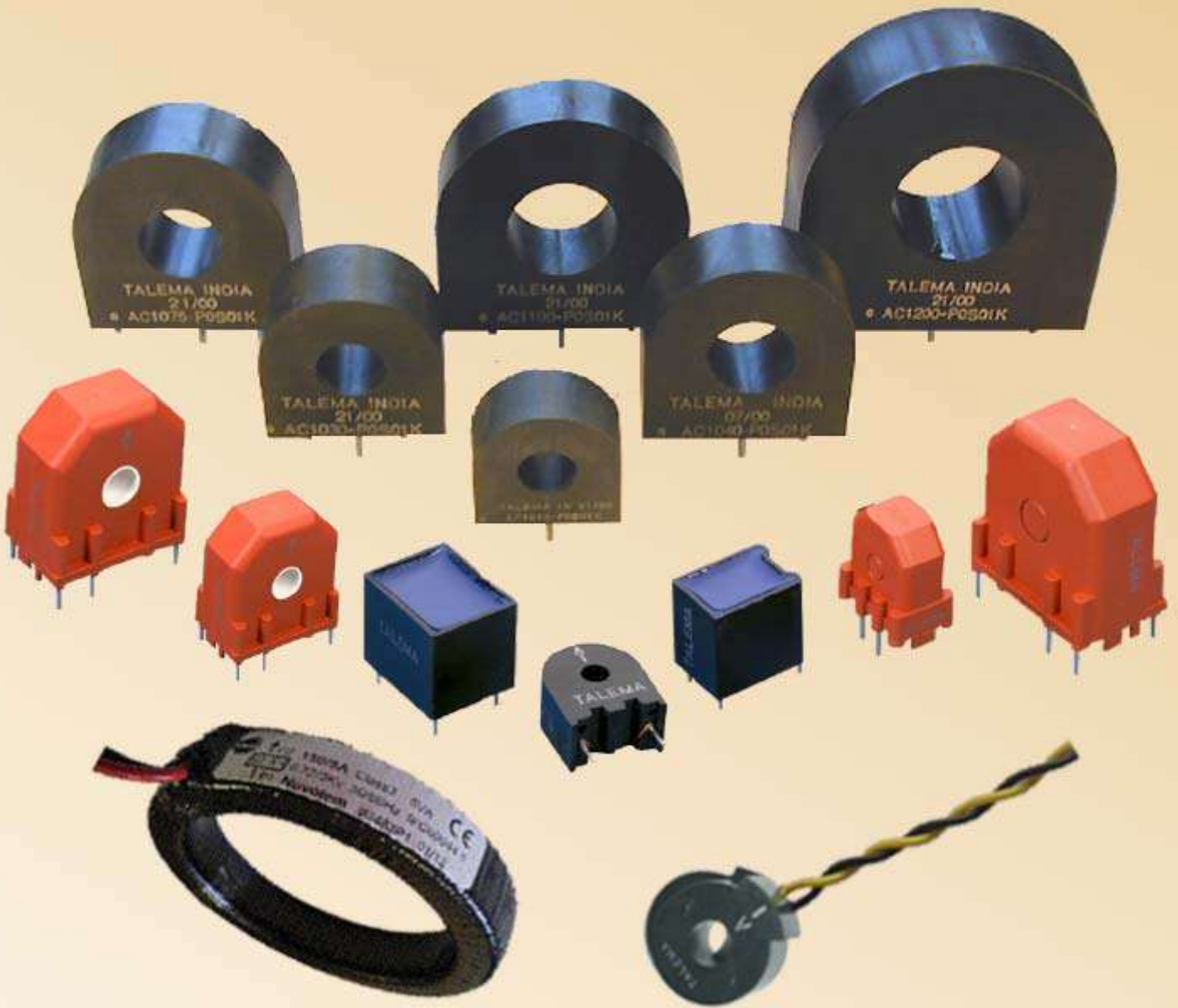


- Mains 50/60Hz Current Transformers •
- Primary Current Ratings to 2500 Amps •
- 20KHz to 200KHz Current Sense Inductors & Transformers •
- Fully RoHS & REACH Compliant •



Current Sense Transformers and Inductors

TALEMA PROFILE

Founded in 1975, The TALEMA International Group has established itself as a world leader in the Design & Manufacture of toroidal transformers and related magnetic components. Our strong technical engineering expertise has contributed to the growth of our current workforce to over 800 employees in manufacturing locations in the Czech Republic and India.

Over the years The Talema Group has succeeded in designing, producing and delivering in excess of 50 million transformers to its customers. The recent incorporation of xDSL technology into our extensive range of Telecom and LAN magnetics offerings, such as ISDN, Ethernet transformers for 10/100/1000Base-T, has broadened our market offering to an even higher level.



QUALITY

The TALEMA Group has a total commitment to quality and employs Lean Six Sigma training for engineering, production and administrative staff to help achieve a goal of zero defects. All facilities maintain very stringent Quality Control and Quality Assurance procedures and are certified to and manufacture in accordance with ISO 9001:2015 (India) and ISO 9001:2016 (Czech Republic) and meet a broad range of International Standards including UL, VDE, IEC and EN.

ENVIRONMENT

All TALEMA International Group manufacturing facilities are RoHS & REACH Compliant and all chokes, inductors and HF Components are produced in an Environment Management System (EMS) facility certified to ISO 14001:2015 (India) and ISO 14001:2016 (Czech Republic).

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Visit our websites for detailed electrical and mechanical specifications for Talema's extensive line of magnetic components for Power Conversion, Telecom & LAN Applications:

www.talema.com

www.nuvotem.com

www.ntmagnetics.cz

ASM Series • 50/60 Hz Current Sensor

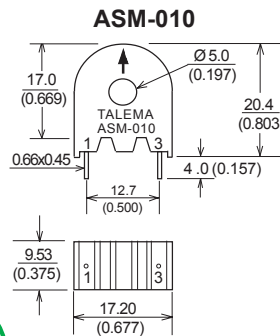
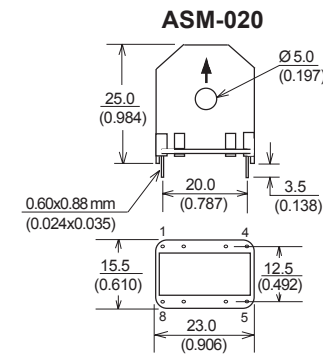
ASM Series current sensors operate as the sealed secondary of a current transformer while the conductor carrying the current to be measured functions as a one turn primary. Measurement accuracy can be improved by increasing the number of primary turns. Applications include detection of branch circuit overload and load drop or shutdown.

Features

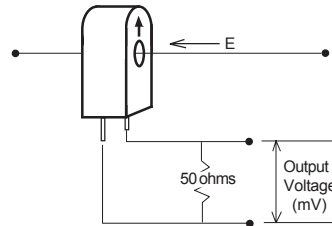
- Fully encapsulated for optimal PC board mtg.
- Mains frequency of 50/60 Hz
- Primary current ratings from 1 to 100 Amps
- Primary to secondary isolated to 2500 or 4000VAC
- Operating temperature range: -40° C to +120° C
- Competitive pricing due to high volume production
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



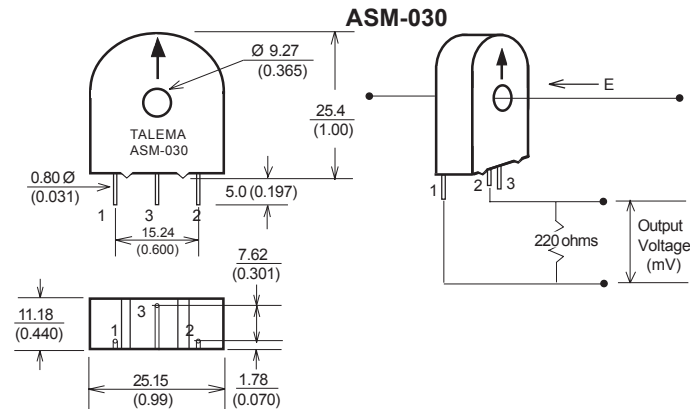
Part Number	Current Range	Output Voltage Tolerance
ASM-010	1 - 10 Amps	±10%
ASM-020	1 - 20 Amps	±10%
ASM-030	1 - 30 Amps	±10%
ASM-050	5 - 50Amps	±10%
ASM-075	5 - 75 Amps	±10%
ASM-100	5 - 100 Amps	±10%



ASM-010 & ASM-020

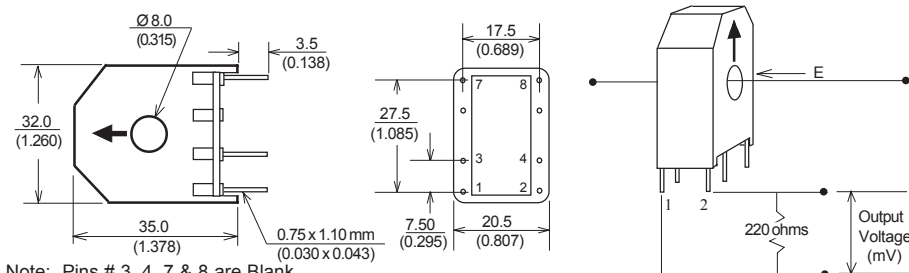


Note: Pins #1 and 8 are Blank



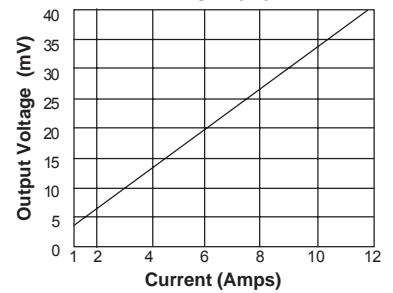
Note: Pin #3 is Blank

ASM-050, ASM-075 & ASM-100

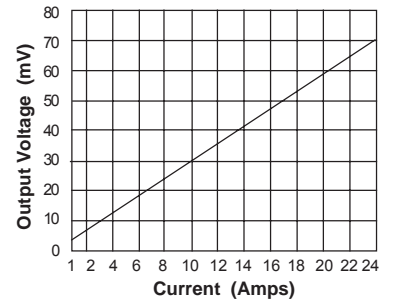


Note: Pins #3, 4, 7 & 8 are Blank

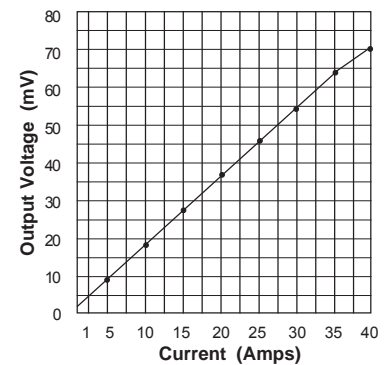
Typical Response ASM-010



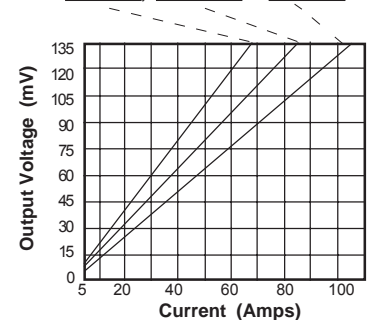
ASM-020



ASM-030



ASM-050, ASM-075 & ASM-100

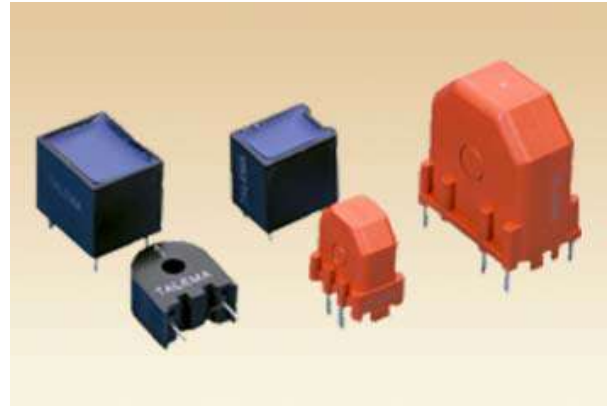


AS Series • Current Sense Inductors & Transformers

AS Series Current Sensors are designed as a low cost method of controlling, monitoring or measuring AC currents. The sensors serve as feedback elements between the output and pulse control circuitry providing accurate regulation of switch mode power supplies.

Features

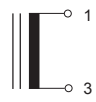
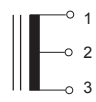
- Fully encapsulated for optimal PC board mounting
- Frequency range from 20KHz to 200KHz
- Primary current rating to 30 Amps
- Primary to secondary isolated to 2500 or 4000VAC
- Meets VDE norms
- Optimum performance over designated current and frequency range
- Competitive pricing due to high volume production
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



Applications

Isolated current feed-back signal in Switch Mode Power Supplies • Motor current load/overload • Lighting • Switch Controls Ultra-sound current • High resolution sonar current • Isolated bi-directional current sensor with full wave bridge rectifier

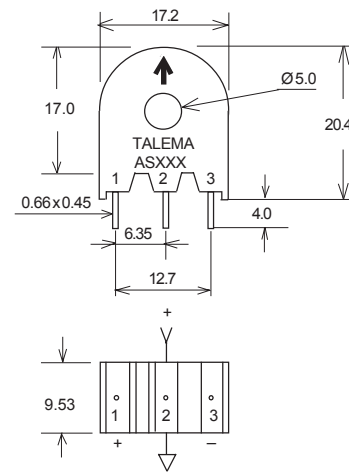
Electrical Specifications @ 25°C

Part Number	Prim./Sec. Ratio	L _{sec} ⁽¹⁾ (mH Min)	DCR _{sec} (Ohms Max.)	Sec. Term. ⁽²⁾ Resistance (Ohms Nom.)	I _{sec} ⁽³⁾ Max.	Volt μS ⁽⁴⁾ Max.	Schematic
AS-100	1:50	5	0.6	50	300mA	175	
AS-101	1:100	22	1.1	100	150mA	350	
AS-102	1:200	89	4.5	200	75mA	700	
AS-103	1:300	200	10.0	300	50mA	900	
AS-104	1:500	560	25.0	500	30mA	1500	
AS-105	1:750	1260	43.0	750	40mA	3750	
AS-110	1:50CT	5	0.3 / 0.3	25 + 25	300mA	175	
AS-111	1:100CT	22	0.55 / 0.55	50 + 50	150mA	350	
AS-112	1:200CT	89	2.25 / 2.25	100 + 100	75mA	700	
AS-113	1:300CT	200	5.0 / 5.0	150 + 150	50mA	900	
AS-114	1:500CT	560	12.5 / 12.5	250 + 250	30mA	1500	
AS-115	1:750CT	1260	21.5 / 21.5	375 + 375	40mA	3750	

Notes:

- 1) L_{sec}: Secondary inductance tested at 10KHz and 10mV for 1:50 through 1:500 Prim./Sec. Ratios and 1KHz/10mV for Prim./Sec. ratio of 1:750
- 2) This nominal termination resistance value will yield approximately 1.0V of output for each amp of current in a single turn sense line. The output Voltage/Ampere of these devices can be increased or decreased linearly over a restricted temperature range by adjusting the terminating resistance.
- 3) For Prim./Sec. Ratios of 1:50 through 1:500, the I_{sec} value corresponds to a maximum primary current of 15 Amp-turns rms while the I_{sec} value for the ratio of 1:750 corresponds to a max. primary current of 30 Amp-turns rms.
- 4) $V_{\mu S} = R_t \times I_s \times \frac{1}{2F}$
 R_t (Ohms): Recommended Terminating Resistance
 I_s (A): Secondary Current
 F (Hz): Frequency
- 5) Operating Temperature Range: -40°C to +120°C
- 6) Pin# 2 is on Center-Tapped (CT) versions only

Mechanical Drawing

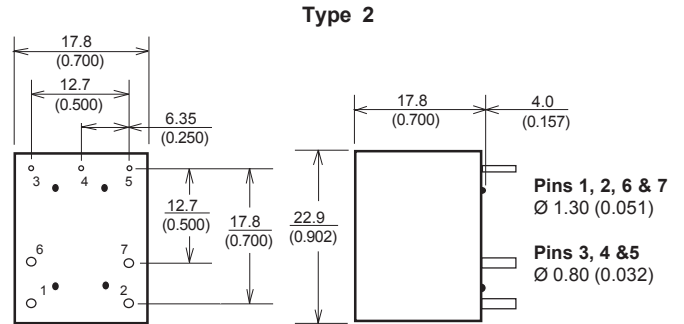
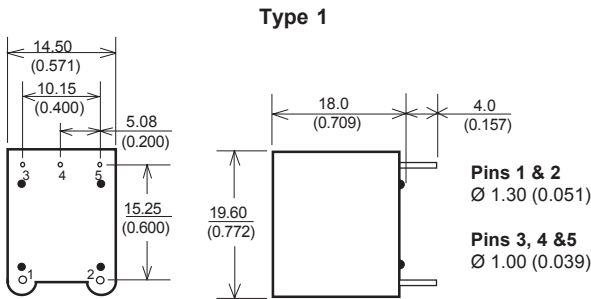


Primary Sense Current

AS Series • Current Sense Inductors & Transformers

Electrical Specifications @ 25°C

Part Number		Prim./Sec. Ratio	L _{sec} ⁽¹⁾ (mHMin.)	DCR _{sec} (Ohms Max.)	Sec. Term. ⁽²⁾ Resistance (Ohms Nom.)	I _{sec} ⁽³⁾ Max.	Volt μS ⁽⁴⁾ Max.	Schematic
Type 1	Type 2							
AS-200	AS-300	1:50	5	0.65	50	300mA	175	
AS-201	AS-301	1:100	20	1.30	100	150mA	350	
AS-202	AS-302	1:200	80	4.50	200	75mA	700	
AS-210	AS-310	1:50CT	5	0.65	25 + 25	300mA	175	
AS-211	AS-311	1:100CT	20	1.30	50 + 50	150mA	350	
AS-212	AS-312	1:200CT	80	4.50	100 + 100	75mA	700	
-	AS-320	1:50	5	0.65	50	300mA	175	
-	AS-321	1:100	20	1.30	100	150mA	350	
-	AS-322	1:200	80	4.50	200	75mA	700	
-	AS-330	1:50CT	5	0.65	25 + 25	300mA	175	
-	AS-331	1:100CT	20	1.30	50 + 50	150mA	350	
-	AS-332	1:200CT	80	4.50	100 + 100	75mA	700	

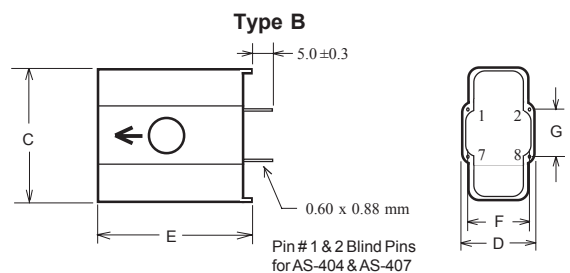
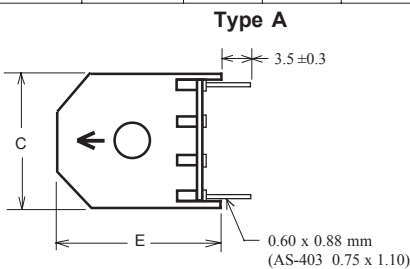


Features

- Meets requirements of IEC 950 and VDE norms
UL94V-0 recognized materials
- Operating frequency range from 20KHz to 200KHz
- Operating Temperature Range: -40°C to +120°C
- Primary current rating to 80 Amps

Electrical Specifications at 25°C

Part Number	Pri./Sec. Ratio	I _p Amps	Volt μS (Max.)	Application	Schematic	Case Type	Dimensions							
							C	D	E	F	G	H	I	Hole
AS-400	1:100	1	350	Switching		A	17.8	12.8	20.0	10.0	5.0	15.0	5.0	--
AS-401	1:100	2	550	Switching		A	23.0	15.5	25.0	12.5	10.0	20.0	5.0	--
AS-402	1:100	5	1500	Switching		B	32.5	18.0	35.5	15.0	12.5	--	--	--
AS-403	1:100	10	1500	Switching		A	32.0	20.5	35.0	17.5	12.5	27.5	7.5	--
AS-404	1:100	50	1500	Switching		B	32.5	18.0	35.5	15.0	12.5	--	--	Ø 8
AS-405	1:500	50	2700	Switching		A	23.0	15.5	25.0	12.5	10.0	20.0	5.0	Ø 5
AS-406	1:500	65	4200	Switching		A	27.0	18.0	30.0	15.0	12.5	22.5	5.0	Ø 5
AS-407	1:500	80	7500	Switching		B	32.5	18.0	35.5	15.0	12.5	--	--	Ø 8



AC Series • Current Transformer Quick Reference Guide

Low Cost 50/60Hz Current Transformers

Applications

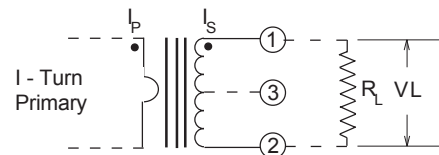
- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

Features

- Excellent quality at extremely competitive price due to high volume production
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



Schematic



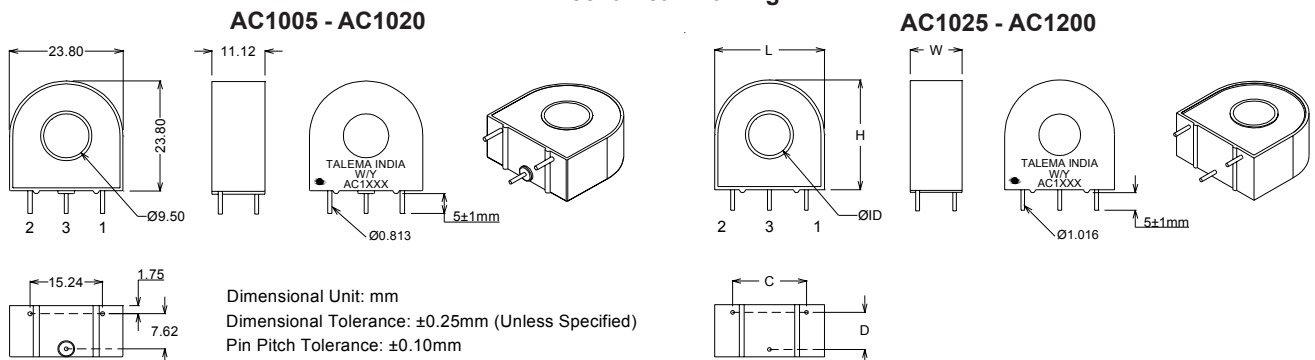
Electrical Specifications at 20°C

AC Series • Standard Accuracy Current Transformers

Part No.	Primary Current I_p Amps	Turns Ratio	Terminating Resistor R_L		DCR (Ohms)	RCF @ 10%	Volts/Amp @ rated I_p for various loads (Ohms)				μ Arms	Vrms	Net Weight (grams)	Case Dimensions - mm					
			Ohms	Watt			Nominal	100	500	2K				5K	L	ID	H	W	C
AC1005	5	1000:1	100	0.0025	41.80	1.010	0.10	0.46	1.43	2.01	237	0.66	16.3	--	--	--	--	--	--
AC1010	10	1000:1	100	0.0100	41.80	1.010	0.10	0.45	1.10	1.42	386	1.32	16.3	--	--	--	--	--	--
AC1015	15	1000:1	100	0.0230	41.80	1.010	0.10	0.45	0.90	1.12	513	1.99	16.3	--	--	--	--	--	--
AC1020	20	1000:1	100	0.0400	41.80	1.010	0.10	0.43	0.76	0.93	628	2.65	16.3	--	--	--	--	--	--
AC1025	25	1000:1	100	0.0630	48.00	10.20	0.10	0.47	1.06	1.31	566	3.65	35.5	30.20	11.40	30.20	14.30	20.32	10.16
AC1030	30	1000:1	100	0.0900	48.00	1.020	0.10	0.47	0.95	1.16	644	4.38	35.5	30.20	11.40	30.20	14.30	20.32	10.16
AC1040	40	1000:1	100	0.1600	49.30	1.026	0.10	0.46	0.87	1.05	914	5.82	47.3	34.90	14.60	34.90	14.30	25.40	10.16
AC1050	50	1000:1	100	0.2500	49.30	1.026	0.10	0.43	0.76	0.90	1090	7.28	47.3	34.90	14.60	34.90	14.30	25.40	10.16
AC1060	60	1000:1	100	0.3600	24.00	1.001	0.10	0.44	0.66	0.76	1250	7.41	65.2	38.10	14.60	38.10	15.90	33.00	10.16
AC1075	75	1000:1	100	0.5700	24.00	1.001	0.10	0.39	0.57	0.65	1520	9.26	65.2	38.10	14.60	38.10	15.90	33.00	10.16
AC1100	100	1000:1	100	1.0000	21.30	1.001	0.10	0.34	0.50	0.56	1740	12.00	80.0	44.50	19.05	44.50	14.30	35.56	10.16
AC1150	150	1000:1	100	2.2500	11.00	1.002	0.10	0.37	0.50	0.55	1820	16.60	150.0	55.60	23.80	55.60	20.60	45.72	12.70
AC1200	200	1000:1	100	4.0000	11.00	1.002	0.10	0.31	0.41	0.45	2340	22.20	150.0	55.60	23.80	55.60	20.60	45.72	12.70

RCF : Ratio correction factor - Multiply current readings by this factor to compensate for transformer losses

Mechanical Drawing



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs
- 3) Each part number adjusted to be most accurate at specified load

Dimensional Unit: mm
Dimensional Tolerance: ±0.25mm (Unless Specified)
Pin Pitch Tolerance: ±0.10mm

AC1005 • 5 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

Features

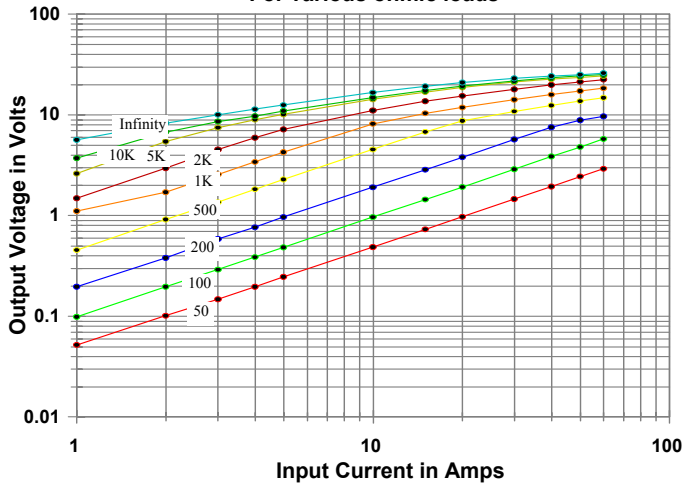
- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



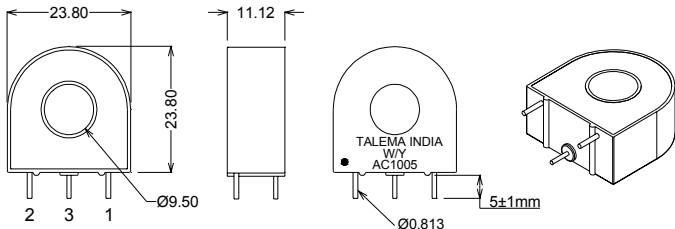
Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

Electrical Specifications @ 20°C ambient	
Primary Current	5A nom., 60A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 5A for 100 Ohms load	0.100 V/A
Volt per Amp Ratio at 0.5A for 100 Ohms load	0.096 V/A
DC Resistance at 20°C	41.8 Ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

**Output Volts vs Input Current
For various ohmic loads**

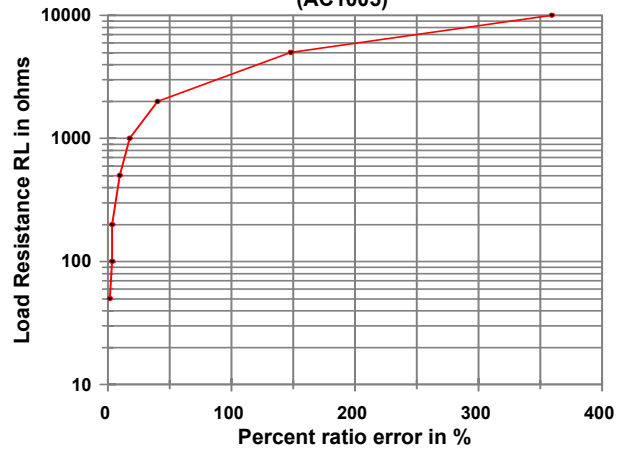


Mechanical Drawing

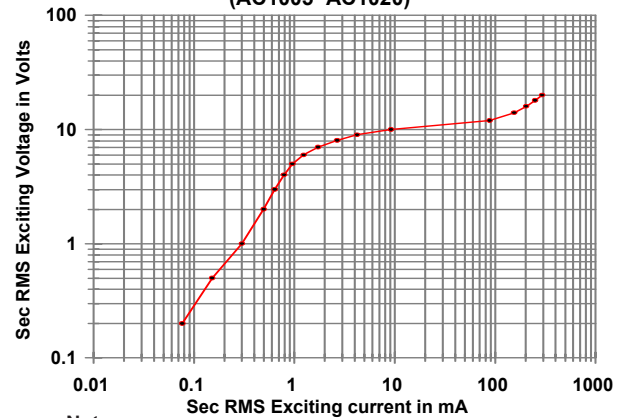


Dimensional Unit: mm
 Dimensional Tolerance: ±0.25mm (Unless Specified)
 Pin Pitch Tolerance: ±0.10mm

**%RE vs RL at Rated primary current
(AC1005)**

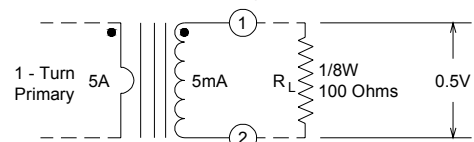


**Typical Excitation Curve
(AC1005~AC1020)**



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1010 • 10 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

Features

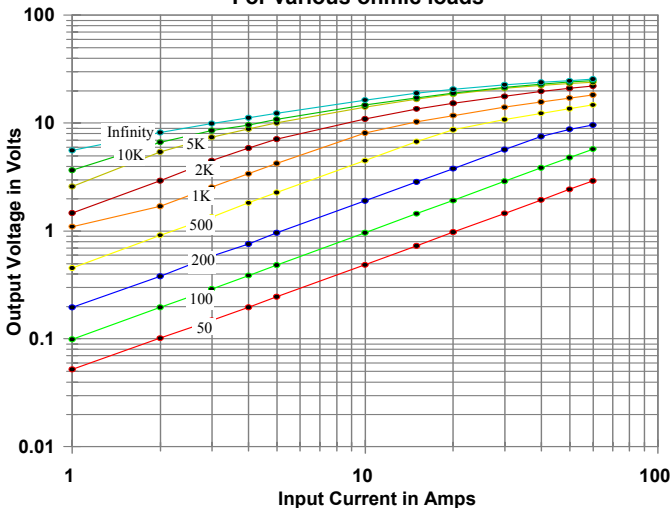
- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



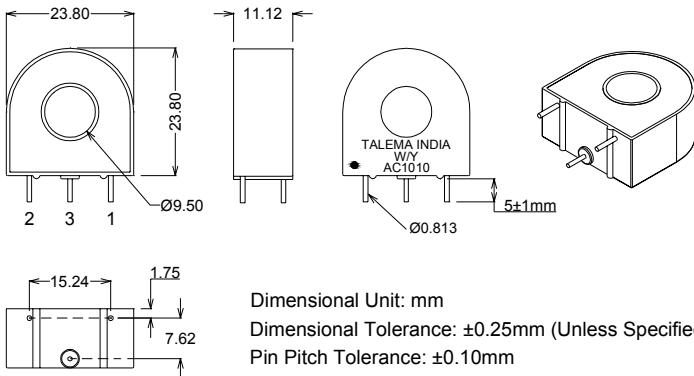
Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

Electrical Specifications @ 20°C ambient	
Primary Current	10A nom., 60A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 10A for 100 ohm load	0.100 V/A
Volt per Amp Ratio at 1A for 100 ohm load	0.097 V/A
DC Resistance at 20°C	41.8 ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

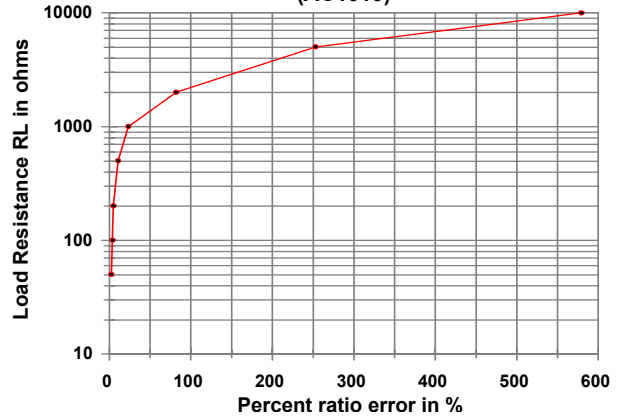
**Output Volts vs Input Current
For various ohmic loads**



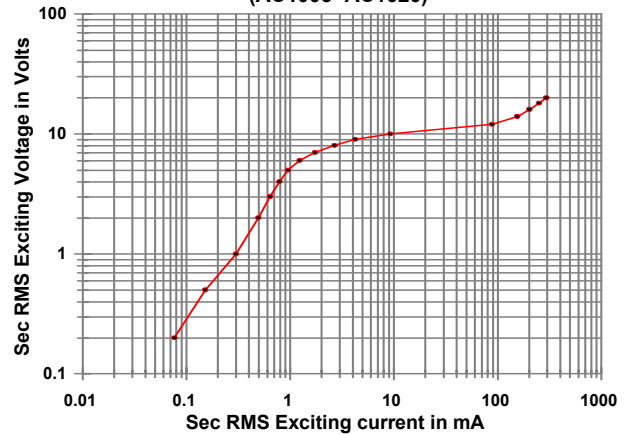
Mechanical Drawing



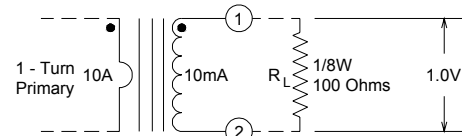
**%RE vs RL at Rated primary current
(AC1010)**



**Typical Excitation Curve
(AC1005~AC1020)**



- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1015 • 15 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

Features

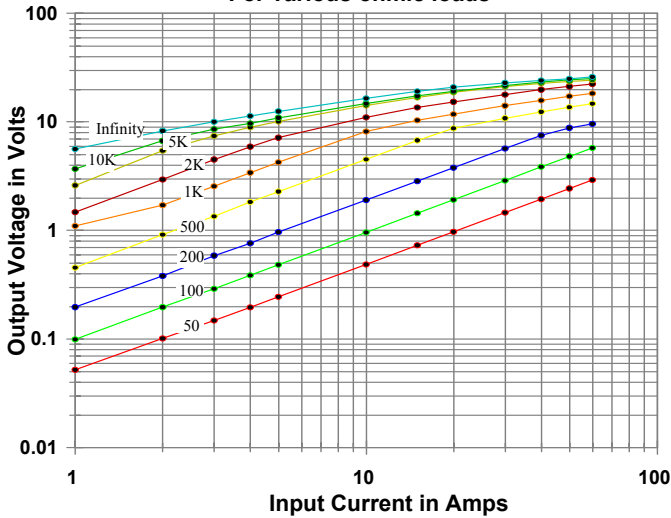
- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



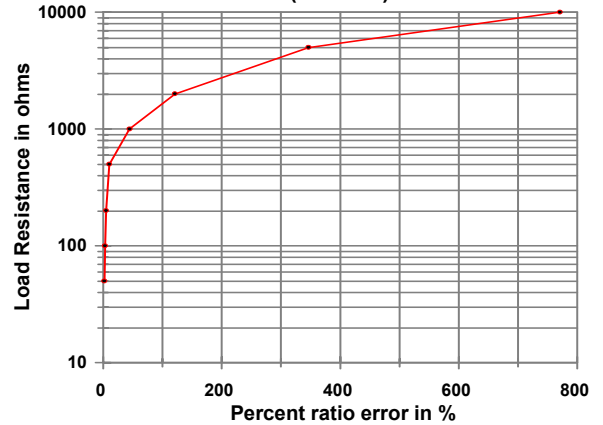
Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 meohms min.

Electrical Specifications @ 20°C ambient	
Primary Current	15A nom., 60A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 15A for 100 ohm load	0.100 V/A
Volt per Amp Ratio at 1.5A for 100 ohm load	0.097 V/A
DC Resistance at 20°C	41.8 ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

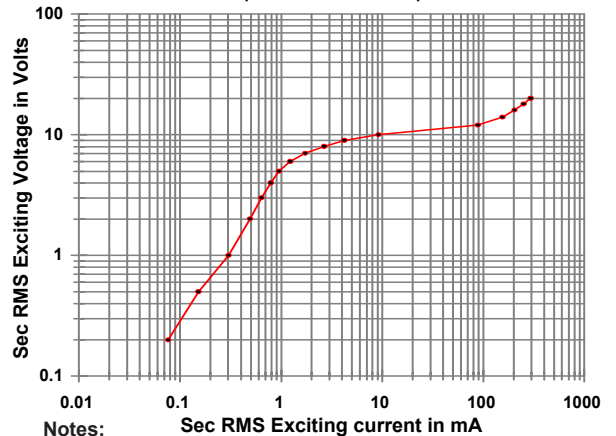
**Output Volts vs Input Current
For various ohmic loads**



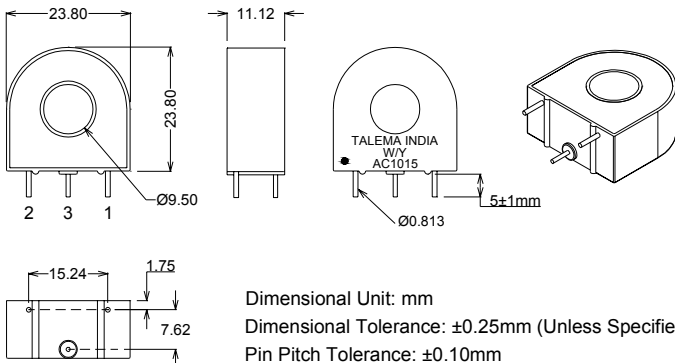
**%RE vs RL at Rated primary current
(AC1015)**



**Typical Excitation Curve
(AC1005-AC1020)**



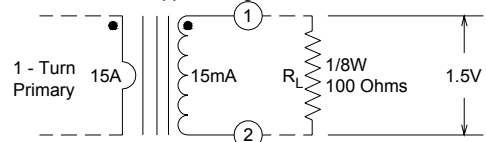
Mechanical Drawing



Notes:

Sec RMS Exciting current in mA

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1020 • 20 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

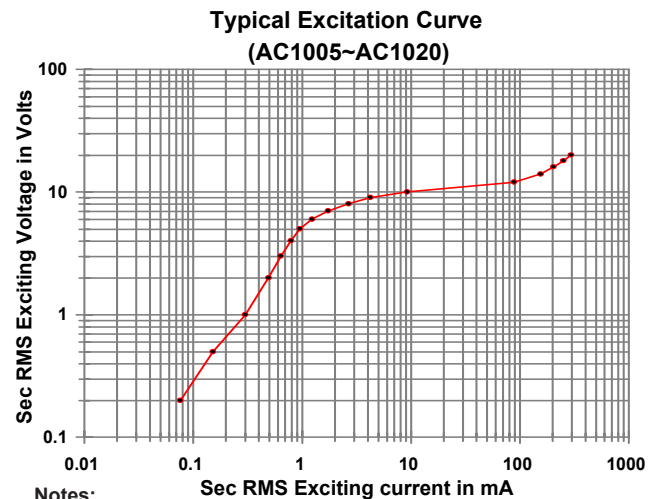
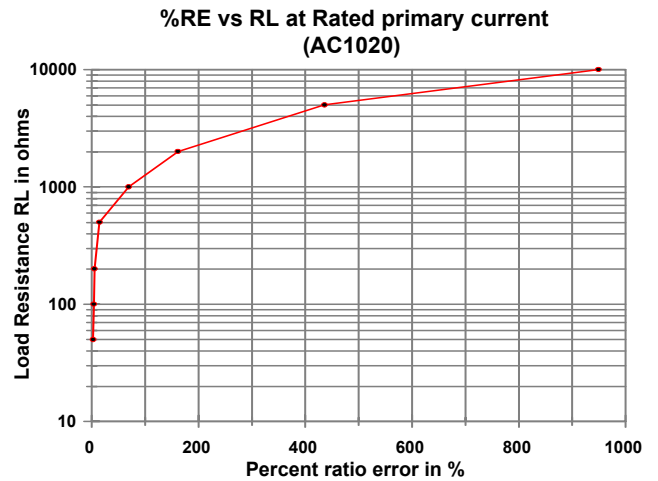
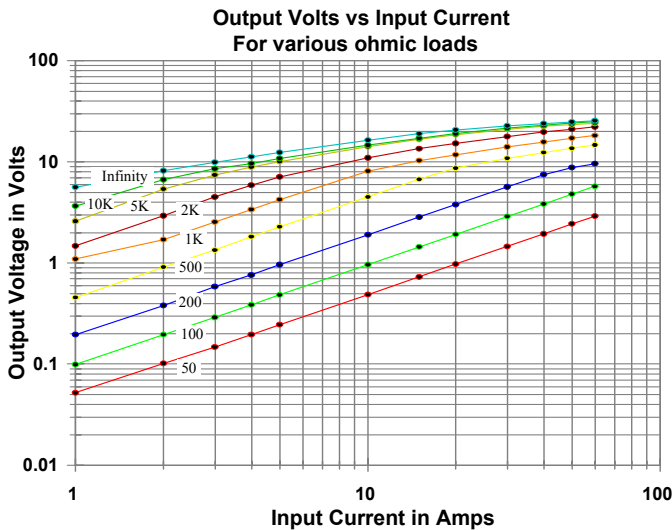
Features

- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

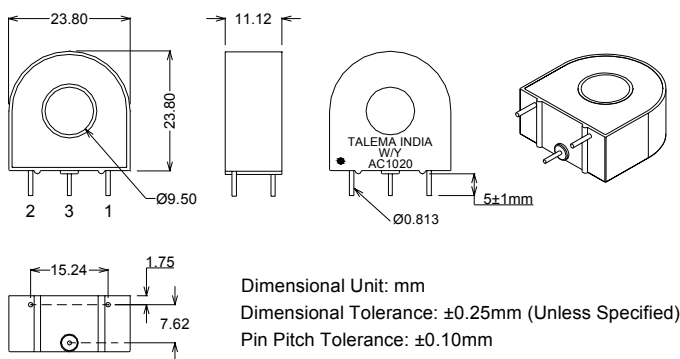


Electrical Specifications @ 20°C ambient	
Primary Current	20A nom., 60A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 20A for 100 Ohms load	0.100 V/A
Volt per Amp Ratio at 2A for 100 Ohms load	0.097 V/A
DC Resistance at 20°C	41.8 Ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

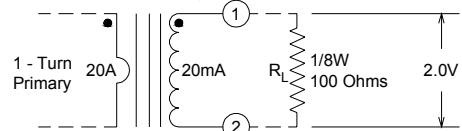


Mechanical Drawing



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1025 • 25 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

Features

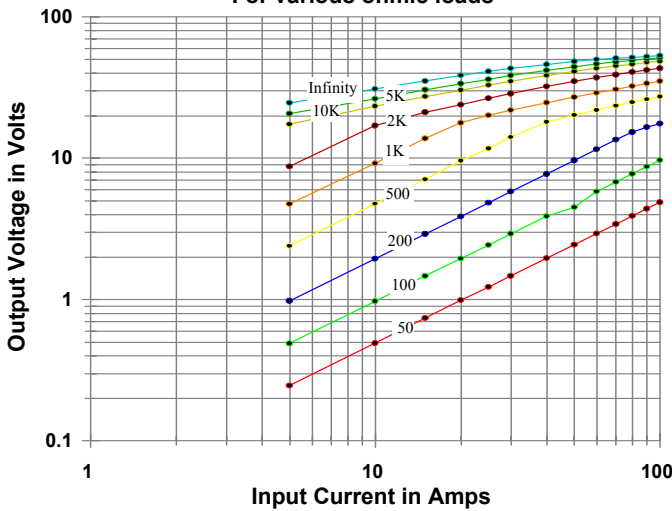
- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



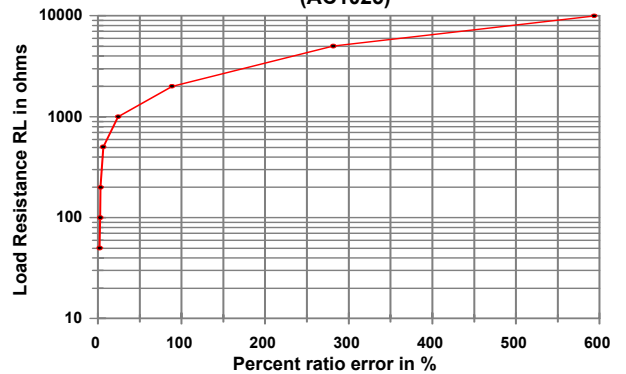
Electrical Specifications @ 20°C ambient	
Primary Current	25A nom., 75A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 25A for 100 Ohms load	0.100 V/A
Volt per Amp Ratio at 2.5A for 100 Ohms load	0.098 V/A
DC Resistance at 20°C	48 Ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

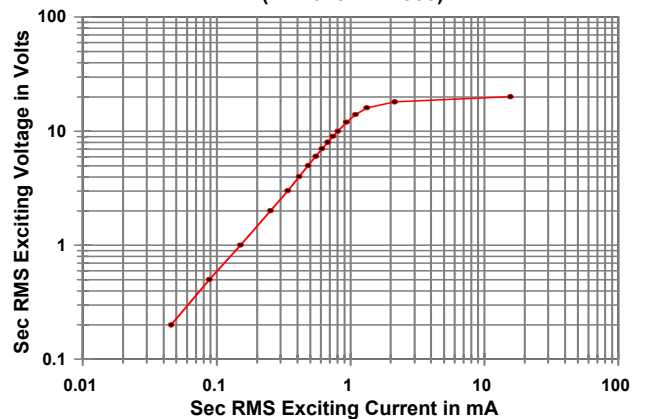
**Output Volts vs Input Current
For various ohmic loads**



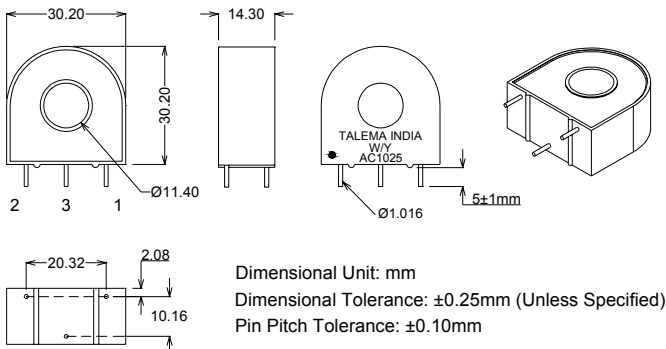
**%RE vs RL at Rated primary current
(AC1025)**



**Typical Excitation Curve
(AC1025~AC1030)**

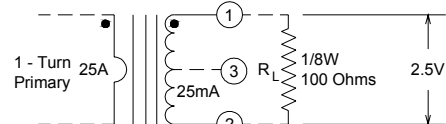


Mechanical Drawing



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1030 • 30 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

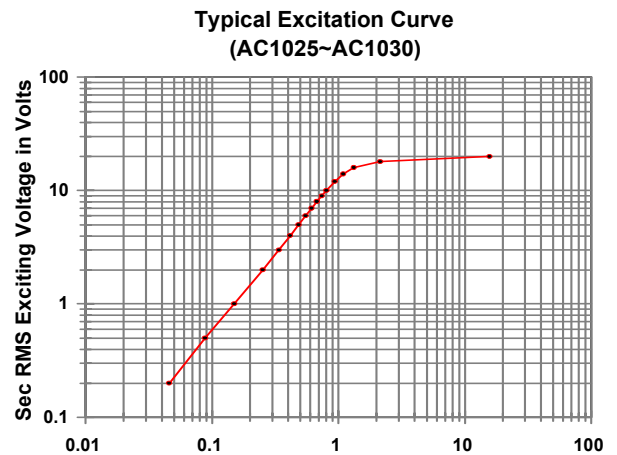
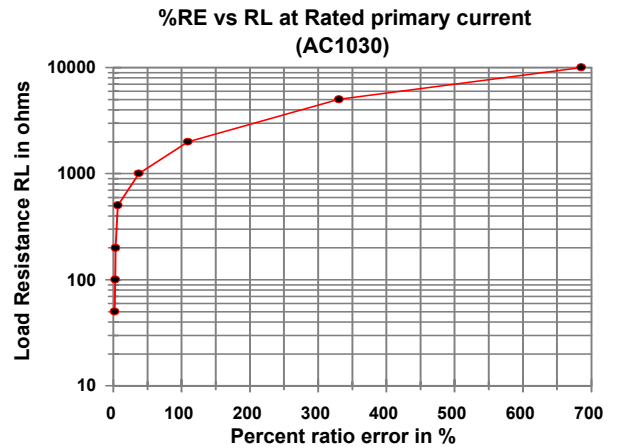
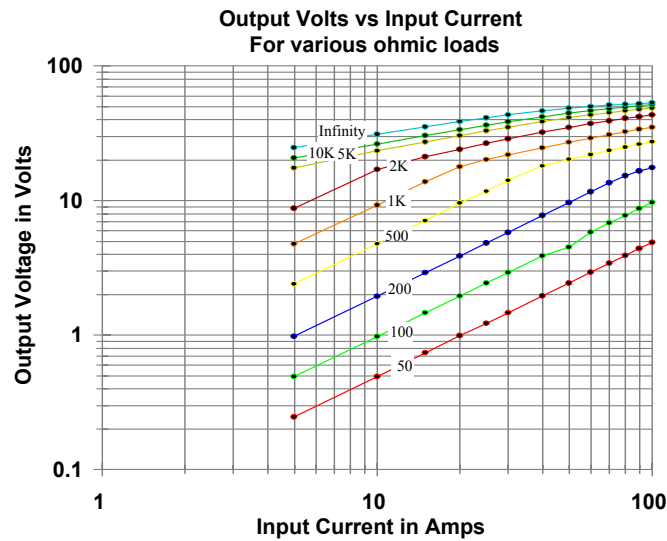
Features

- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

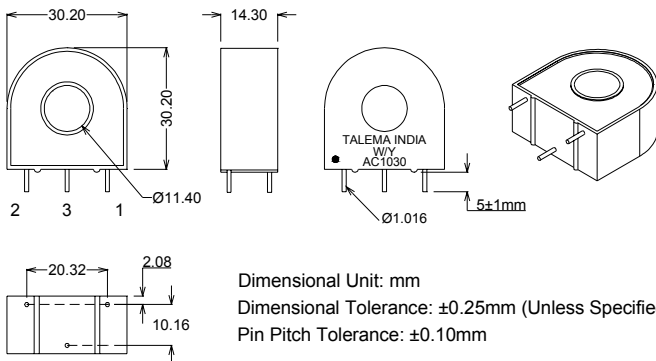


Electrical Specifications @ 20°C ambient	
Primary Current	30A nom., 75A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 30A for 100 Ohms load	0.100 V/A
Volt per Amp Ratio at 3A for 100 Ohms load	0.098 V/A
DC Resistance at 20°C	48 Ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

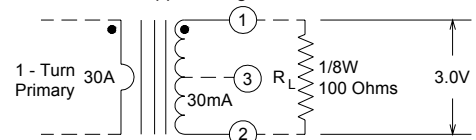


Mechanical Drawing



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1040 • 40 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

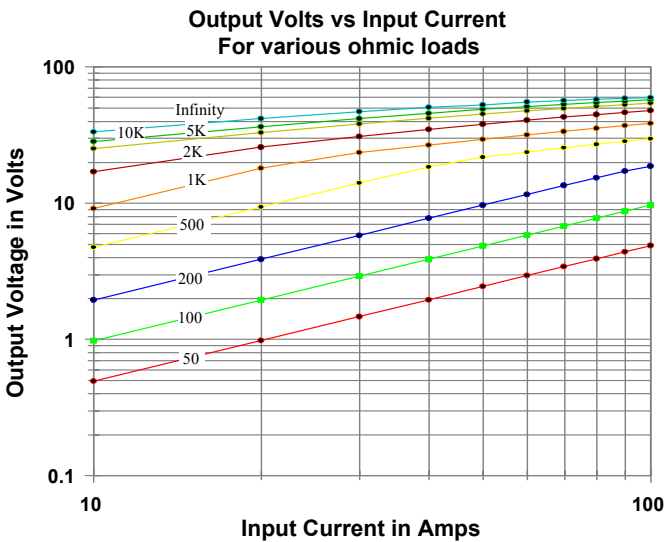
Features

- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

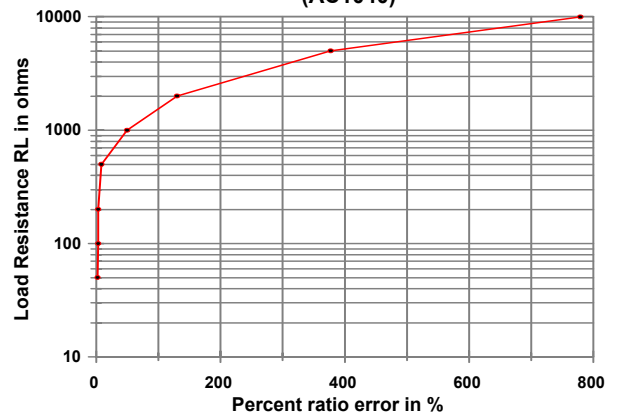


Electrical Specifications @ 20°C ambient	
Primary Current	40A nom., 125A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 40A for 100 Ohms load	0.100 V/A
Volt per Amp Ratio at 4A for 100 Ohms load	0.098 V/A
DC Resistance at 20°C	49.3 Ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

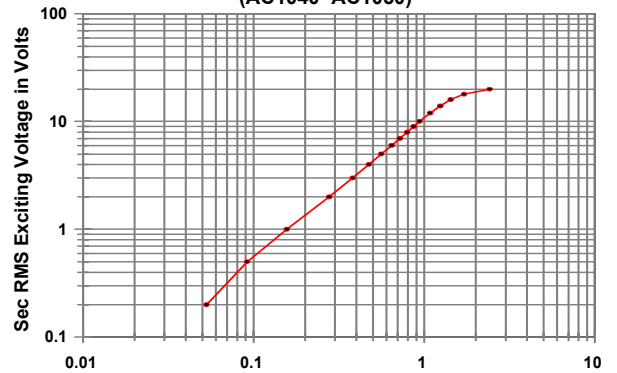
Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.



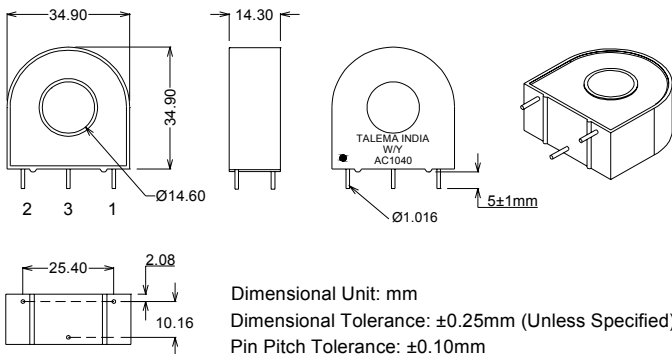
%RE vs RL at Rated primary current (AC1040)



Typical Excitation Curve (AC1040-AC1050)

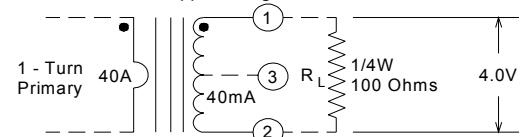


Mechanical Drawing



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1050 • 50 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

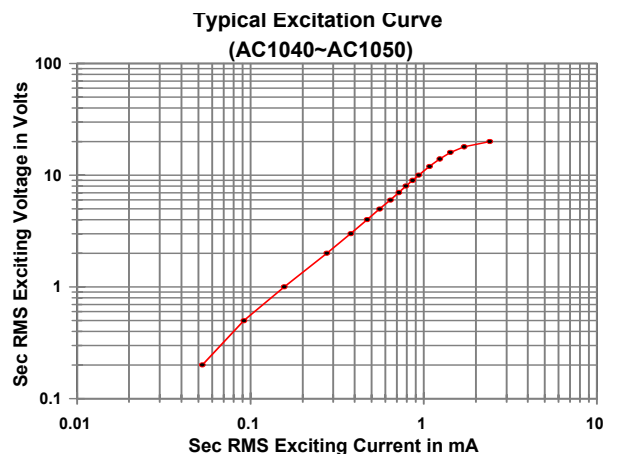
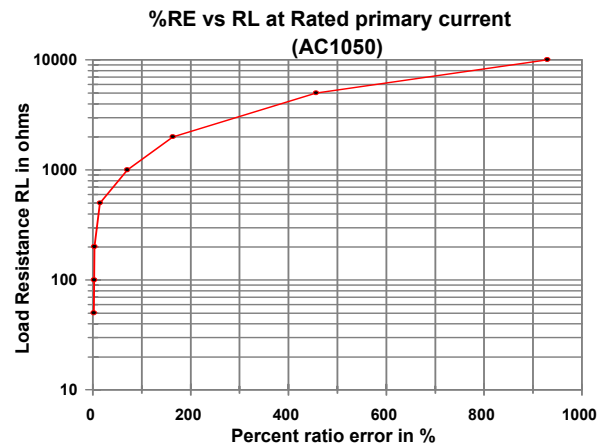
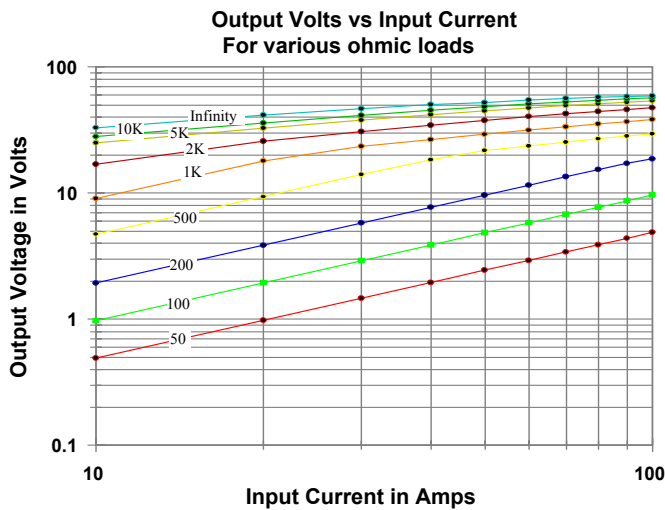
Features

- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

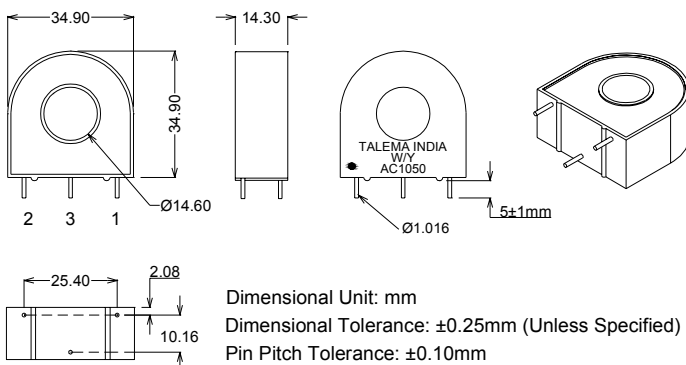


Electrical Specifications @ 20°C ambient	
Primary Current	50A nom., 125A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 50A for 100 Ohms load	0.100 V/A
Volt per Amp Ratio at 5A for 100 Ohms load	0.098 V/A
DC Resistance at 20°C	49.3 Ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

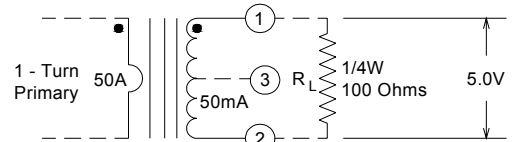


Mechanical Drawing



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1060 • 60 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

Features

- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

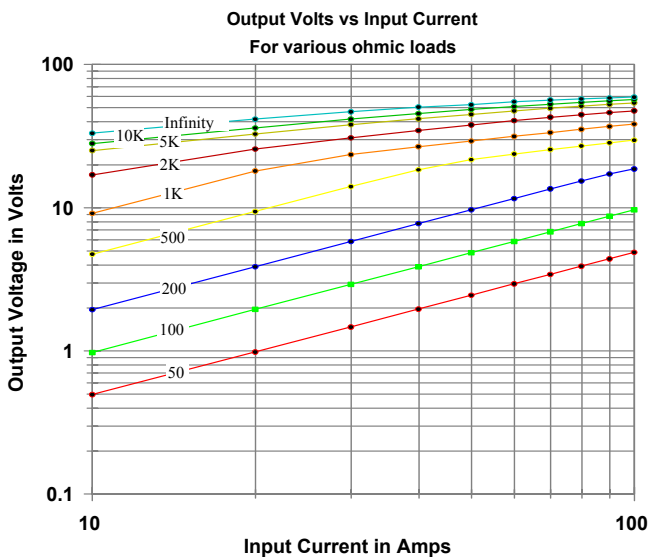
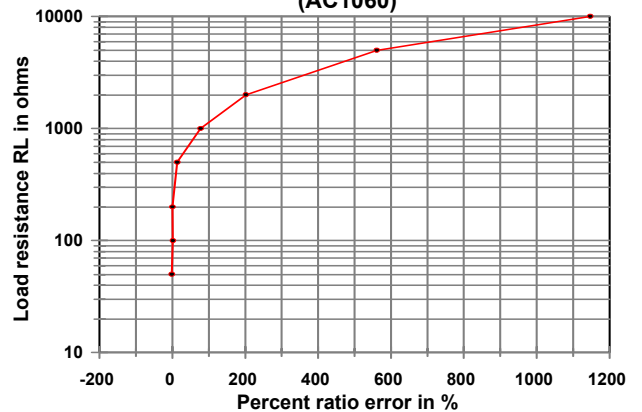


Environmental Specifications

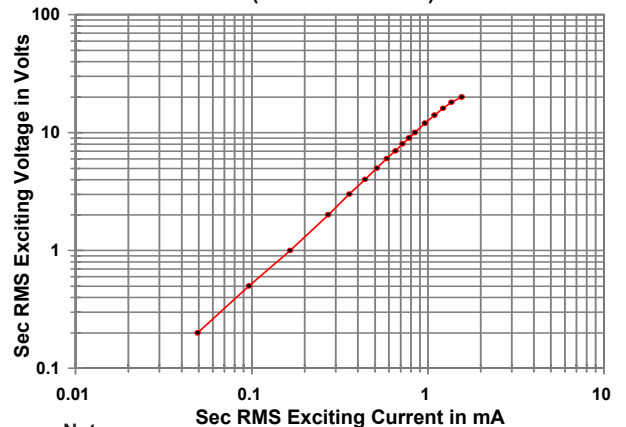
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

Electrical Specifications @ 20°C ambient	
Primary Current	60A nom., 200A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 60A for 100 ohm load	0.100 V/A
Volt per Amp Ratio at 6A for 100 ohm load	0.0984 V/A
DC Resistance at 20°C	24 ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

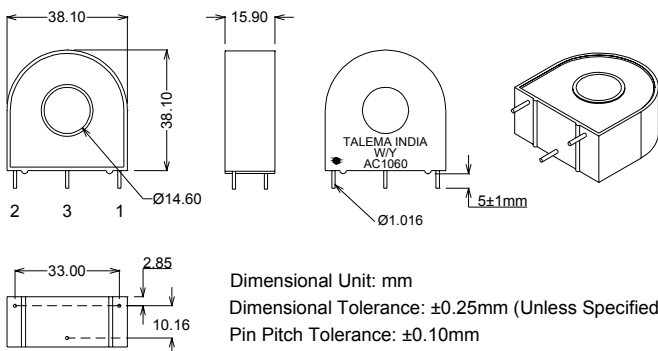
%RE vs RL at Rated primary current (AC1060)



Typical Excitation Curve (AC1060-AC1075)

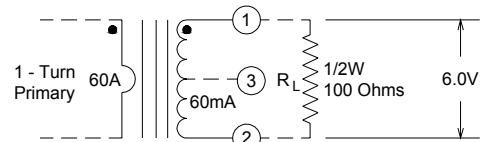


Mechanical Drawing



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1075 • 75 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

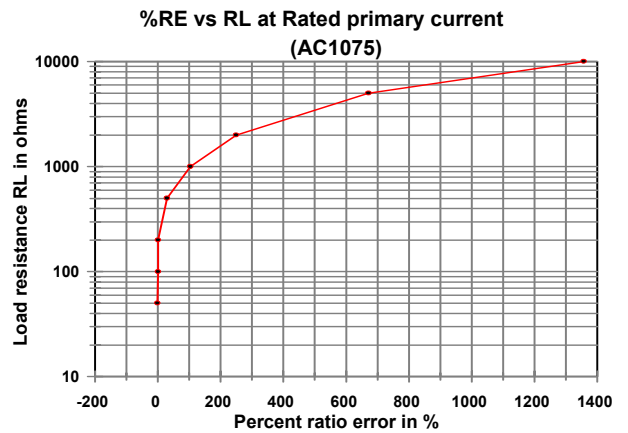
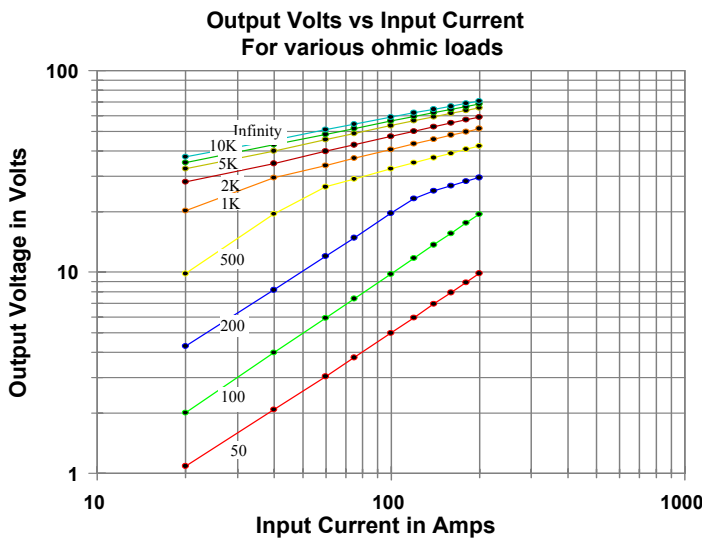
Features

- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

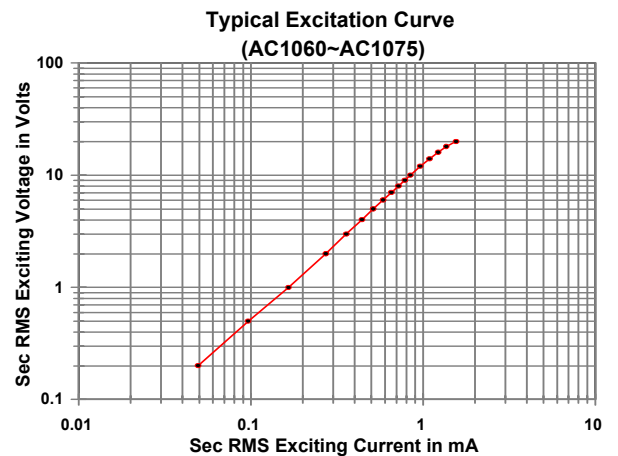
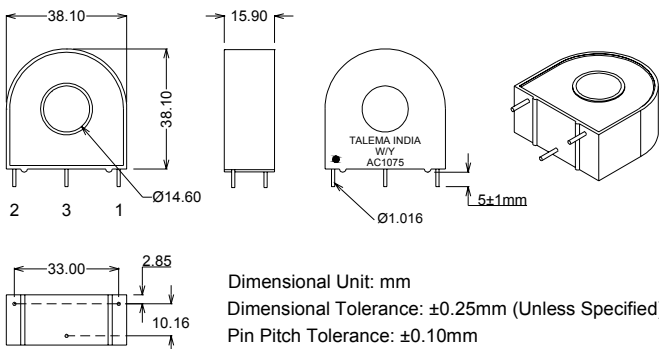


Electrical Specifications @ 20°C ambient	
Primary Current	75A nom., 200A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 75A for 100 ohm load	0.100 V/A
Volt per Amp Ratio at 7.5A for 100 ohm load	0.0984 V/A
DC Resistance at 20°C	24 ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

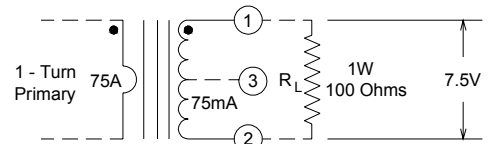


Mechanical Drawing



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1100 • 100 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

Features

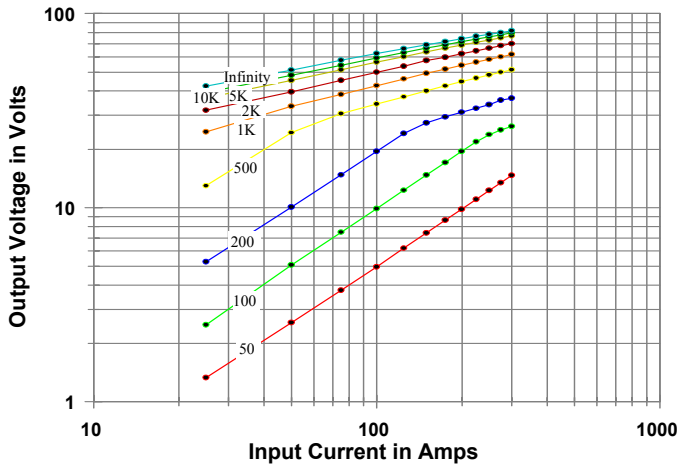
- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



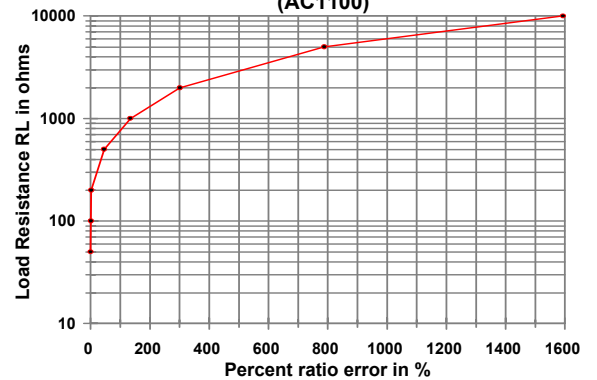
Electrical Specifications @ 20°C ambient	
Primary Current	100A nom., 250A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 100A for 100 Ohm load	0.100 V/A
Volt per Amp Ratio at 10A for 100 Ohm load	0.0986 V/A
DC Resistance at 20°C	21.3 Ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

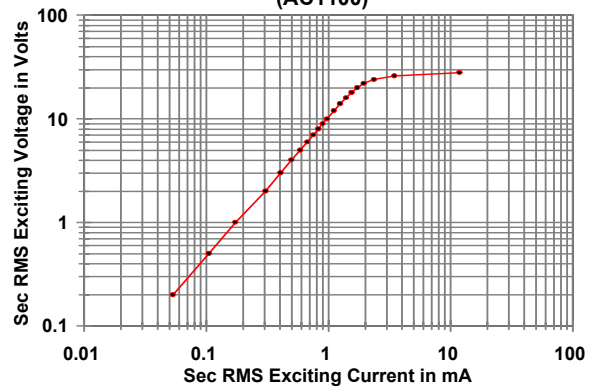
**Output Volts vs Input Current
For various ohmic loads**



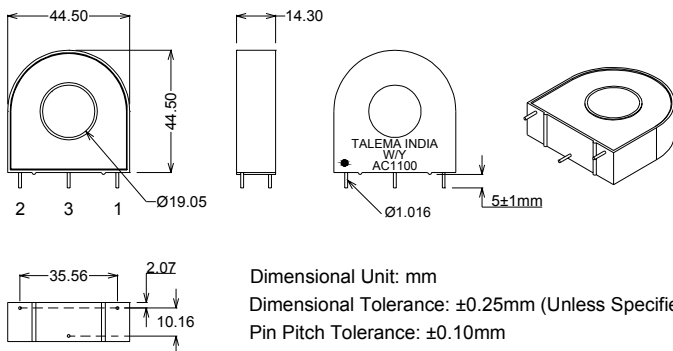
**%RE vs RL at Rated primary current
(AC1100)**



**Typical Excitation Curve
(AC1100)**

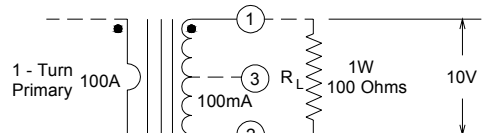


Mechanical Drawing



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1150 • 150 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

Features

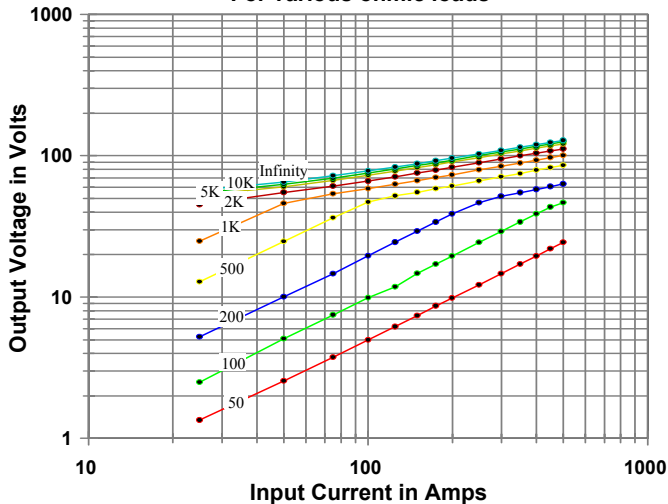
- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



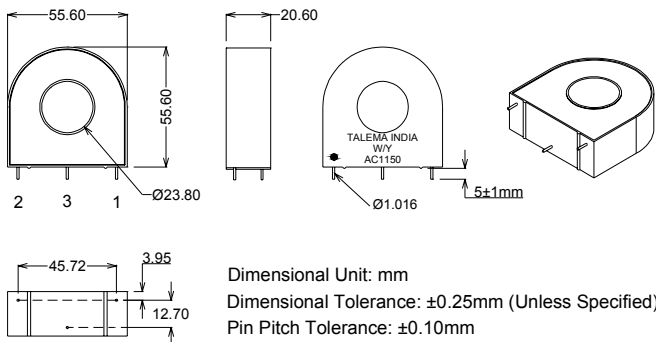
Electrical Specifications @ 20°C ambient	
Primary Current	150A nom., 500A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 150A for 100 Ohms load	0.100 V/A
Volt per Amp Ratio at 15A for 100 Ohms load	0.0990 V/A
DC Resistance at 20°C	11 Ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

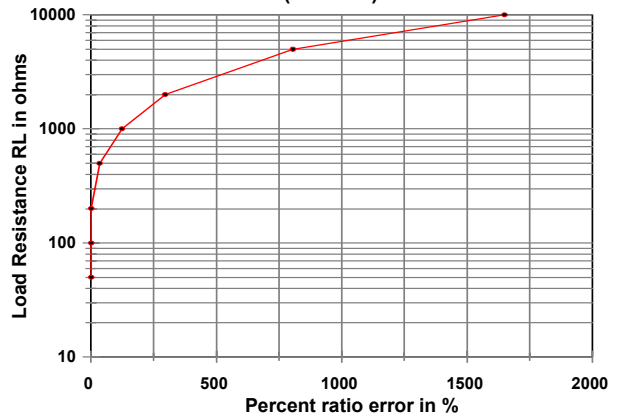
**Output Volts vs Input Current
For various ohmic loads**



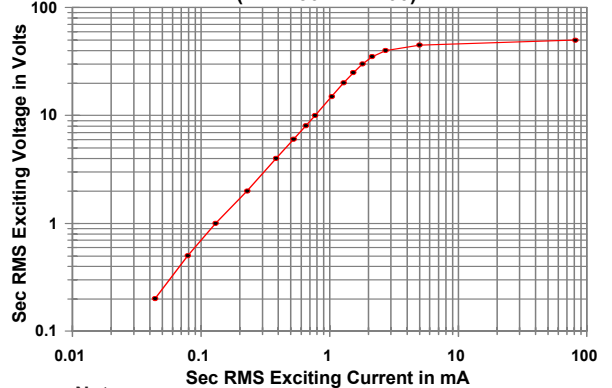
Mechanical Drawing



**%RE vs RL at Rated primary current
(AC1150)**

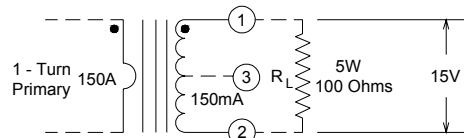


**Typical Excitation Curve
(AC1150-AC1200)**



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



AC1200 • 200 Amp Current Transformer

Low Cost 50/60Hz Current Transformers

Applications

- Sensing Overload Current
- Ground fault detection
- Metering
- Analog to Digital Circuits

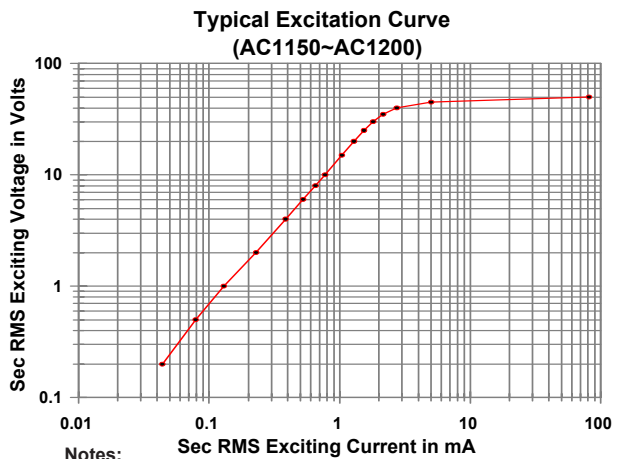
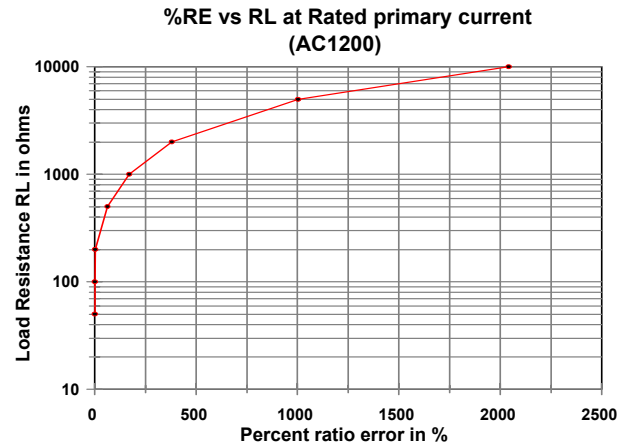
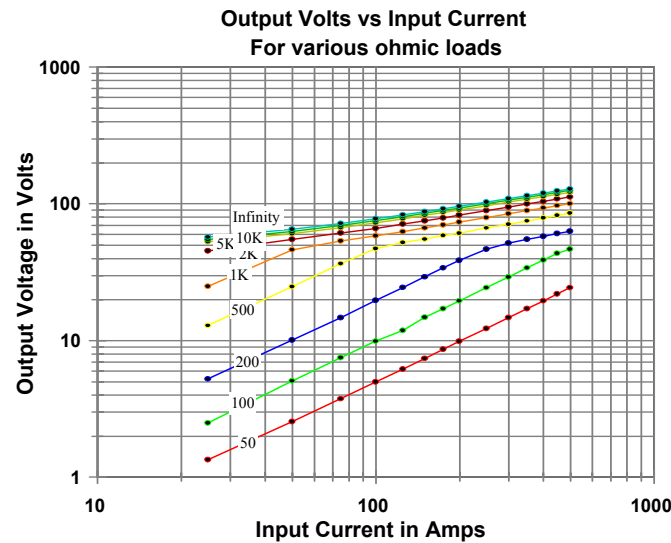
Features

- Competitive pricing due to high volume production
- Confirms to UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant

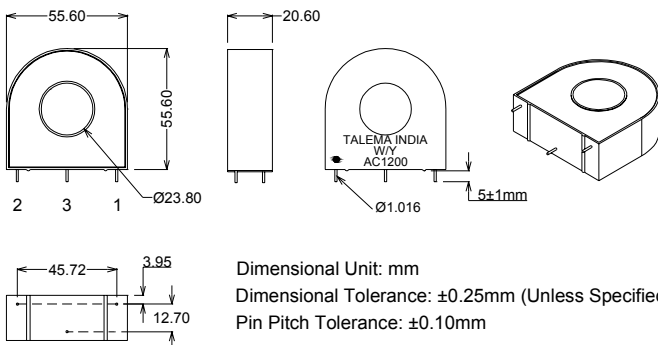


Electrical Specifications @ 20°C ambient	
Primary Current	200A nom., 500A max.
Turns Ratio	1000:1 nominal
Volt per Amp Ratio at 200A for 100 ohm load	0.100 V/A
Volt per Amp Ratio at 20A for 100 ohm load	0.0991 V/A
DC Resistance at 20°C	11 ohms
Dielectric Withstanding Voltage (Hi-pot)	4KVrms

Environmental Specifications	
Storage Temperature	-55° to +130°C
Insulation Resistance	100 megohms min.

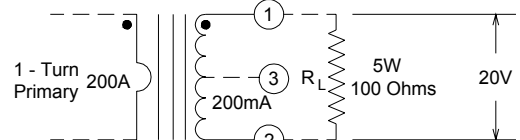


Mechanical Drawing



Notes:

- 1) Unless requested, the terminating resistor and the one-turn primary are not supplied
- 2) Pin 3: Normally for mechanical support only but will be used on center tapped designs



ACX Series • High Accuracy Current Transformers

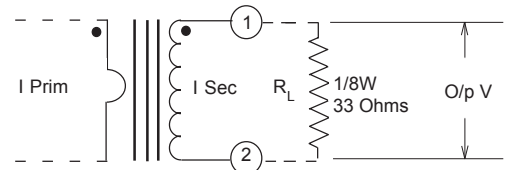
Features

- Primary current range 50-150A
 - 1% accuracy
 - Operating frequency 50/60Hz
 - Turns Ratio 2500 : 1
 - Rated burden resistance 33 Ohms
 - Dielectric withstand voltage 4KVrms
 - Operating temperature range -40 to +85°C
 - All Materials UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
 - Fully RoHS & REACH Compliant



Electrical Specifications @ 20°C		
Part No.	Current Rating in Amps	Winding Resistance in Ohms
ACX-1050	50	171
ACX-1075	75	227
ACX-1100	100	155
ACX-1150	150	135

Schematic



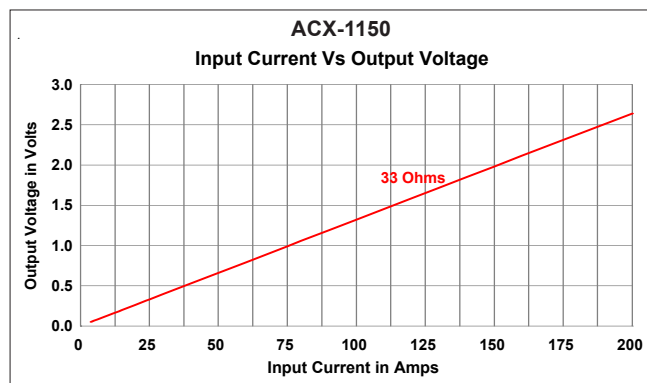
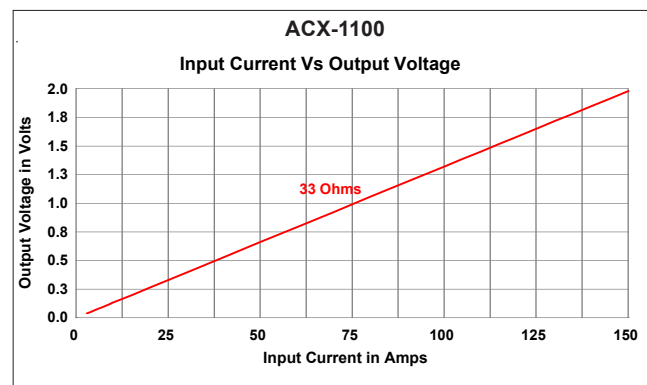
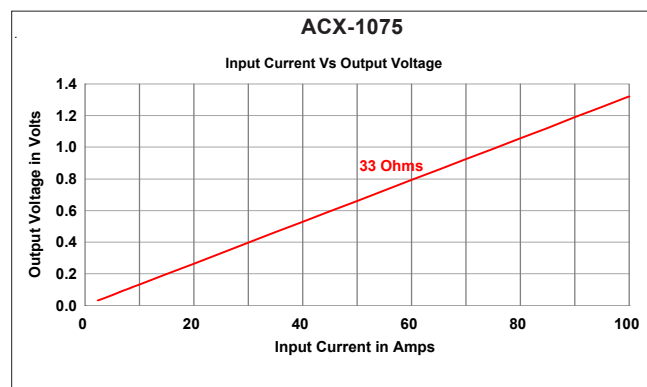
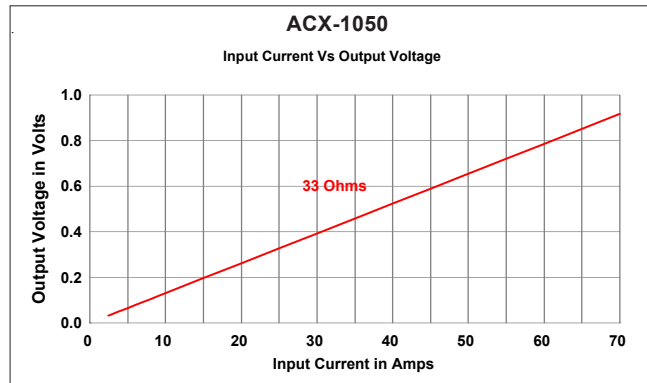
Mechanical Drawing

<h4 style="text-align: center;">ACX-1050</h4>	<h4 style="text-align: center;">ACX-1075</h4>
<h4 style="text-align: center;">ACX-1100</h4>	<h4 style="text-align: center;">ACX-1150</h4>

Notes:

- 1) Dimensional Unit: mm, Tolerance: ±0.25mm (Unless Specified)
Pin Pitch Tolerance: ±0.10mm
- 2) Pin #3 for Mechanical Support.

Response Curves



AP Series • Precise Current Transformer

Features

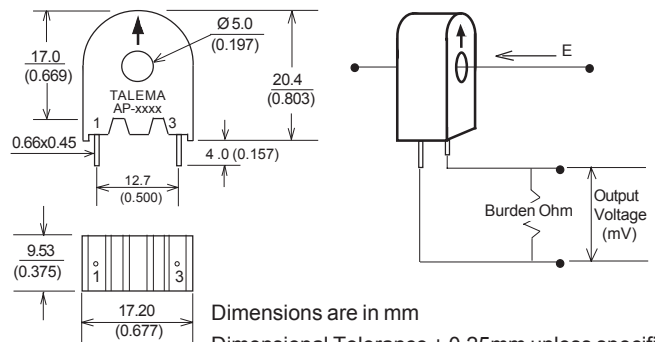
- Precision CT's in compact packages
- Class 0.2 accuracy typical
- Excellent linearity over rated current range
- 2.5KVrms isolation
- Operating temperature range -40 to +85°C
- All materials UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



Mechanical Drawing

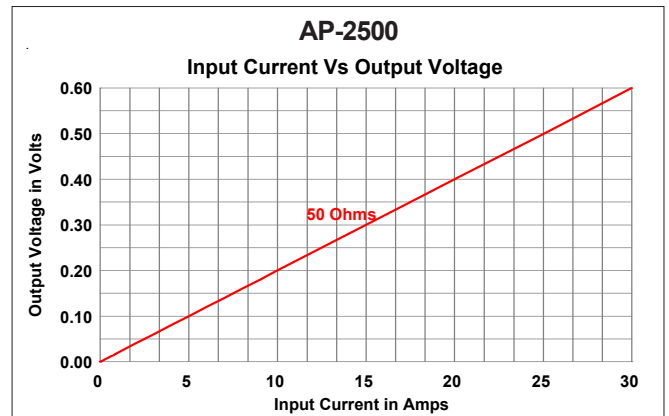
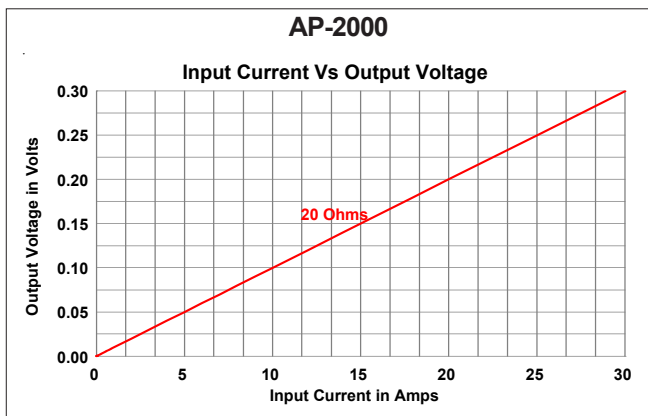
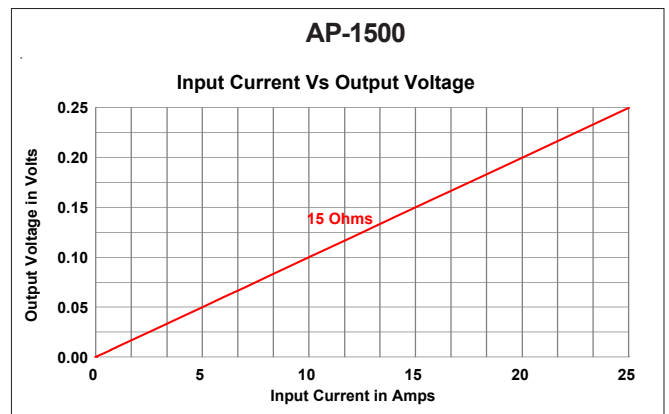
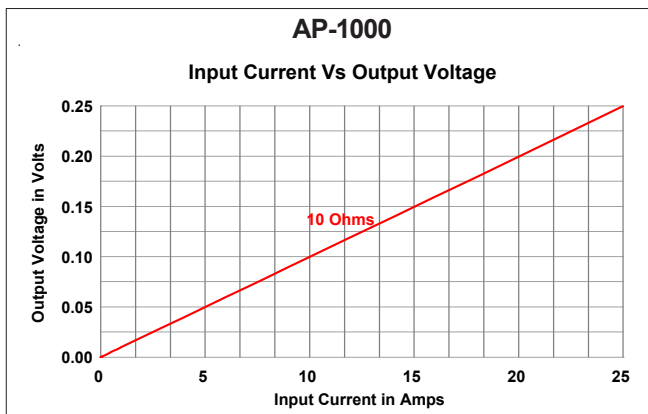
Electrical Specifications at 20°C

Part No.	Turns	Burden Ohms	Rated Current in Amps	Max. Current in Amps	Resistance in Ohms Max.
AP-1000	1000	10	10	20	70
AP-1500	1500	15	10	20	120
AP-2000	2000	20	15	25	235
AP-2500	2500	50	15	25	330



Dimensions are in mm
Dimensional Tolerance $\pm 0.25\text{mm}$ unless specified
Pin Pitch Tolerance: $\pm 0.1\text{mm}$

Output Response at Rated Burden



AQ Series • High Accuracy - High Current - High O/P Voltage Current Transformers

Features

- High Accuracy, High Current, High Output Voltage Current Transformers
- 0.1-0.2% Accuracy Typical
- Excellent Linearity over rated current range
- 2.5kV Isolation
- Frequency 50-60Hz
- All materials UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



Applications:

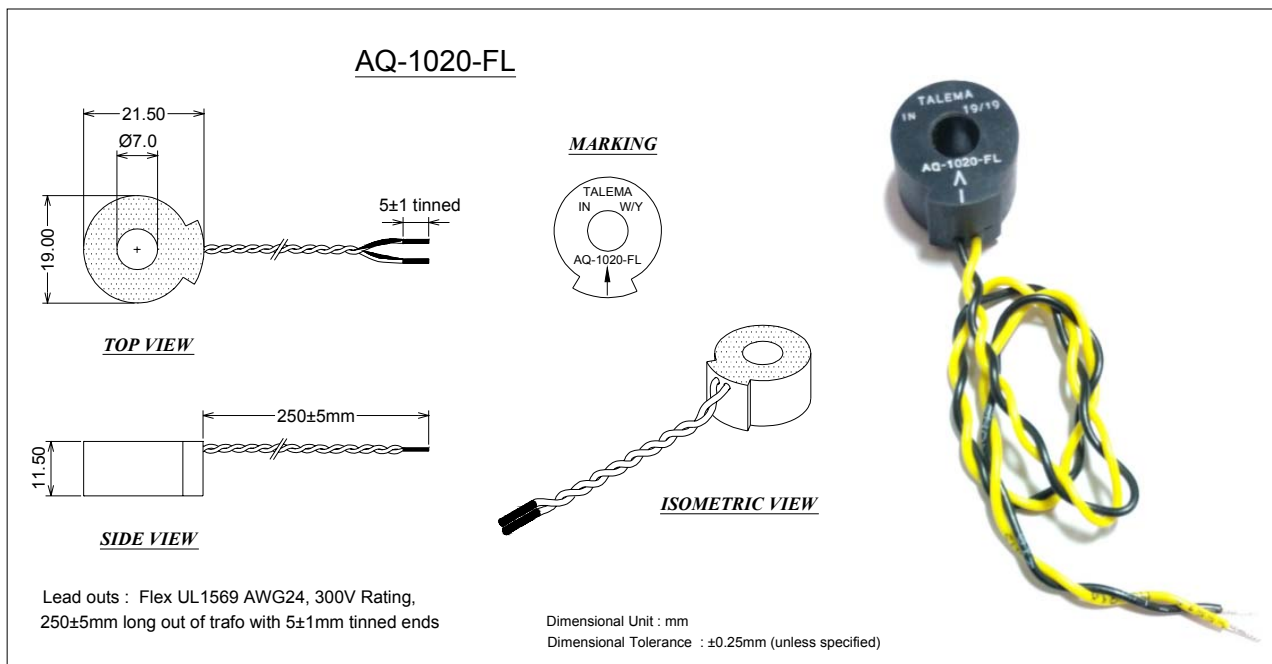
- Instrumentation
- Energy Meters
- EV Charging



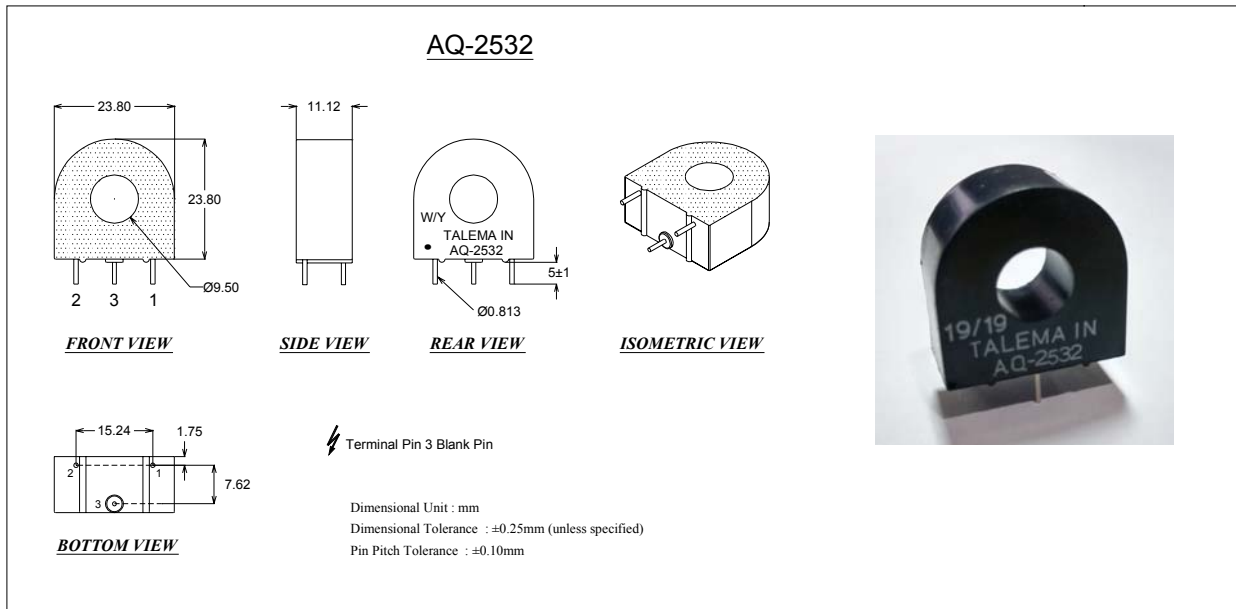
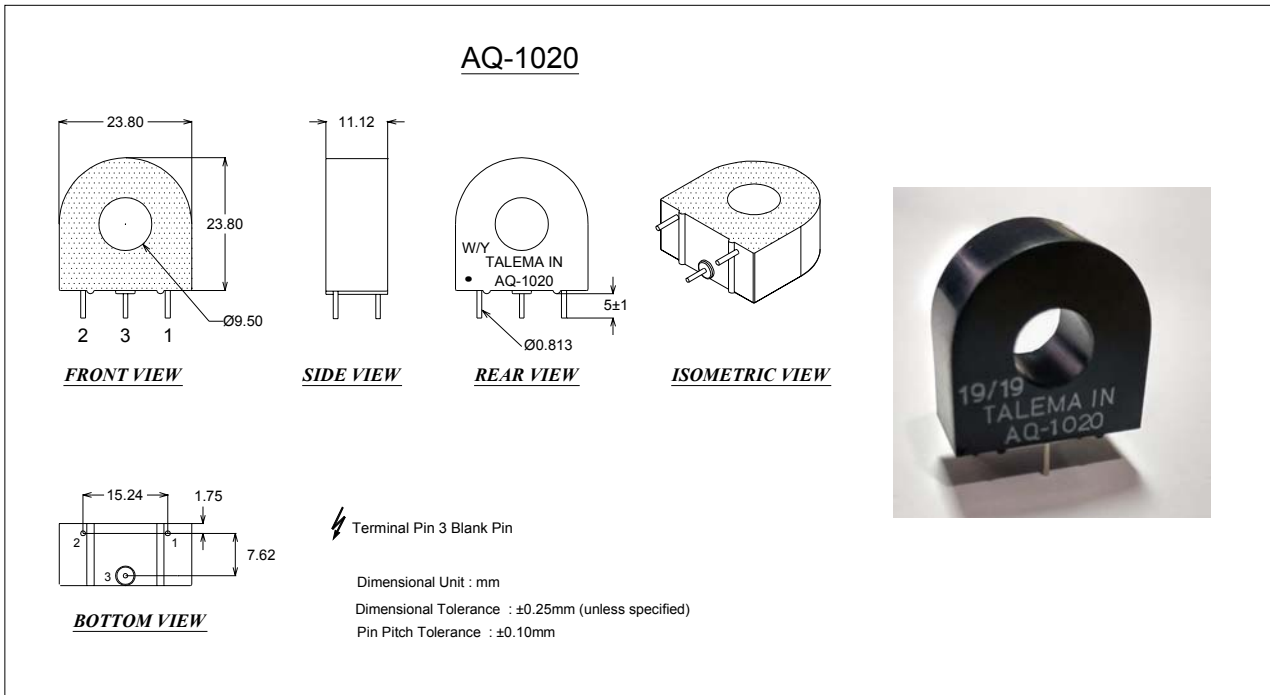
Electrical Specifications at 20°C

Part Number	Rated Current (Amps)	Turns	Burden Resistance (Ohms)	Output Voltage (Volts)	Max. Current (Amps)	DCR (Ohms)	Mounting
AQ-1020-FL	20	1000	15	0.30	40	78	Flying Leads
AQ-1020	20	1000	15	0.30	40	24	PCB
AQ-2532	32	2500	25	0.32	50	130	PCB
AQ-2563	63	2500	33	0.83	75	85	PCB
AQ-25125	125	2500	50	2.50	150	95	PCB

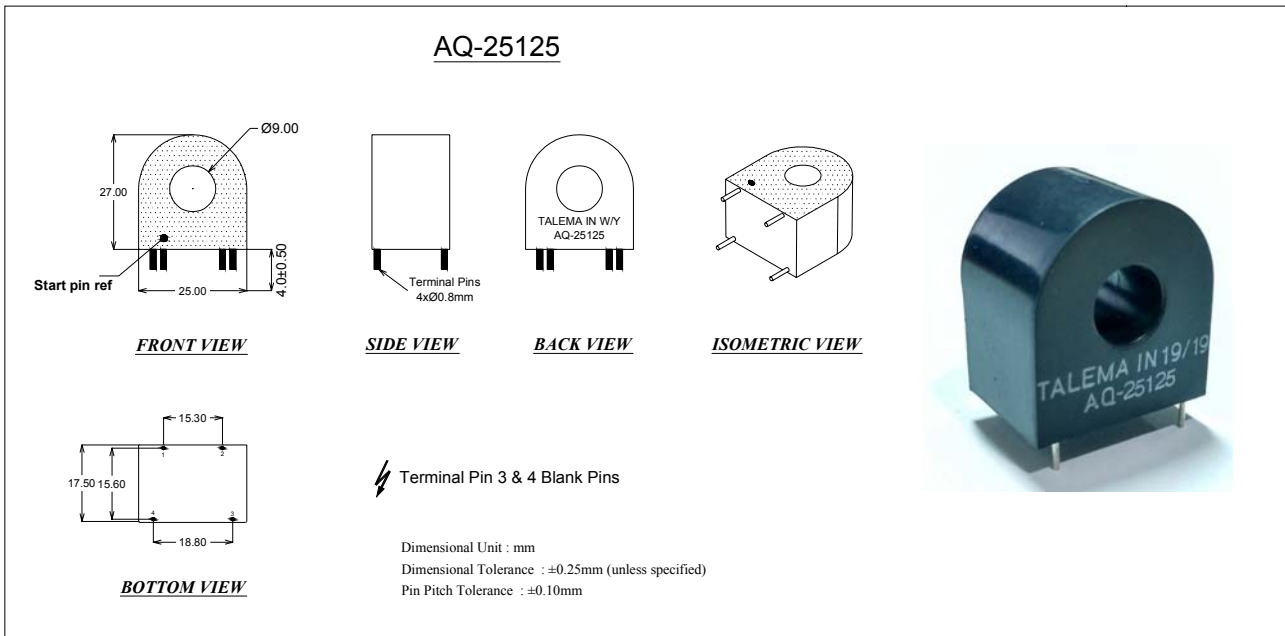
Mechanical Drawing



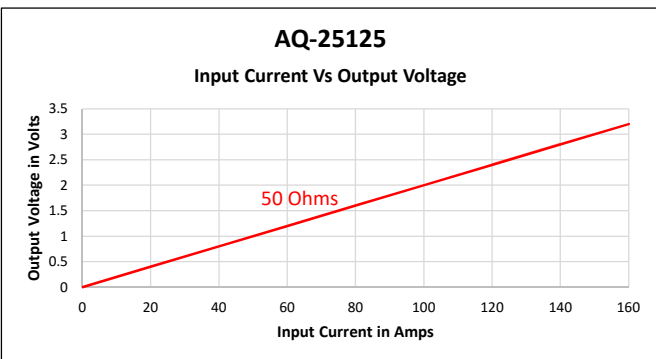
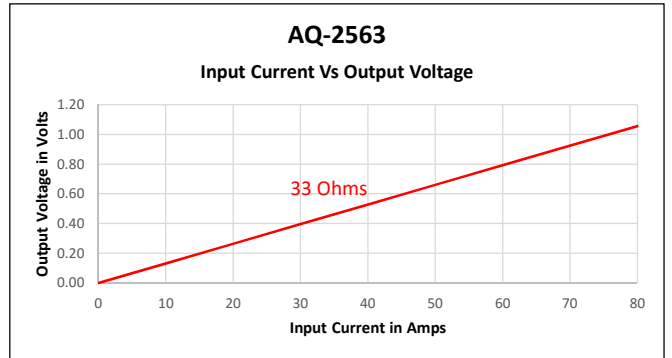
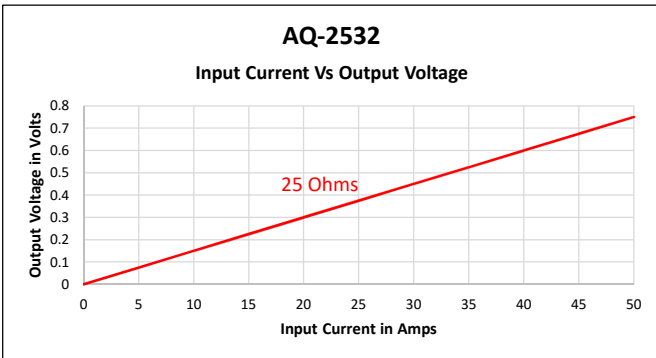
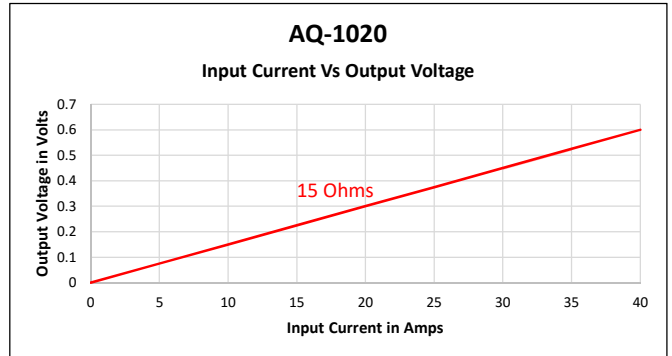
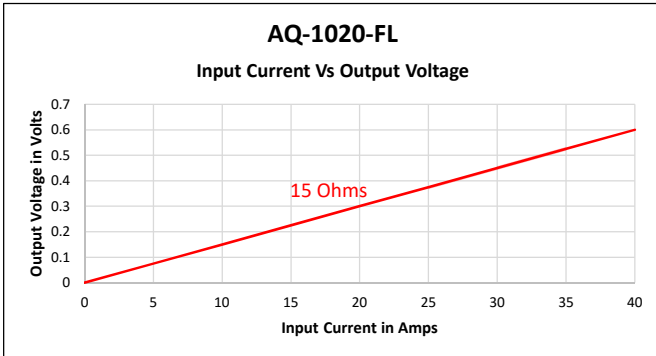
Mechanical Drawing



Mechanical Drawing



Output Response at Rated Burden



AX Series • 50/60Hz Current Transformers

Features

- High output voltage in small package
- Good linearity over current range
- 2.5KV isolation
- High saturation current
- Operating temperature range: -40°C to +85°C
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



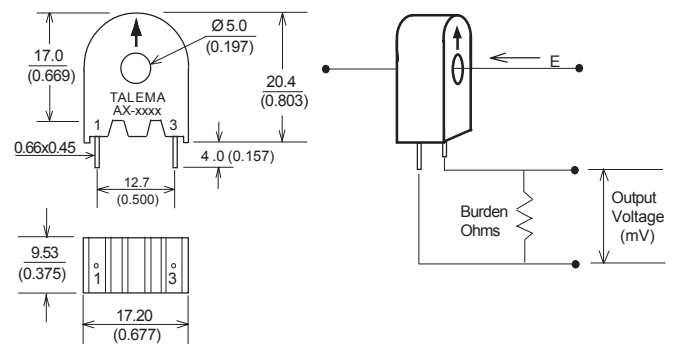
Applications

- Power Monitoring • Current Measurement • Instrumentation

Electrical Specifications at 20°C

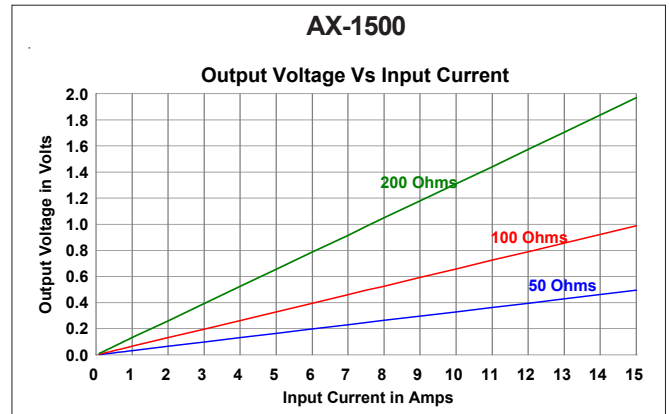
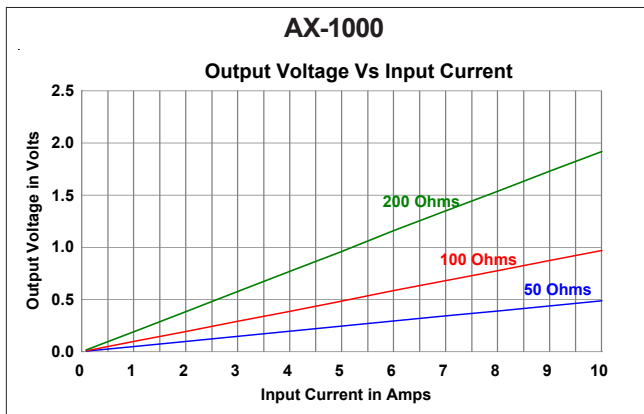
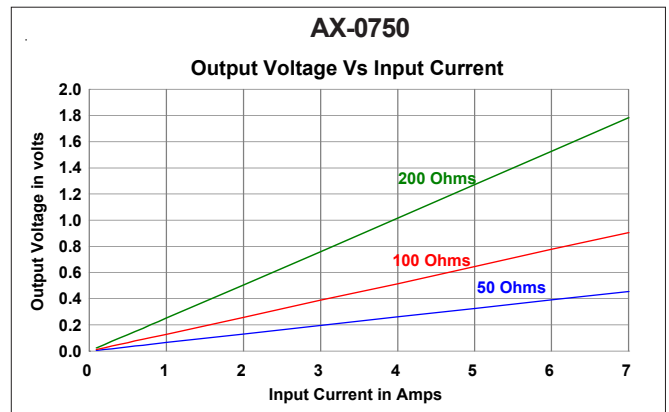
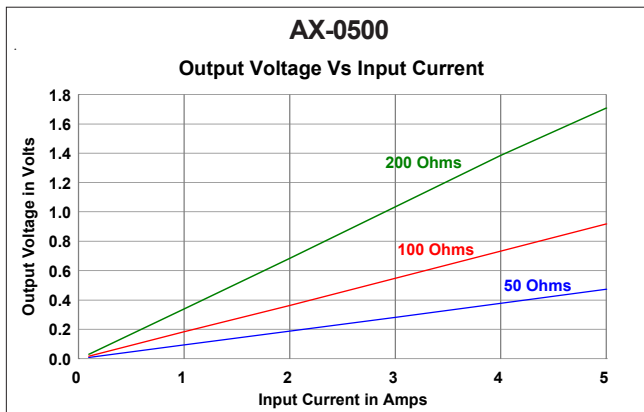
Part No.	Turns	Current Rating in A	Winding Resistance in Ohms
AX-0500	500	5	32
AX-0750	750	7.5	55
AX-1000	1000	10.0	93
AX-1500	1500	15.0	140

Mechanical Dimension

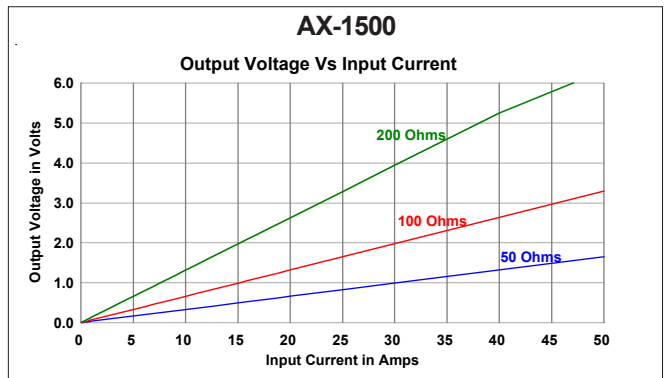
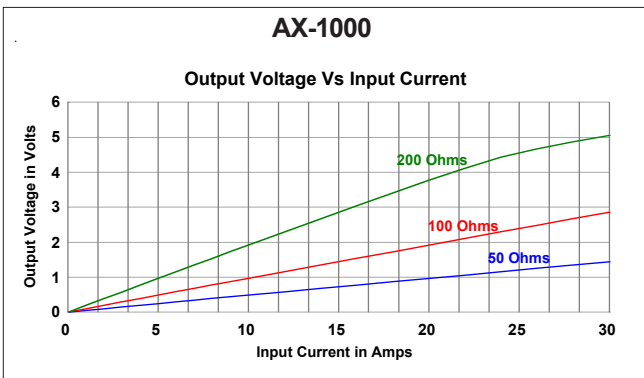
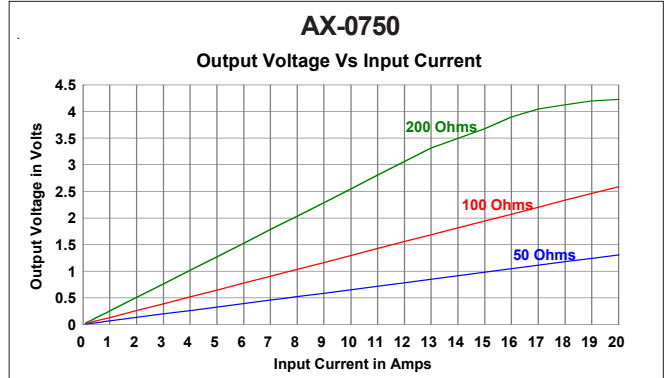
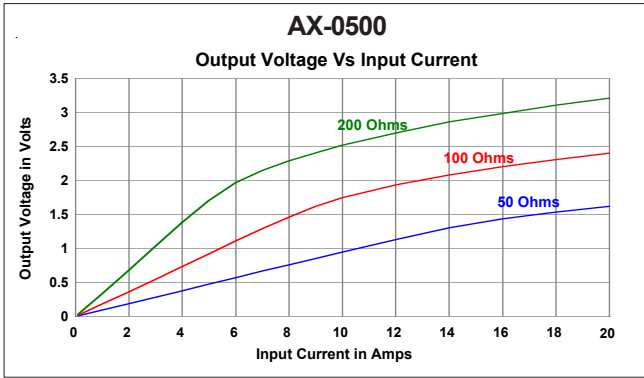


Dimensions are in mm. General Tolerance $\pm 0.25\text{mm}$ unless specified.
Pin Pitch Tolerance: $\pm 0.1\text{mm}$

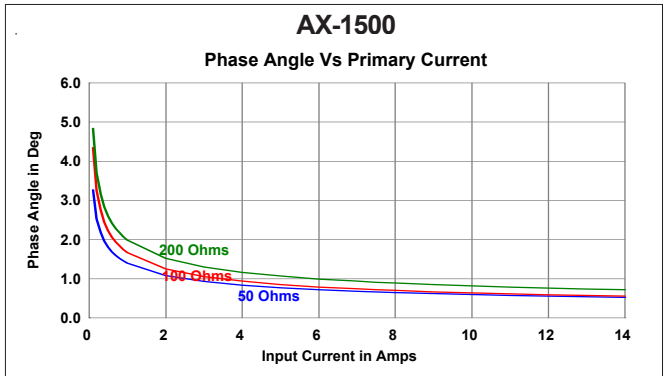
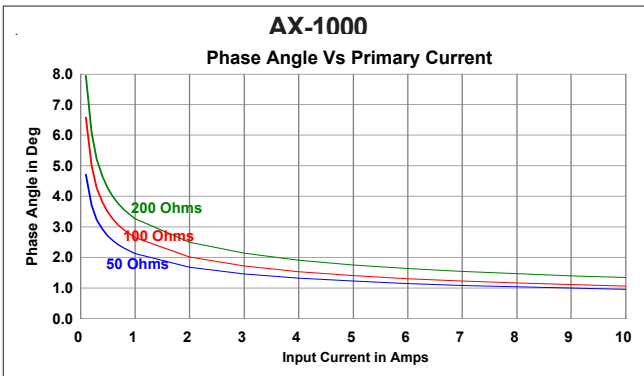
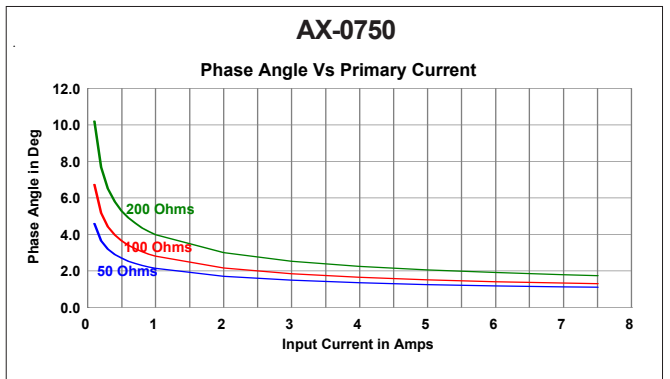
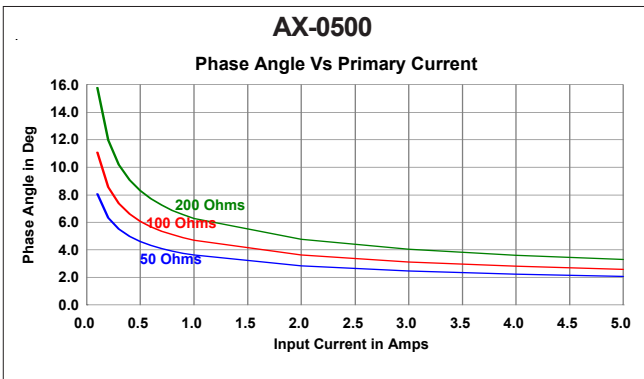
Output Voltage Vs Input Current



Saturation Current Response



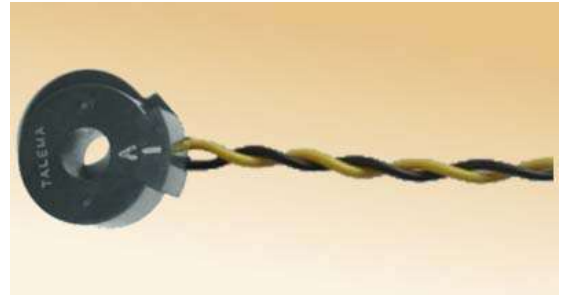
Phase Angle Vs Primary Current



AZ Series • Flying Lead Current Transformers

Features

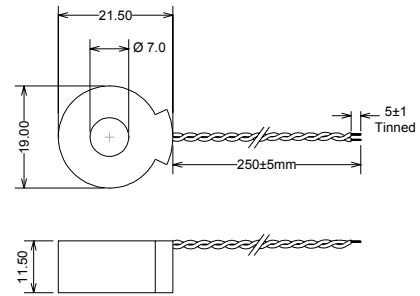
- Very high output voltage & linearity in small size
- Integral flying leads for ease of installation
- Large center-hole allows 6.3mm tabs
- Dielectric withstand voltage 4KVrms
- Operating temperature Range -40°C to +85°C
- All materials UL94V-0
- Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility
- Fully RoHS & REACH Compliant



Electrical Specifications at 20°C

Parameter	AZ-0500	AZ-0750	AZ-1000
Operating Frequency in Hz	50/60	50/60	50/60
Maximum Primary Current in Amps	25	40	50
Turns Ratio Nominal	500:1	750:1	1000:1
DC Resistance in Ohms Nominal	18	35	72
Rated Burden Resistance in Ohms	33	33	33

Mechanical Drawing

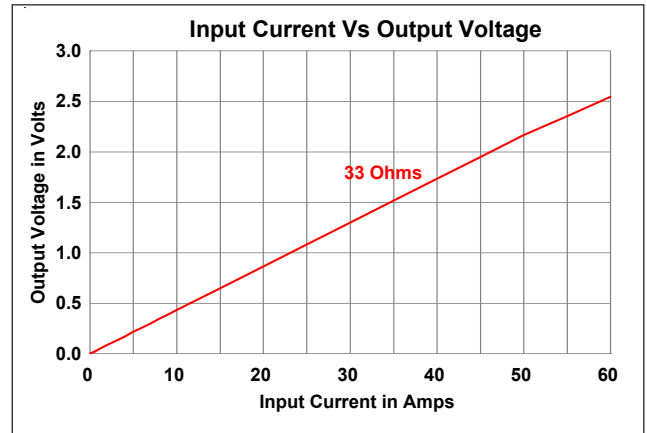
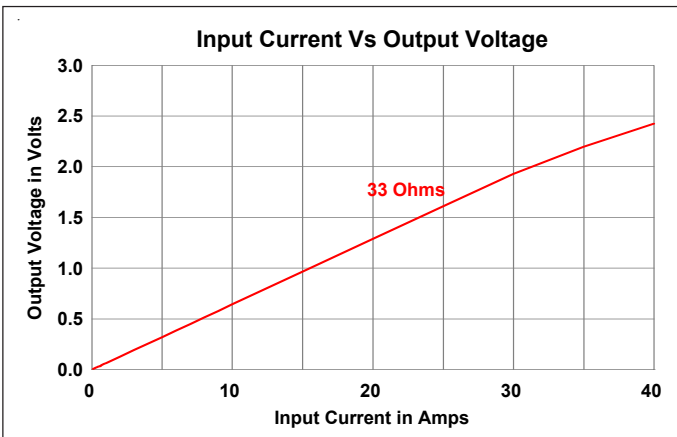


Lead outs: Flex UL1569 AWG24, 300V Rating, 250±5mm long out of trafo with 5mm tinned ends

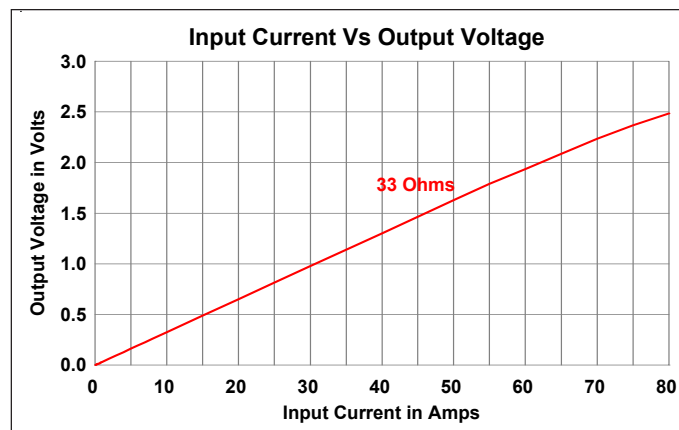
AZ-0500

Response Curve

AZ-0750



AZ-1000



FSD RANGE • 5A Tape Wound Current Transformers
Features

FSD Range of high quality toroidal current transformers are suitable for measuring AC current from 60A-2500A with 5A secondary windings. This range of tape wound transformer offers a cost effective solution where as conventional bus bar mount types are not suitable. FSD Range is rugged construction, unaffected by vibration and come with 3Metres long flying leads for versatility of mounting location, simple & effective termination. Cost-effective solution without compromising on Quality. Manufactured in an ISO 9001:2015 and ISO 14001:2015 certified Talema facility. Fully RoHS & REACH Compliant.


Specification

- Overload 1.2times rated primary current
- Isolation 3KV (50Hz for 1 Minute)
- Lead length: 3 Metres
- Accuracy class 3
- Rated system voltage 0.72KV
- Insulation class E
- Operating temperature -20°C to +70°C
- Confirms to IEC441-1 & EN60044-1
- Mounting: None supplied (Normally fixed with cable ties)

Applications

- Current Monitoring Generators
- Switchgear
- Distribution
- Control Panels



Part Number	Ratio	VA	Approx. Dimension in "mm"			Approx. Weight in Grams	** RS Stock Code	Part Number for RS Components
			OD	ID	HT			
93526 P1	60/5	3.5	70	32	36	600	751-1614	93481 P1
93527 P1	100/5	3.5	70	32	20	330	751-1617	93482 P1
93528 P1	150/5	5	70	32	20	340	751-1611	93483 P1
93529 P1	200/5	5	62	37	20	170	751-1620	93484 P1
93530 P1	250/5	5	62	37	20	175	751-1623	93485 P1
93531 P1	300/5	5	62	37	20	185	751-1627	93486 P1
93532 P1	400/5	5	80	54	20	260	751-1636	93487 P1
93533 P1	500/5	5	80	54	20	270	751-1639	93488 P1
93534 P1	600/5	5	80	54	20	285	751-1633	93489 P1
93535 P1	800/5	5	102	74	20	415	751-1642	93490 P1
93536 P1	1000/5	5	102	74	20	445	751-1645	93491 P1
93537 P1	1600/5	5	120	92	20	415	N/A	N/A
93538 P1	2000/5	5	120	92	20	460	N/A	N/A
93539 P1	2500/5	5	120	92	20	515	N/A	N/A

** Up to 1000/5A available at RS Components from June 2012

Regional Locations - Design, Manufacturing, Sales & Marketing
Talema Group Regional Offices
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(Sales & Marketing)

Talema Group, LLC
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Germany
(Design, Sales & Marketing)

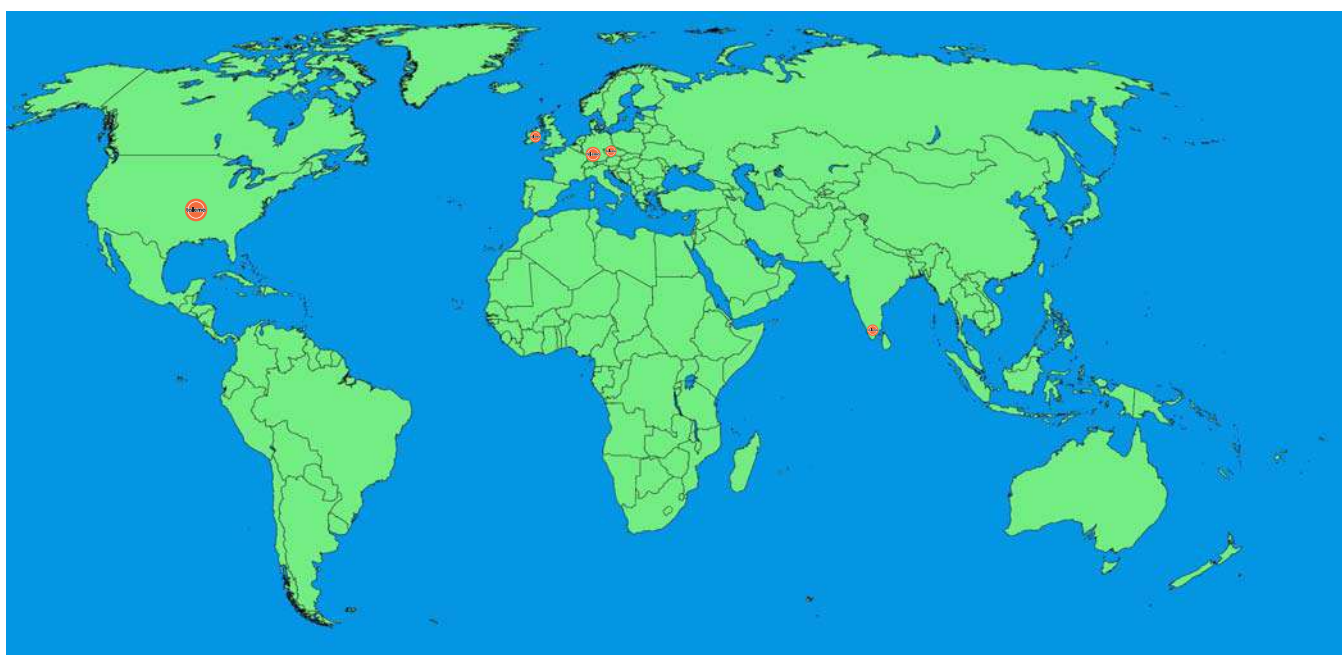
Talema Elektronik GmbH
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 Web: www.talema.com

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 Fax: +353 (0) 74 95 48139
 E-Mail: info@nuvotem.com
 Web: www.nuvotem.com

Czech Republic
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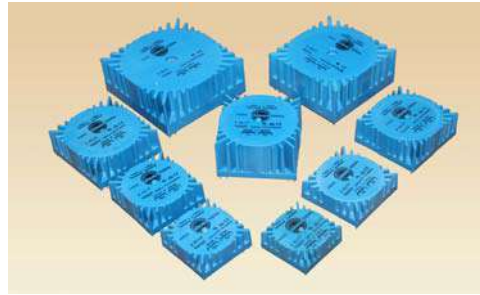
NT Magnetics s.r.o.
 Chebská 27
 322 00 Plzeň
 Tel: +420 377 - 338 351
 Fax: +420 377 - 338 350
 E-Mail: talema@talema.cz
 Web: www.ntmagnetics.cz

Locations of Talema Group Regional Offices


Summary TOTAL PROGRAM

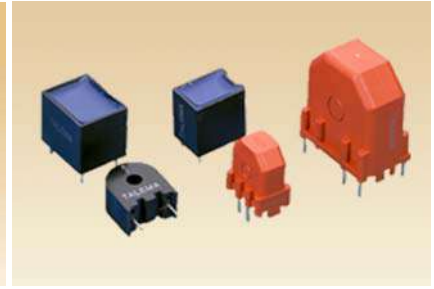
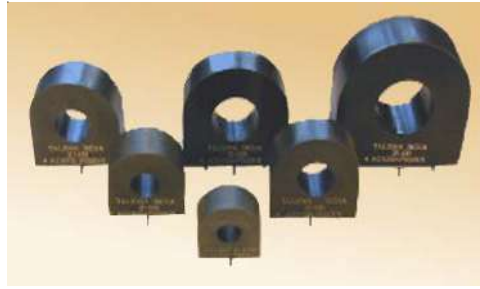
SECTION 1

- TOROIDAL 50/60Hz TRANSFORMERS,
TOROIDAL PCB TRANSFORMERS &
MEDICAL GRADE ISOLATION TRANSFORMERS



SECTION 2

- CURRENT SENSE TRANSFORMERS &
INDUCTORS



SECTION 3

- CHOKES, INDUCTORS AND TRANSFORMERS
FOR POWER APPLICATIONS



SECTION 4

- Transformers & Inductors FOR
SMPS MAGNETICS REQUIREMENTS



SECTION 5

- COMPONENTS FOR TELECOMMUNICATIONS
AND DATA LINE TECHNOLOGY

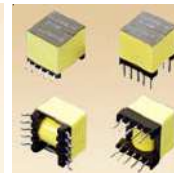
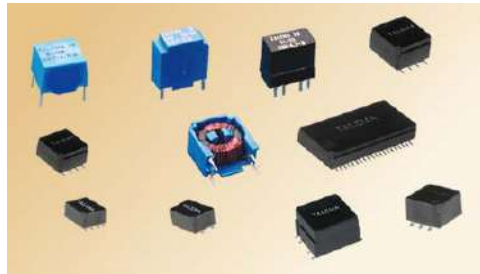
SECTION 6

- CURRENT COMPENSATED EMI NOISE
SUPPRESSION CHOKES



SECTION 7

- LAN MAGNETIC COMPONENTS FOR
ETHERNET APPLICATIONS



SECTION 8

- TI/E1/CEPT-PRI - T3/DS3/E3/STS-1 FOR
TELECOMMUNICATION PRODUCTS

