 0.748	11.0 0.433	21.5 0.846	5.0 0.197	18.5 0.728	4.2 0.165		22.5- 28.5
TC153H	10.5 0.413	23.5 0.925	10.0 0.394	29.7 1.170	7.1 0.280	25.0 0.984	5.5 0.217	3.0 0.118	22.5- 27.5

Secondary Burden & Output Voltage Graph

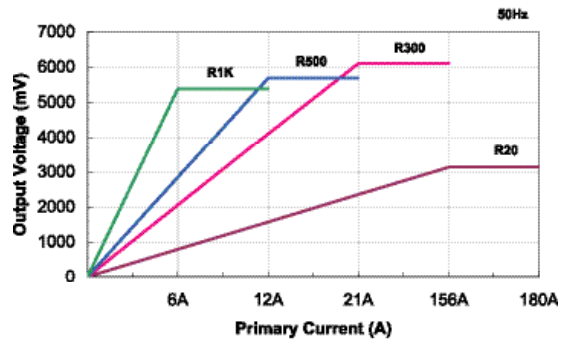




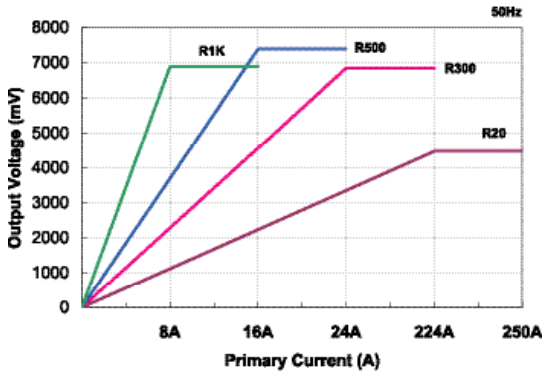
High Precision Current Transformer



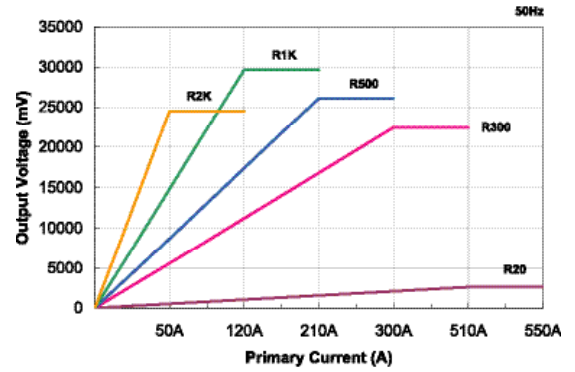
TC140V/L



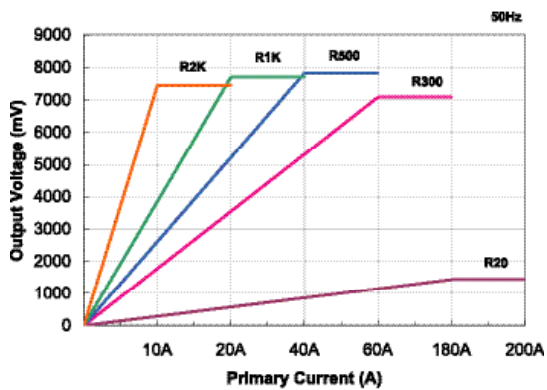
TC141V/L



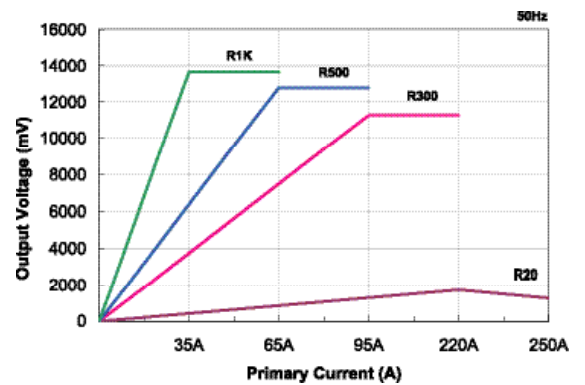
TC142V/L



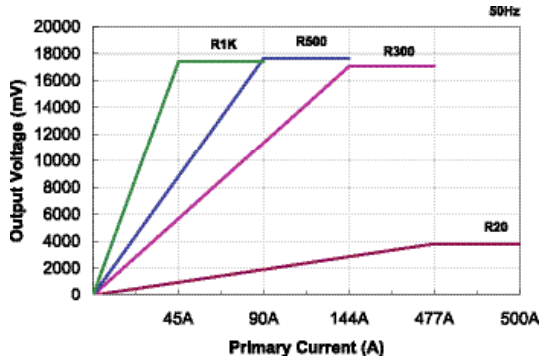
TC143V/L



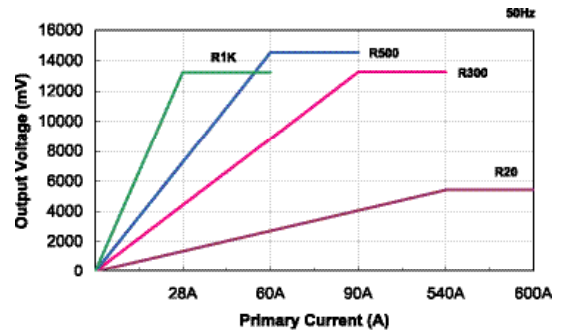
TC172V/L



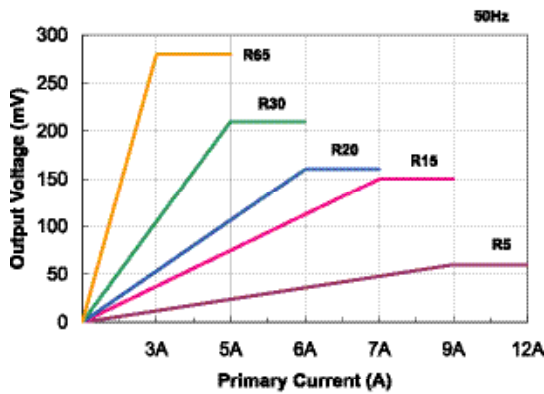
TC173V/L



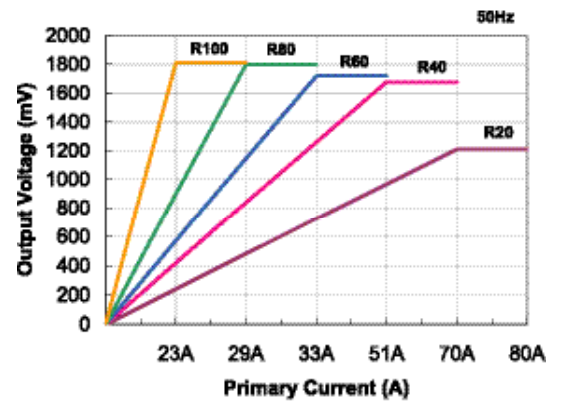
TC174V/L



TC175V/L



TZ1PH



TC153H

Other Current Sensor

TC152H

