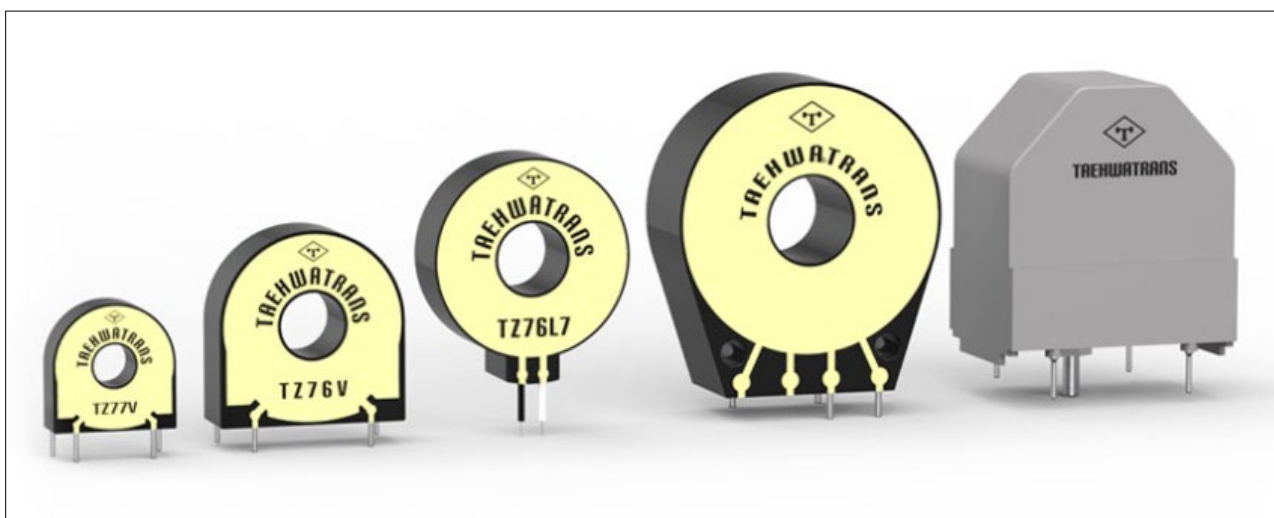
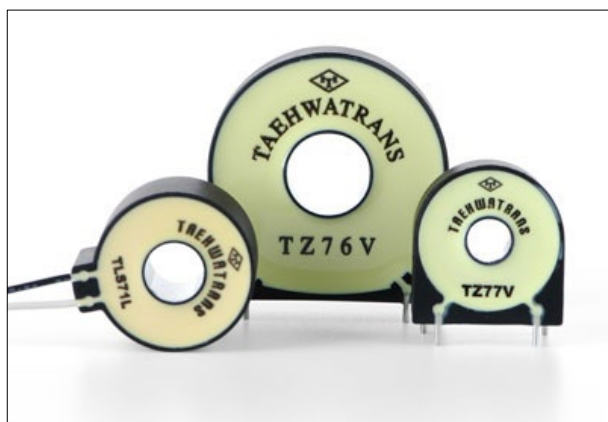
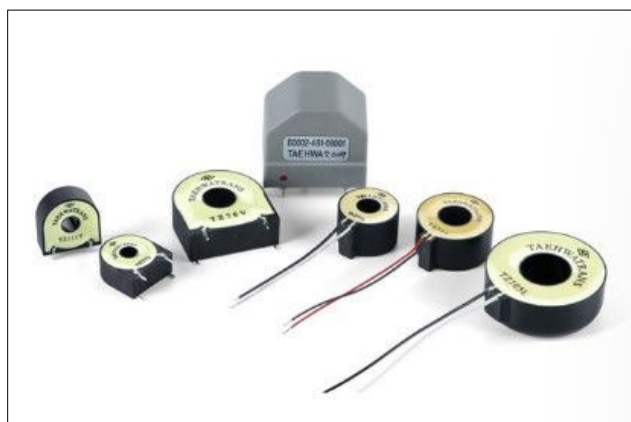


# Revenue Grade Metering CTs



Taehwatrans Revenue Grade CTs are designed for applications which require maximum accuracy & precision for tenant billing purpose. The best in class performance and robust design make them ideal for field installation in applications such as energy & demand metering, billing metering, tenant submetering, and load surveys.

Taehwatrans provides an extensive line of solid(toroidal) current transformers for a variety of applications. Our revenue metering class CTs are premium graded units intended for power metering applications where high accuracy and minimum phase angle error are prerequisite. Our CTs have 0.1% linearity at 5% to 120% of rated current, which is in compliance with 0.1, 0.2 and 0.2S class accuracy of IEC61869-2 and 0.15 and 0.15S of ANSI standard.

Our products are UL Recognized for both US and Canada and some lines of CTs are Measurement Canada certified. Our products has excellent reading sensitivity at very low current levels and stable performance over different temperature ranges from -40 to 80 degrees.

Our commercial metering CTs are widely used in 0.2 and 0.2S class industrial and commercial smart meters by global top-tier electrical meter manufacturers around the globe. For example, our TZ31L model is applied to a 0.2 class meter that requires 0.1% linearity from 1mA to 10A current ranges.

We are very proud of being capable of offering extensive selections of CTs with different sizes, different mounting styles along with numerous secondary ratios to meet most applications.

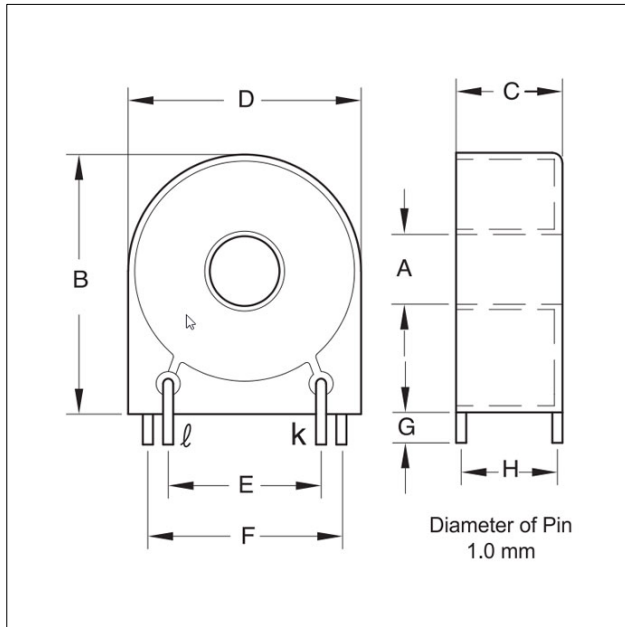
## Application

- 0.1/0.2 class revenue grade metering (1A or 5A current rated CT connected meters)
- Industrial meters
- Substation MV/ LV feeder monitoring
- Data Logger in Digital Fault Recorders
- Inverter controlling
- Power quality analyzer
- HEMS(Home Energy Management System) / BEMS(Building Energy Management System)/ FEMS(Factory Energy Management System)
- EV charge stand / cable

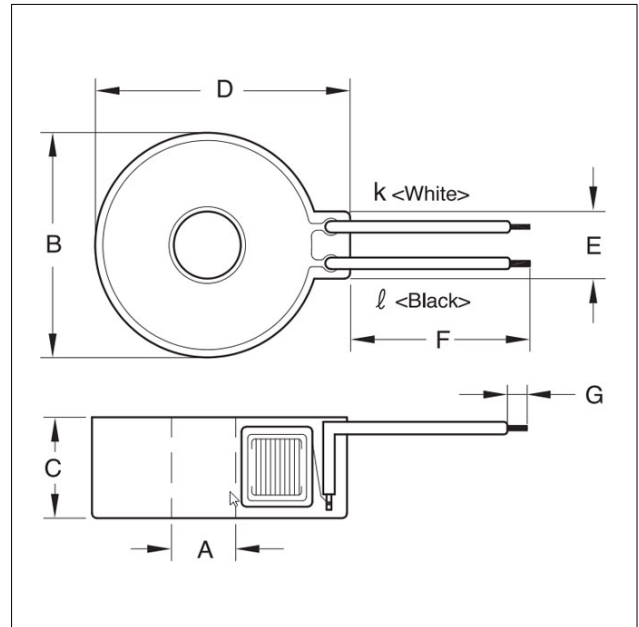
## General Features

- 0.1/0.2 class accuracy compliant to IEC61869-2 and ANSI C12.20
- Linearity: 0.1%
- Frequency: 50 to 400 Hz
- High potential voltage : 2,500 Vac/min
- Best low current sensitivity & stability
- Operating Temperature: -35°C to +65°C
- Consistent performance over temperature changes
- UL Recognized
- RoHS compliant

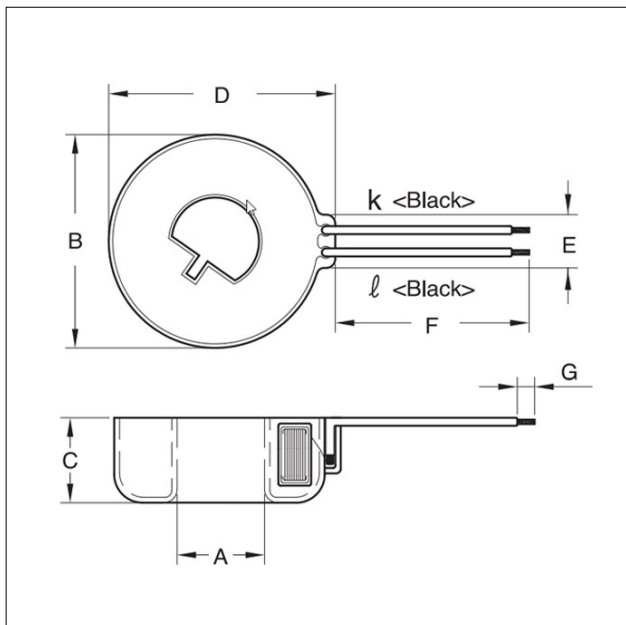
# Drawing



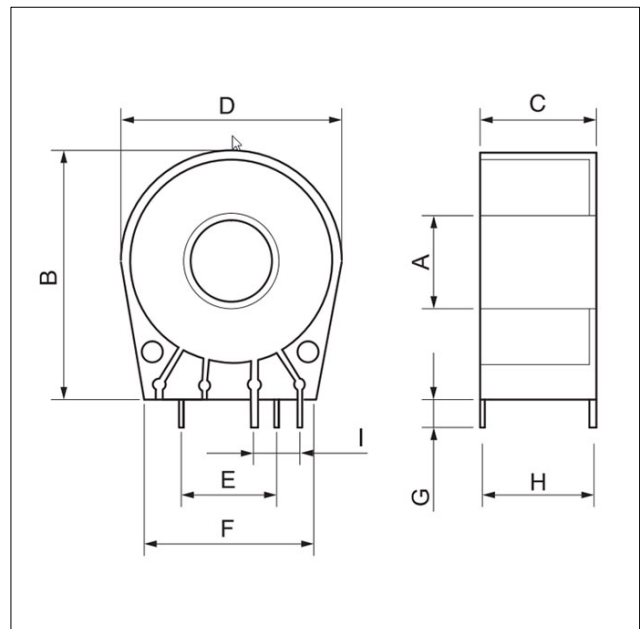
PCB Mountable Type



Lead Wire Type



TLS79L / TLS96L



TC158V

# Electrical Property & Dimension

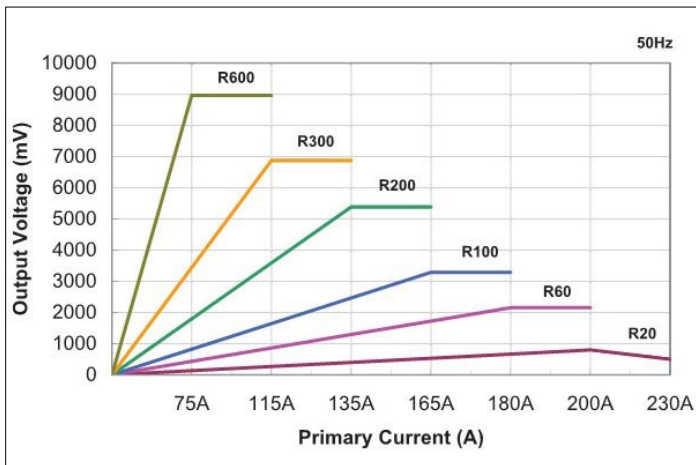
F : 50Hz / 60Hz

Model NO	Current Ratio	Amplitude Error(%)		Phase Shift (min)		DCR( $\Omega$ )	I <sub>max</sub>	Dimensions(mm)			
		0.25A	5A	0.25A	5A	( $\pm 6\%$ )		Window	Width	Height	Thickness
TC158V	5A / 2mA	-0.03 $\pm$ 0.05	-0.03 $\pm$ 0.03	1' $\pm$ 2'	1' $\pm$ 1'	37.5	450A	17.5	55.7	64.5	24
TS76V/L	5A / 2mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.05	3' $\pm$ 2'	3' $\pm$ 2'	51	180A	12.9	41.3	37.5	14
TS77V/L	5A / 2mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	7' $\pm$ 2'	5' $\pm$ 3'	130	80A	6.9	26.8	23.6	11
TLS65V/L	5A / 5mA	-0.05 $\pm$ 0.15	-0.05 $\pm$ 0.15	16' $\pm$ 6'	14' $\pm$ 6'	43	22A	5.7	19.2	19.5	8.6
TLS68V/L	5A / 3.125mA	-0.05 $\pm$ 0.15	-0.05 $\pm$ 0.15	16' $\pm$ 6'	10' $\pm$ 6'	97	23A	5.7	19.2	19.5	8.6
TLS77V/L	5A / 2mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	6' $\pm$ 3'	5' $\pm$ 3'	130	80A	6.8	23.5	25	11.0
TLS71V/L	5A / 2mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	5' $\pm$ 5'	4' $\pm$ 3'	187	100A	8.9	25.3	27.5	17.0
TLS84V/L	5A / 5mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	9' $\pm$ 2'	6' $\pm$ 2'	20	120A	12.9	38.0	39.3	14.0
TLS85V/L	5A / 2.5mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	5' $\pm$ 4'	5' $\pm$ 3'	39	150A	12.9	38.0	39.3	14.0
TLS76V/L	5A / 2mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	4' $\pm$ 4'	3.5' $\pm$ 3'	51	180A	12.9	38.0	39.3	14.0
TLS31L	10A / 2mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	8' $\pm$ 4'	6' $\pm$ 4'	395	110A	13.0	35.7	31.5	16.5
TLS110L	100A / 25mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	7' $\pm$ 4'	5' $\pm$ 3'	280	140A	32.3	63.2	59.6	18.0
TLS104L	100A/100mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	7' $\pm$ 4'	6' $\pm$ 4'	12	140A	19.6	52.0	48.2	19.2
TLS105L	200A/100mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	4' $\pm$ 2.5'	3' $\pm$ 2.5'	26	240A	19.6	52.0	48.2	19.2
TLS106L	200A/80mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	4' $\pm$ 2'	3' $\pm$ 2'	33	280A	19.6	52.0	48.2	19.2
TLS79L	200A/80mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	4' $\pm$ 2'	3' $\pm$ 2'	33	360A	19.5	51.2	48.2	19.3
TLS96L	200A/40mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	7' $\pm$ 4'	5' $\pm$ 4'	246	180A	19.6	52.0	48.2	19.2
TZ76V/L	5A / 2mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	4' $\pm$ 5'	0 $\pm$ 5'	51	180A	12.9	38.0	39.3	14.0
TZ71V/L	5A / 2mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	5' $\pm$ 5'	4' $\pm$ 3'	187	100A	8.9	25.3	27.5	17.0
TZ77V/L	5A / 2mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	7' $\pm$ 5'	5' $\pm$ 5'	130	80A	6.8	23.5	25.0	11.0
TZ73V/L	5A / 2mA	-0.25 $\pm$ 0.25	-0.25 $\pm$ 0.25	15' $\pm$ 8'	11' $\pm$ 6'	103	45A	6.8	23.5	25.0	11.0
TZ31L	10A / 2mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	8' $\pm$ 4'	6' $\pm$ 4'	395	110A	13.0	35.7	31.5	16.5
TZ87V/L	5A / 1.25mA	-0.03 $\pm$ 0.07	-0.03 $\pm$ 0.07	7' $\pm$ 4'	5' $\pm$ 4'	160	100A	12.9	41.3	37.5	14.0

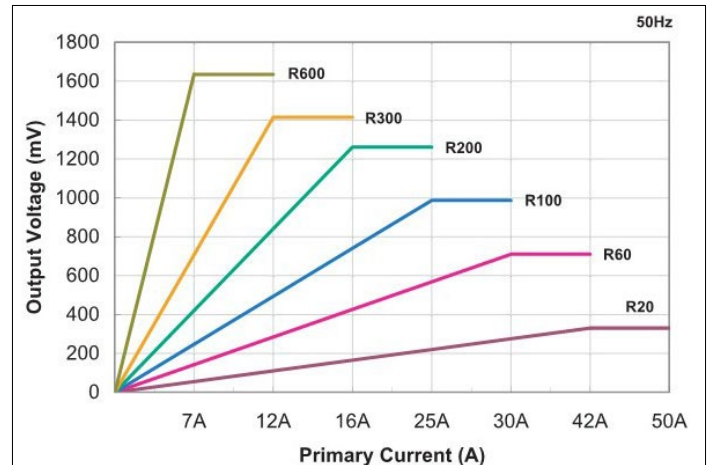
\* V : PCB Mountable

\* L : Lead Wire

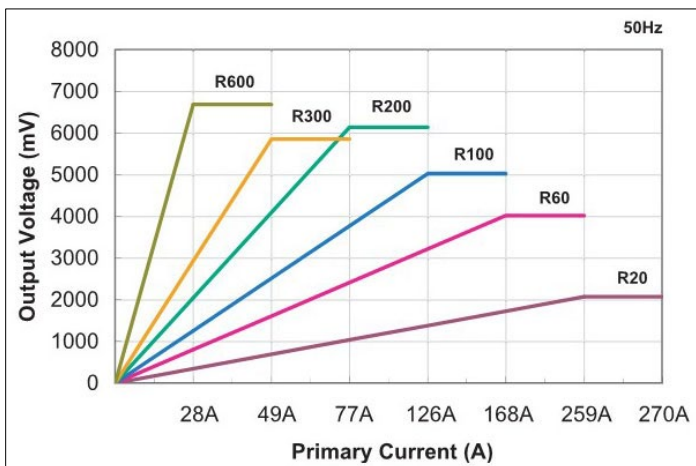
# Secondary Burden & Output Voltage Graph



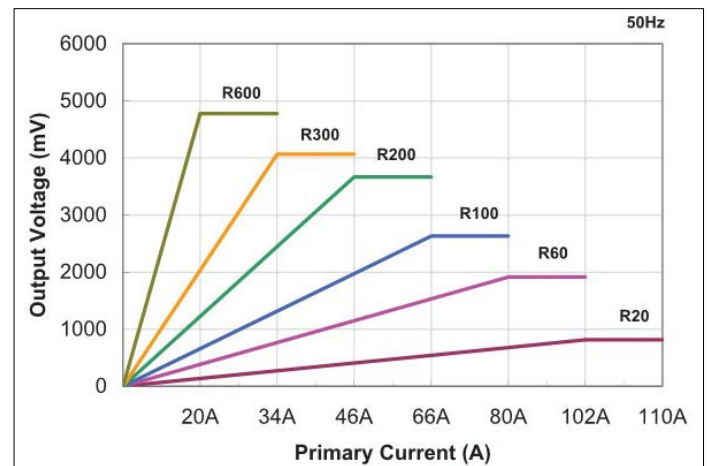
TZ31L



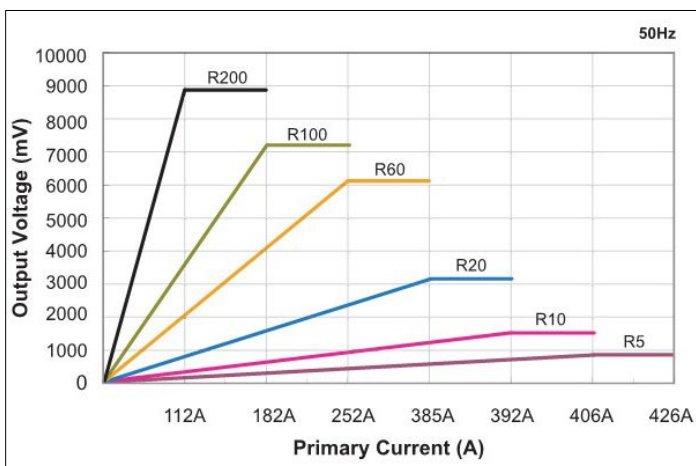
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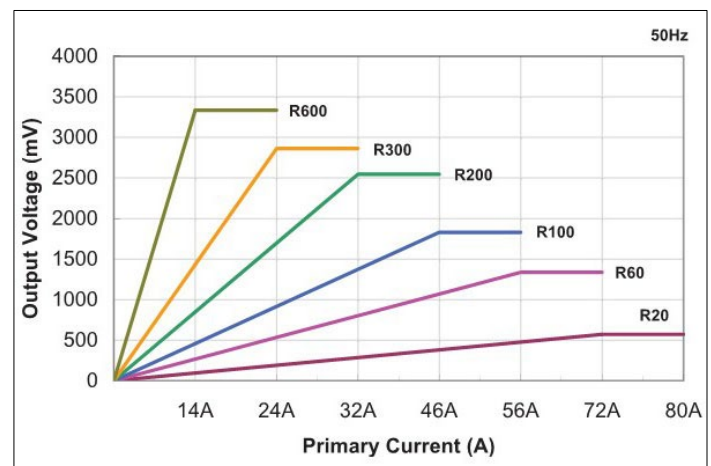
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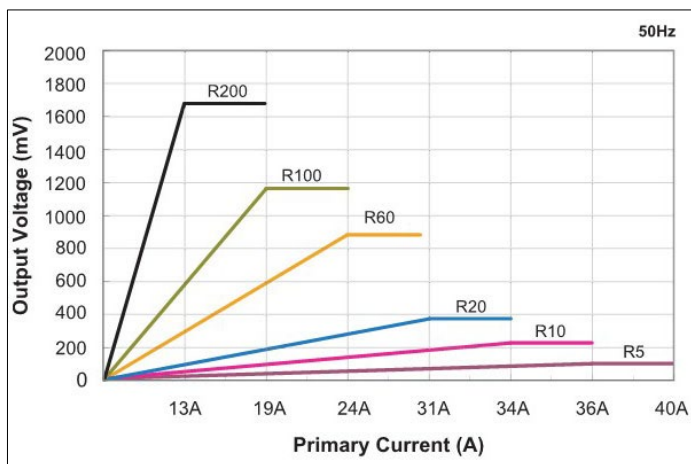
TS77V/L



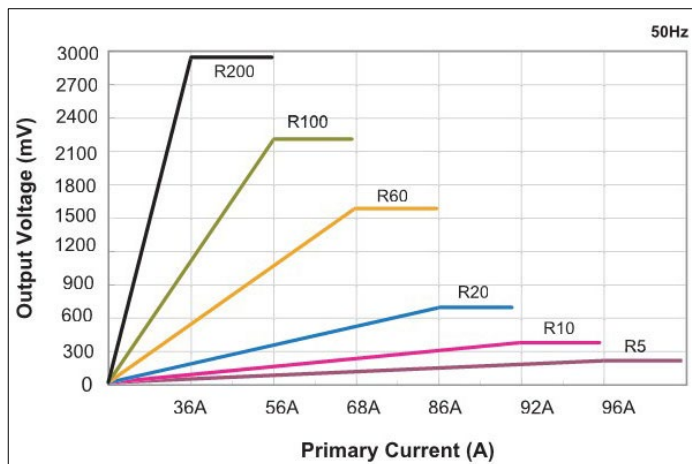
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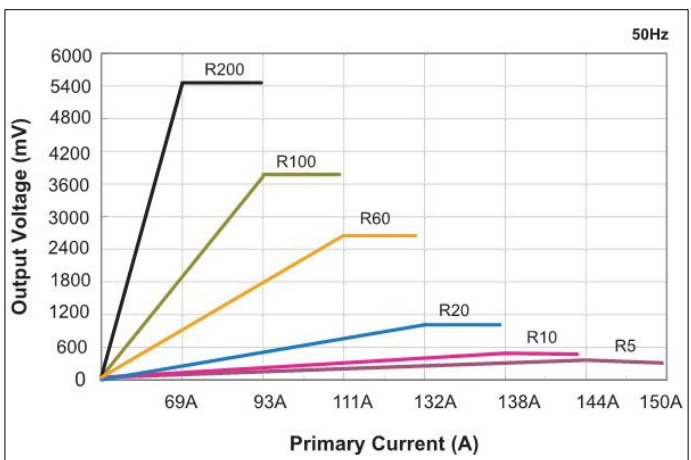
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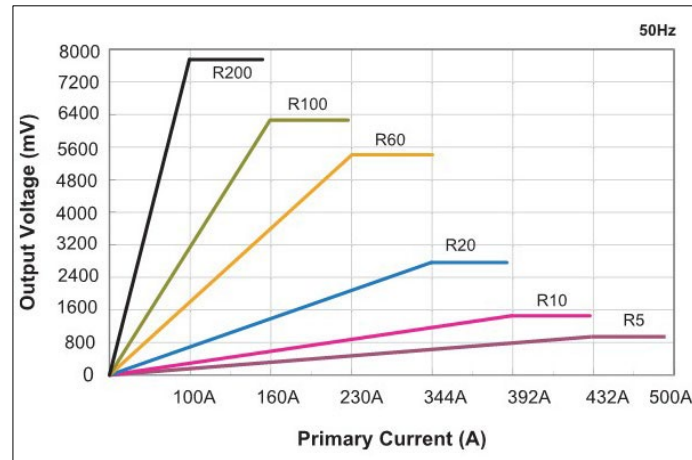
TLS68V/L



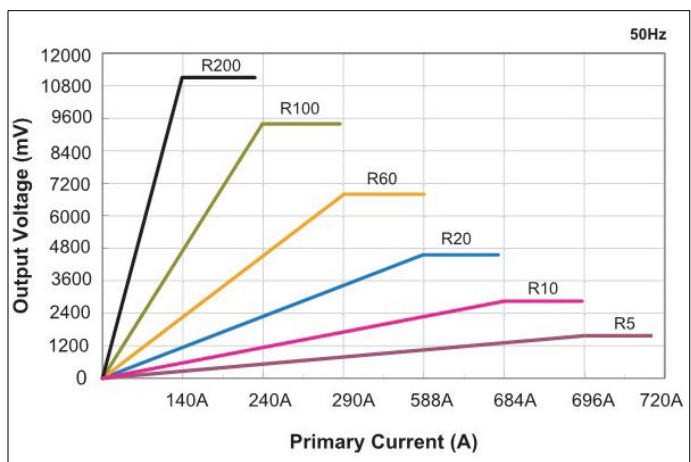
TLS77V/L



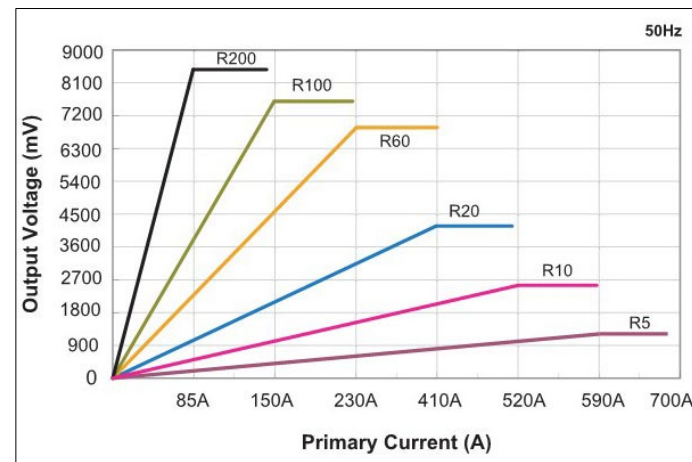
TLS71V/L



TLS76V/L

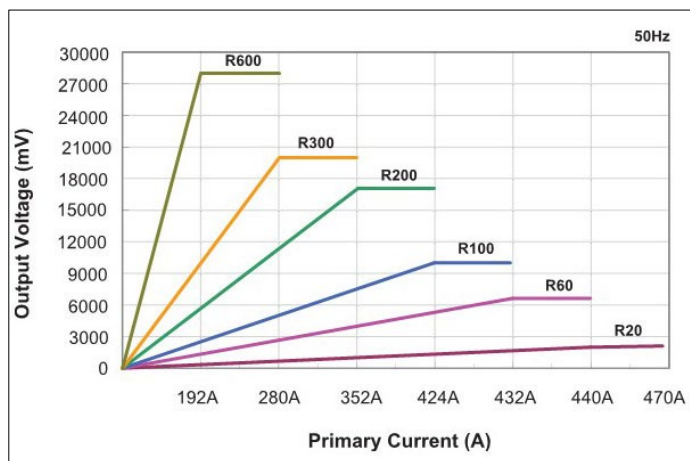


TLS106V/L & TLS79L

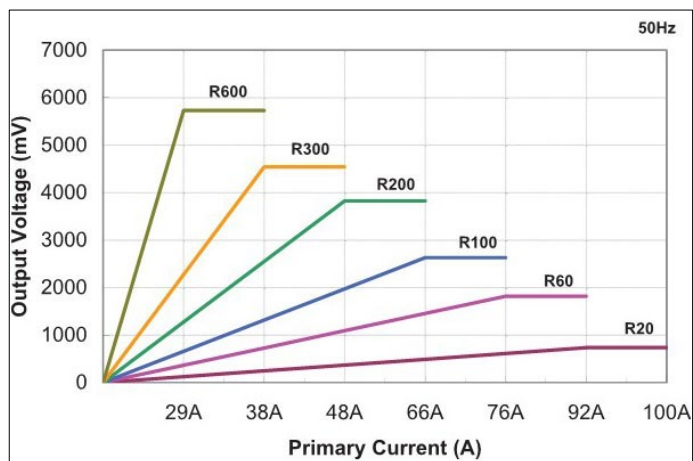


TLS105V/L

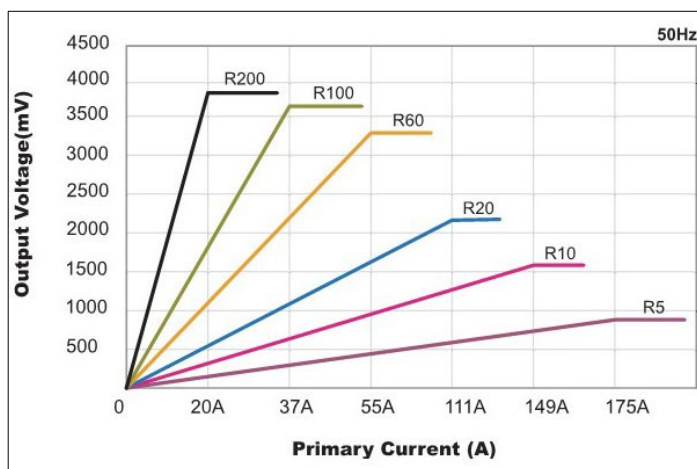




TLS110L



TZ71V/L



TLS84L



ASRAS CO.,LTD  
1694, 1694/1 Prachasongkhro Road Dingdaeng,  
Dindaeng, Bangkok 10400 Tel.  
02-277-9969, Fax 02-277-0995

E-mail : sales@asras.co.th  
Website : www.asras.co.th

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