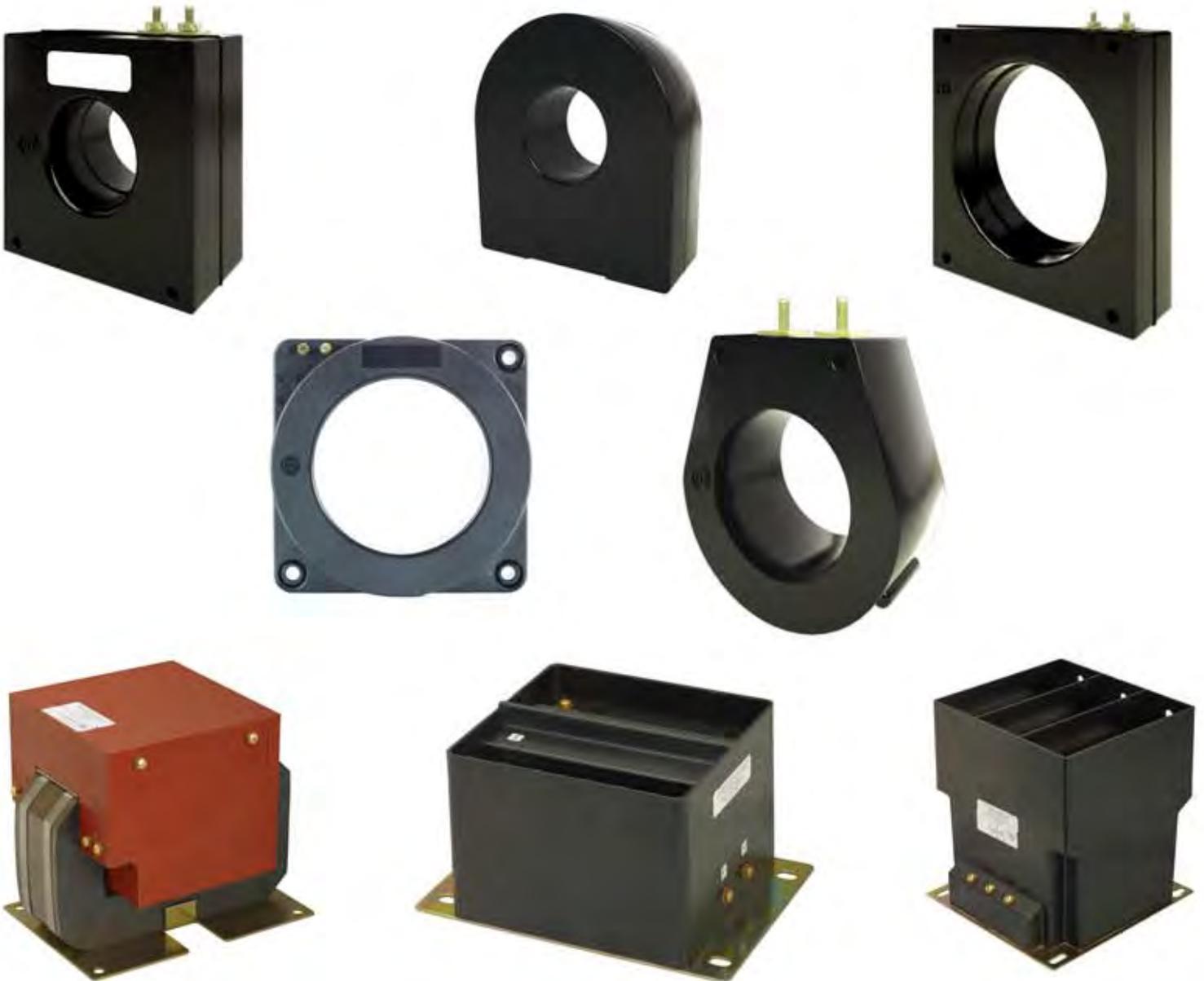


MAGNETICS

CATALOG



M O D E L I N D E X

1 - 600V Current Transformers
Non-ANSI Rated Window Type

2 - 600V Current Transformers
ANSI Rated Window Type

3 - 600V Voltage Transformers

4 - 600V Current Transformers
ANSI Rated Bushing Type

5 - 720V Current Transformers
IEC Rated Busbar Type

6 - 720V Voltage Transformers
IEC Rated

7 - MV Voltage Transformers

8 - MV Control Power Transformers

9 - MV Current Transformers

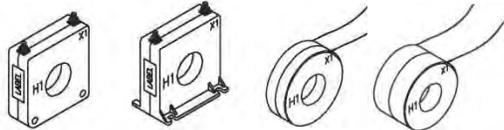
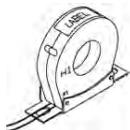
10 - Current Transformer Kits

Technical Data

CURRENT TRANSFORMERS

For Metering and Instrumentation

600V Current Transformers
Non-ANSI Rated Window Type

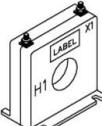
WINDOW SIZES	Page 1-3			
0.56"				
MODEL 13	13			
WINDOW SIZES	Page 1-4			
0.64"				
MODEL 1A	1A			
WINDOW SIZES	Page 1-5			
0.94"				
MODEL 15	15 SFT			
WINDOW SIZES	Page 1-6			
1.00", 1.05", 1.13"				
MODEL 2	2SHT	2SFT	2RL	2DRL
WINDOW SIZES	Page 1-8			
0.69"				
MODEL 3P2				
WINDOW SIZES	Page 1-10			
1.25"				
MODEL 58RBL	58RBL			
WINDOW SIZES	Page 1-11			
1.56"				
MODEL 5	5SHT	5SFT	5RL	
WINDOW SIZES	Page 1-14			
1.56"				
MODEL 5A	5ASHT	5ASFT	5ARL	

600V Current Transformers Non-ANSI Rated Window Type

CURRENT TRANSFORMERS

For Metering and Instrumentation

600V Current Transformers
Non-ANSI Rated Window Type

WINDOW SIZES 1.56"				Page 1-16	
MODEL 5DRL	5DRL				
WINDOW SIZES 2.06"				Page 1-17	
MODEL 6A	6ASHT	6ASFT	6ARL		
WINDOW SIZES 1.56"				Page 1-19	
MODEL 10	10SFT				
WINDOW SIZES 2.06"				Page 1-21	
MODEL 56	56SHT	56SFT	56RL		
WINDOW SIZES 2.06"				Page 1-23	
MODEL 6	6SHT	6SFT	6RL		
WINDOW SIZES 2.50"				Page 1-25	
MODEL 7	7SHT	7SFT	7RL		
WINDOW SIZES 2.06"					Page 1-29
MODEL 76	76SHT	76SFT	76RL	76RT	

600V Current Transformers Non-ANSI Rated Window Type



Current Transformer

Model 13
rev 03182021

CERTIFICATIONS:



Model	13
Window Size	0.56
Width	1.34
Height	1.80
Depth	0.52

APPLICATION:

For current to voltage conversion by use of a load resistor

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

0.56"

APPROXIMATE WEIGHT:

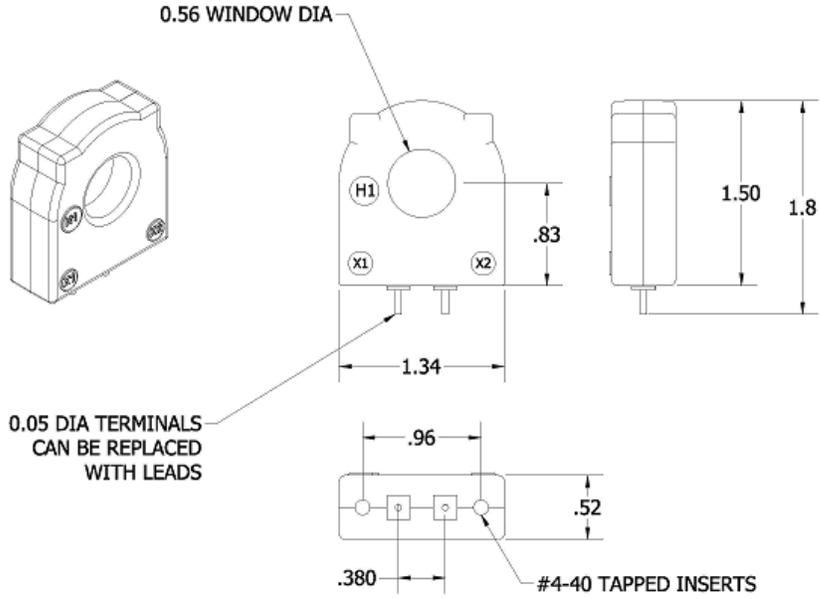
0.1 – 0.2 lbs.

CONTINUOUS THERMAL CURRENT RATING FACTOR:

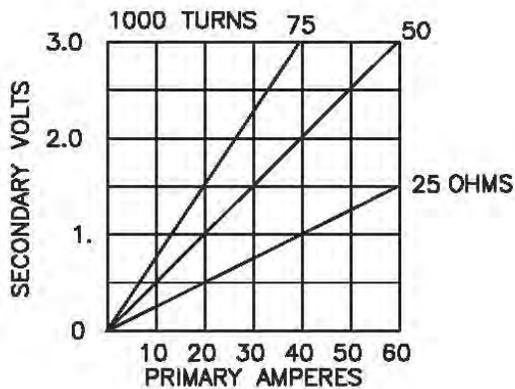
200A at 30°c amb., 120A at 55°c amb.

CONNECTIONS:

This lightweight, miniature current transformer is suitable for direct mounting on printed circuit boards. Model 13 is provided with standard hexagon nuts to secure the transformer to the board, so that the assembly can withstand vibration and shock while maintaining electrical integrity. The graph below illustrates the voltage capacity and over the ranges shown, will maintain a +/-3% linearity.



TYPICAL PERFORMANCE CHARACTERISTICS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 1A

APPLICATION:

With ammeters, energy management systems and instrumentation

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

0.64"

APPROXIMATE WEIGHT:

0.42 lbs.

CONNECTIONS:

-Flexible Leads are UL 1015 105°C, CSA approved

#16AWG, 24" long

-Non-standard length to be specified

-1 Amp, and other secondary currents available

upon request



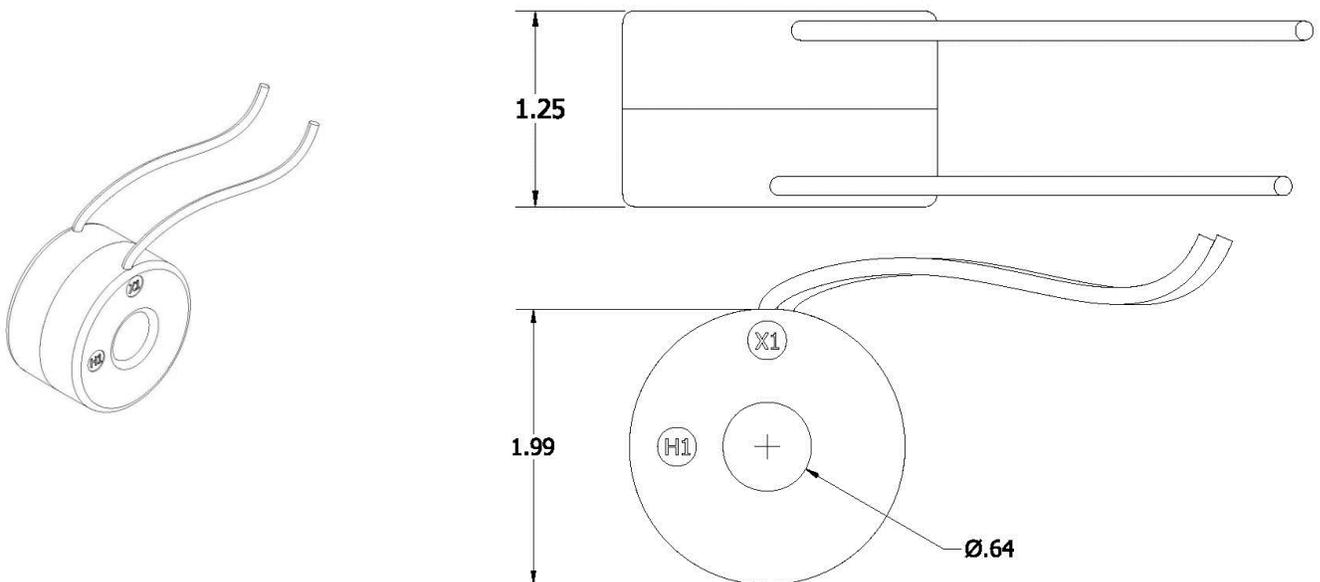
Model	1A
Window Size	0.64
Width	1.99
Height	1.99
Depth	1.25

CERTIFICATIONS:



MODEL 1A
Window Diameter 0.64"
Approximate weight: 0.42 lbs.

CATALOG NUMBER	CURRENT RATIO	ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ
1A-500	50:5	+ 2%	1
1A-600	60:5	+ 1%	2
1A-750	75:5	+ 1%	2
1A-800	80:5	+ 1%	2
1A-101	100:5	+ 1%	2.5
1A-121	120:5	+ 1%	3
1A-1250	125:5	+ 1%	3
1A-151	150:5	+ 1%	4
1A-201	200:5	+ 1%	5
1A-251	250:5	+ 1%	7.5



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Current Transformer

Model 15

CERTIFICATIONS:



APPLICATION:

With ammeters, energy management systems and instrumentation

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

0.94"

APPROXIMATE WEIGHT:

0.9 lbs.

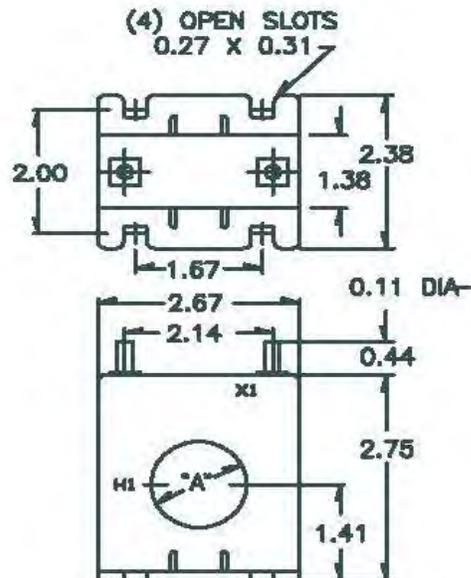
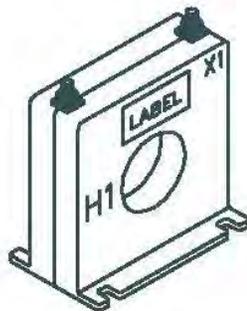
CONNECTIONS:

- Non-standard lead length can be specified
- Flexible leads are UL 1015 105° C CSA approved, #16 AWG, 24" long
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut

Model	15SFT
Window Size	0.94
Width	2.67
Height	2.75
Depth	1.38

MODEL 15
Window Diameter 0.94"
Approximate weight: 0.9 lbs.

CATALOG NUMBER	CURRENT RATIO	ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ
15SFT-500	50:5	± 1.5%	2
15SFT-600	60:5	± 1.5%	2
15SFT-750	75:5	± 1.5%	2.5
15SFT-800	80:5	± 1.0%	2
15SFT-101	100:5	± 1.0%	2
15SFT-121	120:5	± 1.0%	3
15SFT-1250	125:5	± 1.0%	4
15SFT-151	150:5	± 1.0%	5
15SFT-1750	175:5	± 1.0%	10
15SFT-201	200:5	± 1.0%	12.5





Current Transformer

Model 2

APPLICATION:

Generally for Ammeter use only

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW:

1.00", 1.05", 1.13"

APPROXIMATE WEIGHT:

0.5 lbs.

CONNECTIONS:

- Flexible Leads are UL 1015 105°C, CSA approved #16 AWG, 24" long
- Non-standard length to be specified
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- SHT and SFT case styles also available as SHL or SFL with Leads
- Mounting bracket for Model 2SHT part 59-0217



2SHT



2SFT



2RL



2DRL

CERTIFICATIONS:



E228202



223647



Model	2SHT	2SFT	2RL	2DRL
Window Size	1.13	1.13	1.05	1.00
Width	2.40	2.40	2.46	2.42
Height	2.71	2.68	2.46	2.42
Depth	0.95	2.00	1.05	1.75

MODEL 2

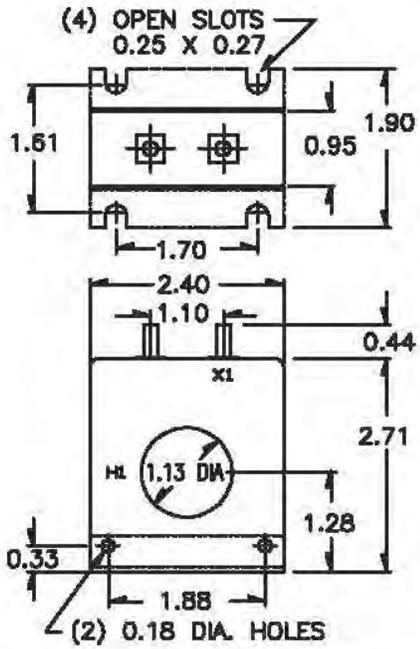
Window Diameter 1.00", 1.05", 1.13"

Approximate weight: 0.5 lbs.

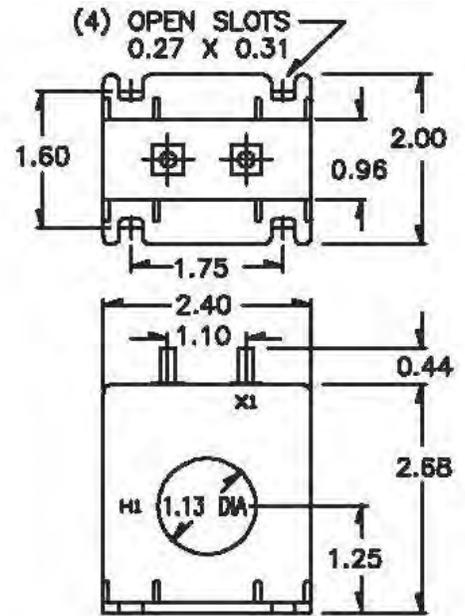
CATALOG NUMBER	CURRENT RATIO	MODELS 2SFT, 2SHT, 2RL		MODEL 2DRL	
		ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ	ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ
2**-250	25:5	-	-	± 5%	1
2**-500	50:5	± 4%	1	± 2%	1.5
2**-600	60:5	± 3%	2	± 2%	2
2**-750	75:5	± 3%	2	± 2%	3
2**-800	80:5	± 2%	2	± 2%	4
2**-101	100:5	± 1%	2	± 1%	5
2**-121	120:5	± 1%	2.5	± 1%	5
2**-1250	125:5	± 1%	2.5	± 1%	5
2**-151	150:5	± 1%	4	± 1%	8
2**-181	180:5	± 1%	4	± 1%	10
2**-201	200:5	± 1%	4	± 1%	10
2**-251	250:5	± 1%	6	± 1%	12.5
2**301	300:5	± 1%	8	± 1%	15
2**-331	330:5	± 1.2%	10	± 1%	17.5

NOTE: When ordering, Prefix Cat. No. With model designation required, i.e. 2SFT-301, 2RL-301, or 2SHT-301 or 2DRL-301

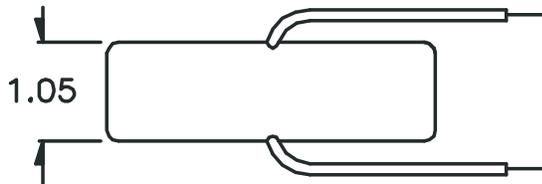
2SHT



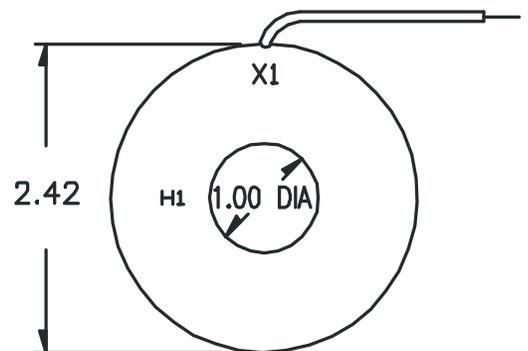
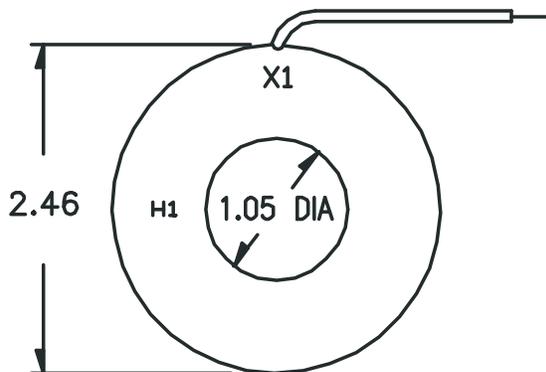
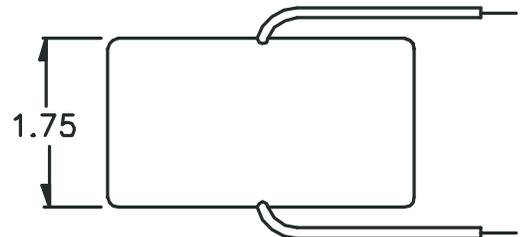
2SFT



2RL



2DRL





Current Transformer

Model 3P2
Rev 101419

CERTIFICATIONS:

APPLICATION:

3 Phase metering and other switchboard applications and for current to voltage conversion by use of a loading resistor as illustrated in the graph below and having low primary current input.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

0.69"

APPROXIMATE WEIGHT:

1.5 lbs.

CONNECTIONS:

- Transformers can be ordered with secondary leads configured in various ways (consult factory)
- Terminals are brass studs No. 8-32 with one flat washer, lock washer, and regular nut
- Load resistors may be mounted directly on terminals thus providing a "space saver" feature.



223647



Continuous Thermal Current Rating Factor

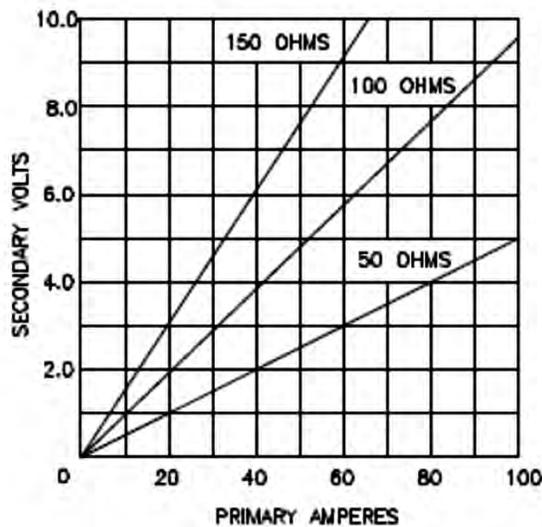
Models 3P2-500 – 3P2-201:
1.33 at 30°C. ambient.
1.0 at 55°C. ambient.

Models 3P2-1000T:
350A at 30°C amb.,
250A at 55° amb.

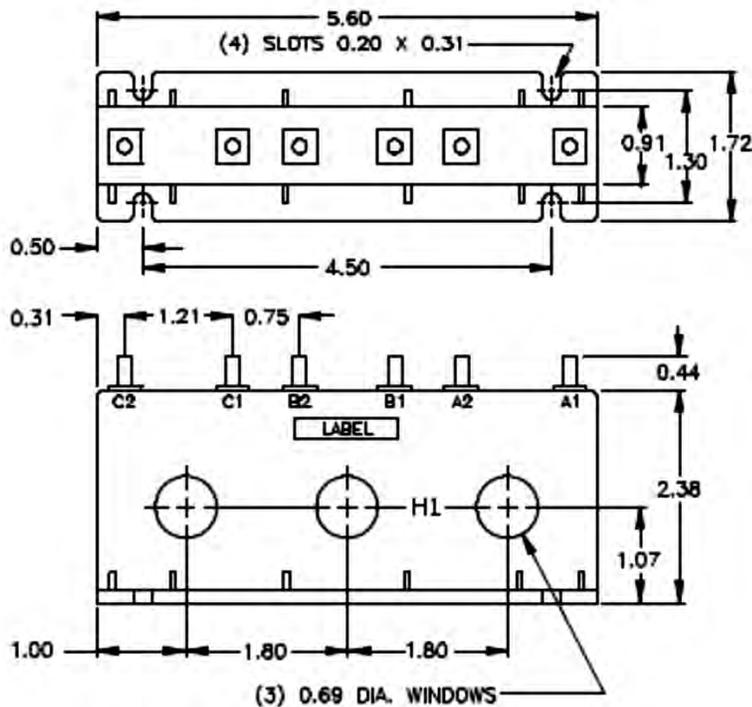
MODEL 3P2
Window Diameter 0.69"
Approximate weight: 1.5 lbs.

CATALOG NUMBER	CURRENT RATIO	ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ
3P2-500	50:5	± 2%	0.75
3P2-600	60:5	± 2%	0.75
3P2-750	75:5	± 2%	1.0
3P2-800	80:5	± 2%	1.0
3P2-101	100:5	± 1%	1.0
3P2-121	120:5	± 1%	1.0
3P2-1250	125:5	± 1%	1.0
3P2-151	150:5	± 1%	1.5
3P2-201	200:5	± 1%	2.0
3P2-1000T	See Performance Graph		

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The graph illustrates voltage output capacity, and over the ranges shown, will maintain + 3% linearity.



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Current Transformer

Model 58RBL
rev 02222024

APPLICATION:

With ammeters, wattmeters and cross current compensation

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

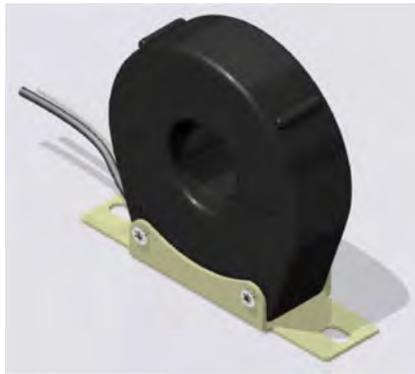
1.25"

APPROXIMATE WEIGHT:

1.3 lbs.

CONNECTIONS:

- Flexible Leads are UL 1015 105°C, # 16AWG, 24" long
- Non-standard length to be specified



CERTIFICATIONS:



E228202



223647

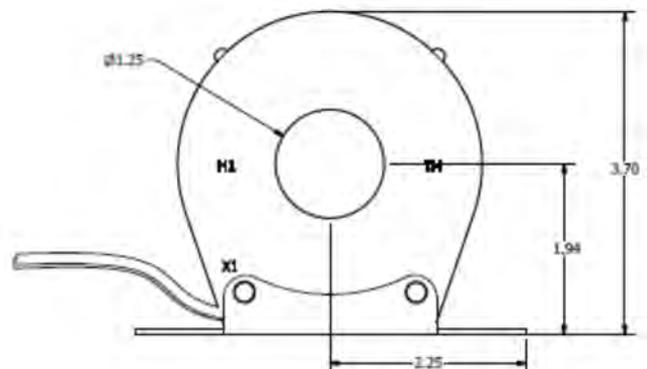
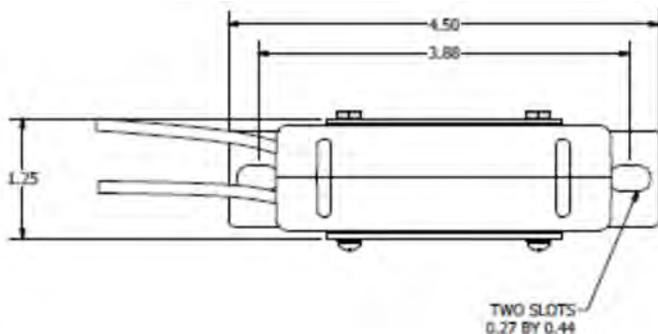


Model	58RBL
Window Size	1.25
Width	4.50
Height	3.70
Depth	1.25

MODEL 58RBL

Window Diameter 1.25"
Approximate weight: 1.3 lbs.

CATALOG NUMBER	CURRENT RATIO	ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ
58RBL-500	50:5	± 3%	1.5
58RBL-600	60:5	± 2%	2.5
58RBL-750	75:5	± 1.5%	2.5
58RBL-800	80:5	± 1%	2.5
58RBL-101	100:5	± 1.5%	5
58RBL-121	120:5	± 1%	5
58RBL-1250	125:5	± 1%	6
58RBL-151	150:5	± 1%	7.5
58RBL-201	200:5	± 1%	12.5
58RBL-251	250:5	± 1%	12.5
58RBL-301	300:5	± 1%	15
58RBL-401	400:5	± 1%	25
58RBL-501	500:5	± 1%	25
58RBL-601	600:5	± 1%	25
58RBL-751	750:5	± 1%	25
58RBL-801	800:5	± 1%	25



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Current Transformer

Model 5

rev 07062022

APPLICATION:

With ammeters, wattmeters and cross current compensation

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

1.56"

APPROXIMATE WEIGHT:

1.0 lbs.

CONNECTIONS:

- Flexible Leads are UL 1015 105°C, CSA approved #16AWG, 24" long
- Non-standard length to be specified
- Terminals are brass studs No. 8-32 UNC with one flat washer, lock washer, and regular nut
- SHT and SFT case style also available as SHL and SFL with leads
- Mounting bracket Part # 59-0218

CERTIFICATIONS:



E228202



223647



ISO 9001

QUALITY MANAGEMENT



5RL



5RBT



5SHT



5SFT

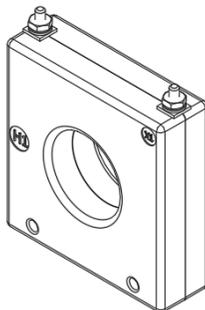
Model	5SHT	5SFT	5RL	5RBT
Window Size	1.56	1.56	1.56	1.56
Width	3.53	3.53	3.56	3.50
Height	3.65	3.78	4.37	3.56
Depth	1.09	1.09	1.10	1.25

MODEL 5

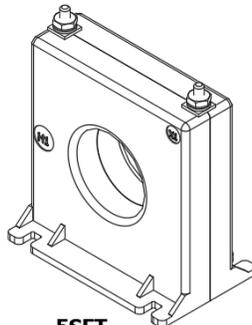
Window Diameter 1.56"
Approximate weight: 1.0 lbs.

CATALOG NUMBER	CURRENT RATIO	ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ
5**-500	50:5	± 2%	1
5**-750	75:5	± 2%	1.5
5**-101	100:5	± 2%	2
5**-151	150:5	± 1%	5
5**-201	200:5	+ 1%	5
5**-251	250:5	+ 1%	10
5**-301	300:5	+ 1%	12.5
5**-401	400:5	+ 1%	12.5
5**-501	500:5	+ 1%	20
5**-601	600:5	+ 1%	25
5**-751	750:5	+ 1%	25
5**-801	800:5	+ 1%	25
5**-102	1000:5	+ 1%	25
5**-122	1200:5	+ 1%	30

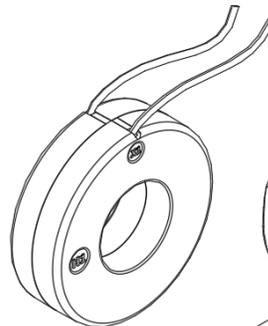
NOTE: WHEN ORDERING, PREFIX CAT NO. WITH MODEL DESIGNATION REQUIRED, I.E. 5SFT-500, 5RL-500, ETC.



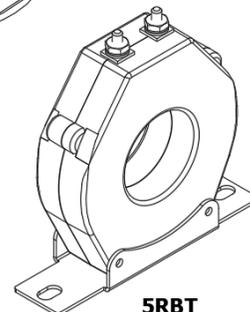
5SHT



5SFT



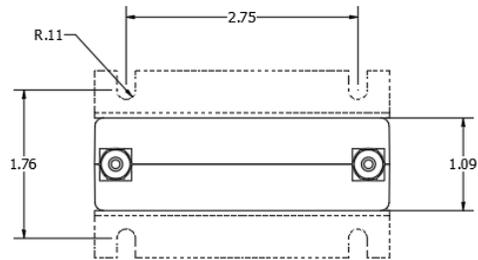
5RL



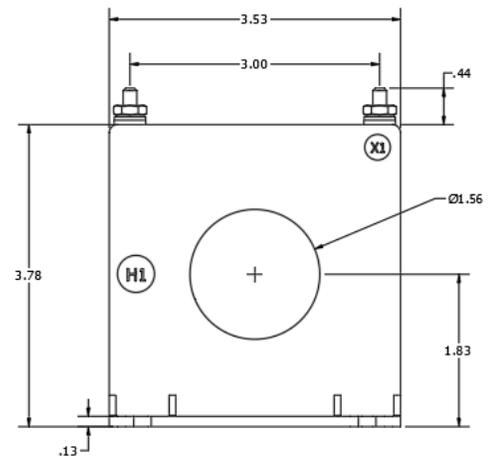
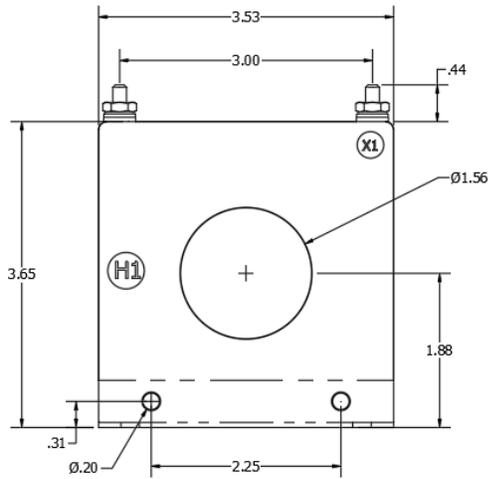
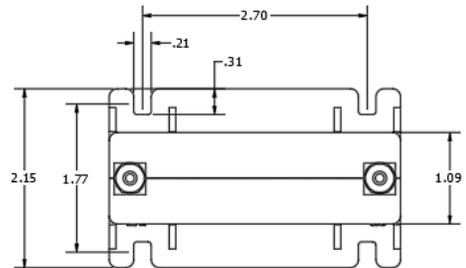
5RBT



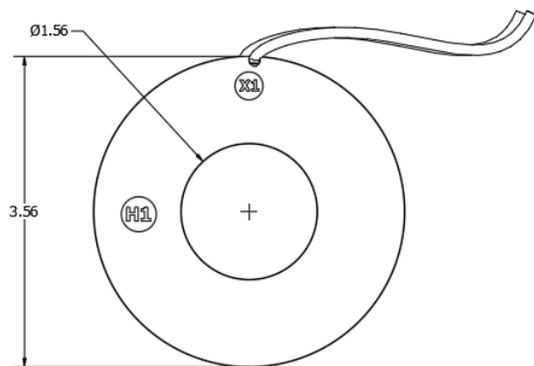
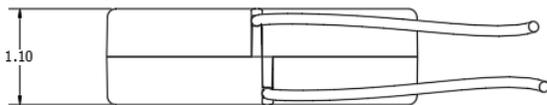
5SHT



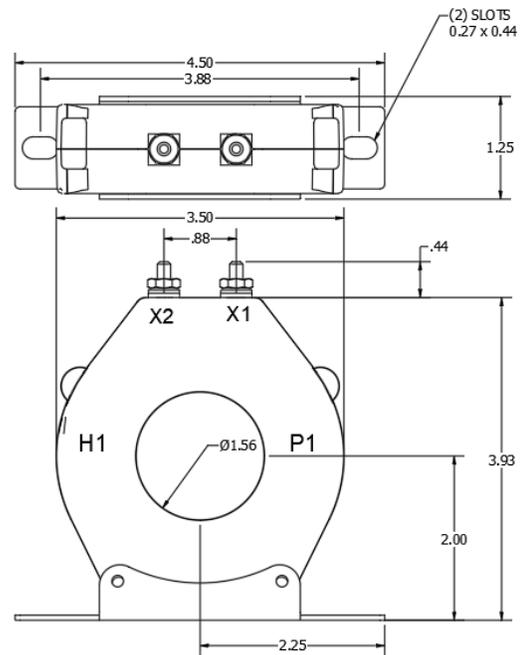
5SFT



5RL



5RBT





Current Transformer

Model 5SHT-0.333 / 5SFT-0.333 rev 031821

APPLICATION:

With ammeters, wattmeters and cross current compensation

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

1.56"

APPROXIMATE WEIGHT:

1.0 lbs.

CONNECTIONS:

- Flexible Leads are UL 1015 105°C, CSA approved #16AWG, 24" long
- Non-standard length to be specified
- Terminals are brass studs No. 8-32 UNC with one flat washer, lock washer, and regular nut
- Mounting bracket Part #59-0218

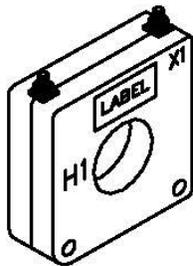


CERTIFICATIONS:



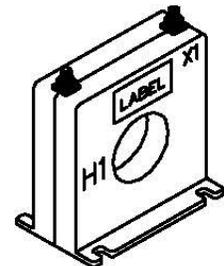
Model	5SHT	5SFT
Window Size	1.56	1.56
Width	3.53	3.53
Height	3.65	3.78
Depth	1.09	2.15

MODEL 5**
Window Diameter 1.56"
Approximate weight: 1.0 lbs.

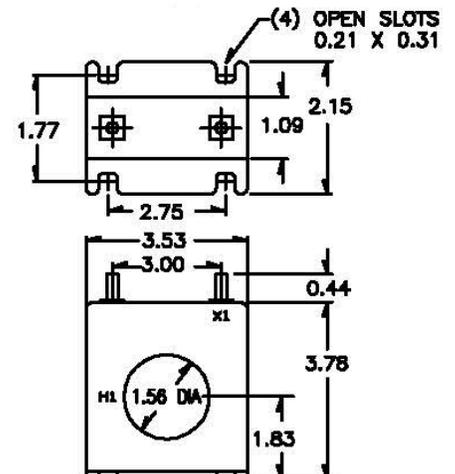
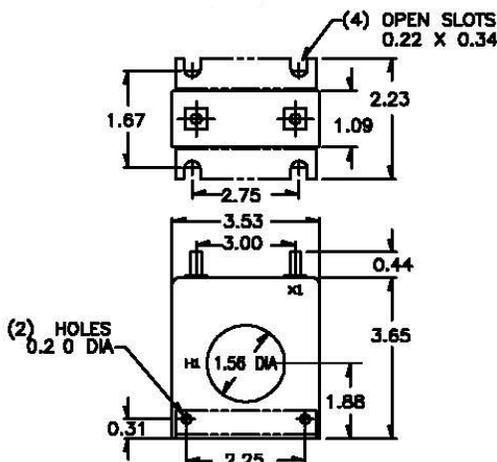


5SHT

CATALOG NUMBER	CURRENT VOLTAGE RATIO
5**201-0.333	200:0.333
5**251-0.333	250:0.333
5**301-0.333	300:0.333
5**401-0.333	400:0.333
5**501-0.333	500:0.333
5**601-0.333	600:0.333
5**751-0.333	750:0.333
5**801-0.333	800:0.333
5**102-0.333	1000:0.333
5**122-0.333	1200:0.333



5SFT



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 5A
rev 120418

CERTIFICATIONS:

APPLICATION:

With ammeters and wattmeters.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts, 10 kV BIL, full wave

WINDOW DIAMETER:

1.56"

APPROXIMATE WEIGHT:

1.0 lbs.

CONNECTIONS:

-Terminals are brass studs No. 8-32

UNC with one flatwasher.

-Flexible Leads are UL 1015 105°C, CSA approved #16AWG, 24" long

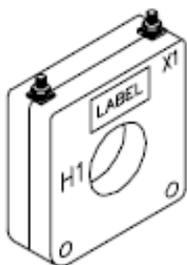
-Non-standard length to be specified



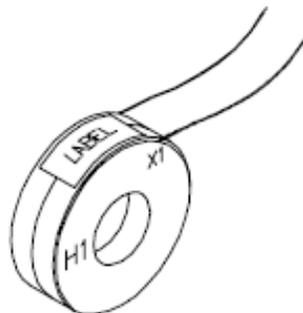
Model	5ASHT	5ASFT	5ARL
Window Size	1.56	1.56	1.56
Width	3.53	3.53	3.56
Height	3.70	3.77	3.56
Depth	1.10	1.09	1.10



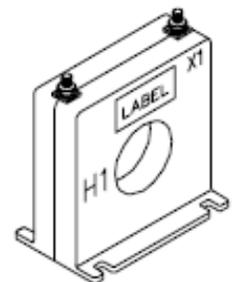
CATALOG NUMBER	CURRENT RATIO	V.A. FOR ± 1% CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.8		@30°C	@55°C
5A**-500	50:5	1.0	4.8	-	-	-	-	0.009	2.0	2.0
5A**-750	75:5	1.0	2.4	4.8	-	-	-	0.010	2.0	2.0
5A**-101	100:5	1.0	1.2	2.4	-	-	-	0.012	2.0	2.0
5A**-151	150:5	5.0	0.6	1.2	2.4	4.8	-	0.019	2.0	2.0
5A**-201	200:5	5.0	0.6	0.6	1.2	2.4	4.8	0.024	2.0	2.0
5A**-251	250:5	12.5	0.3	0.3	1.2	2.4	2.4	0.033	2.0	1.5
5A**-301	300:5	15.0	0.3	0.3	0.6	1.2	2.4	0.040	2.0	1.5
5A**-401	400:5	20.0	0.3	0.3	0.6	1.2	1.2	0.091	1.5	1.0
5A**-501	500:5	25.0	0.3	0.3	0.6	0.6	1.2	0.105	1.33	0.8
5A**-601	600:5	30.0	0.3	0.3	0.3	0.6	1.2	0.158	1.0	0.8
5A**-751	750:5	30.0	0.3	0.3	0.3	0.6	0.6	0.147	1.0	0.8
5A**-801	800:5	30.0	0.3	0.3	0.3	0.6	0.6	0.156	1.0	0.8
5A**-102	1000:5	35.0	0.3	0.3	0.3	0.3	0.6	0.196	1.0	0.8
5A**-122	1200:5	40.0	0.3	0.3	0.3	0.3	0.3	0.291	1.0	0.6



5ASHT



5ARL



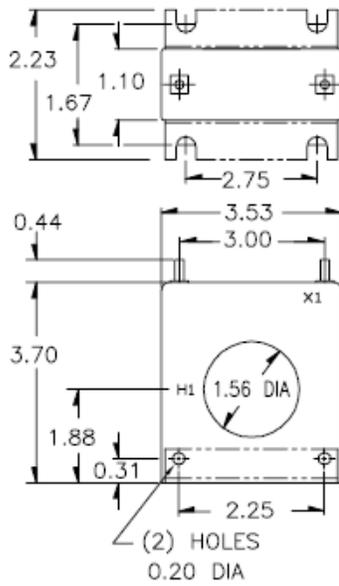
5ASFT

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



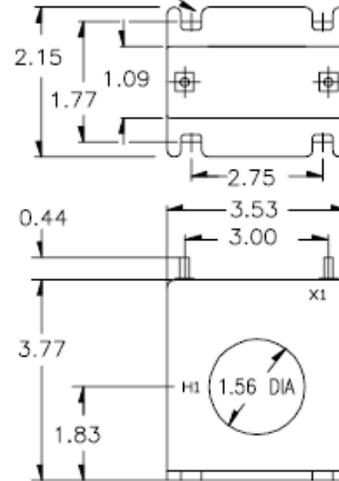
(4) OPEN SLOTS
0.22 X 0.34

5ASHT

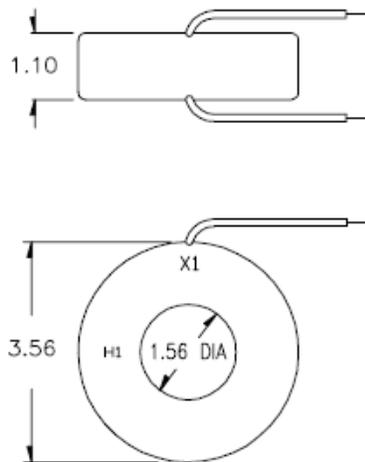


(4) OPEN SLOTS
0.21 X 0.31

5ASFT



5ARL





Current Transformer

Model 5DRL

APPLICATION:

With ammeters, wattmeters and cross current compensation

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

1.56"

APPROXIMATE WEIGHT:

2.0 lbs.

CONNECTIONS:

- Flexible Leads are UL 1015 105°C, CSA approved #16AWG, 24" long
- Non-standard length to be specified



5DRL

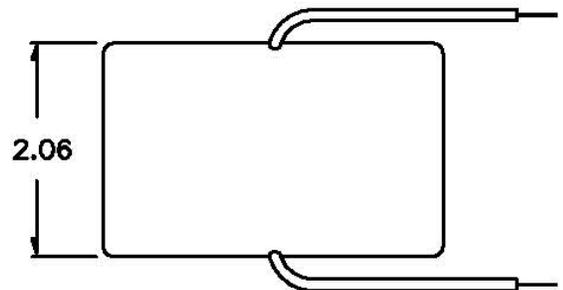
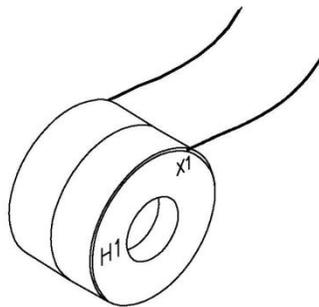
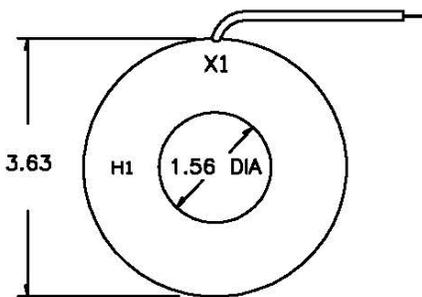
Model	5DRL
Window Size	1.56
Width	3.63
Height	3.63
Depth	2.06

CERTIFICATIONS:



MODEL 5DRL
Window Diameter 1.56"
Approximate weight: 2.0 lbs.

CATALOG NUMBER	CURRENT RATIO	ACCURACY AT 60 Hz	BURDEN VA AT 60 Hz
5DRL-500	50:5	+ 2%	2.5
5DRL-600	60:5	+ 1%	2.5
5DRL-750	75:5	+ 1%	3.5
5DRL-101	100:5	+ 1%	5
5DRL-151	150:5	+ 1%	10
5DRL-201	200:5	+ 1%	12.5
5DRL-251	250:5	+ 1%	20
5DRL-301	300:5	+ 1%	20
5DRL-401	400:5	+ 1%	40
5DRL-501	500:5	+ 1%	50
5DRL-601	600:5	+ 1%	60
5DRL-751	750:5	+ 1%	60
5DRL-801	800:5	+ 1%	60
5DRL-102	1000:5	+ 1%	75
5DRL-122	1200:5	+ 1%	90



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 6A
rev 120418

CERTIFICATIONS:



APPLICATION:

With ammeters, wattmeters.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

2.06"

APPROXIMATE WEIGHT:

1.25 lbs.

CONNECTIONS:

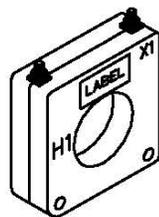
- Flexible leads are UL 1015 105 C, CSA approved #16 AWG24" long
- Non-standlength to be specified.
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- ASFT and ASHT case styles also available as ASFL and ASHL with leads
- Mounting kit – 59-0223 required for Model 6ASHT



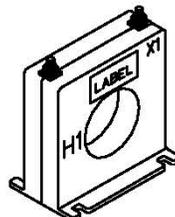
Model	6ASHT	6ASFT	6ARL
Window Size	2.06	2.06	2.06
Width	4.08	4.12	4.08
Height	4.22	4.21	4.08
Depth	1.10	1.10	1.10

CATALOG NUMBER	CURRENT RATIO	V.A. FOR ± 1% CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.8		@30°C	@55°C
6A**-101	100:5	1.0	1.2	2.4	-	-	-	0.015	2.0	2.0
6A**-151	150:5	5.0	1.2	1.2	2.4	4.8	-	0.024	2.0	2.0
6A**-201	200:5	5.0	0.6	1.2	2.4	2.4	4.8	0.037	2.0	2.0
6A**-251	250:5	7.5	0.3	0.6	1.2	2.4	4.8	0.044	2.0	1.5
6A**-301	300:5	12.5	0.3	0.3	1.2	2.4	2.4	0.055	2.0	1.5
6A**-401	400:5	15.0	0.3	0.3	0.6	1.2	1.2	0.071	1.5	1.33
6A**-501	500:5	25.0	0.3	0.3	0.6	1.2	1.2	0.107	1.5	1.0
6A**-601	600:5	30.0	0.3	0.3	0.6	10.6	1.2	0.128	1.33	1.0
6A**-751	750:5	30.0	0.3	0.3	0.3	0.6	1.2	0.156	1.25	1.0
6A**-801	800:5	35.0	0.3	0.3	0.3	0.6	0.6	0.167	1.25	0.8
6A**-102	1000:5	35.0	0.3	0.3	0.3	0.3	0.6	0.208	1.0	0.8
6A**-122	1200:5	40.0	0.3	0.3	0.3	0.6	0.3	0.250	1.0	0.8
6A**-152	1500:5	50.0	0.3	0.3	0.3	0.3	0.3	0.388	1.0	0.8

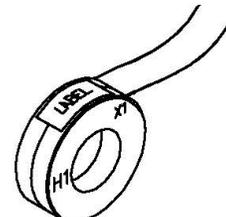
Note: When ordering, prefix Cat No. with model designation, i.e. 6ASHT-201, 6ARL-301 etc.



6ASHT



6ASFT

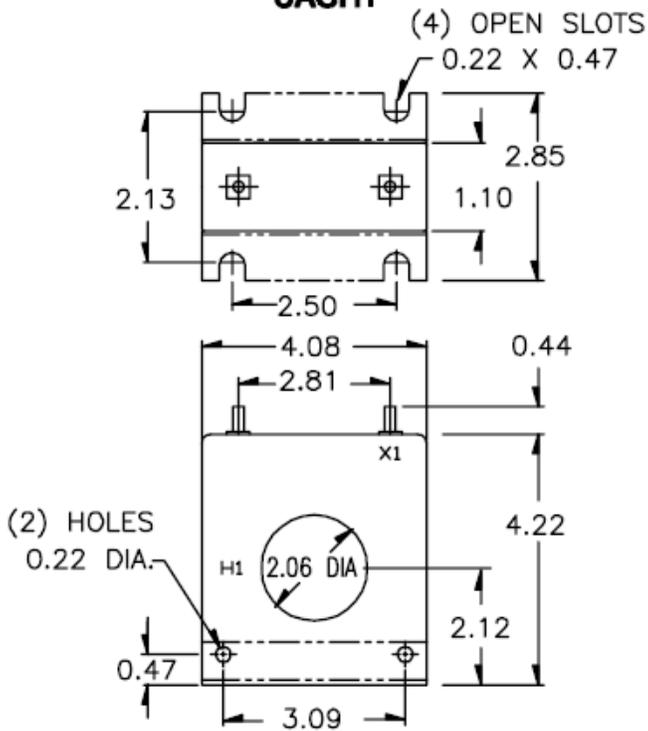


6ARL

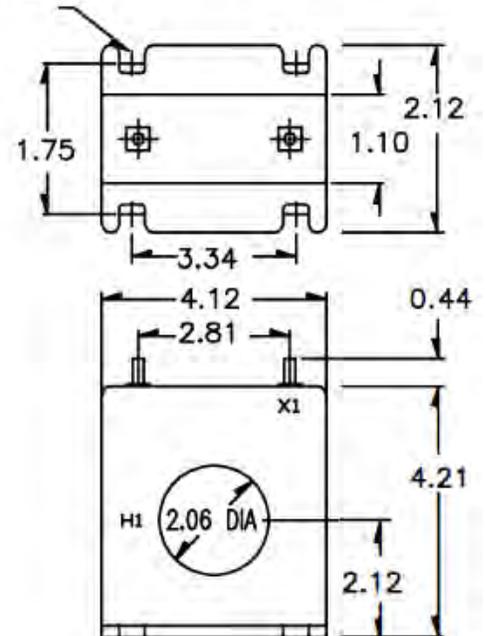
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



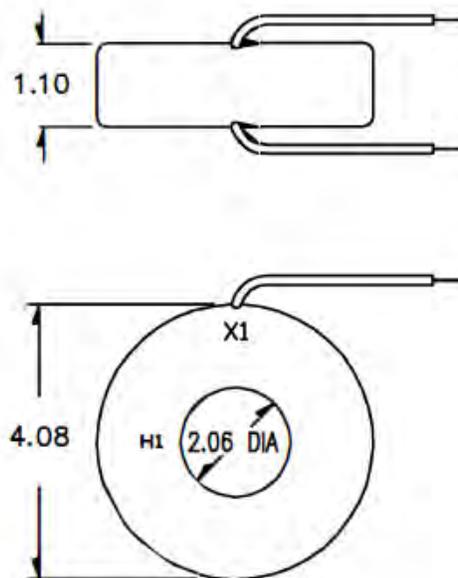
6ASHT



(4) OPEN SLOTS 6ASFT



6ARL





Current Transformer

Model 10

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

1.56"

APPROXIMATE WEIGHT:

2.5 lbs.

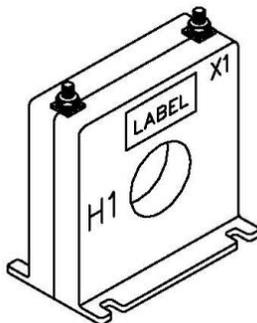
CONNECTIONS:

-Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut

Model	10SFT
Window Size	1.56
Width	4.08
Height	4.59
Depth	2.10

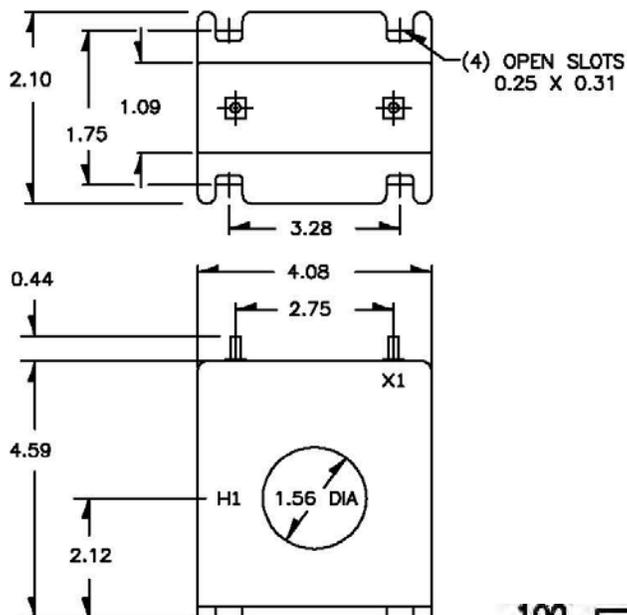
MODEL 10
Window Diameter 1.56"
Approximate weight: 2.5 lbs.

CATALOG NUMBER	CURRENT RATIO	V.A. FOR ± 1% CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.8		@30°C	@55°C
10SFT-500	50:5	2.0 ± 2%	4.8	-	-	-	-	0.007	2	2
10SFT-750	75:5	2.5	1.2	4.8	-	-	-	0.01	2	2
10SFT-101	100:5	3	1.2	2.4	4.8	-	-	0.018	2	2
10SFT-151	150:5	5	0.6	0.6	2.4	4.8	-	0.031	2	2
10SFT-201	200:5	7.5	0.3	0.6	1.2	2.4	4.8	0.043	2	1.5
10SFT-251	250:5	10	0.3	0.3	1.2	1.2	2.4	0.053	2	1.5
10SFT-301	300:5	15	0.3	0.3	0.6	1.2	2.4	0.07	2	1.5
10SFT-401	400:5	20	0.3	0.3	0.3	0.6	1.2	0.114	1.5	1
10SFT-501	500:5	30	0.3	0.3	0.3	0.6	1.2	0.128	1.33	1
10SFT-601	600:5	40	0.3	0.3	0.3	0.6	0.6	0.192	1.33	0.8

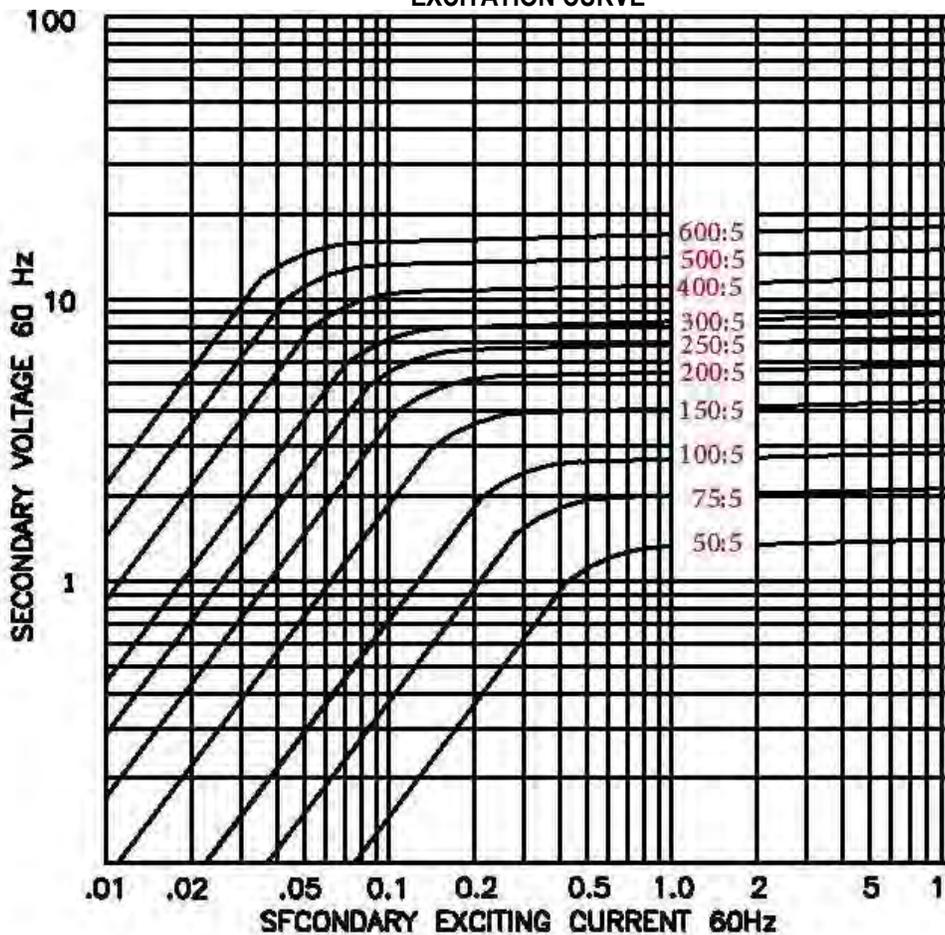


Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Model 10



EXCITATION CURVE



Model 10

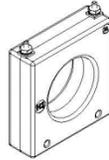
Current Transformer

Model 56

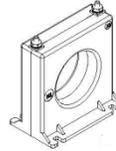
CERTIFICATIONS:



56RL



56SHT



56SFT

APPLICATION:

With ammeters, wattmeters and cross current compensation

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

2.06"

APPROXIMATE WEIGHT:

0.6 lbs.

CONNECTIONS:

-Flexible Leads are UL 1015 105°C, CSA approved #16AWG, 24" long

-Non-standard length to be specified

-Terminals are brass studs No. 8-32 UNC with one flat washer, lock washer, and regular nut

-RBT and RT case styles also available and SHT and SFT as SHL and SFL with leads

Model	56SHT	56SFT	56RL
Window Size	2.06	2.06	2.06
Width	3.50	3.50	3.50
Height	3.63	3.63	3.50
Depth	1.10	1.10	1.09

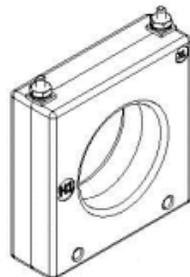
MODEL 56

Window Diameter 2.06"

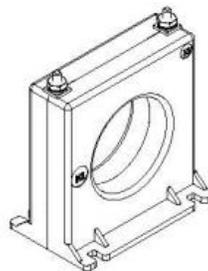
Approximate weight: 0.6 lbs.

CATALOG NUMBER	CURRENT RATIO	ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ
56**-500	50:5	± 3%	0.5
56**-750	75:5	± 1%	0.5
56**-101	100:5	± 1%	1
56**-151	150:5	± 1%	2.5
56**-201	200:5	+ 1%	4
56**-251	250:5	+ 1%	6
56**-301	300:5	+ 1%	7.5
56**-401	400:5	+ 1%	10
56**-501	500:5	+ 1%	12.5
56**-601	600:5	+ 1%	15
56**-751	750:5	+ 1%	7
56**-801	800:5	+ 1%	8
56**-102	1000:5	+ 1%	10
56**-122	1200:5	+ 1%	12.5

NOTE: WHEN ORDERING, PREFIX CAT NO. WITH MODEL DESIGNATION REQUIRED, I.E. 56SFT-500, 56RL-500, ETC.



56SHT



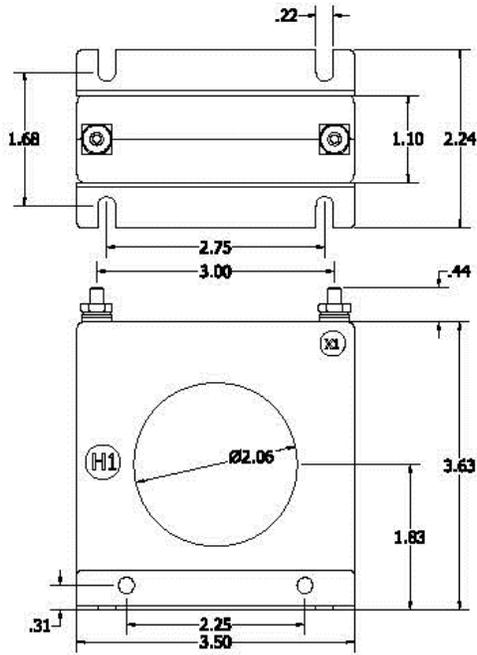
56SFT



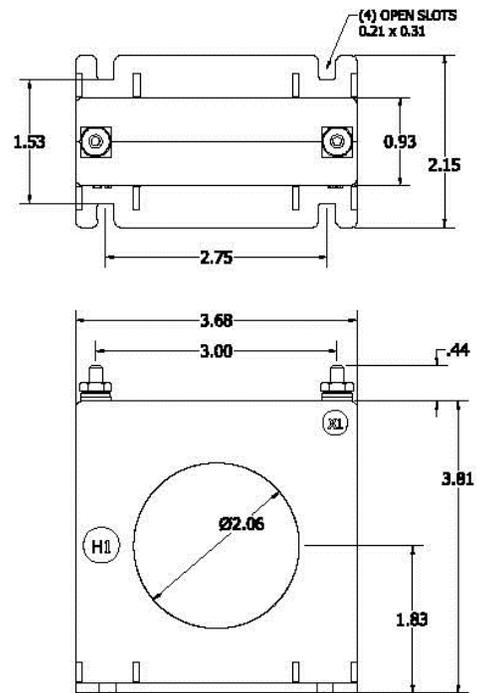
56RL



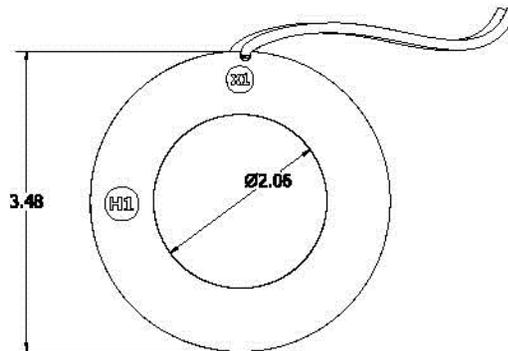
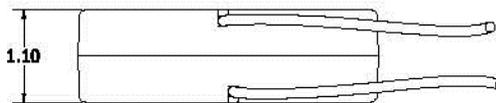
56SHT



56SFT



56RL



Current Transformer

Model 6

APPLICATION:

With ammeters, wattmeters and cross current compensation

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

2.06"

APPROXIMATE WEIGHT:

1.2 lbs.

CONNECTIONS:

- Flexible leads are UL 1015 105 C, CSA approved #16 AWG, 24" long
- Non-standard length to be specified.
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Mounting bracket 59-0223
- SFT and SHT case styles also available as SFL and SHL with leads
- Mounting kit – 59-0223



Model	6SHT	6SFT	6RL
Window Size	2.06	2.06	2.06
Width	4.08	4.12	4.08
Height	4.22	4.22	4.08
Depth	1.10	1.10	1.10

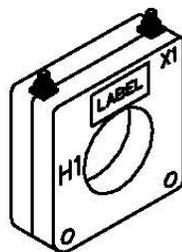
CERTIFICATIONS:



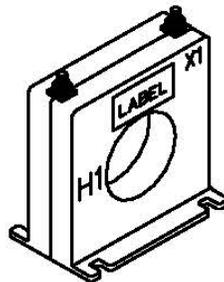
MODEL 6
Window Diameter 2.06"
Approximate weight: 1.2 lbs.

CATALOG NUMBER	CURRENT RATIO	ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ
6**-101	100:5	+ 2%	2
6**-151	150:5	+ 1%	5
6**-201	200:5	+ 1%	5
6**-251	250:5	+ 1%	7.5
6**-301	300:5	+ 1%	12.5
6**-401	400:5	+ 1%	15
6**-501	500:5	+ 1%	25
6**-601	600:5	+ 1%	30
6**-751	750:5	+ 1%	25
6**-801	800:5	+ 1%	25
6**-102	1000:5	+ 1%	35
6**-122	1200:5	+ 1%	40
6**-152	1500:5	+ 1%	50

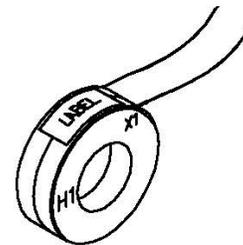
Note: When ordering, prefix Cat No. with model designation, i.e. 6SHT-201, 6RL-301 etc.



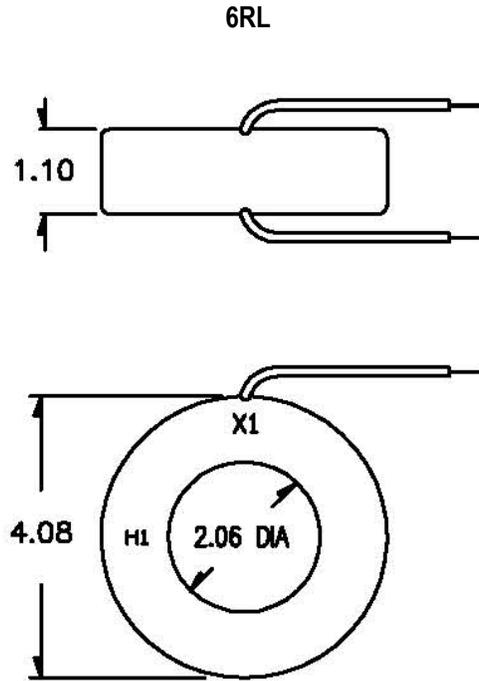
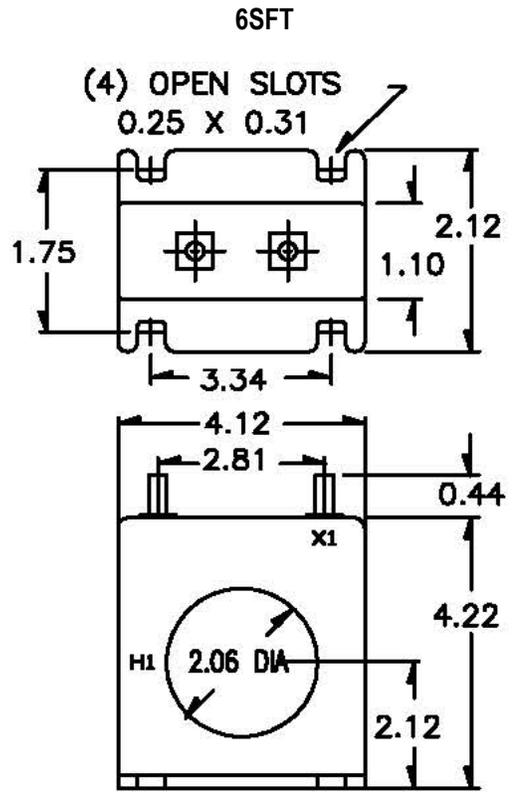
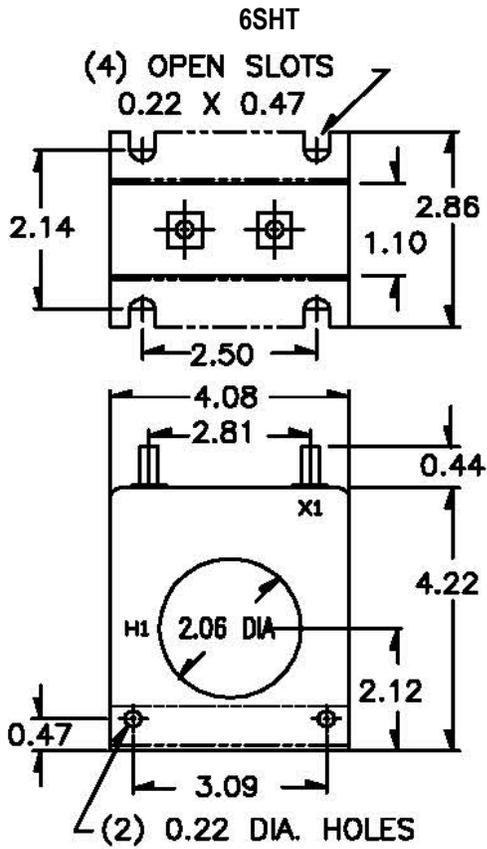
6SHT



6SFT



6RL





Current Transformer

Model 7

APPLICATION:

With ammeters, wattmeters and cross current compensation.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

2.50"

APPROXIMATE WEIGHT:

1.5 lbs.

CONNECTIONS:

- Flexible leads are UL 1015 105 C, CSA approved #16 AWG, 24" long
- Non-standard length to be specified
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- SFT and SHT case styles also available as SFL and SHL with leads
- Mounting kit 59-0219



Model	7SHT	7SFT	7RL
Window Size	2.50	2.50	2.50
Width	4.56	4.56	4.58
Height	4.85	4.85	4.58
Depth	1.10	1.08	1.10

CERTIFICATIONS:



E228202



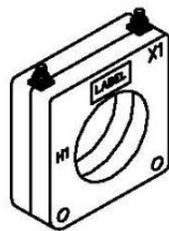
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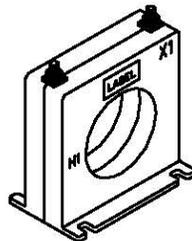
MODEL 7
Window Diameter 2.50"
Approximate weight: 1.5 lbs.

CATALOG NUMBER	CURRENT RATIO	ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ
7*-101	100:5	+ 2%	2.5
7*-151	150:5	+ 1%	5
7*-201	200:5	+ 1%	5
7*-251	250:5	+ 1%	5
7*-301	300:5	+ 1%	12.5
7*-401	400:5	+ 1%	15
7*-501	500:5	+ 1%	25
7*-601	600:5	+ 1%	30
7*-751	750:5	+ 1%	30
7*-801	800:5	+ 1%	35
7*-102	1000:5	+ 1%	35
7*-122	1200:5	+ 1%	35
7*-152	1500:5	+ 1%	40
7*-162	1600:5	+ 1%	45

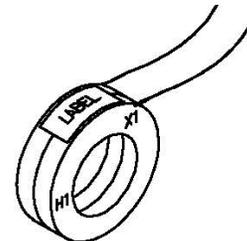
Note: When ordering, prefix Cat No. with model designation required, i.e. 7SFT-500, 7RL-500, etc.



7SHT



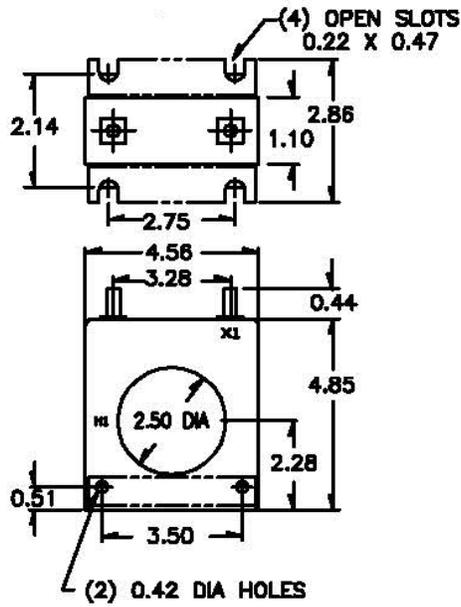
7SFT



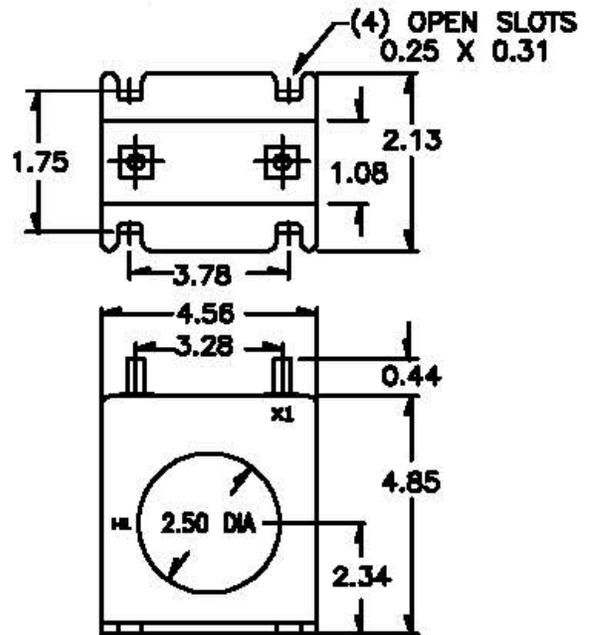
7RL



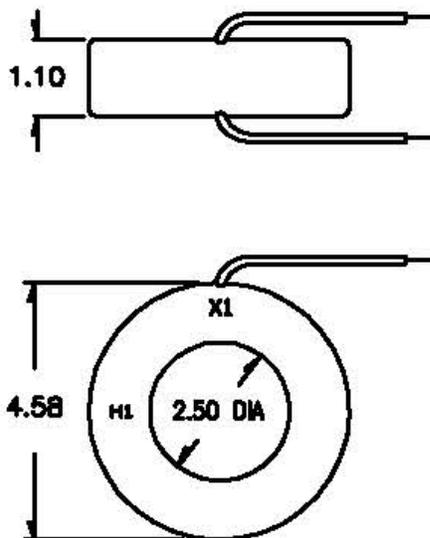
7SHT



7SFT



7RL





Current Transformer

Model 7SHT-0.333 / 7SFT-0.333

CERTIFICATIONS:



E228202



223647



APPLICATION:

With ammeters, wattmeters and cross current compensation.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

2.50"

APPROXIMATE WEIGHT:

1.5 lbs.

CONNECTIONS:

- Flexible leads are UL 1015 105 C, CSA approved #16 AWG, 24" long
- Non-standard length to be specified
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Mounting kit 59-0219

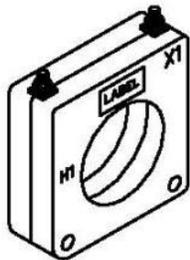


Model	7SHT	7SFT
Window Size	2.50	2.50
Width	4.56	4.56
Height	4.85	4.85
Depth	1.10	1.08

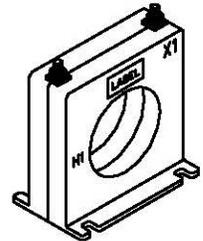
7**

Window Diameter 2.50"
Approximate weight: 1.5 lbs.

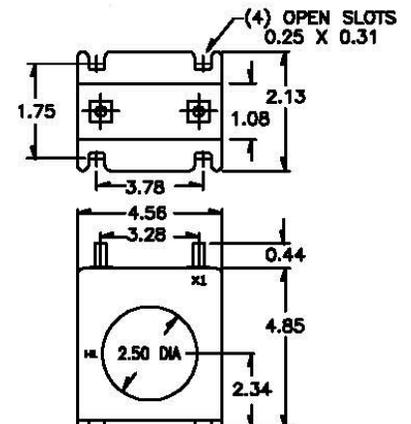
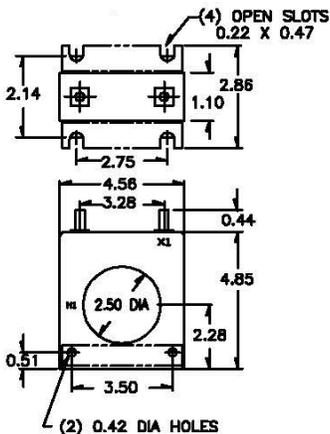
CATALOG NUMBER	CURRENT VOLTAGE RATIO
7**-201-0.333	200:0.333
7**-251-0.333	250:0.333
7**-301-0.333	300:0.333
7**-401-0.333	400:0.333
7**-501-0.333	500:0.333
7**-601-0.333	600:0.333
7**-751-0.333	750:0.333
7**-801-0.333	800:0.333
7**-102-0.333	1000:0.333
7**-122-0.333	1200:0.333
7**-152-0.333	1500:0.333
7**-162-0.333	1600:0.333



7SHT



7SFT



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 76

APPLICATION:

With ammeters, wattmeters and cross current compensation.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

3.00"

APPROXIMATE WEIGHT:

1.5 lbs.

CONNECTIONS:

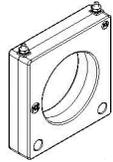
- Flexible leads are UL 1015 105 C, CSA approved #16 AWG, 24" long
- Non-standard length to be specified
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- RBT and RT case styles also available and SFT and SHT as SFL and SHL with leads



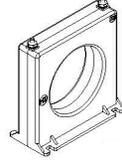
76RL



76RT



76SHT



76SFT

CERTIFICATIONS:



E228202



223647

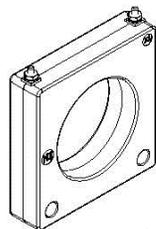


Model	76SHT	76SFT	76RL	76RT
Window Size	3.00	3.00	3.00	3.00
Width	4.54	4.54	4.50	4.50
Height	4.68	4.68	4.50	4.64
Depth	1.12	1.12	1.13	1.10

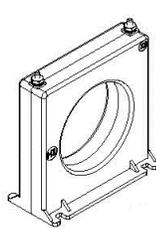
MODEL 76
Window Diameter 3.00"
Approximate weight: 1.5 lbs.

CATALOG NUMBER	CURRENT RATIO	ACCURACY AT 60 HZ	BURDEN VA AT 60 HZ
76**-201	200:5	+ 1%	5
76**-251	250:5	+ 1%	5
76**-301	300:5	+ 1%	6
76**-401	400:5	+ 1%	10
76**-501	500:5	+ 1%	10
76**-601	600:5	+ 1%	10
76**-751	750:5	+ 1%	10
76**-801	800:5	+ 1%	12.5
76**-102	1000:5	+ 1%	10
76**-122	1200:5	+ 1%	10
76**-152	1500:5	+ 1%	12.5
76**-162	1600:5	+ 1%	12.5
76**-202	2000:5	+ 1%	15

Note: When ordering, prefix Cat No. with model designation required, i.e. 76SFT-201, 76RL-201, etc.



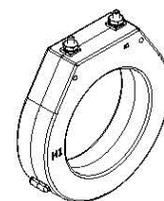
76SHT



76SFT



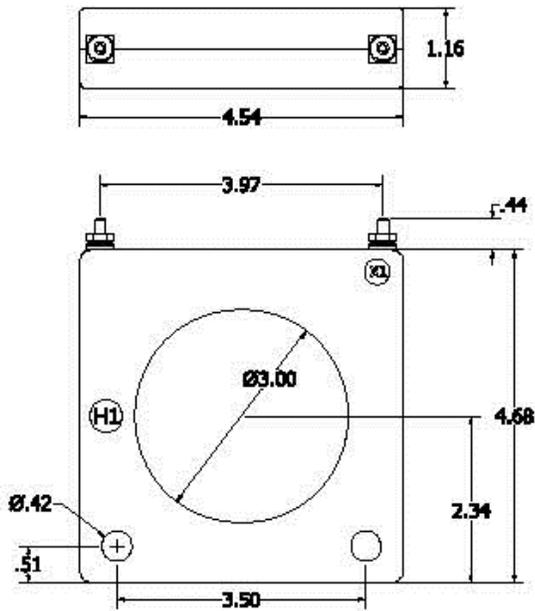
76RL



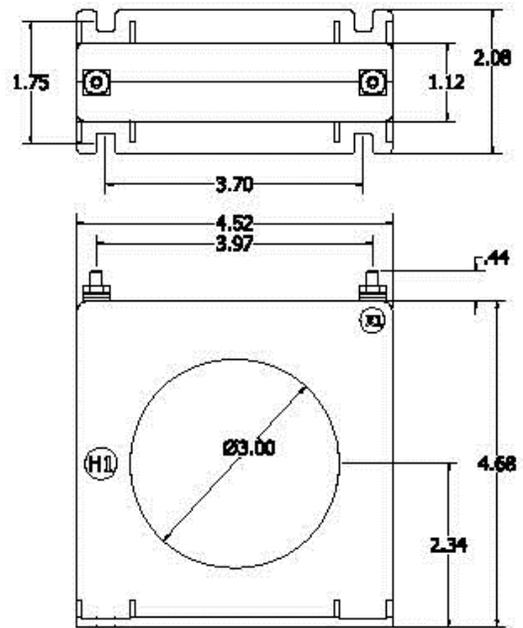
76RT



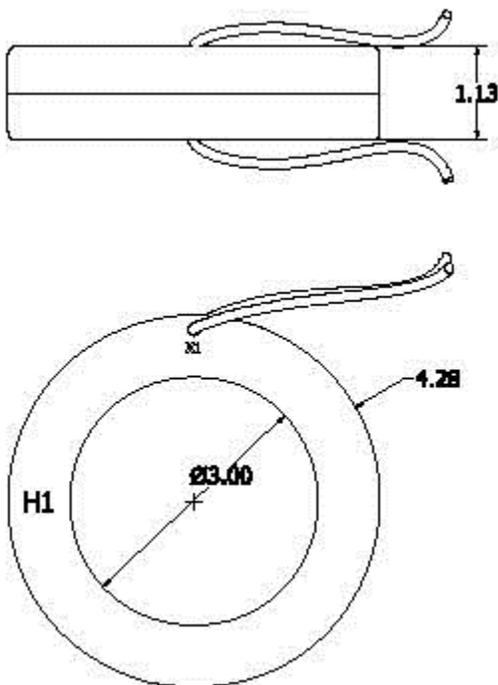
76SHT



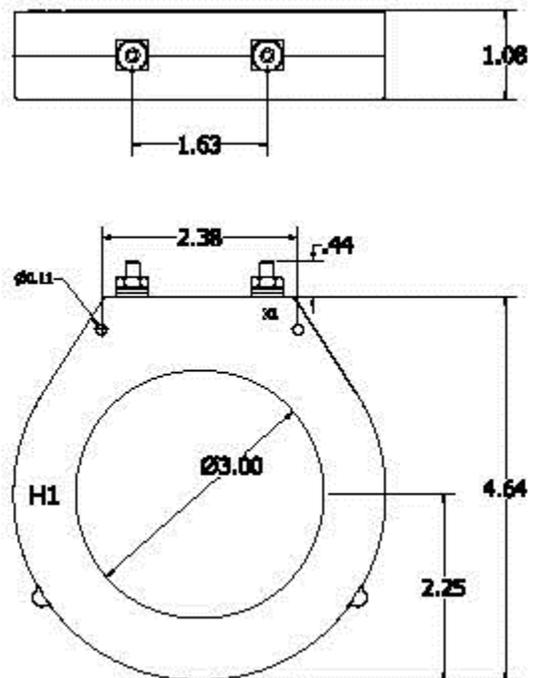
76SFT



76RL



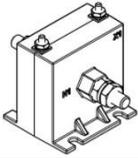
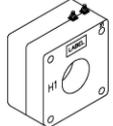
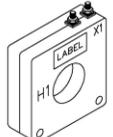
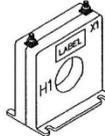
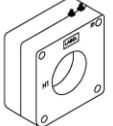
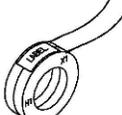
76RT



CURRENT TRANSFORMERS

For Metering and Instrumentation

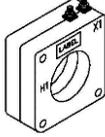
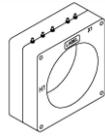
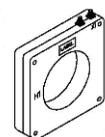
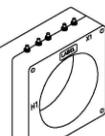
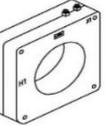
600V Current Transformers
ANSI Rated Window Type

WINDOW SIZES Wound Primary		Page 2-6		
MODEL 189				
WINDOW SIZES 1.25", 1.63", 2.00", 2.50", 3.13"		Page 2-7		
MODELS 21, 22, 23, 24, 25				
WINDOW SIZES 1.50", 2.25", 3.00", 3.38", 3.75"		Page 2-13		
MODEL 296, 297, 298, 299, 300				
WINDOW SIZES 1.56", 2.00", 2.50"		Page 2-19		
MODEL 64, 65, 66				
WINDOW SIZES 2.06"	 6ASHT	 6ASFT	 6ARL	Page 2-23
MODEL 6A				
WINDOW SIZES 2.25", 2.75", 3.25", 4.00", 4.62"				Page 2-25
MODEL 112, 113, 114, 115, 117				
WINDOW SIZES 2.50"	 7ASHT	 7ASFT	 7ARL	Page 2-31
MODEL 7A				
WINDOW SIZES 2.50"				Page 2-33
MODEL 193, 194				

CURRENT TRANSFORMERS

For Metering and Instrumentation

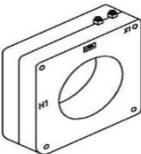
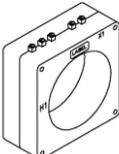
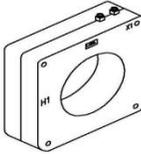
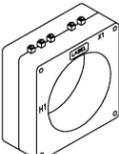
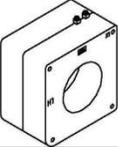
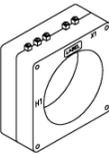
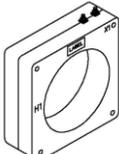
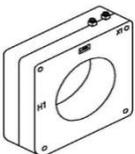
600V Current Transformers
ANSI Rated Window Type

WINDOW SIZES 2.50"	 180SHT	 180RL	Page 2-35
MODEL 180 WINDOW SIZES 3.25"	 8SHT	 8RL	Page 2-37
MODEL 8 WINDOW SIZES 4.00"	 100SHT		Page 2-40
MODEL 100 WINDOW SIZES 4.00"	 110SHT		Page 2-42
MODEL 110 WINDOW SIZES 4.00"	 115MR		Page 2-44
MODEL 115MR WINDOW SIZES 4.25"	 19SHT	 19RL	Page 2-46
MODEL 19 WINDOW SIZES 4.25"	 170SHT	 170RL	Page 2-48
MODEL 170 WINDOW SIZES 4.62"	 117MR		Page 2-51
MODEL 117MR WINDOW SIZES 5.75"	 120SHT		Page 2-53
MODEL 120			

CURRENT TRANSFORMERS

For Metering and Instrumentation

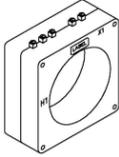
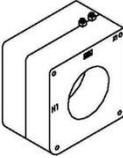
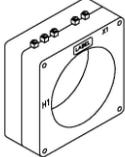
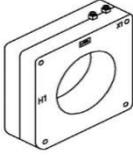
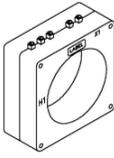
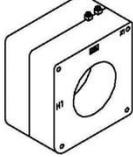
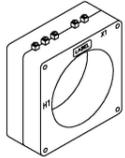
600V Current Transformers
ANSI Rated Window Type

WINDOW SIZES 5.75"		Page 2-55
MODEL 135		
WINDOW SIZES 5.75"		Page 2-57
MODEL 135MR		
WINDOW SIZES 6.00"		Page 2-59
MODEL 144		
WINDOW SIZES 6.00"		Page 2-61
MODEL 144MR		
WINDOW SIZES 6.00"		Page 2-63
MODEL 145		
WINDOW SIZES 6.00"		Page 2-65
MODEL 145MR		
WINDOW SIZES 6.31"		Page 2-67
MODEL 125		
WINDOW SIZES 7.25"		Page 2-69
MODEL 142		

CURRENT TRANSFORMERS

For Metering and Instrumentation

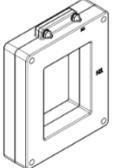
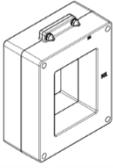
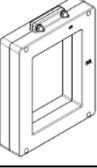
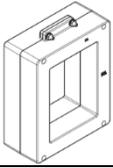
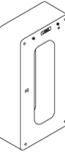
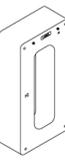
600V Current Transformers
ANSI Rated Window Type

WINDOW SIZES 7.25"		Page 2-71
MODEL 142MR		
WINDOW SIZES 7.31"		Page 2-73
MODEL 143		
WINDOW SIZES 7.31"		Page 2-75
MODEL 143MR		
WINDOW SIZES 8.13"		Page 2-77
MODEL 140		
WINDOW SIZES 8.13"		Page 2-79
MODEL 140MR		
WINDOW SIZES 8.13"		Page 2-81
MODEL 141		
WINDOW SIZES 8.13"		Page 2-83
MODEL 141MR		
WINDOW SIZES 8.13"		Page 2-85
MODEL 190 & 190X		

CURRENT TRANSFORMERS

For Metering and Instrumentation

600V Current Transformers
ANSI Rated Window Type

WINDOW SIZES 25" x 4.25"		Page 2-86
MODEL 560		
WINDOW SIZES 3.25" x 4.25"		Page 2-88
MODEL 561		
WINDOW SIZES 4.00" x 5.38"		Page 2-90
MODEL 562		
WINDOW SIZES 4.00" x 5.38"		Page 2-92
MODEL 562-LONG LEAD		
WINDOW SIZES 4.00" x 5.38"		Page 2-94
MODEL 563		
WINDOW SIZES 5.00" x 14.00"		Page 2-96
MODEL 592		
WINDOW SIZES 8.06" x 22.06"		Page 2-98
MODEL 593		



Current Transformer

Model 189

APPLICATION:

Ammeters and wattmeters

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

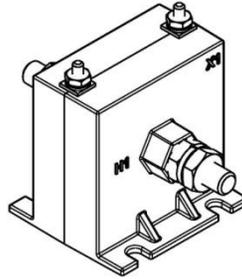
Wound Primary

APPROXIMATE WEIGHT:

0.75 lbs.

CONNECTIONS:

Primary terminals for the Model 189 for ratios of 30:5 and below are No. 10-32 brass screws with one lockwasher (Dimension A=3.28), for ratios 40:5 and above, 3/8-16 brass studs with one lockwasher and regular nut (Dimension A=4.10)



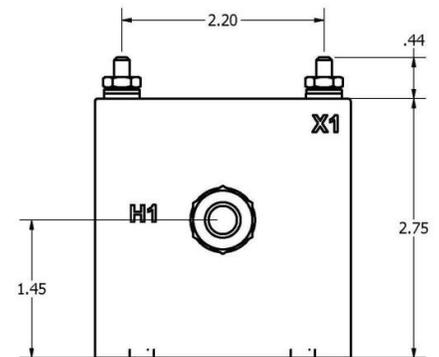
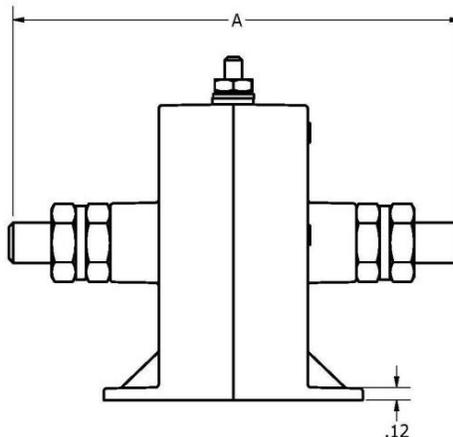
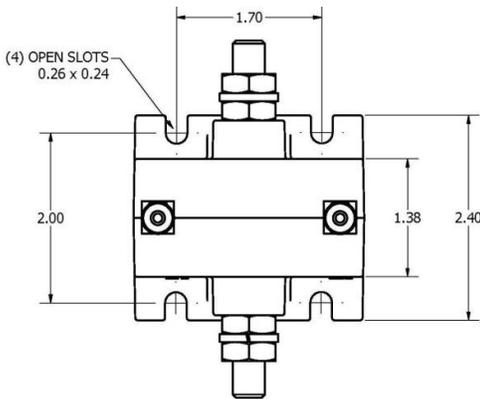
CERTIFICATIONS:



Model	189
Window Size	Wound Primary
Width	2.70
Height	2.75
Depth	2.40

MODEL 189
Wound Primary
Approximate weight: 0.75 lbs.

CATALOG NUMBER	CURRENT RATIO	ANSI METERING CLASS AT 60 HZ	
		B0.1	B0.2
189-0025	2.5:5	0.6	0.6
189-005	5:5	0.6	0.6
189-0075	7.5:5	0.6	0.6
189-010	10:5	0.6	0.6
189-015	15:5	0.6	0.6
189-020	20:5	0.6	0.6
189-025	25:5	0.6	0.6
189-030	30:5	0.6	0.6
189-040	40:5	0.6	0.6
189-050	50:5	0.6	0.6
189-060	60:5	0.6	0.6
189-075	75:5	0.6	0.6
189-080	80:5	0.6	0.6
189-101	100:5	0.6	0.6



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 21, 22, 23, 24, 25

rev 03182021

CERTIFICATIONS:



APPLICATION:

Relaying and Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

1.25", 1.63", 2.00", 2.50", 3.13"

APPROXIMATE WEIGHT:

21, 22, 23: 7 lbs. 24: 6 lbs. 25: 4 lbs.

CONNECTIONS:

-Terminals are brass studs No. 8-32

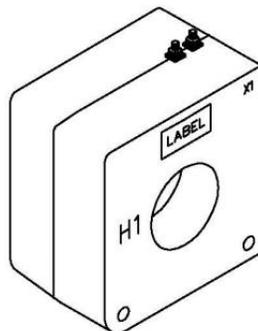
UNC with one flat washer,
lockwasher, and regular nut

-Order Mounting bracket kit separately
59-0224

Model	21	22	23	24	25
Window Size	1.25	1.63	2.00	2.50	3.13
Width	4.63	4.63	4.63	4.63	4.63
Height	5.10	5.10	5.10	5.10	5.10
Depth	3.00	3.00	3.00	3.00	3.00

MODEL 21
Window Diameter 1.25"
Approximate weight: 7 lbs.

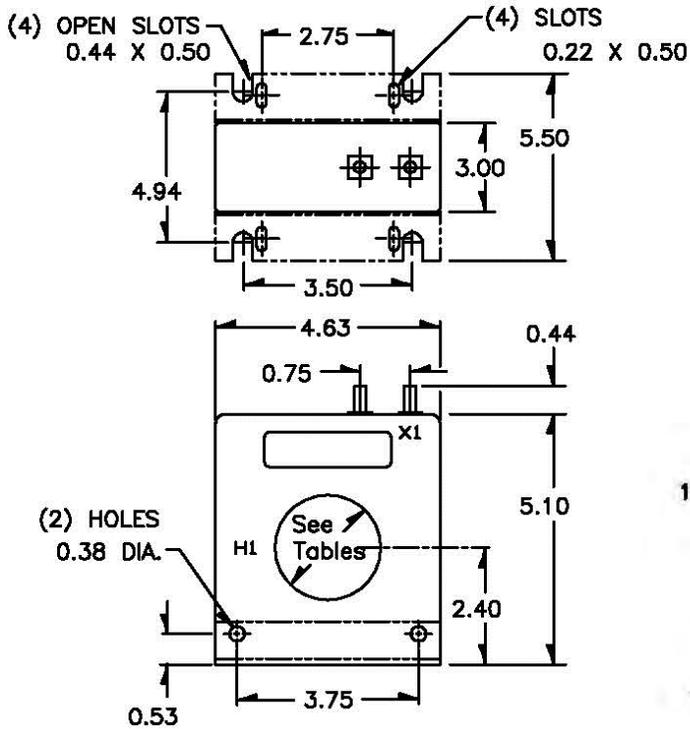
CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.8		@ 30°C	@55°C
21 - 500	50:5	-	1.2	2.4	-	-	-	0.026	2.0	2.0
21 - 750	75:5	C10	0.6	1.2	2.4	4.8	-	0.042	2.0	2.0
21 - 101	100:5	C10	0.6	1.2	1.2	2.4	4.8	0.063	2.0	2.0
21 - 151	150:5	C20	0.3	0.6	0.6	1.2	2.4	0.098	2.0	1.5
21 - 201	200:5	C20	0.3	0.3	0.6	0.6	1.2	0.126	2.0	1.5
21 - 251	250:5	C20	0.3	0.3	0.3	0.6	1.2	0.158	1.5	1.5
21 - 301	300:5	C20	0.3	0.3	0.3	0.3	0.3	0.168	1.5	1.33
21 - 401	400:5	C50	0.3	0.3	0.3	0.3	0.3	0.253	1.5	1.0
21 - 501	500:5	C20	0.3	0.3	0.3	0.3	0.6	0.283	1.5	1.0
21 - 601	600:5	C50	0.3	0.3	0.3	0.3	0.3	0.339	1.33	1.0
21 - 751	750:0	C50	0.3	0.3	0.3	0.3	0.3	0.424	1.0	0.8
21 - 801	800:5	C50	0.3	0.3	0.3	0.3	0.3	0.452	1.0	0.8
21 - 102	1000:5	C100	0.3	0.3	0.3	0.3	0.3	0.565	1.0	0.8



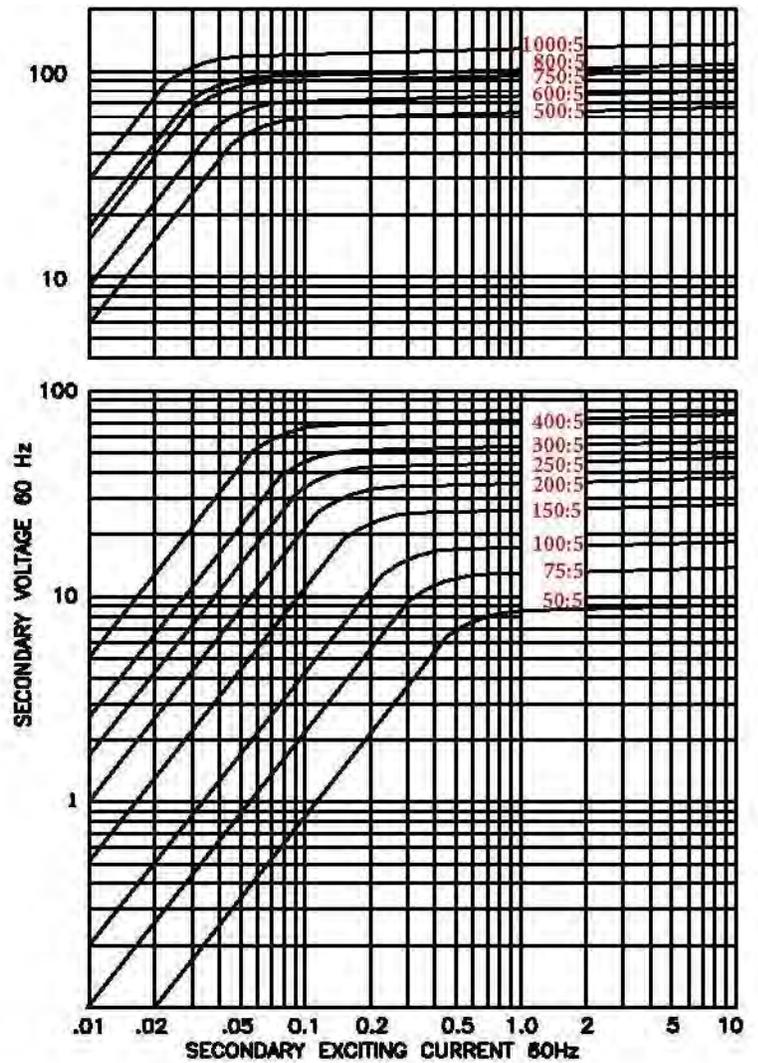
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Models 21, 22, 23, 24 & 25



EXCITATION CURVE



Model 21



Current Transformer

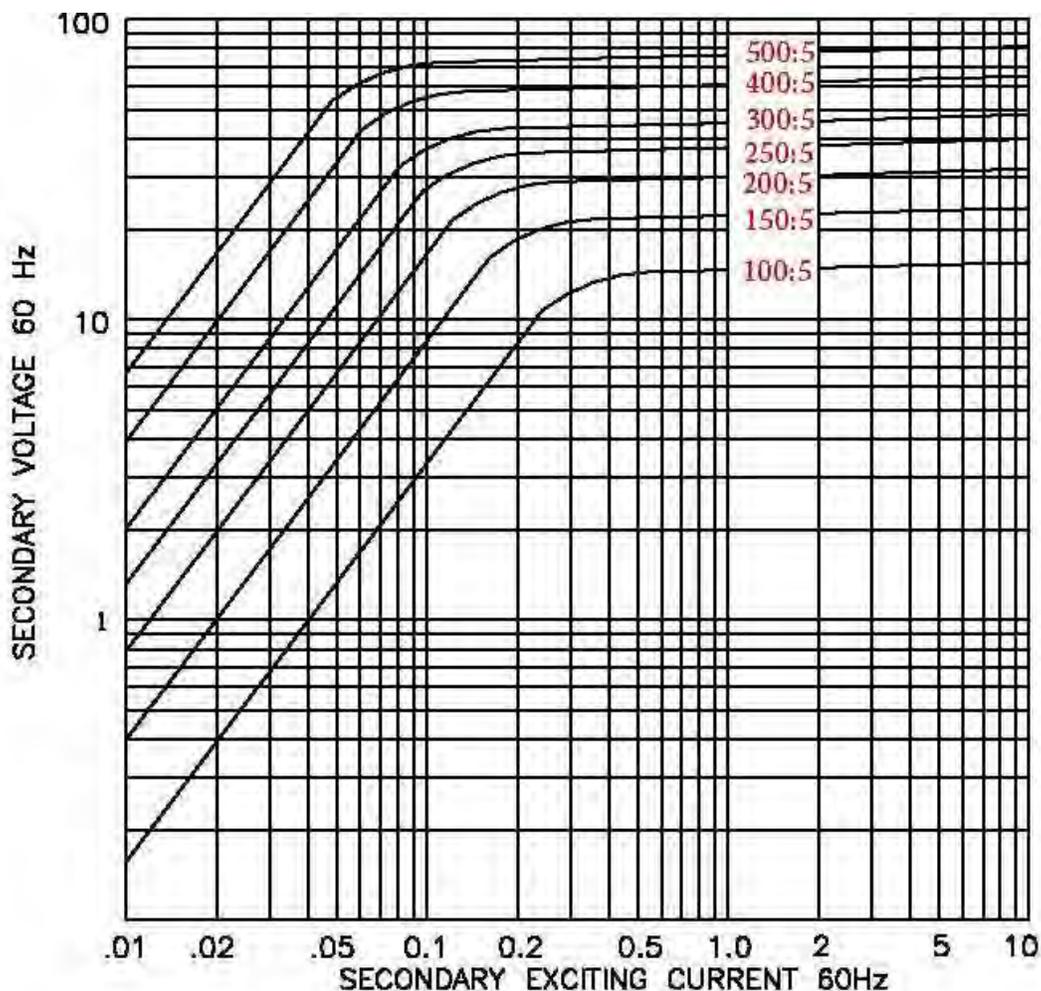
Model 21, 22, 23, 24, 25

rev 03182021

MODEL 22
 Window Diameter 1.63"
 Approximate weight: 7 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.B		@ 30° C	@ 55° C
22 - 101	100:5	C10	0.6	1.2	2.4	2.4	4.8	0.060	2.0	2.0
22 - 151	150:5	C10	0.3	0.6	1.2	1.2	2.4	0.090	2.0	2.0
22 - 201	200:5	C20	0.3	0.3	0.6	1.2	1.2	0.120	2.0	1.5
22 - 251	250:5	C20	0.3	0.3	0.6	0.6	1.2	0.150	1.5	1.5
22 - 301	300:5	C20	0.3	0.3	0.3	0.6	0.6	0.180	1.5	1.33
22 - 401	400:5	C20	0.3	0.3	0.3	0.3	0.6	0.241	1.5	1.0
22 - 501	500:5	C50	0.3	0.3	0.3	0.3	0.3	0.301	1.5	1.0

EXCITATION CURVE



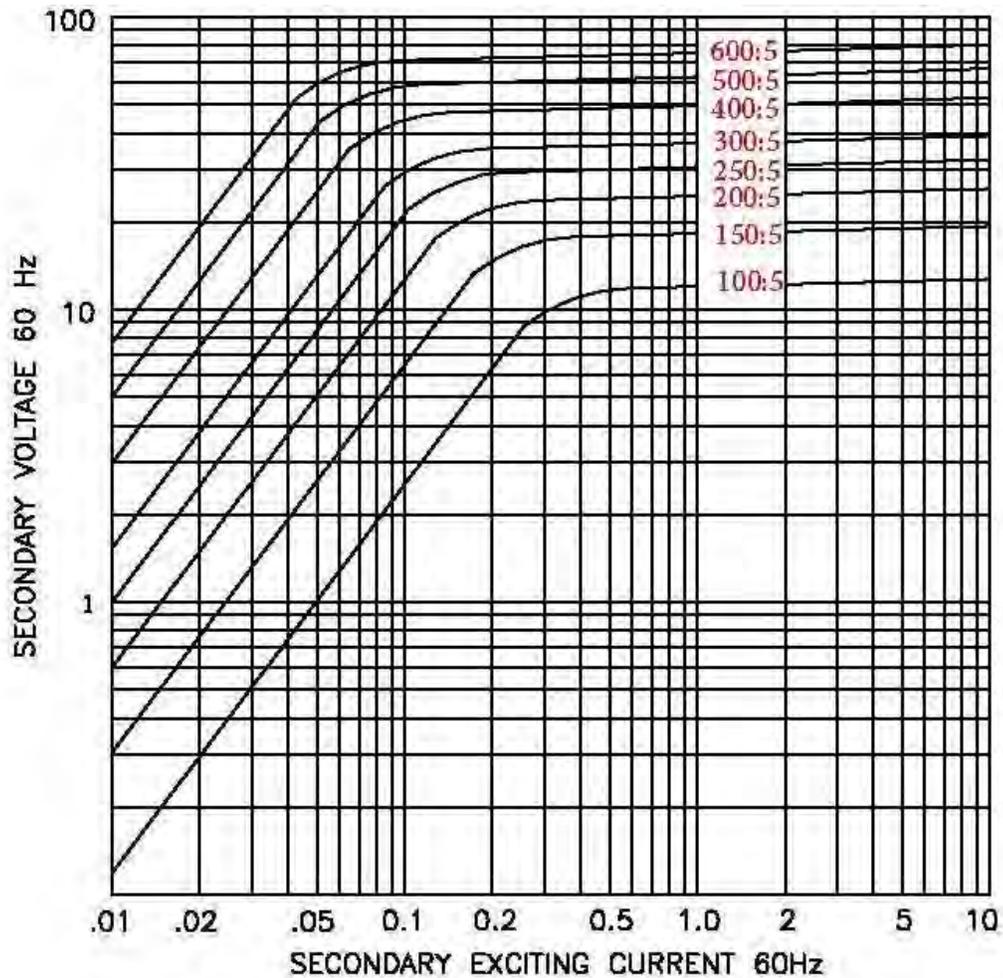
Model 22

MODEL 23

Window Diameter 2.00"
Approximate weight: 7 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.B		@ 30° C	@ 55° C
23-101	100:5	-	0.6	0.6	2.4	4.8	-	0.051	2.0	2.0
23-151	150:5	C10	0.6	0.6	0.6	1.2	2.4	0.076	2.0	2.0
23-201	200:5	C10	0.3	0.6	0.6	1.2	2.4	0.114	2.0	1.5
23-251	250:5	C20	0.3	0.3	0.6	0.6	1.2	0.143	2.0	1.5
23-301	300:5	C20	0.3	0.3	0.3	0.6	1.2	0.171	1.5	1.33
23-401	400:5	C20	0.3	0.3	0.3	0.3	0.8	0.228	1.5	1.0
23-501	500:5	C20	0.3	0.3	0.3	0.3	0.3	0.288	1.5	1.0
23-601	600:5	C50	0.3	0.3	0.3	0.3	0.3	0.343	1.33	1.0

EXCITATION CURVE

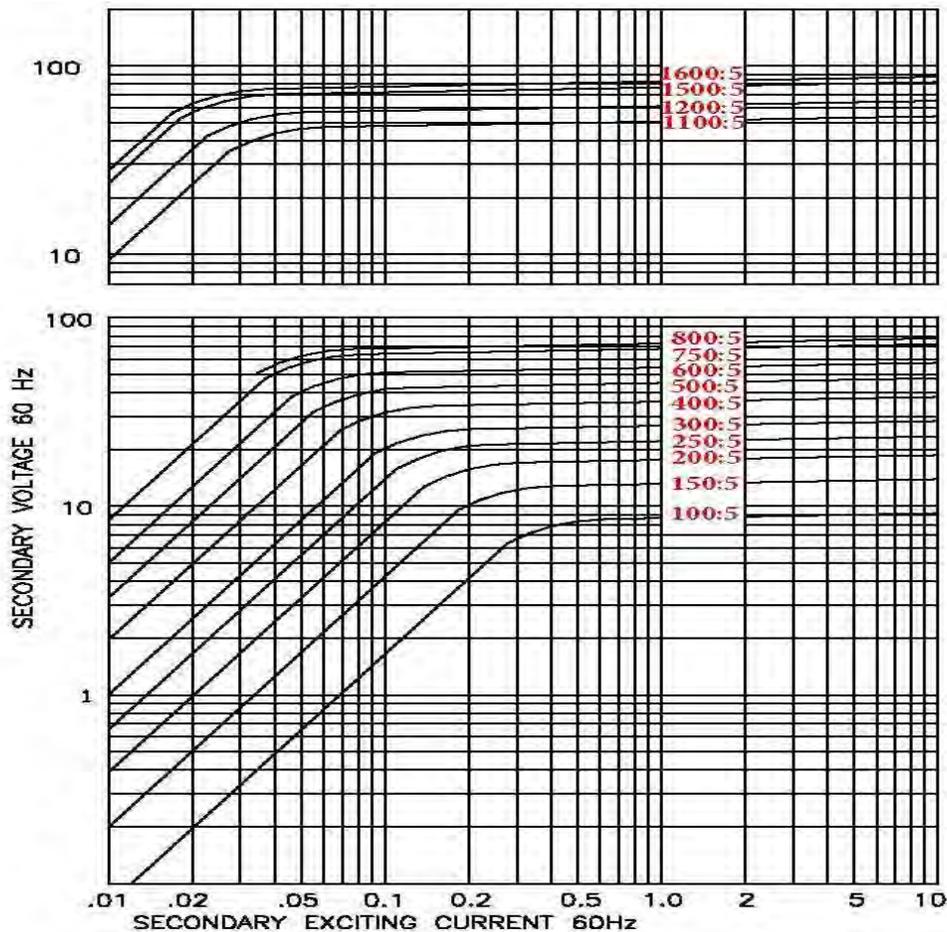


Model 23

MODEL 24
 Window Diameter 2.50"
 Approximate weight: 6.5 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.B		@ 30°C	@ 55°C
24 - 101	100:5	-	0.6	1.2	2.4	4.8	-	0.046	2.0	2.0
24 - 151	150:5	-	0.6	0.6	1.2	2.4	4.8	0.069	2.0	2.0
24 - 201	200:5	C10	0.3	0.3	0.6	1.2	2.4	0.096	2.0	1.5
24 - 251	250:5	C10	0.3	0.3	0.3	0.6	1.2	0.118	2.0	1.5
24 - 301	300:5	C10	0.3	0.3	0.3	0.6	1.2	0.133	2.0	1.5
24 - 401	400:5	C20	0.3	0.3	0.3	0.6	0.6	0.212	1.5	1.0
24 - 501	500:5	C20	0.3	0.3	0.3	0.3	0.6	0.265	1.5	1.0
24 - 601	600:5	C20	0.3	0.3	0.3	0.3	0.3	0.317	1.33	1.0
24 - 751	750:5	C20	0.3	0.3	0.3	0.3	0.3	0.396	1.0	1.0
24 - 801	800:5	C20	0.3	0.3	0.3	0.3	0.3	0.423	1.0	0.8
24 - 102	1000:5	C10	0.3	0.3	0.3	0.3	0.3	0.446	1.0	0.8
24 - 122	1200:5	C10	0.3	0.3	0.3	0.3	0.3	0.535	1.0	0.8
24 - 152	1500:5	C10	0.3	0.3	0.3	0.3	0.3	0.669	1.0	0.8
24 - 162	1600:5	C10	0.3	0.3	0.3	0.3	0.3	0.713	0.8	0.8

EXCITATION CURVE



Model 24



Current Transformer

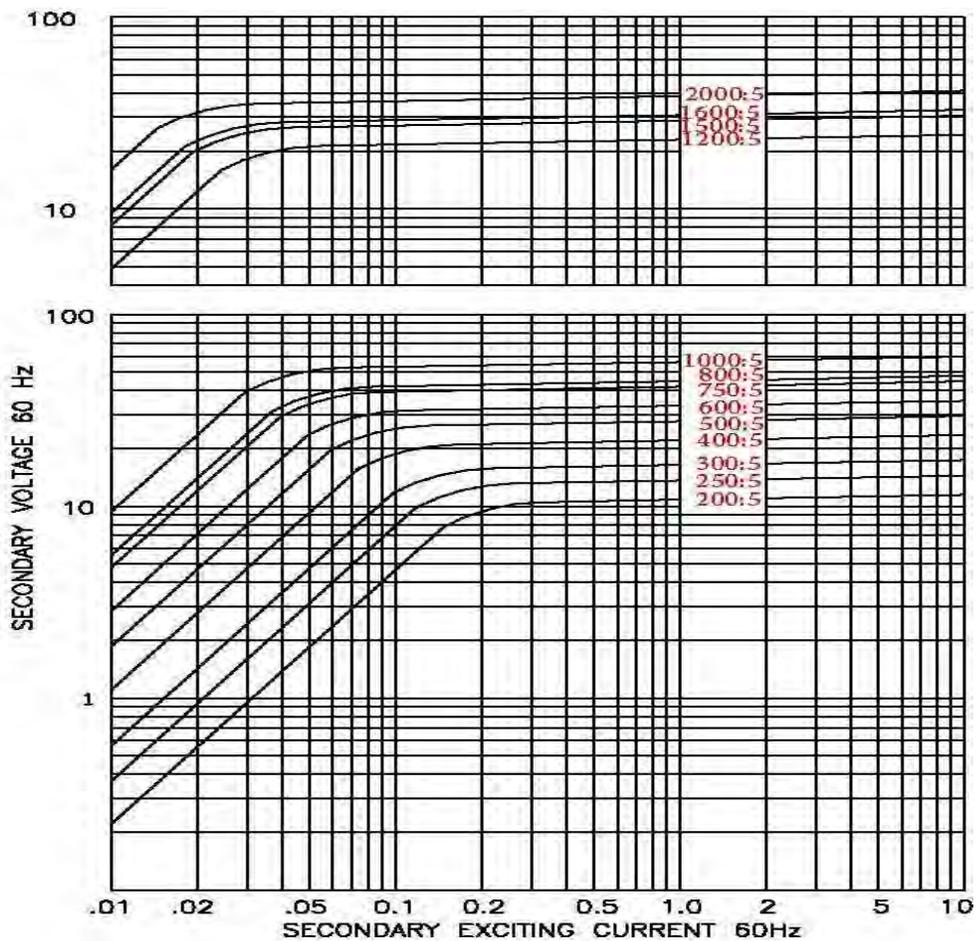
Model 21, 22, 23, 24, 25

rev 03182021

MODEL 25
 Window Diameter 3.13"
 Approximate weight: 4 lbs.

CATALOG NUMBER	CURRENT RATIO	V.A. FOR ± 1% CLASS	ANSI METERING CLASS AT 60 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.B		@ 30°C	@ 55°C
25-201	200:5	10	0.6	0.6	1.2	2.4	4.8	0.081	2.0	2.0
25-251	250:5	15	0.3	0.3	1.2	1.2	2.4	0.108	2.0	1.5
25-301	300:5	20	0.3	0.3	0.6	1.2	2.4	0.129	2.0	1.5
25-401	400:5	30	0.3	0.3	0.6	0.6	1.2	0.194	1.5	1.33
25-501	500:5	45	0.3	0.3	0.3	0.6	1.2	0.243	1.5	1.0
25-601	600:5	60	0.3	0.3	0.3	0.3	0.6	0.292	1.33	1.0
25-751	750:5	75	0.3	0.3	0.3	0.3	0.6	0.364	1.0	0.8
25-801	800:5	80	0.3	0.3	0.3	0.3	0.3	0.389	1.0	0.8
25-102	1000:5	100	0.3	0.3	0.3	0.3	0.3	0.486	1.0	0.8
25-122	1200:5	75	0.3	0.3	0.3	0.3	0.3	0.389	1.0	0.8
25-152	1500:5	90	0.3	0.3	0.3	0.3	0.3	0.617	1.0	0.8
25-162	1600:5	95	0.3	0.3	0.3	0.3	0.3	0.658	1.0	0.6
25-202	2000:5	100	0.3	0.3	0.3	0.3	0.3	0.822	0.8	0.6

EXCITATION CURVE



Model 25



Current Transformer

Model 296-300
rev 011218

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

1.50", 2.25", 3.0", 3.38", 3.75"

APPROXIMATE WEIGHT:

18, 15, 12, 10, 5 lbs.

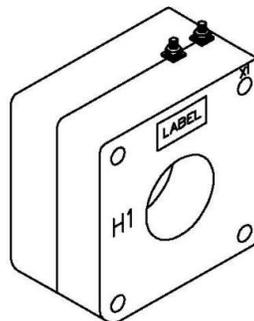
CONNECTIONS:

- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Multi-ratios available upon request

Model	296	297	298	299	300
Window Size	1.50	2.25	3.00	3.38	3.75
Width	5.96	5.96	5.96	5.96	5.96
Height	6.31	6.31	6.31	6.31	6.31
Depth	3.00	3.00	3.00	3.00	3.00

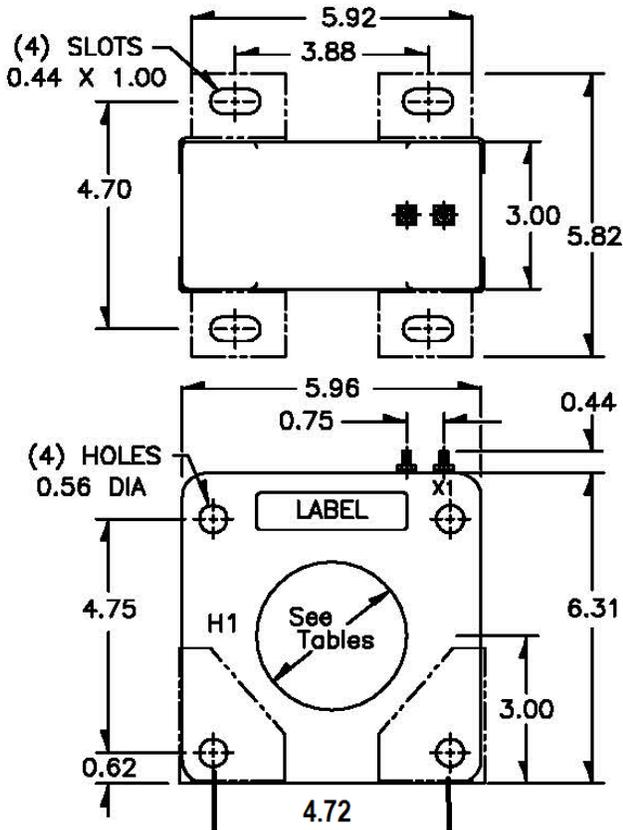
MODEL 296
Window Diameter 1.50"
Approximate weight: 18 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
296 - 500	50:5	C10	1.2	2.4	4.8	-	-	0.018	2.0	2.0
296 - 750	75:5	C10	0.6	1.2	2.4	4.8	-	0.027	2.0	2.0
296 - 101	100:5	C20	0.6	0.6	1.2	2.4	4.8	0.035	2.0	2.0
296 - 151	150:5	C20	0.3	0.3	0.6	1.2	2.4	0.053	2.0	2.0
296 - 201	200:5	C20	0.3	0.3	0.6	0.6	1.2	0.071	2.0	2.0
296 - 251	250:5	C50	0.3	0.3	0.3	0.3	0.6	0.121	2.0	2.0
296 - 301	300:5	C50	0.3	0.3	0.3	0.3	0.6	0.168	2.0	1.5
296 - 401	400:5	C100	0.3	0.3	0.3	0.3	0.3	0.224	2.0	1.5
296 - 501	500:5	C50	0.3	0.3	0.3	0.3	0.3	0.249	1.5	1.5
296 - 601	600:5	C100	0.3	0.3	0.3	0.3	0.3	0.298	1.5	1.33
296 - 751	750:5	C100	0.3	0.3	0.3	0.3	0.3	0.373	1.5	1.0
296 - 801	800:5	C100	0.3	0.3	0.3	0.3	0.3	0.398	1.5	1.0
296 - 102	1000:5	C100	0.3	0.3	0.3	0.3	0.3	0.447	1.33	1.0

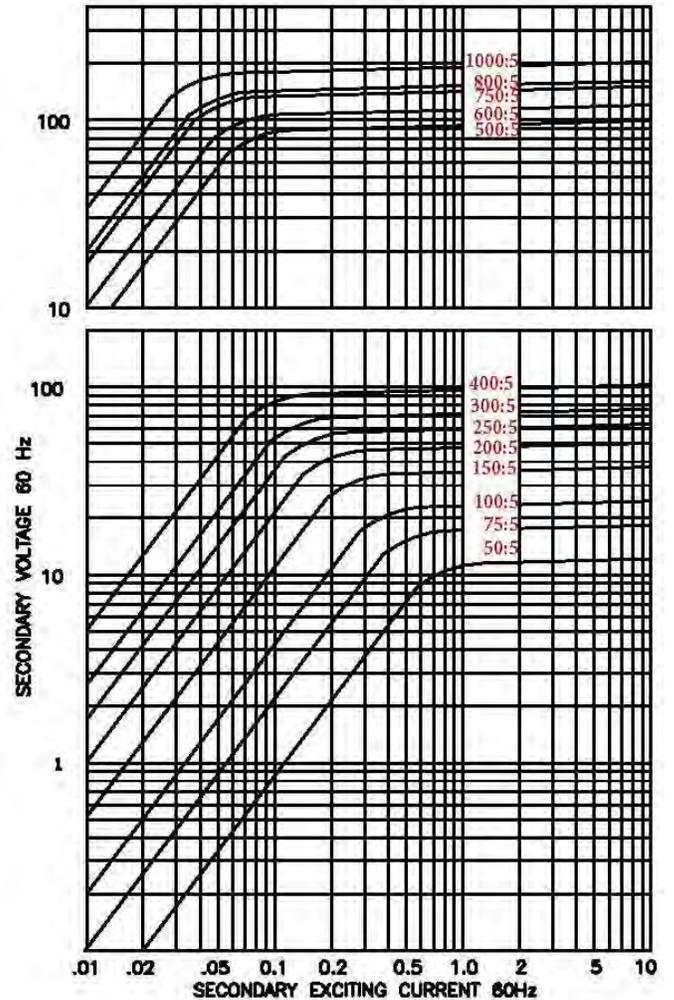




Model 296



EXCITATION CURVE



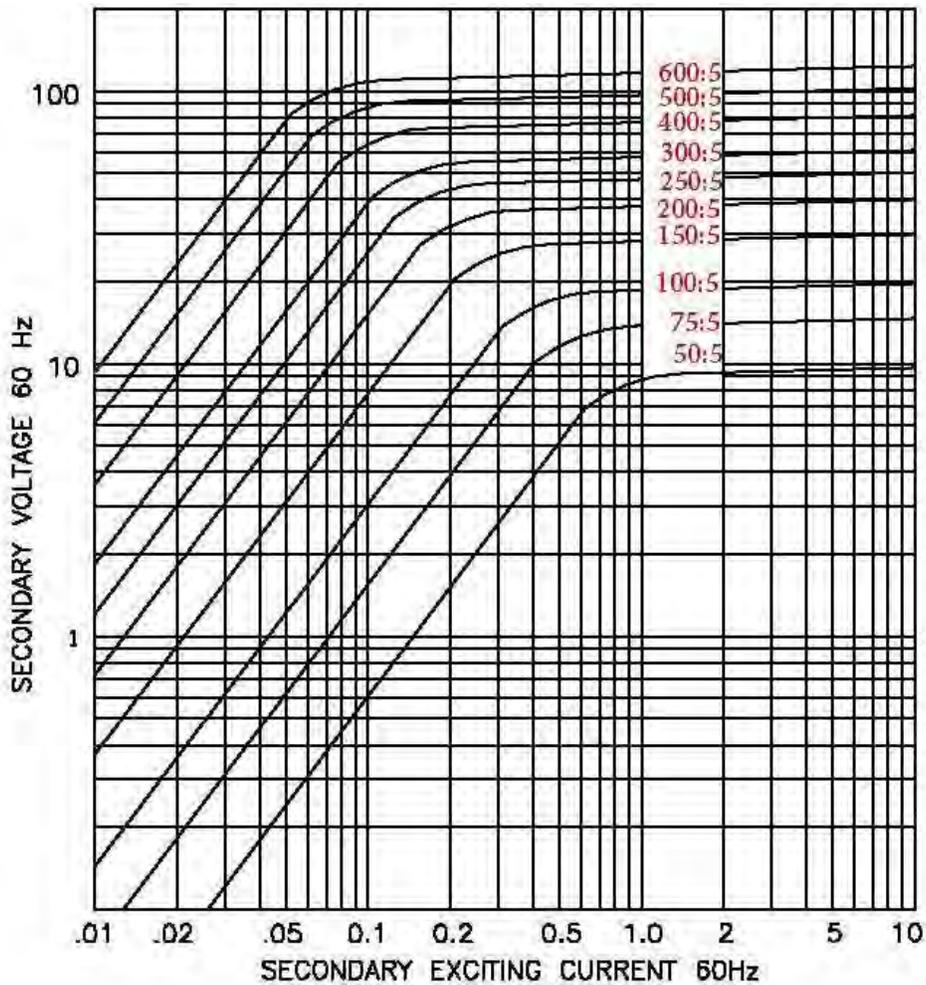
Model 296

Current Transformer

MODEL 297
Window Diameter 2.25"
Approximate weight: 15 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
297 - 500	50:5	-	2.4	4.8	-	-	-	0.015	2.0	2.0
297 - 750	75:5	C10	1.2	2.4	4.8	4.8	-	0.023	2.0	2.0
297 - 101	100:5	C10	0.6	1.2	2.4	4.8	4.8	0.051	2.0	2.0
297 - 151	150:5	C20	0.6	0.6	1.2	2.4	2.4	0.048	2.0	2.0
297 - 201	200:5	C20	0.3	0.6	0.6	1.2	2.4	0.103	2.0	2.0
297 - 251	250:5	C20	0.3	0.3	0.3	0.6	1.2	0.111	2.0	2.0
297 - 301	300:5	C50	0.3	0.3	0.3	0.6	1.2	0.154	2.0	1.5
297 - 401	400:5	C50	0.3	0.3	0.3	0.3	0.6	0.205	2.0	1.5
297 - 501	500:5	C50	0.3	0.3	0.3	0.3	0.3	0.233	2.0	1.5
297 - 601	600:5	C100	0.3	0.3	0.3	0.3	0.3	0.308	1.5	1.33

EXCITATION CURVE

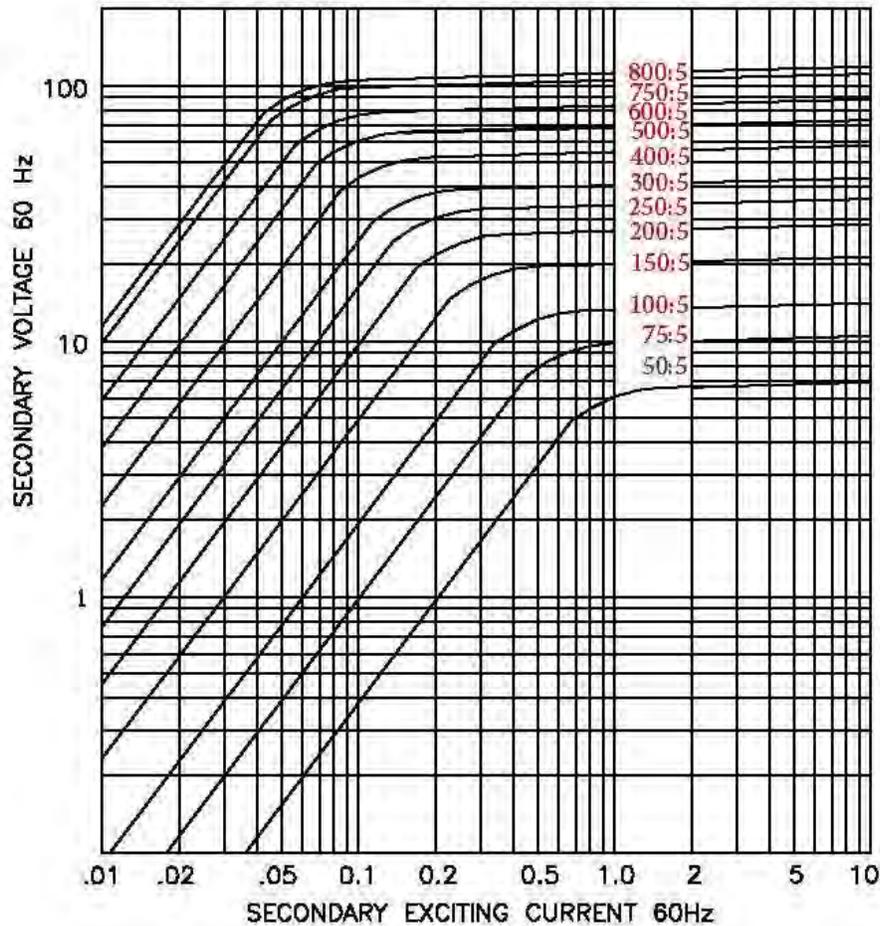


Model 297

MODEL 298
 Window Diameter 3.0"
 Approximate weight: 12 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
298 - 500	50:5	-	2.4	4.8	-	-	-	0.023	2.0	2.0
298 - 750	75:5	-	1.2	1.2	4.8	-	-	0.028	2.0	2.0
298 - 101	100:5	C10	0.6	0.6	2.4	4.8	-	0.040	2.0	2.0
298 - 151	150:5	C10	0.6	0.6	1.2	2.4	4.8	0.060	2.0	2.0
298 - 201	200:5	C20	0.6	0.6	0.6	1.2	2.4	0.080	2.0	2.0
298 - 251	250:5	C20	0.3	0.3	0.6	1.2	2.4	0.073	2.0	2.0
298 - 301	300:5	C20	0.3	0.3	0.6	0.6	1.2	0.087	2.0	2.0
298 - 401	400:5	C20	0.3	0.3	0.3	0.3	0.6	0.186	2.0	1.5
298 - 501	500:5	C50	0.3	0.3	0.3	0.3	0.6	0.233	2.0	1.5
298 - 601	600:5	C50	0.3	0.3	0.3	0.3	0.3	0.279	1.5	1.33
298 - 751	750:5	C50	0.3	0.3	0.3	0.3	0.3	0.349	1.5	1.0
298 - 801	800:5	C50	0.3	0.3	0.3	0.3	0.3	0.372	1.5	1.0

EXCITATION CURVE



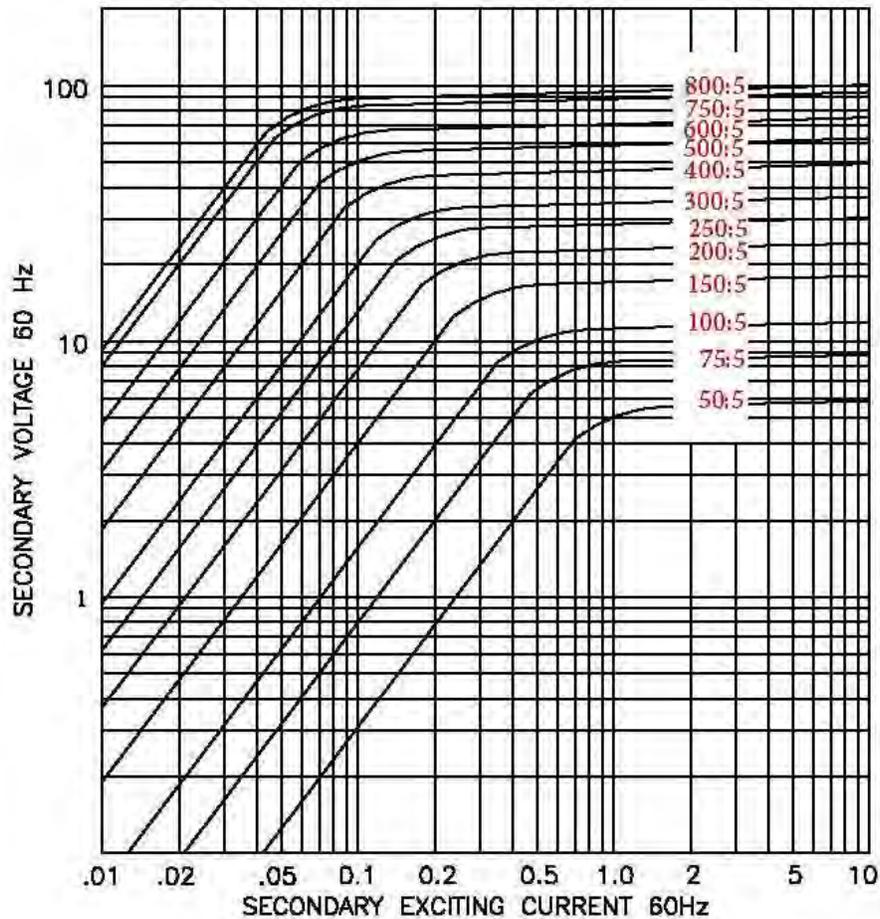
Model 298

Current Transformer

Model 299
Window Diameter 3.38"
Approximate weight: 10 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
299 - 500	50:5	-	4.8	4.8	-	-	-	0.022	2.0	2.0
299 - 750	75:5	-	1.2	2.4	4.8	-	-	0.028	2.0	2.0
299 - 101	100:5	C10	0.6	1.2	2.4	4.8	-	0.038	2.0	2.0
299 - 151	150:5	C10	0.6	0.6	1.2	2.4	4.8	0.057	2.0	2.0
299 - 201	200:5	C10	0.6	0.6	1.2	1.2	2.4	0.088	2.0	2.0
299 - 251	250:5	C20	0.3	0.3	0.6	1.2	2.4	0.098	2.0	2.0
299 - 301	300:5	C20	0.3	0.3	0.3	0.6	1.2	0.118	2.0	2.0
299 - 401	400:5	C20	0.3	0.3	0.3	0.6	0.6	0.177	2.0	1.5
299 - 501	500:5	C20	0.3	0.3	0.3	0.3	0.6	0.221	2.0	1.5
299 - 601	600:5	C50	0.3	0.3	0.3	0.3	0.3	0.265	1.5	1.33
299 - 751	750:5	C50	0.3	0.3	0.3	0.3	0.3	0.331	1.5	1.0
299 - 801	800:5	C50	0.3	0.3	0.3	0.3	0.3	0.353	1.5	1.0

EXCITATION CURVE

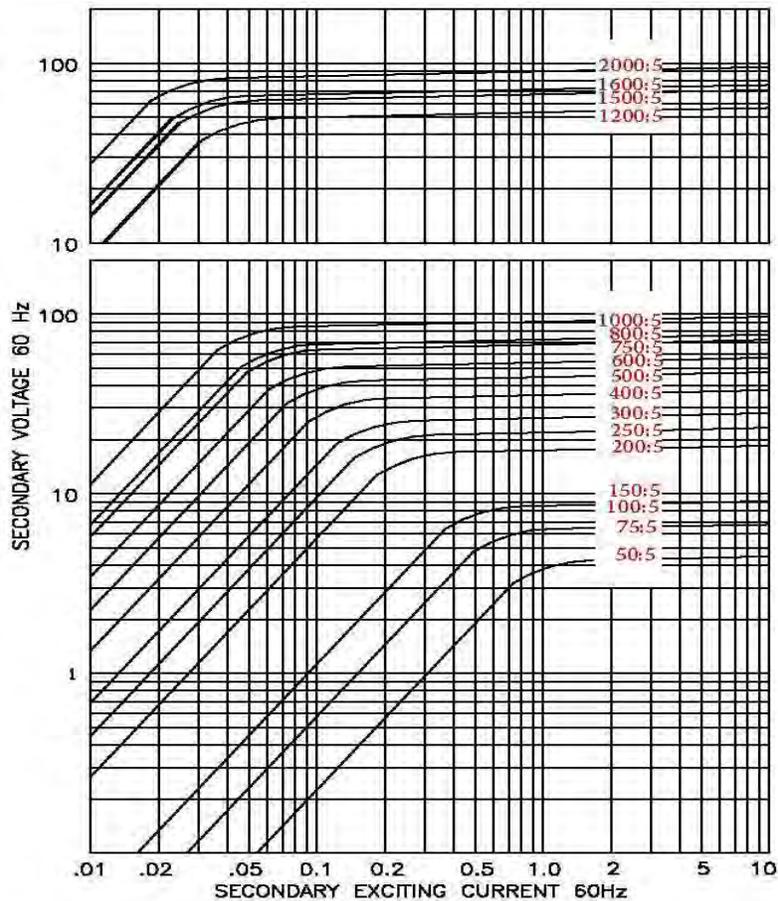


Model 299

Window Diameter 3.75"
Approximate weight: 9 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
300 - 500	50:5	-	2.4	4.8	-	-	-	0.012	2.0	2.0
300 - 750	75:5	-	2.4	2.4	-	-	-	0.019	2.0	2.0
300 - 101	100:5	-	2.4	2.4	2.4	-	-	0.026	2.0	2.0
300 - 151	150:5	-	0.6	0.6	2.4	2.4	4.8	0.054	2.0	2.0
300 - 201	200:5	C10	0.6	0.6	1.2	2.4	4.8	0.072	2.0	2.0
300 - 251	250:5	C10	0.3	0.6	1.2	1.2	2.4	0.104	2.0	2.0
300 - 301	300:5	C10	0.3	0.3	0.3	0.6	1.2	0.108	2.0	2.0
300 - 401	400:5	C20	0.3	0.3	0.3	0.6	1.2	0.144	2.0	1.5
300 - 501	500:5	C20	0.3	0.3	0.3	0.6	0.6	0.209	2.0	1.5
300 - 601	600:5	C20	0.3	0.3	0.3	0.3	0.6	0.251	1.5	1.33
300 - 751	750:5	C20	0.3	0.3	0.3	0.3	0.3	0.329	1.5	1.0
300 - 801	800:5	C50	0.3	0.3	0.3	0.3	0.3	0.334	1.5	1.0
300 - 102	1000:5	C50	0.3	0.3	0.3	0.3	0.3	0.418	1.33	1.0
300 - 122	1200:5	C10	0.3	0.3	0.3	0.3	0.3	0.425	1.33	1.0
300 - 152	1500:5	C10	0.3	0.3	0.3	0.3	0.3	0.531	1.0	1.0
300 - 162	1600:5	C10	0.3	0.3	0.3	0.3	0.3	0.567	1.0	0.8
300 - 202	2000:5	C20	0.3	0.3	0.3	0.3	0.3	0.708	1.0	0.8

EXCITATION CURVE



Model 300



Current Transformer

Model 64, 65, 66

APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

1.56", 2.0", 2.5"

APPROXIMATE WEIGHT:

3.75, 3.25 and 2.5 lbs.

CONNECTIONS:

-Terminals are brass studs No. 8 – 32 with one flat washer, lockwasher, and regular nut



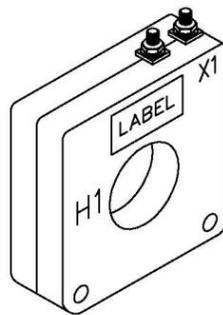
CERTIFICATIONS:



Model	64	65	66
Window Size	1.56	2.00	2.50
Width	4.00	4.00	4.00
Height	4.00	4.00	4.00
Depth	1.75	1.75	1.75

MODEL 64
Window Diameter 1.56"
Approximate weight: 3.75 lbs.

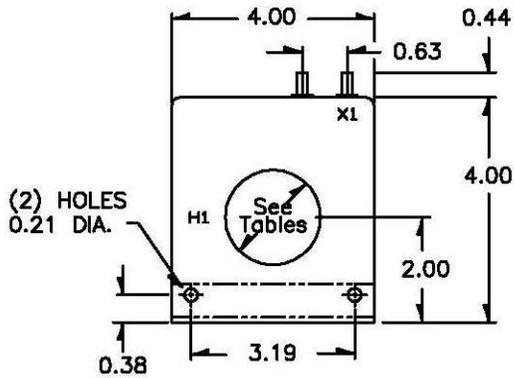
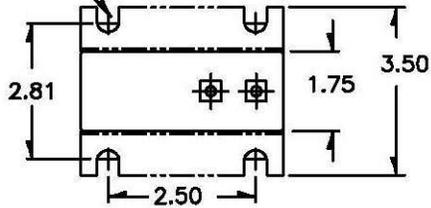
CATALOG NUMBER	CURRENT RATIO	V.A. FOR ± 1% CLASS	ANSI METERING CLASS AT 60 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO. 1	BO.2	BO.5	BO.9	B1.B		@ 30° C	@ 55° C
64 – 500	50:5	2.5 ± 2%	2.4	-	-	-	-	0.011	2.0	2.0
64 – 750	75:5	4.0	1.2	2.4	-	-	-	0.020	2.0	2.0
64 – 101	100:5	5.0	1.2	1.2	4.8	4.8	-	0.026	2.0	2.0
64 – 151	150:5	7.5	0.6	0.6	1.2	2.4	4.8	0.043	2.0	2.0
64 – 201	200:5	12.5	0.3	0.3	1.2	1.2	2.4	0.063	2.0	1.5
64 – 251	250:5	20.0	0.3	0.3	0.6	1.2	2.4	0.074	2.0	1.5
64 – 301	300:5	35.0	0.3	0.3	0.3	0.6	1.2	0.086	2.0	1.5
64 – 401	400:5	50.0	0.3	0.3	0.3	0.6	1.2	0.110	1.5	1.33
64 – 501	500:5	50.0	0.3	0.3	0.3	0.3	0.6	0.173	1.5	1.0





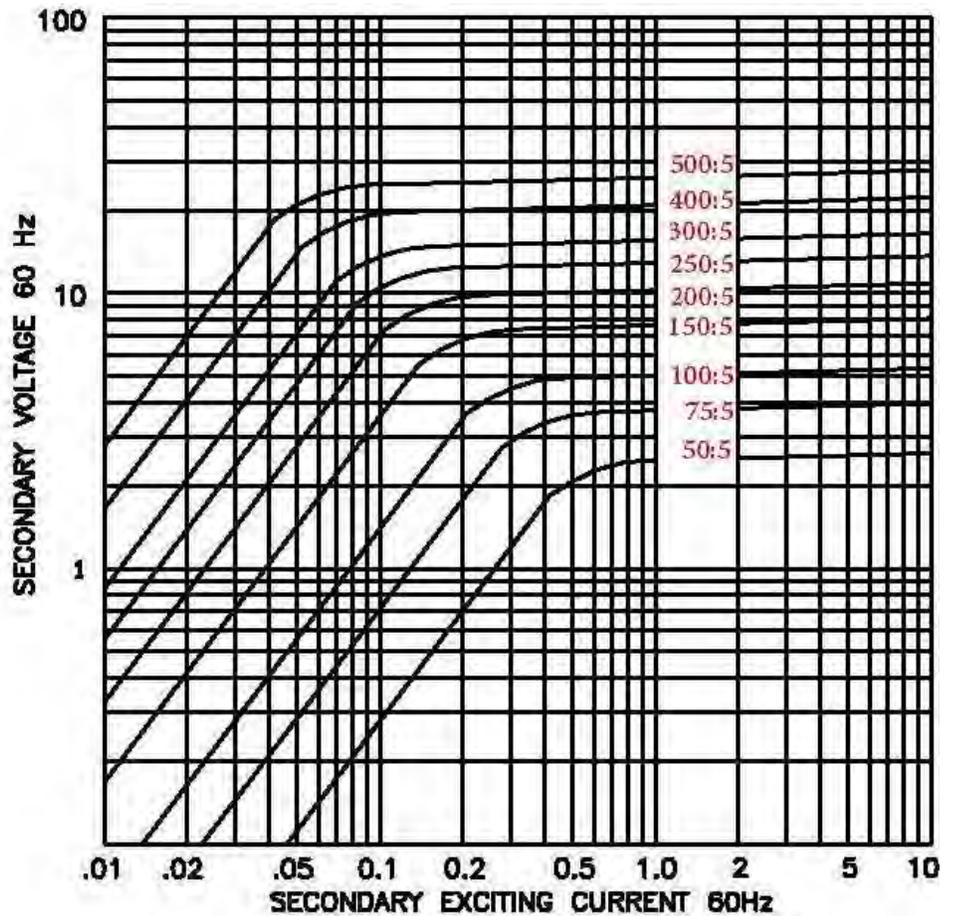
Models 64, 65 & 66

(4) OPEN SLOTS
0.22 X 0.47



(2) HOLES
0.21 DIA.

EXCITATION CURVE

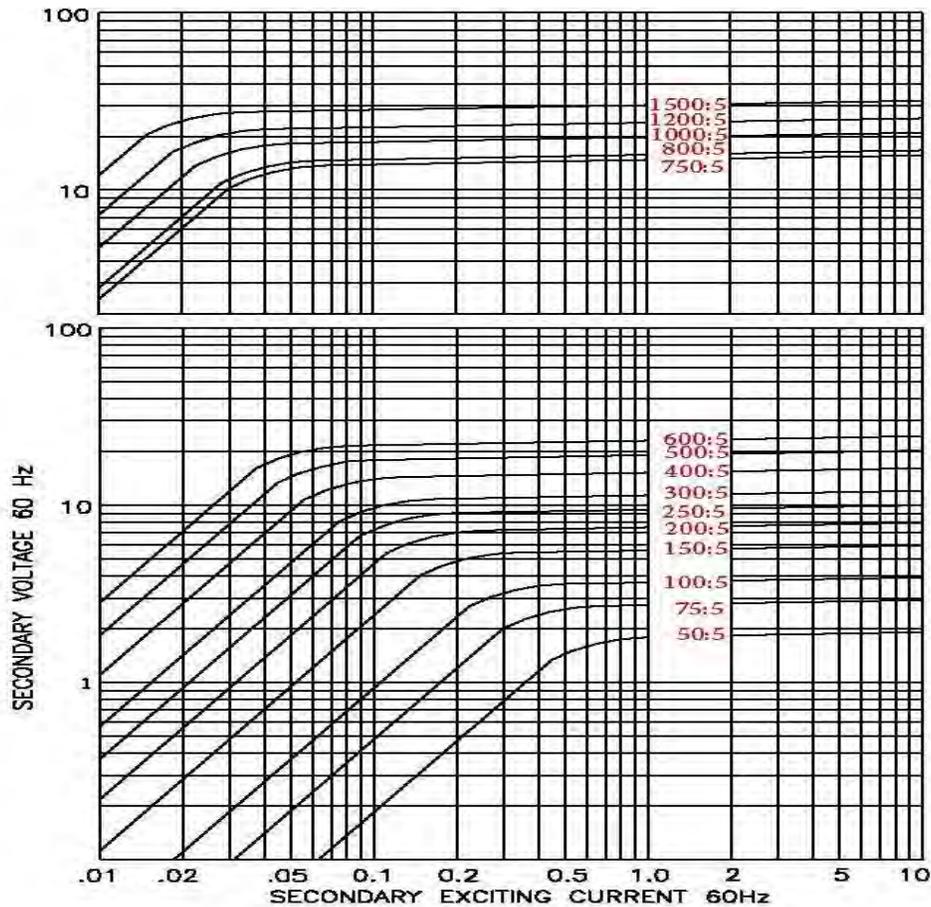


Model 64

MODEL 65
 Window Diameter 2.0"
 Approximate weight: 3.25 lbs.

CATALOG NUMBER	CURRENT RATIO	V.A. FOR ± 1% CLASS	ANSI METERING CLASS AT 50 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.8		@ 30° C	@ 55° C
65 - 500	50:5	2.0	2.4	-	-	-	-	0.007	2.0	2.0
65 - 750	75:5	4.0	2.4	2.4	-	-	-	0.013	2.0	2.0
65 - 101	100:5	4.0	1.2	1.2	4.8	-	-	0.022	2.0	2.0
65 - 151	150:5	6.0	0.6	0.6	2.4	4.8	4.8	0.039	2.0	2.0
65 - 201	200:5	12.5	0.6	0.6	1.2	2.4	2.4	0.047	2.0	2.0
65 - 251	250:5	15.0	0.3	0.3	0.6	1.2	2.4	0.067	2.0	1.5
65 - 301	300:5	20.0	0.3	0.3	0.6	1.2	2.4	0.077	2.0	1.5
65 - 401	400:5	35.0	0.3	0.3	0.3	0.6	1.2	0.110	1.5	1.25
65 - 501	500:5	50.0	0.3	0.3	0.3	0.6	1.2	0.155	1.33	1.0
65 - 601	600:5	60.0	0.3	0.3	0.3	0.3	0.6	0.186	1.25	1.0
65 - 751	750:5	75.0	0.3	0.3	0.3	0.6	0.6	0.197	1.0	0.8
65 - 801	800:5	80.0	0.3	0.3	0.3	0.3	0.6	0.210	1.0	0.8
65 - 102	1000:5	100.0	0.3	0.3	0.3	0.3	0.6	0.253	1.0	0.8
65 - 122	1200:5	105.0	0.3	0.3	0.3	0.3	0.3	0.316	1.0	0.8
65 - 152	1500:5	140.0	0.3	0.3	0.3	0.3	0.3	0.491	1.0	0.8

EXCITATION CURVE



Model 65



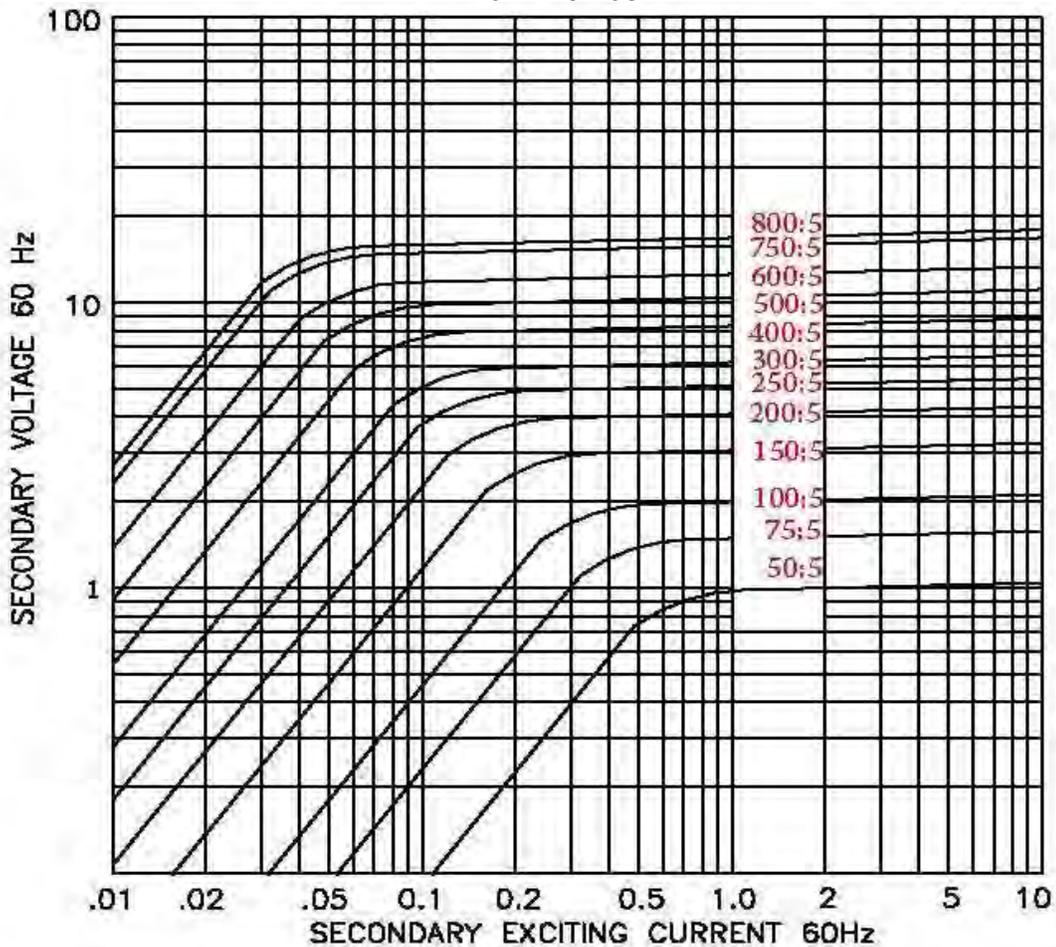
Current Transformer

Model 64, 65, 66

Model 66
Window Diameter 2.5"
 Approximate weight: 2.5 lbs.

CATALOG NUMBER	CURRENT RATIO	V.A. FOR + 1.5% CLASS	ANSI METERING CLASS AT 60 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30° C	@ 55° C
66 - 500	50:5	1.5+2%	-	-	-	-	-	0.006	2.0	2.0
66 - 750	75:5	2.5+2%	2.4	-	-	-	-	0.008	2.0	2.0
66 - 101	100:5	2.5	1.2	2.4	-	-	-	0.013	2.0	2.0
66 - 151	150:5	4.0	1.2	1.2	2.4	4.8	-	0.020	2.0	2.0
66 - 201	200:5	5.0	0.6	0.6	2.4	2.4	4.8	0.038	2.0	2.0
66 - 251	250:5	10.0	0.6	0.6	1.2	2.4	4.8	0.045	2.0	2.0
66 - 301	300:5	12.5	0.3	0.3	1.2	2.4	2.4	0.065	2.0	1.5
66 - 401	400:5	20.0	0.3	0.3	0.6	1.2	1.2	0.082	1.5	1.33
66 - 501	500:5	30.0	0.3	0.3	0.6	1.2	1.2	0.107	1.5	1.25
66 - 601	600:5	40.0	0.3	0.3	0.6	0.6	1.2	0.162	1.33	1.0
66 - 751	750:5	50.0	0.3	0.3	0.3	0.6	0.6	0.202	1.0	0.8
66 - 801	800:5	60.0	0.3	0.3	0.3	0.6	0.6	0.216	1.0	0.8

EXCITATION CURVE



Model 66



Current Transformer

Model 6A

APPLICATION:

Ammeters, wattmeters.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL.full wave

WINDOW DIAMETER:

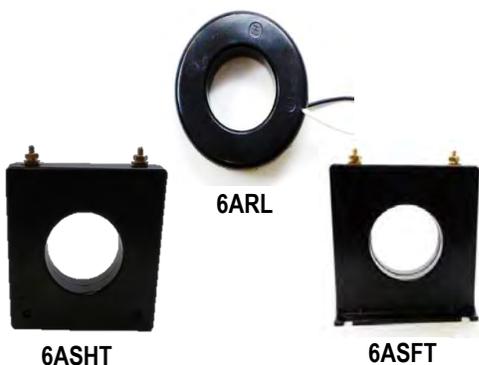
2.06"

APPROXIMATE WEIGHT:

1.25 lbs.

CONNECTIONS:

- Terminal and brass studs No. 8-32 with one flat washer, lockwasher, and regular nut
- Flexible leads are UL 1015 105°C, CSA approved, #16 AWG, 24" long.
- Non-standard, lead length can be specified.
- Mounting bracket 59-0223
- Model 6ASHT and model 6ASFT also available as 6ASHL and 6ASFL with leads



CERTIFICATIONS:



Model	6ASHT	6ASFT	6ARL
Window Size	2.06	2.06	2.06
Width	4.08	4.12	4.08
Height	4.22	4.22	4.08
Depth	1.10	1.10	1.10

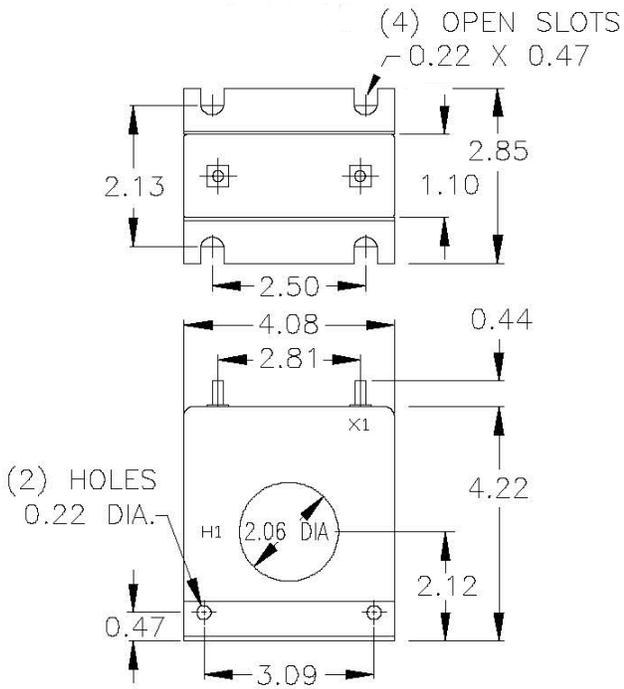
MODEL 6A
Window Diameter 2.06"
Approximate weight: 1.25 lbs.

CATALOG NUMBER	CURRENT RATIO	V.A. ± 1% CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
6A**-101	100:5	1.0	1.2	2.4	-	-	-	0.015	2.0	2.0
6A**-151	150:5	5.0	1.2	1.2	4.8	4.8	-	0.024	2.0	2.0
6A**-201	200:5	5.0	0.6	1.2	2.4	4.8	-	0.037	2.0	2.0
6A**-251	250:5	7.5	0.3	0.6	2.4	2.4	4.8	0.044	2.0	1.5
6A**-301	300:5	12.5	0.3	0.6	1.2	2.4	2.4	0.055	2.0	1.5
6A**-401	400:5	15.0	0.3	0.3	0.6	1.2	2.4	0.071	1.5	1.33
6A**-501	500:5	25.0	0.3	0.3	0.6	1.2	2.4	0.107	1.5	1.0
6A**-601	600:5	30.0	0.3	0.3	0.6	0.6	1.2	0.128	1.33	1.0
6A**-751	750:5	30.0	0.3	0.3	0.6	0.6	1.2	0.156	1.25	1.0
6A**-801	800:5	35.0	0.3	0.3	0.6	0.6	0.6	0.167	1.25	0.8
6A**-102	1000:5	35.0	0.3	0.3	0.3	0.6	0.6	0.208	1.0	0.8
6A**-122	1200:5	40.0	0.3	0.3	0.3	0.3	0.6	0.250	1.0	0.8
6A**-152	1500:5	50.0	0.3	0.3	0.3	0.3	0.6	0.388	1.0	0.8

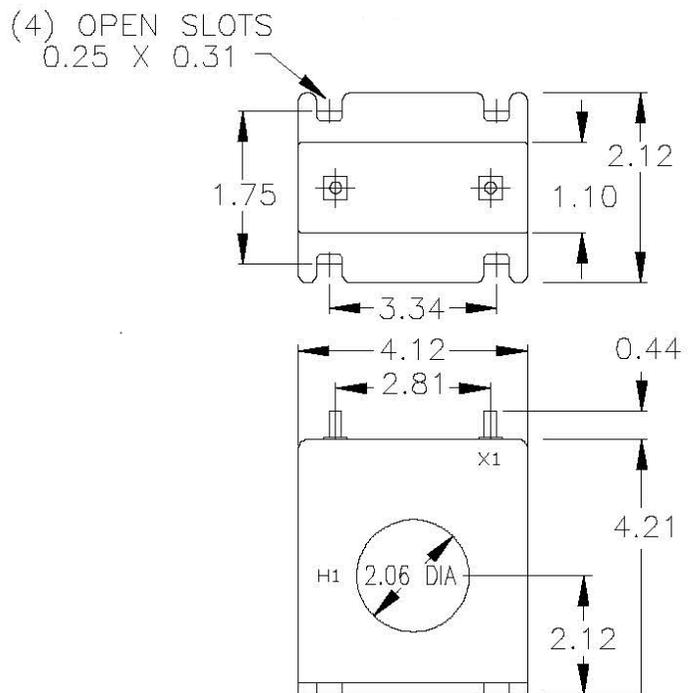
*Note: When ordering, prefix Cat No. with model designation, i.e. 6SHT-201, 6RL-301 etc.



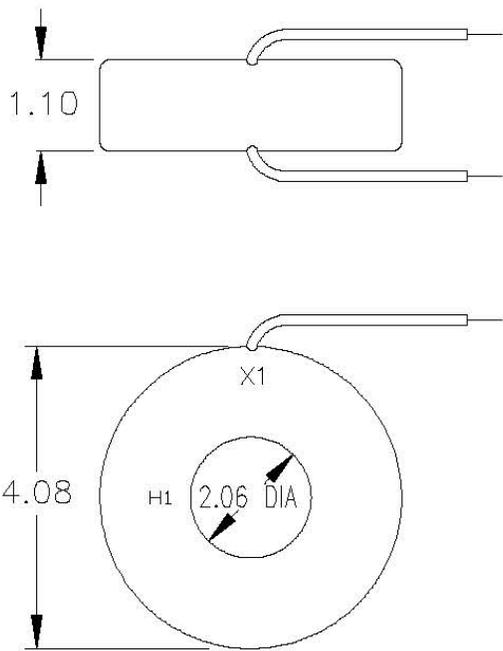
Model 6ASHT



Model 6ASFT



Model 6ARL





Current Transformer

Model 112, 113, 114, 115, 117
rev 03182021



CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER: 2.25", 2.75", 3.25", 4.00", 4.62"

APPROXIMATE WEIGHT:

25, 22, 22, 17, 11.5 lbs.

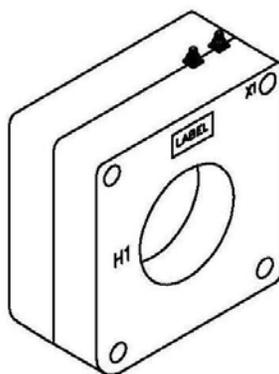
CONNECTIONS:

- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Mounting kits 59-0215 (CR) and 59-0216 (CL)
- Multi-ratios available upon request

Model	112	113	114	115	117
Window Size	2.25	2.75	3.25	4.00	4.62
Width	7.00	7.00	7.00	7.00	7.00
Height	7.12	7.12	7.12	7.12	7.12
Depth	4.00	4.00	4.00	4.00	4.00

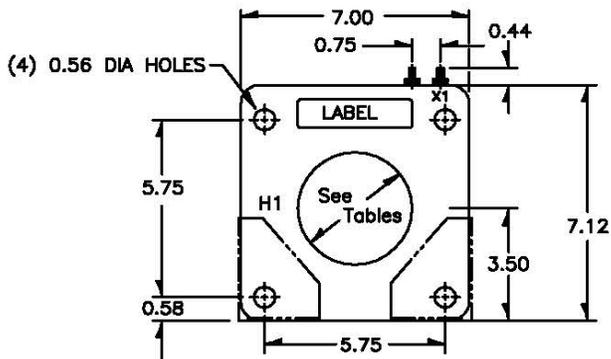
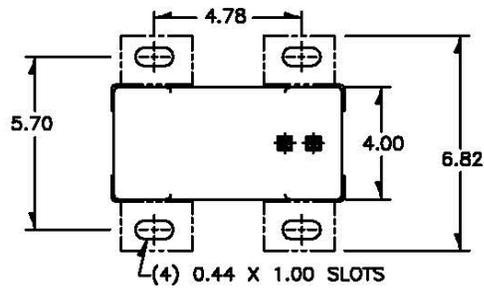
MODEL 112
Window Diameter 2.25"
Approximate weight: 25 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
112-500	50:5	C10	1.2	2.4	-	-	-	0.029	2.0	2.0
112-750	75:5	C10	0.6	1.2	2.4	4.8	-	0.046	2.0	2.0
112-101	100:5	C20	0.6	0.6	2.4	2.4	4.8	0.062	2.0	2.0
112-151	150:5	C20	0.3	0.6	1.2	1.2	2.4	0.093	2.0	2.0
112-201	200:5	C50	0.3	0.3	0.3	0.6	1.2	0.124	2.0	2.0
112-251	250:5	C50	0.3	0.3	0.3	0.3	0.6	0.155	2.0	2.0
112-301	300:5	C50	0.3	0.3	0.3	0.3	0.6	0.186	2.0	2.0
112-401	400:5	C100	0.3	0.3	0.3	0.3	0.3	0.248	2.0	1.5
112-501	500:5	C100	0.3	0.3	0.3	0.3	0.3	0.341	2.0	1.5
112-601	600:5	C100	0.3	0.3	0.3	0.3	0.3	0.409	1.5	1.33
112-751	750:5	C200	0.3	0.3	0.3	0.3	0.3	0.495	1.5	1.0
112-801	800:5	C200	0.3	0.3	0.3	0.3	0.3	0.529	1.5	1.0
112-102	1000:5	C200	0.3	0.3	0.3	0.3	0.3	0.661	1.33	1.0
112-122	1200:5	C200	0.3	0.3	0.3	0.3	0.3	0.793	1.33	1.0

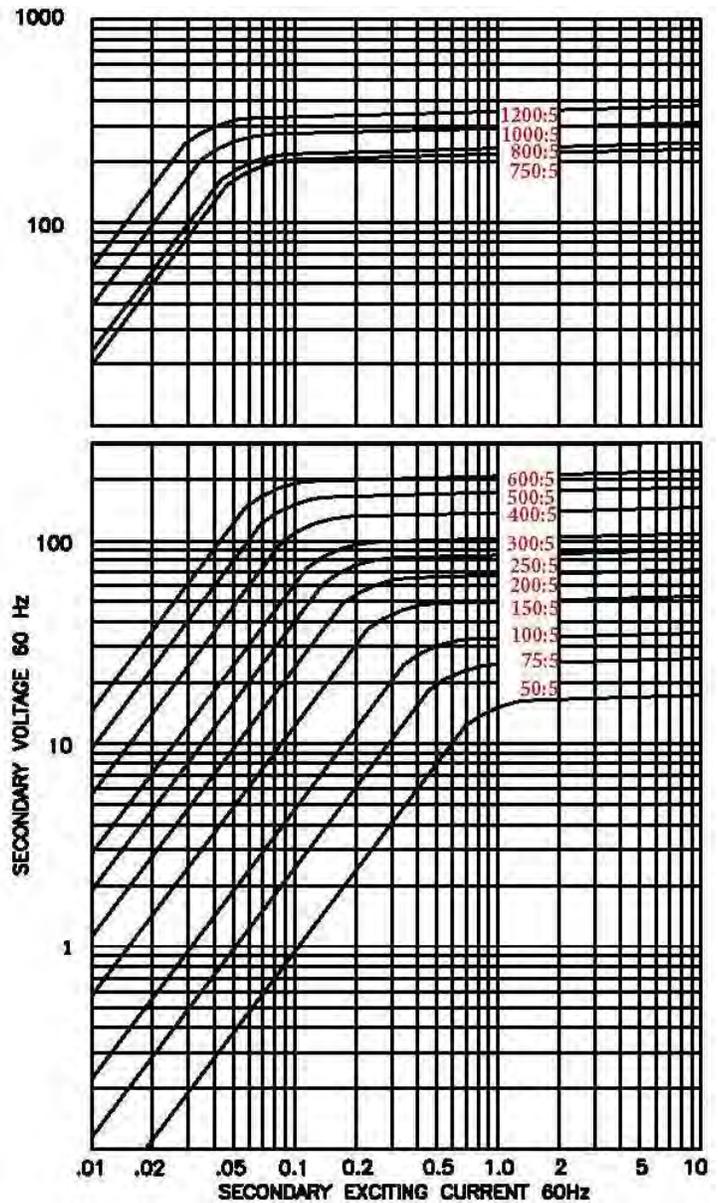




Models 112, 113, 144, 115 & 117



EXCITATION CURVE

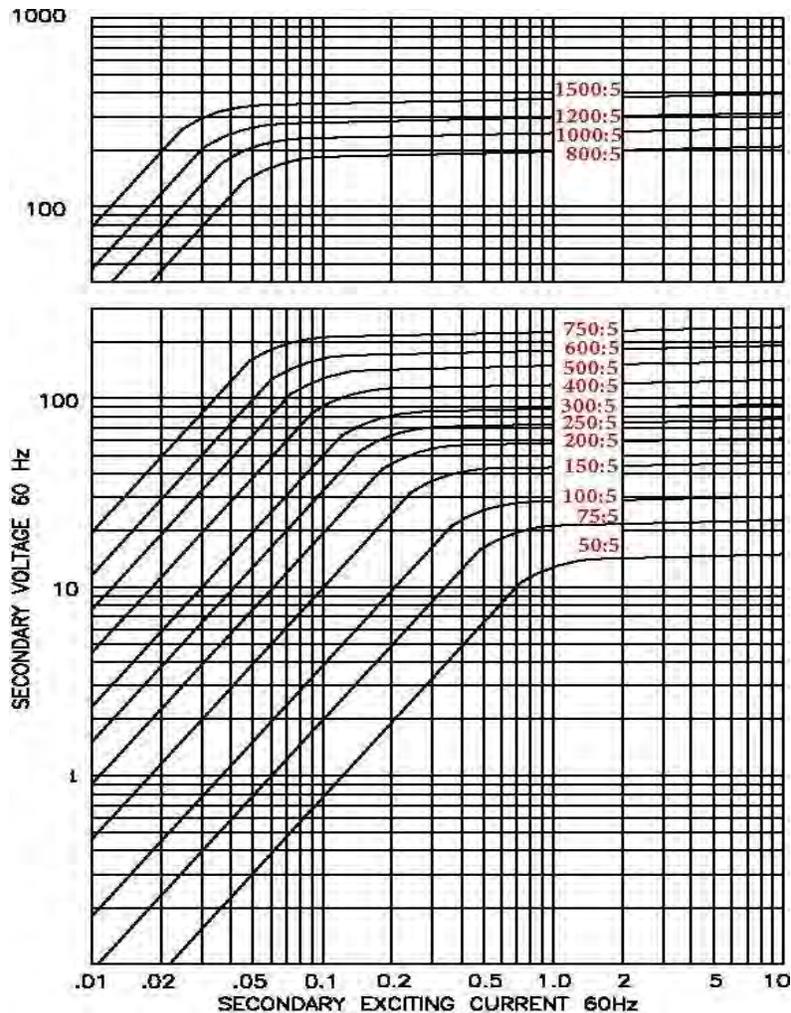


Model 112

MODEL 113
 Window Diameter 2.75"
 Approximate weight: 23 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 50 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.8		@ 30° C	@ 55° C
113 - 500	50:5	C10	2.4	4.8	-	-	-	0.033	2	2
113 - 750	75:5	C10	0.6	1.2	4.8	4.8	-	0.043	2	2
113 - 101	100:5	C20	0.6	0.6	2.4	2.4	4.8	0.059	2	2
113 - 151	150:5	C20	0.3	0.3	0.6	1.2	2.4	0.089	2	2
113 - 201	200:5	C20	0.3	0.3	0.6	0.6	1.2	0.118	2	2
113 - 251	250:5	C50	0.3	0.3	0.6	0.6	1.2	0.163	2	2
113 - 301	300:5	C50	0.3	0.3	0.3	0.6	1.2	0.195	2	2
113 - 401	400:5	C100	0.3	0.3	0.3	0.3	0.6	0.260	2	1.5
113 - 501	500:5	C100	0.3	0.3	0.3	0.3	0.3	0.325	2	1.5
113 - 601	600:5	C100	0.3	0.3	0.3	0.3	0.3	0.390	1.5	1.33
113 - 751	750:5	C200	0.3	0.3	0.3	0.3	0.3	0.488	1.5	1.0
113 - 801	800:5	C200	0.3	0.3	0.3	0.3	0.3	0.503	1.5	1.0
113 - 102	1000:5	C200	0.3	0.3	0.3	0.3	0.3	0.629	1.33	1.0
113 - 122	1200:5	C200	0.3	0.3	0.3	0.3	0.3	0.755	1.33	1.0
113 - 152	1500:5	C200	0.3	0.3	0.3	0.3	0.3	0.943	1.0	0.8

EXCITATION CURVE



Model 113



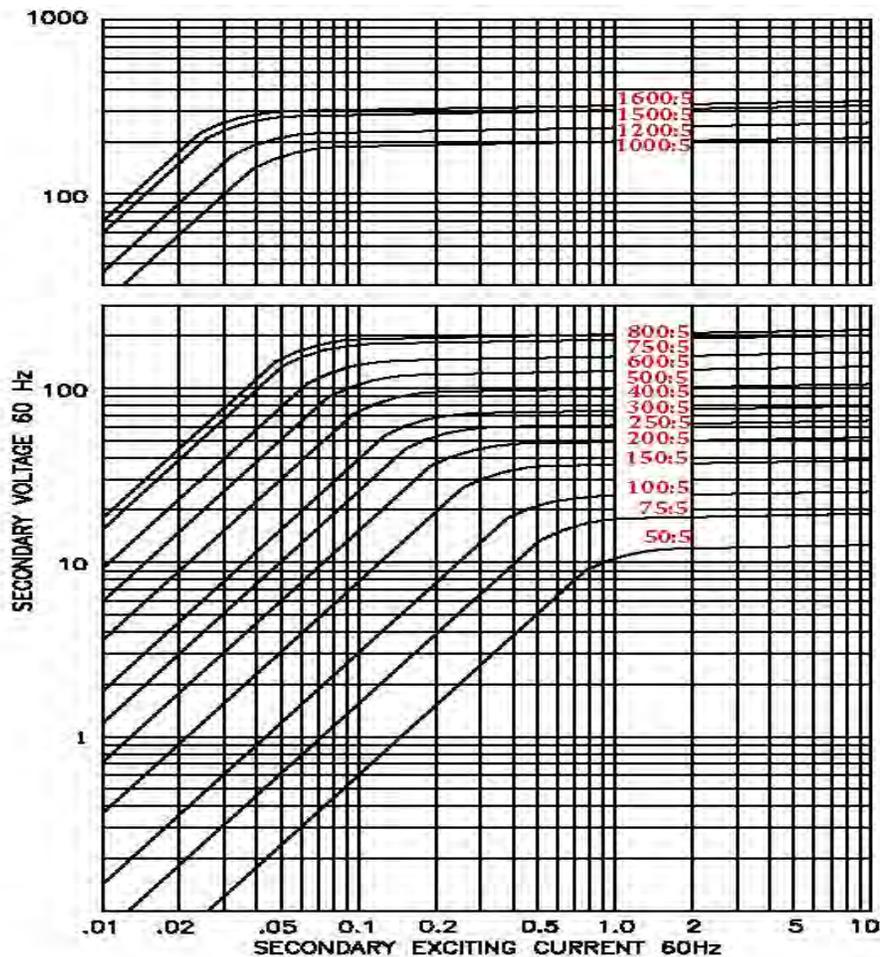
Current Transformer

Model 112, 113, 114, 115, 117
rev 03182021

MODEL 114
Window Diameter 3.25"
Approximate weight: 22 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.8		@ 30° C	@ 55° C
114 - 500	50:5	-	1.2	4.8	-	-	-	0.024	2.0	2.0
114 - 750	75:5	C10	1.2	2.4	4.8	-	-	0.040	2.0	2.0
114 - 101	100:5	C10	1.2	1.2	2.4	4.8	-	0.055	2.0	2.0
114 - 151	150:5	C20	0.6	0.6	1.2	2.4	4.8	0.082	2.0	2.0
114 - 201	200:5	C20	0.3	0.3	0.6	1.2	2.4	0.112	2.0	2.0
114 - 251	250:5	C50	0.3	0.3	0.6	1.2	1.2	0.141	2.0	2.0
114 - 301	300:5	C50	0.3	0.3	0.6	0.6	1.2	0.165	2.0	2.0
114 - 401	400:5	C100	0.3	0.3	0.3	0.3	0.6	0.220	2.0	1.5
114 - 501	500:5	C100	0.3	0.3	0.3	0.3	0.6	0.267	2.0	1.5
114 - 601	600:5	C100	0.3	0.3	0.3	0.3	0.3	0.371	1.5	1.33
114 - 751	750:5	C100	0.3	0.3	0.3	0.3	0.3	0.464	1.5	1.0
114 - 801	800:5	C200	0.3	0.3	0.3	0.3	0.3	0.495	1.5	1.0
114 - 102	1000:5	C100	0.3	0.3	0.3	0.3	0.3	0.597	1.5	1.0
114 - 122	1200:5	C200	0.3	0.3	0.3	0.3	0.3	0.716	1.33	1.0
114 - 152	1500:5	C200	0.3	0.3	0.3	0.3	0.3	0.896	1.0	0.8
114 - 162	1600:5	C200	0.3	0.3	0.3	0.3	0.3	0.955	1.0	0.8

EXCITATION CURVE

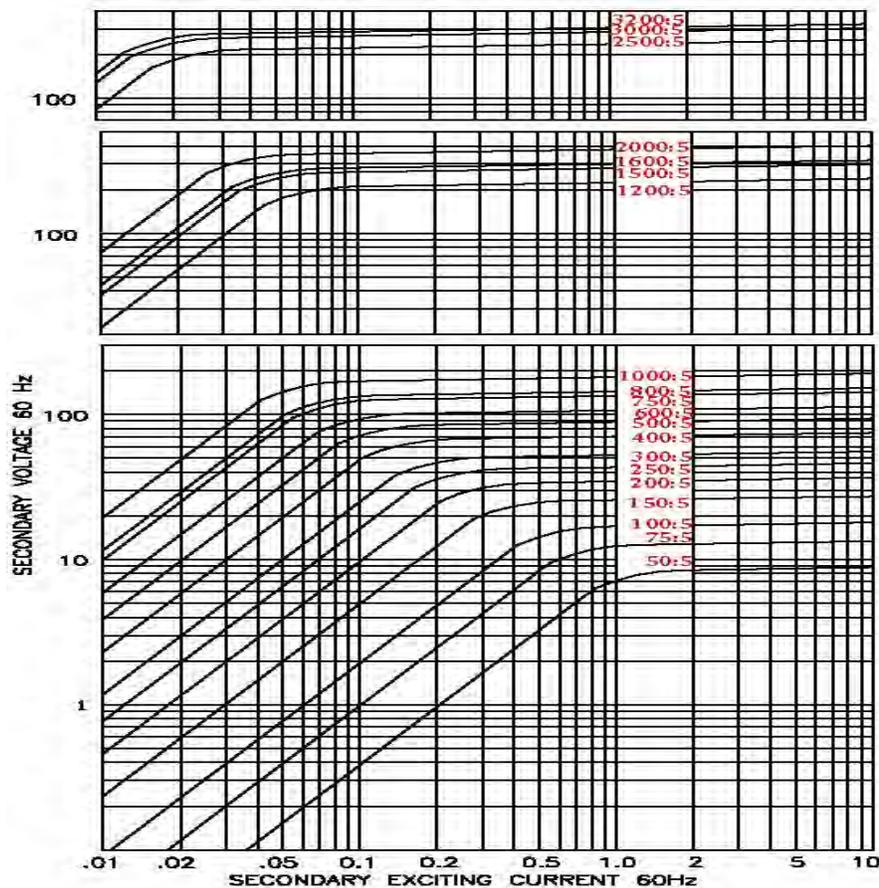


Model 114

MODEL 115
 Window Diameter 4.0"
 Approximate weight: 19 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.8		@ 30° C	@ 55° C
115 - 500	50:5	-	2.4	4.8	-	-	-	0.025	2.0	2.0
115 - 750	75:5	-	1.2	2.4	4.8	-	-	0.037	2.0	2.0
115 - 101	100:5	C10	1.2	1.2	2.4	4.8	-	0.046	2.0	2.0
115 - 151	150:5	C10	0.6	0.6	1.2	2.4	4.8	0.074	2.0	2.0
115 - 201	200:5	C20	0.3	0.3	0.6	1.2	2.4	0.099	2.0	2.0
115 - 251	250:5	C20	0.3	0.3	0.6	1.2	2.4	0.127	2.0	2.0
115 - 301	300:5	C20	0.3	0.3	0.3	0.6	1.2	0.148	2.0	2.0
115 - 401	400:5	C50	0.3	0.3	0.3	0.3	0.6	0.208	2.0	2.0
115 - 501	500:5	C50	0.3	0.3	0.3	0.3	0.3	0.247	2.0	1.5
115 - 601	600:5	C50	0.3	0.3	0.3	0.3	0.3	0.305	2.0	1.5
115 - 751	750:5	C100	0.3	0.3	0.3	0.3	0.3	0.428	1.5	1.33
115 - 801	800:5	C100	0.3	0.3	0.3	0.3	0.3	0.457	1.5	1.0
115 - 102	1000:5	C100	0.3	0.3	0.3	0.3	0.3	0.571	1.5	1.0
115 - 122	1200:5	C100	0.3	0.3	0.3	0.3	0.3	0.660	1.33	1.0
115 - 152	1500:5	C100	0.3	0.3	0.3	0.3	0.3	0.825	1.0	0.8
115 - 162	1600:5	C100	0.3	0.3	0.3	0.3	0.3	0.880	1.0	0.8
115 - 202	2000:5	C200	0.3	0.3	0.3	0.3	0.3	1.100	1.0	0.8
115 - 252	2500:5	C100	0.3	0.3	0.3	0.3	0.3	1.292	1.0	0.8
115 - 302	3000:5	C200	0.3	0.3	0.3	0.3	0.3	1.550	0.8	0.6
115 - 322	3200:5	C200	0.3	0.3	0.3	0.3	0.3	1.653	0.8	0.6

EXCITATION CURVE



MODEL 115

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

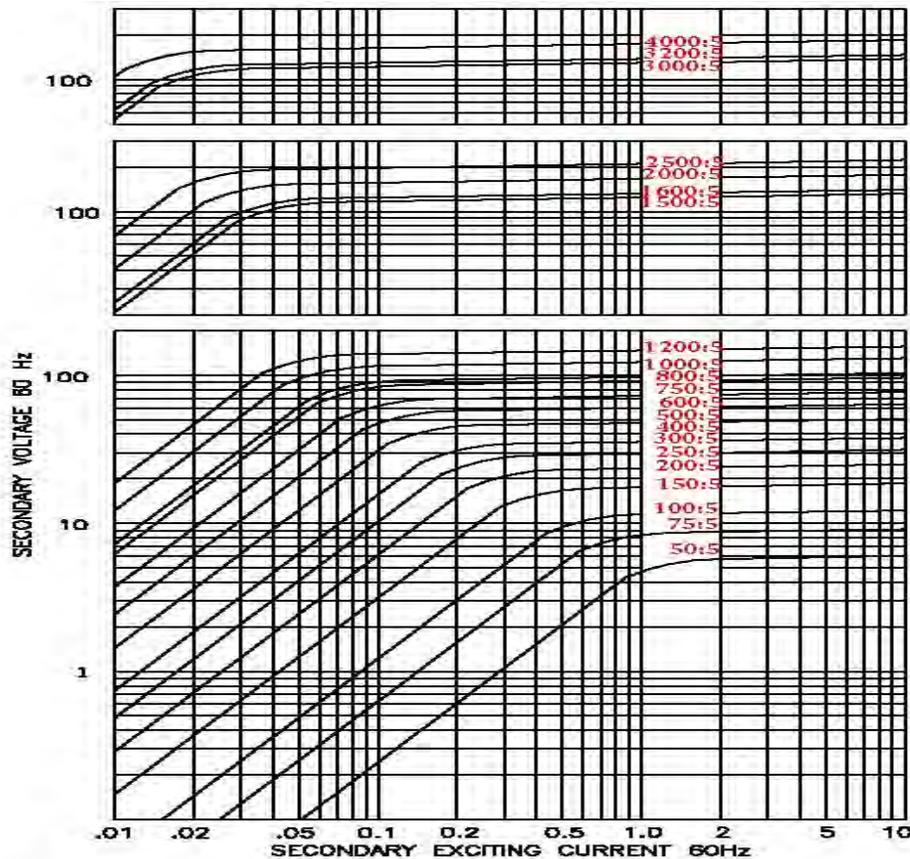
Model 112, 113, 114, 115, 117

rev 03182021

MODEL 117
 Window Diameter 4.62"
 Approximate weight: 13 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.8		@ 30° C	@ 55° C
117 - 500	50:5	-	2.4	-	-	-	-	0.015	2.0	2.0
117 - 750	75:5	-	2.4	2.4	-	-	-	0.024	2.0	2.0
117 - 101	100:5	-	1.2	2.4	4.8	-	-	0.043	2.0	2.0
117 - 151	150:5	C10	0.6	0.6	2.4	4.8	4.8	0.069	2.0	2.0
117 - 201	200:5	C10	0.6	0.6	1.2	2.4	4.8	0.085	2.0	2.0
117 - 251	250:5	C20	0.6	0.6	0.6	1.2	2.4	0.106	2.0	2.0
117 - 301	300:5	C20	0.3	0.3	0.6	1.2	2.4	0.145	2.0	2.0
117 - 401	400:5	C20	0.3	0.3	0.3	0.6	1.2	0.184	2.0	2.0
117 - 501	500:5	C20	0.3	0.3	0.3	0.3	0.6	0.236	2.0	1.5
117 - 601	600:5	C20	0.3	0.3	0.3	0.3	0.6	0.283	2.0	1.5
117 - 751	750:5	C50	0.3	0.3	0.3	0.3	0.3	0.354	1.5	1.33
117 - 801	800:5	C50	0.3	0.3	0.3	0.3	0.3	0.425	1.5	1.33
117 - 102	1000:5	C50	0.3	0.3	0.3	0.3	0.3	0.531	1.5	1.0
117 - 122	1200:5	C100	0.3	0.3	0.3	0.3	0.3	0.637	1.33	1.0
117 - 152	1500:5	C50	0.3	0.3	0.3	0.3	0.3	0.768	1.33	1.0
117 - 162	1600:5	C50	0.3	0.3	0.3	0.3	0.3	0.819	1.0	0.8
117 - 202	2000:5	C50	0.3	0.3	0.3	0.3	0.3	1.024	1.0	0.6
117 - 252	2500:5	C100	0.3	0.3	0.3	0.3	0.3	1.279	1.0	0.6
117 - 302	3000:5	-	0.3	0.3	0.3	0.3	0.3	1.428	1.0	0.6
117 - 322	3200:5	-	0.3	0.3	0.3	0.3	0.3	1.523	1.0	0.6
117 - 402	4000:5	-	0.3	0.3	0.3	0.3	0.3	2.385	0.8	0.6

EXCITATION CURVE



Model 117

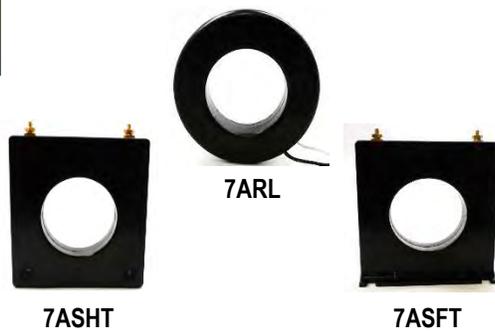
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 7A
rev 03182021

CERTIFICATIONS:



APPLICATION:

Ammeters and wattmeters

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

2.50"

APPROXIMATE WEIGHT:

1.5 lbs.

CONNECTIONS:

- Terminals are brass studs No. 8-32 with one flat washer, lockwasher, and regular nut
- Flexible leads are UL 1015 105° C, CSA approved, #16 AWG, 24" long
- Non-standard, lead length can be specified
- Order Mounting Bracket Kit 0221B00182 separately for model 7ASHT
- Model 7ASHT and model 7ASFT also available as 7ASHL and 7ASFL with leads

Model	7ASHT	7ASFT	7ARL
Window Size	2.50	2.50	2.50
Width	4.56	4.56	4.60
Height	4.88	4.71	4.60
Depth	1.10	2.13	1.10

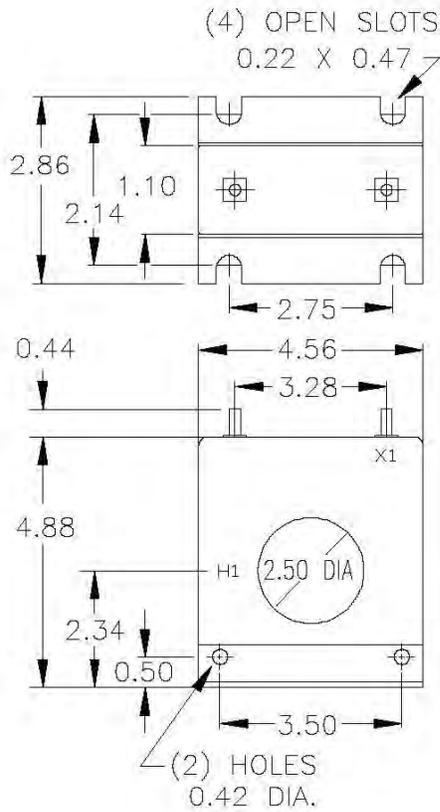
MODEL 7A
Window Diameter 2.50"
Approximate weight: 1.5 lbs.

CATALOG NUMBER	CURRENT RATIO	V.A. ± 1% CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
7A**-101	100:5	1.0	2.4	4.8	-	-	-	0.014	2.0	2.0
7A**-151	150:5	2.5	1.2	2.4	4.8	4.8	-	0.025	2.0	2.0
7A**-201	200:5	5.0	0.6	1.2	2.4	4.8	4.8	0.035	2.0	2.0
7A**-251	250:5	7.5	0.3	0.6	1.2	2.4	4.8	0.043	2.0	2.0
7A**-301	300:5	12.5	0.3	0.6	1.2	2.4	2.4	0.052	2.0	1.5
7A**-401	400:5	15.0	0.3	0.3	0.6	1.2	2.4	0.069	2.0	1.5
7A**-501	500:5	25.0	0.3	0.3	0.6	1.2	1.2	0.108	1.5	1.0
7A**-601	600:5	30.0	0.3	0.3	0.6	0.6	1.2	0.130	1.5	1.0
7A**-751	750:5	30.0	0.3	0.3	0.3	0.6	0.6	0.163	1.33	1.0
7A**-801	800:5	35.0	0.3	0.3	0.3	0.6	0.6	0.173	1.33	1.0
7A**-102	1000:5	35.0	0.3	0.3	0.3	0.6	0.6	0.157	1.33	1.0
7A**-122	1200:5	40.0	0.3	0.3	0.3	0.3	0.6	0.234	1.0	1.0
7A**-152	1500:5	50.0	0.3	0.3	0.3	0.3	0.6	0.292	1.0	0.8
7A**-162	1600:5	50.0	0.3	0.3	0.3	0.3	0.6	0.312	1.0	0.8

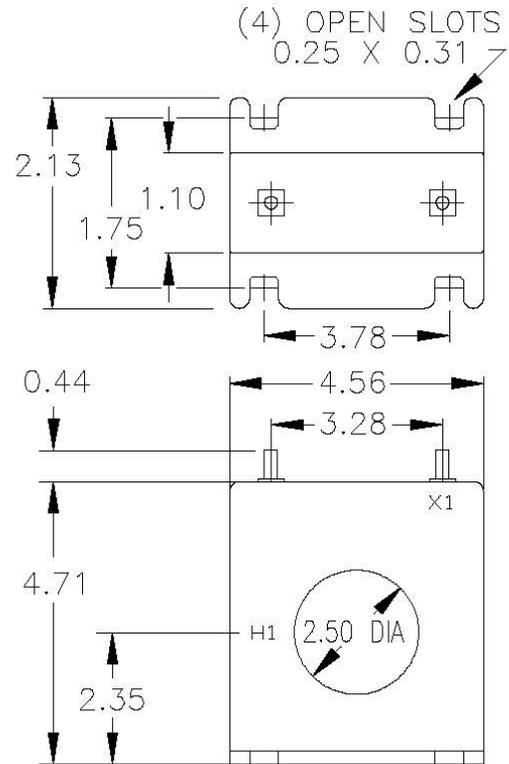
**NOTE: When ordering, prefix Cat. No. with model designation required i.e. 7ASHT-201, 7ARL-301, etc.



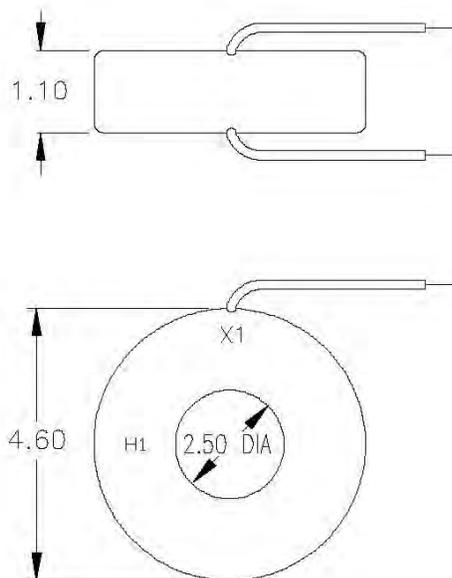
MODEL 7ASHT



MODEL 7ASFT



MODEL 7ARL

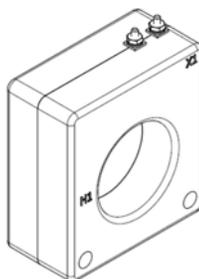




Current Transformer

Model 193/194
rev 10172019

CERTIFICATIONS:



APPLICATION:

Relaying and Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

CONNECTIONS:

- Multi-ratios available upon request
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Mounting kits 59-0215 (CR) and 59-0216 (CL)

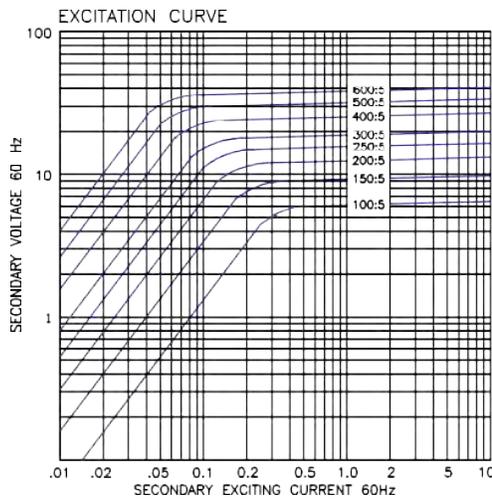
Model	193	194
Window Size	2.13	2.50
Width	4.50	4.50
Height	4.88	4.88
Depth	2.19	2.19

MODEL 193 Window Diameter 2.13" Approximate weight: 3.5 lbs.										
CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
193 - 101	100:5	-	1.2	1.2	4.8	-	-	0.024	2.0	2.0
193 - 151	150:5	-	0.6	0.6	1.2	2.4	4.8	0.038	2.0	2.0
193 - 201	200:5	-	0.3	0.3	1.2	1.2	2.4	0.071	2.0	2.0
193 - 251	250:5	C10	0.3	0.3	0.6	1.2	2.4	0.072	2.0	1.5
193 - 301	300:5	C10	0.3	0.3	0.3	0.6	1.2	0.082	2.0	1.5
193 - 401	400:5	C10	0.3	0.3	0.3	0.3	0.6	0.142	1.5	1.33
193 - 501	500:5	C10	0.3	0.3	0.3	0.3	0.6	0.159	1.5	1.33
193 - 601	600:5	C10	0.3	0.3	0.3	0.3	0.6	0.191	1.5	1.0

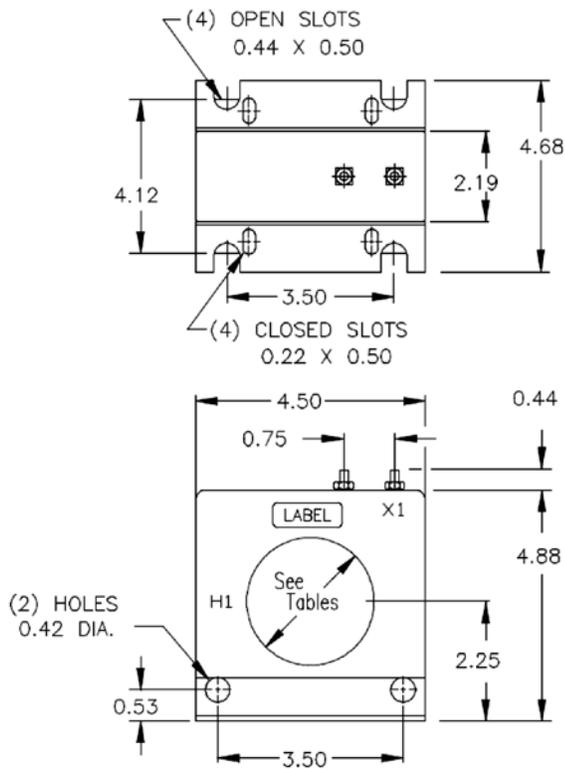
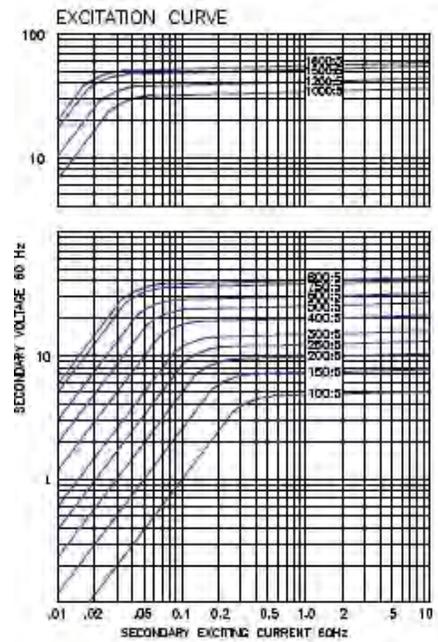
MODEL 194 Window Diameter 2.50" Approximate weight: 3.5 lbs.										
CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
194 - 101	100:5	-	1.2	2.4	4.8	-	-	0.033	2	2
194 - 151	150:5	-	0.6	1.2	2.4	4.8	4.8	0.050	2	2
194 - 201	200:5	-	0.6	0.6	1.2	2.4	4.8	0.065	2	2
194 - 251	250:5	-	0.3	0.3	0.6	1.2	2.4	0.084	2	1.5
194 - 301	300:5	-	0.3	0.3	0.6	1.2	2.4	0.101	2	1.5
194 - 401	400:5	C10	0.3	0.3	0.3	0.6	1.2	0.104	2	1.5
194 - 501	500:5	C10	0.3	0.3	0.3	0.3	0.6	0.133	1.5	1
194 - 601	600:5	C10	0.3	0.3	0.3	0.3	0.6	0.180	1.5	1
194 - 751	750:5	C10	0.3	0.3	0.3	0.3	0.3	0.283	1	0.8
194 - 801	800:5	C10	0.3	0.3	0.3	0.3	0.3	0.302	1	0.8
194 - 102	1000:5	-	0.3	0.3	0.3	0.3	0.3	0.354	1	0.8
194 - 122	1200:5	-	0.3	0.3	0.3	0.3	0.3	0.425	1	0.8
194 - 152	1500:5	-	0.3	0.3	0.3	0.3	0.3	0.531	1	0.6
194 - 162	1600:5	-	0.3	0.3	0.3	0.3	0.3	0.566	0.8	0.6

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

193



194



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 180
rev 02222024

CERTIFICATIONS:



180SHT



180RL

Model	180SHT	180RL
Window Size	2.50	2.50
Width	4.50	4.50
Height	4.50	4.50
Depth	2.19	2.19

APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

2.50"

CONNECTIONS:

Non-standard lead length can be specified.

Mounting bracket -59-0225

Flexible leads are UL 1015 105° C ,

#16 AWG, 24" long

Terminals are brass studs No. 8-32 UNC with

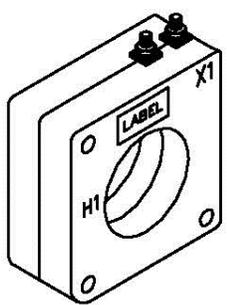
one flat washer, lockwasher, and regular nut

APPROXIMATE WEIGHT:

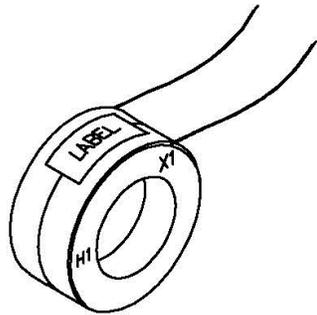
3 lbs.

MODEL 180
Window Diameter 2.50"
Approximate weight: 3 lbs.

CATALOG NUMBER	CURRENT RATIO	V.A. FOR + 1% CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
180 **---500	50:5	1.5	2.4	-	-	-	-	0.009	1.33	1
180 **---750	75:5	2.5	1.2	2.4	-	-	-	0.018	1.33	1
180 **---101	100:5	2.5	1.2	2.4	4.8	-	-	0.021	1.33	1
180 **---151	150:5	5	0.6	1.2	2.4	4.8	-	0.038	1.33	1
180 **---201	200:5	12.5	0.6	0.6	1.2	2.4	-	0.051	1.33	1
180 **---251	250:5	12.5	0.3	0.3	0.6	1.2	-	0.064	1.33	1
180 **---301	300:5	25	0.3	0.3	0.6	1.2	2.4	0.076	1.33	1
180 **---401	400:5	50	0.3	0.3	0.3	0.6	1.2	0.102	1.33	1
180 **---501	500:5	50	0.3	0.3	0.3	0.6	1.2	0.148	1.33	1
180 **---601	600:5	50	0.3	0.3	0.3	0.6	1.2	0.177	1.33	1
180 **---751	750:5	50	0.3	0.3	0.3	0.6	1.2	0.174	1.33	1
180 **---801	800:5	75	0.3	0.3	0.3	0.6	1.2	0.202	1.33	1
180 **---102	1000:5	100	0.3	0.3	0.3	0.3	0.6	0.253	1.33	1
180 **---122	1200:5	125	0.3	0.3	0.3	0.3	0.3	0.303	1.33	1
180 **---152	1500:5	160	0.3	0.3	0.3	0.3	0.3	0.307	1.33	1
180 **---162	1600:5	175	0.3	0.3	0.3	0.3	0.3	0.359	1.25	1
180 **---202	2000:5	200	0.3	0.3	0.3	0.3	0.3	0.449	1.00	0.75



180SHT

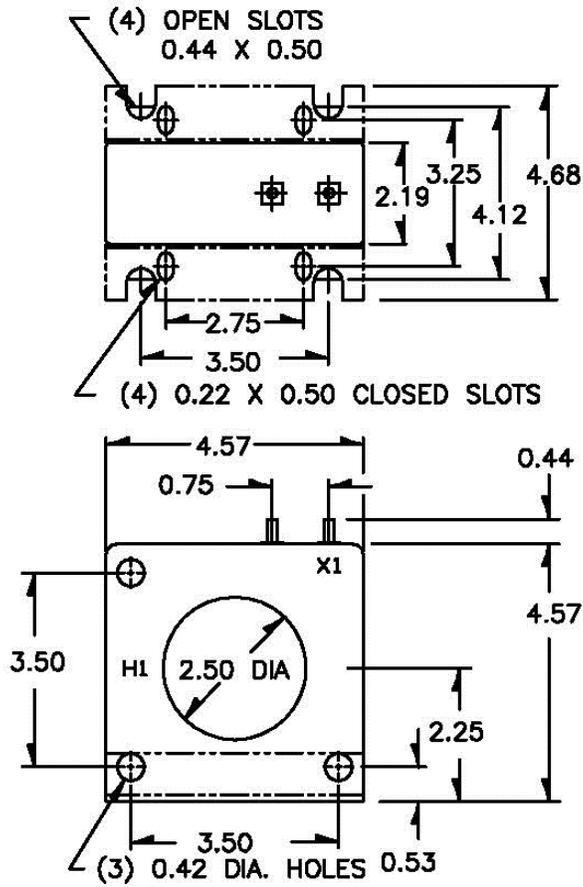


180RL

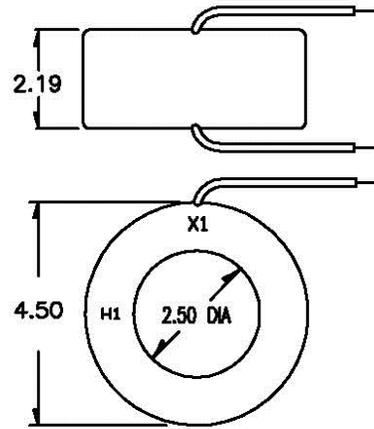
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



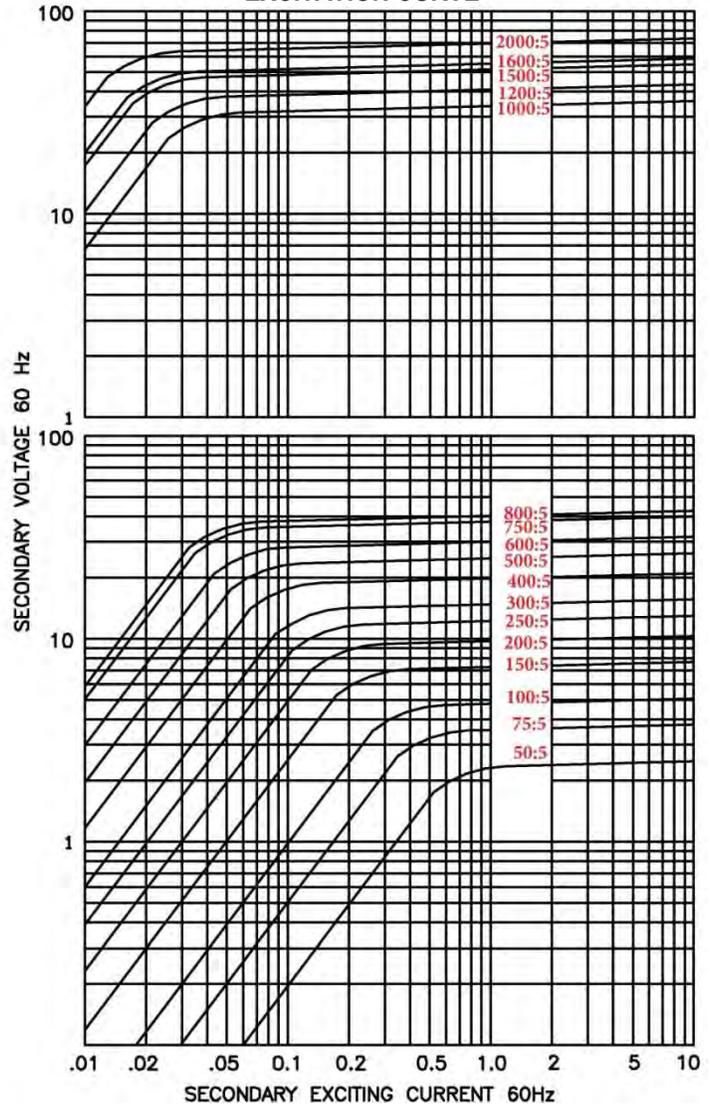
180SHT



180RL



EXCITATION CURVE



Model 180



Current Transformer

Model 8
rev 03182021

CERTIFICATIONS:



8SHT 8RL



APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

3.25"

APPROXIMATE WEIGHT:

2.5 lbs.

CONNECTIONS:

- Flexible Leads are UL 1015 105°C, CSA approved #16 AWG, 24" long
- Non-standard length to be specified
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- SHT case styles also available with Leads
- Order Mounting Bracket Kit E separately when required for Model 8SHT
- Mounting Kit 59-0220

Model	8SHT	8RL
Window Size	3.25	3.25
Width	5.73	5.73
Height	5.73	5.73
Depth	1.15	1.15

MODEL 8SHT and 8RL
Window Diameter 3.25"
Approximate weight: 2.5 lbs.

CATALOG NUMBER	CURRENT RATIO	VA FOR ± 1% CLASS	ANSI METERING CLASS AT 60HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			BO.1	BO.2	BO.5	BO.9	B1.8		@ 30° C	@ 55° C
8**-201	200:5	5	1.2	1.2	2.4	4.8	4.8	0.03	2	2
8**-251	250:5	7.5	0.6	0.6	1.2	2.4	4.8	0.044	2	2
8**-301	300:5	15	0.6	0.6	1.2	2.4	2.4	0.049	2	2
8**-401	400:5	25	0.3	0.3	0.6	1.2	2.4	0.079	2	1.5
8**-501	500:5	35	0.3	0.3	0.6	0.6	1.2	0.102	2	1.5
8**-601	600:5	50	0.3	0.3	0.6	0.6	1.2	0.147	1.5	1.33
8**-751	750:5	50	0.3	0.3	0.6	0.6	1.2	0.184	1.5	1
8**-801	800:5	60	0.3	0.3	0.3	0.6	0.6	0.197	1.5	1
8**-102	1000:5	75	0.3	0.3	0.3	0.6	0.6	0.246	1.33	1
8**-122	1200:5	75	0.3	0.3	0.3	0.3	0.6	0.169	1.5	1
8**-152	1500:5	90	0.3	0.3	0.3	0.3	0.6	0.316	1.33	1
8**-162	1600:5	100	0.3	0.3	0.3	0.3	0.6	0.337	1.33	0.8
8**-202	2000:5	120	0.3	0.3	0.3	0.3	-	0.422	1	0.8
8**-252	2500:5	50	0.3	0.3	0.3	0.3	-	0.438	1	0.8
8**-302	3000:5	60	0.3	0.3	0.3	0.3	-	0.526	1	0.8
8**-322	3200:5	70	0.3	0.3	0.3	0.3	-	0.561	1	0.8

Note: When ordering, Prefix Cat. No. with model designation required, i.e. 8RL-301 or 8SHT-301



8SHT

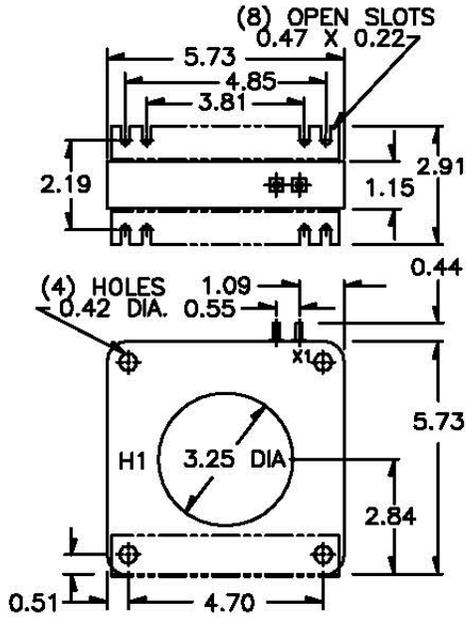


8RL

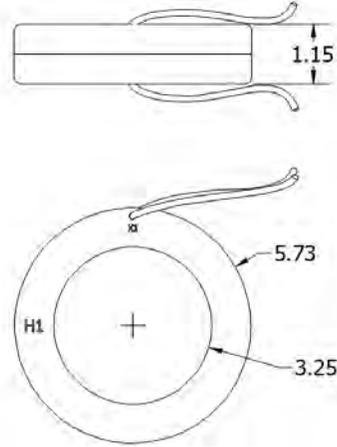
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



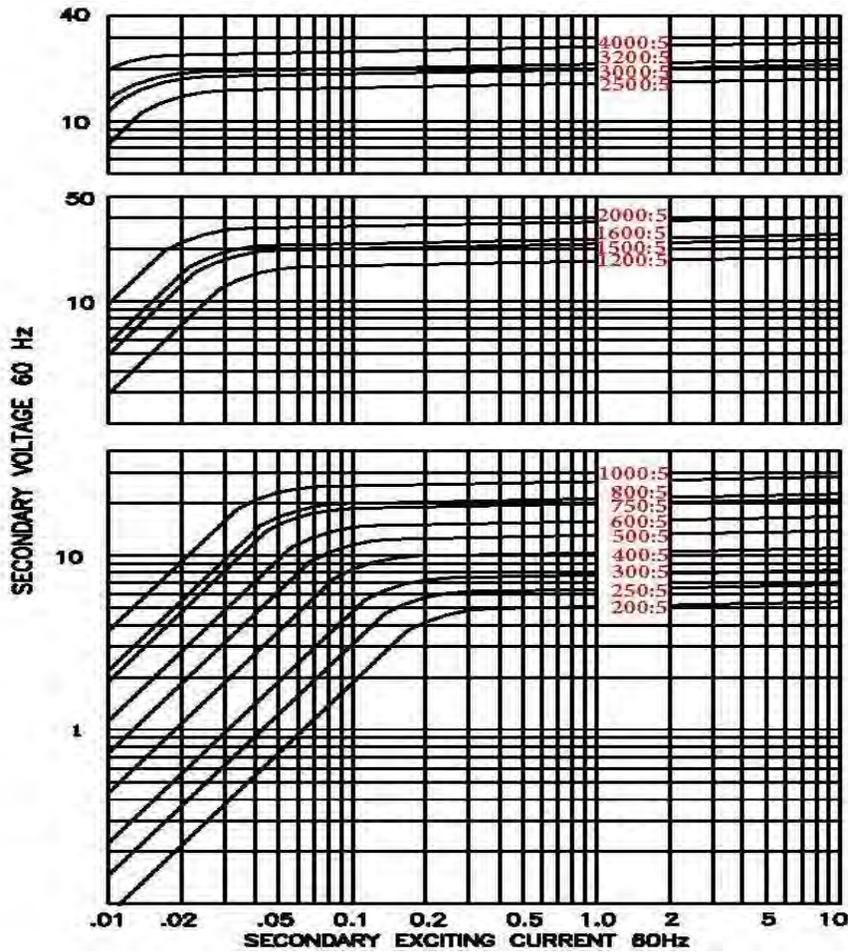
8SHT



8RL



EXCITATION CURVE



Model 8



Current Transformer

Model 8SHT-0.333

APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

3.25"

APPROXIMATE WEIGHT:

2.5 lbs.

CONNECTIONS:

- Flexible Leads are UL 1015 105°C, CSA approved #16 AWG, 24" long
- Non-standard length to be specified
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Mounting kit 59-0220



8SHT-0.333

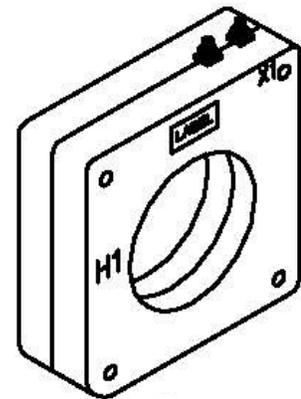
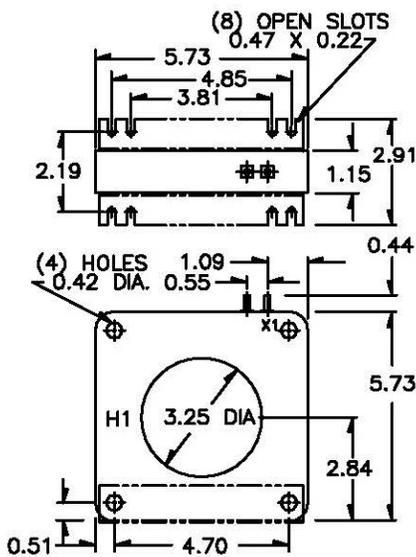
Model	8SHT-0.333
Window Size	3.25
Width	5.73
Height	5.73
Depth	1.15

CERTIFICATIONS:



MODEL 8SHT
Window Diameter 3.25"
Approximate weight: 2.5 lbs.

CATALOG NUMBER	CURRENT VOLTAGE RATIO
8SHT-201-0.333	200:0.333
8SHT-251-0.333	250:0.333
8SHT-301-0.333	300:0.333
8SHT-401-0.333	400:0.333
8SHT-501-0.333	500:0.333
8SHT-601-0.333	600:0.333
8SHT-751-0.333	750:0.333
8SHT-801-0.333	800:0.333
8SHT-102-0.333	1000:0.333
8SHT-122-0.333	1200:0.333
8SHT-152-0.333	1500:0.333
8SHT-162-0.333	1600:0.333
8SHT-202-0.333	2000:0.333
8SHT-252-0.333	2500:0.333
8SHT-302-0.333	3000:0.333
8SHT-322-0.333	3200:0.333



8SHT-0.333

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 100
rev 011218

CERTIFICATIONS:



APPLICATION:

Relaying and Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

4.0"

APPROXIMATE WEIGHT:

6.5 lbs.

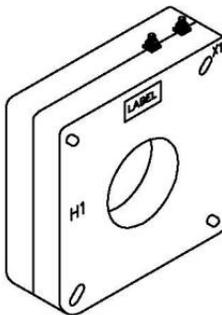
CONNECTIONS:

- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Multi-ratios available upon request
- Mounting Kit – 59-0215 (CR) and 59-0216 (CL)

Model	100
Window Size	4.00
Width	7.00
Height	7.00
Depth	2.17

MODEL 100
Window Diameter 4.0"
Approximate weight: 9.5 lbs.

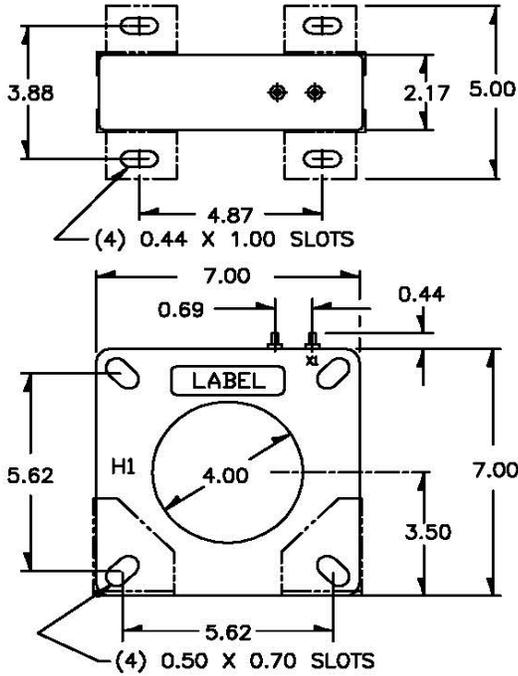
CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
100 – 201	200:5	C10	0.6	0.6	1.2	2.4	-	0.057	2	2
100 – 301	300:5	C10	0.3	0.3	0.6	1.2	-	0.091	2	2
100 – 401	400:5	C20	0.3	0.3	0.6	0.6	1.2	0.133	2	2
100 – 501	500:5	C20	0.3	0.3	0.6	0.6	1.2	0.166	2	1.5
100 – 601	600:5	C20	0.3	0.3	0.3	0.6	0.6	0.199	2	1.5
100 – 801	800:5	C20	0.3	0.3	0.3	0.3	0.6	0.266	1.5	1.33
100 – 102	1000:5	C50	0.3	0.3	0.3	0.3	0.3	0.332	1.5	1
100 – 122	1200:5	C20	0.3	0.3	0.3	0.3	0.3	0.374	1.5	1
100 – 152	1500:5	C20	0.3	0.3	0.3	0.3	0.3	0.468	1.33	1
100 – 162	1600:5	C50	0.3	0.3	0.3	0.3	0.3	0.499	1.33	1
100 – 202	2000:5	C50	0.3	0.3	0.3	0.3	0.3	0.624	1	0.8
100 – 252	2500:5	C50	0.3	0.3	0.3	0.3	0.3	0.735	1	0.8
100 – 302	3000:5	C50	0.3	0.3	0.3	0.3	0.3	0.882	1	0.8



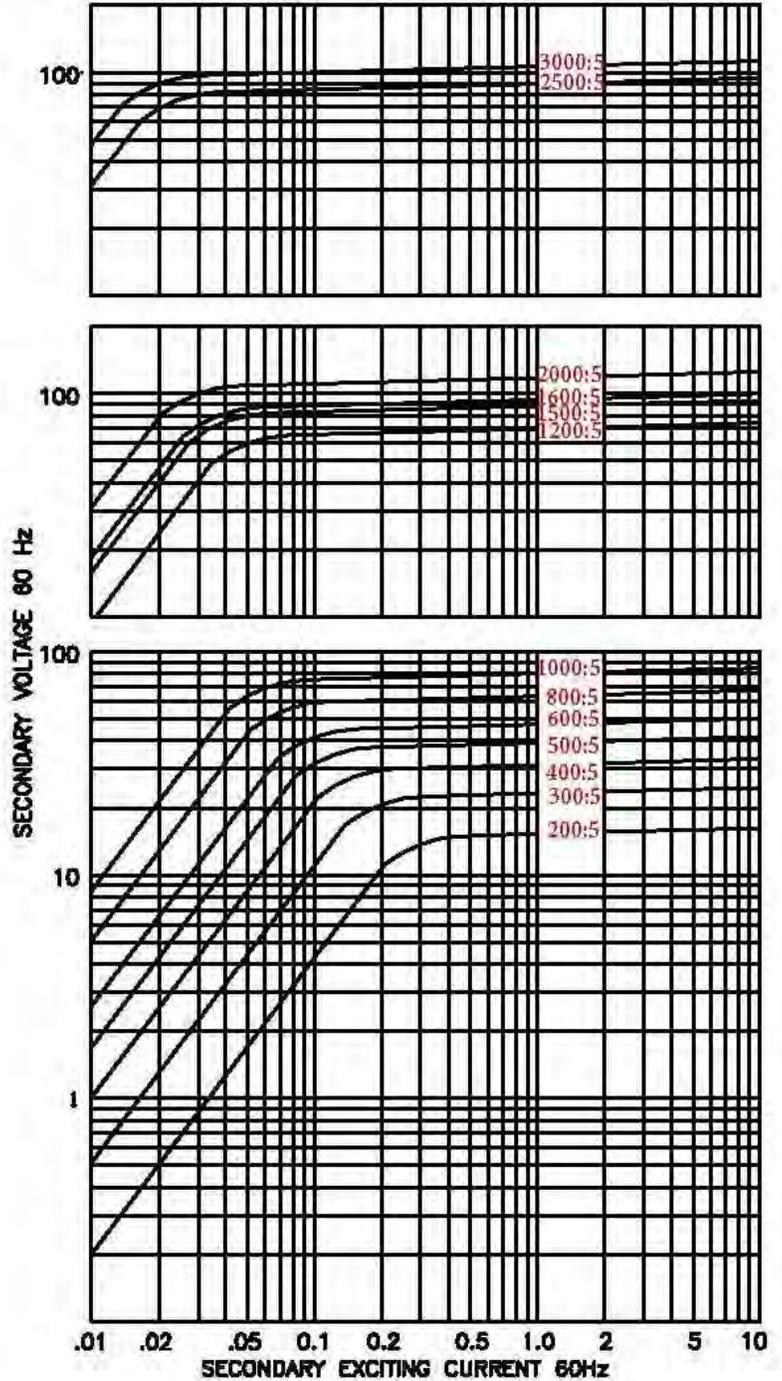
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Model 100



EXCITATION CURVE



Model 100



Current Transformer

Model 110
rev 011218

CERTIFICATIONS:



APPLICATION:

Relaying and Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full

WINDOW DIAMETER:

4.0"

APPROXIMATE WEIGHT:

10 lbs.

CONNECTIONS:

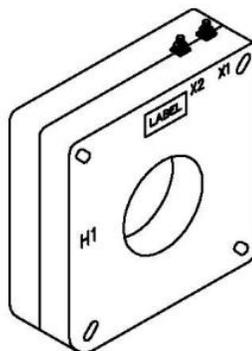
-Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher and regular nut

-Mounting Bracket's 59-0215 (CR) and 59-0216 (CL)

Model	110
Window Size	4.00
Width	7.00
Height	7.00
Depth	2.88

MODEL 110
Window Diameter 4.0"
Approximate weight: 13 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
110 - 201	200:5	C10	0.6	1.2	1.2	2.4	-	0.085	2	2
110 - 301	300:5	C20	0.3	0.6	0.6	1.2	2.4	0.128	2	2
110 - 401	400:5	C20	0.3	0.3	0.3	0.6	1.2	0.152	2	2
110 - 501	500:5	C20	0.3	0.3	0.3	0.6	0.6	0.214	2	1.5
110 - 601	600:5	C50	0.3	0.3	0.3	0.3	0.6	0.256	2	1.5
110 - 801	800:5	C50	0.3	0.3	0.3	0.3	0.3	0.342	1.5	1.33
110 - 102	1000:5	C100	0.3	0.3	0.3	0.3	0.3	0.427	1.5	1
110 - 122	1200:5	C50	0.3	0.3	0.3	0.3	0.3	0.489	1.5	1
110 - 152	1500:5	C100	0.3	0.3	0.3	0.3	0.3	0.611	1.33	1
110 - 162	1600:5	C100	0.3	0.3	0.3	0.3	0.3	0.652	1	1
110 - 202	2000:5	C100	0.3	0.3	0.3	0.3	0.3	0.815	1	0.8
110 - 252	2500:5	C100	0.3	0.3	0.3	0.3	0.3	0.974	1	0.8
110 - 302	3000:5	C100	0.3	0.3	0.3	0.3	0.3	1.168	1	0.6





Current Transformer

Model 115MR

APPLICATION:

Relaying

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

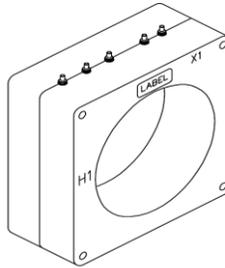
4.0"

APPROXIMATE WEIGHT:

19 lbs.

CONNECTIONS:

- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- The transformer winding is arranged so that the turns are fully distributed between all taps



Model	115MR
Window Size	4.00
Width	7.00
Height	7.12
Depth	4.00

CERTIFICATIONS:



E228202

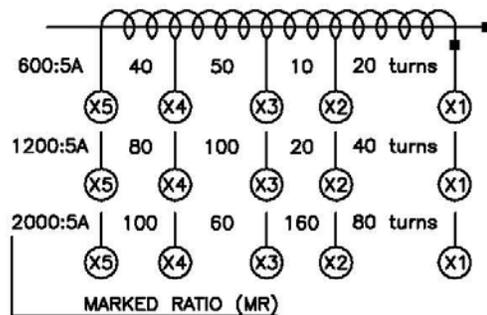
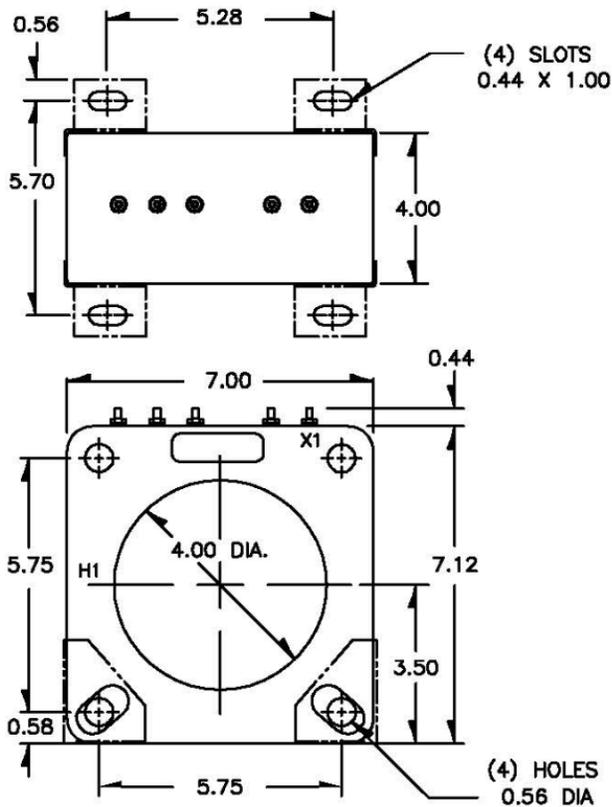


223647



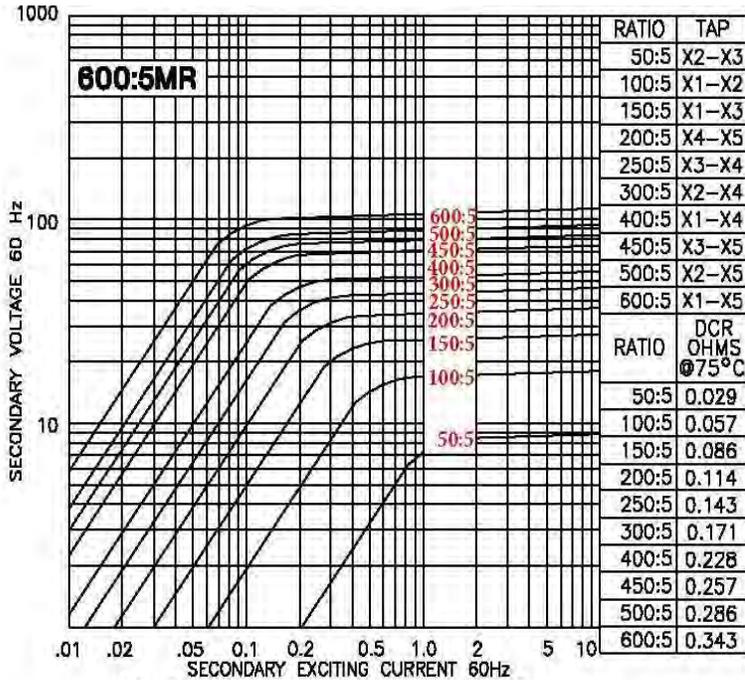
MODEL 115MR
Window Diameter 4.0"
Approximate weight: 19 lbs.

Catalog Number	Relay Class	Continuous Thermal	
		@ 30°C	@ 50°C
115-601MR	C50	2.0	1.5
115-122MR	C100	1.33	1.0
115-202MR	C200	1.0	0.8



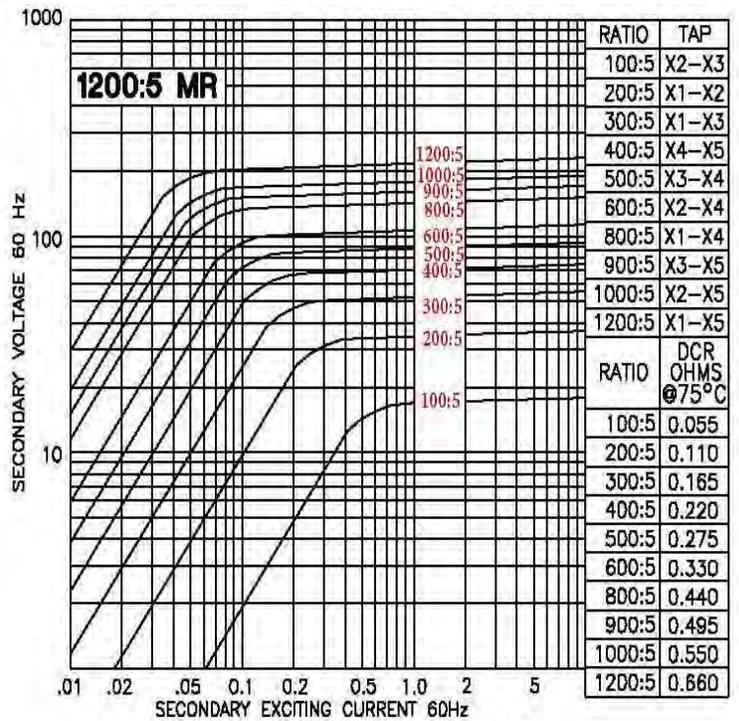


EXCITATION CURVE



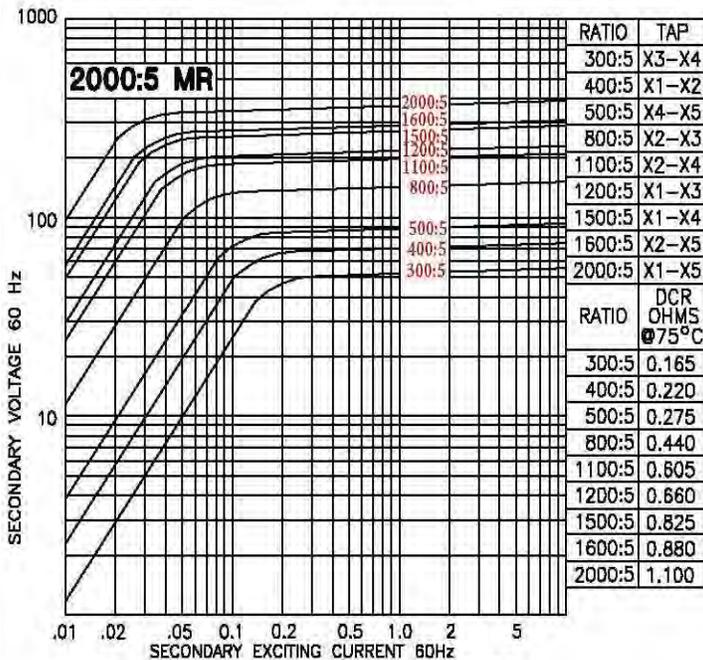
Model 115-601MR- rating C50

TRF= 2.00 @ 30°C, 1.5 @ 55°C amb.



Model 115-122MR - rating C100

TRF= 1.33 @ 30°C, 1.0 @ 55°C amb.



Model 115-202MR - rating C200

TRF= 1.00 @ 30°C, 0.8 @ 55°C amb.



Current Transformer

Model 19
rev 012821

CERTIFICATIONS:

APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

4.25"

APPROXIMATE WEIGHT:

1.5 lbs.

CONNECTIONS:

- Flexible Leads are UL 1015 105°C, CSA approved #15AWG, 24" long
- Non-standard length to be specified
- SHT Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut



19SHT



19RL



Model	19SHT	19RL
Window Size	4.25	4.25
Width	5.92	5.92
Height	6.17	5.92
Depth	1.15	1.14

MODEL 19SHT and 19RL
Window Diameter 4.25"
Approximate weight: 3 lbs.

CATALOG NUMBER	CURRENT RATIO	V.A. FOR ± 1% CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75° C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
19**-301	300:5	4	0.6	1.2	2.4	-	-	0.048	2	2
19**-401	400:5	10	0.3	0.6	1.2	-	-	0.064	2	2
19**-501	500:5	15	0.3	0.6	1.2	-	-	0.087	2	1.5
19**-601	600:5	15	0.3	0.3	0.6	1.2	-	0.116	2	1.5
19**-751	750:5	25	0.3	0.3	0.6	0.6	-	0.145	1.5	1.33
19**-801	800:5	30	0.3	0.3	0.6	0.6	-	0.155	1.5	1.33
19**-102	1000:5	30	0.3	0.3	0.6	0.6	-	0.242	1.33	1
19**-122	1200:5	40	0.3	0.3	0.3	0.6	-	0.291	1.33	1
19**-152	1500:5	15	0.3	0.3	0.6	1.2	-	0.200	1.5	1
19**-162	1600:5	15	0.3	0.3	0.3	0.6	-	0.213	1.5	1
19**-202	2000:5	20	0.3	0.3	0.3	0.6	-	0.266	1.33	1
19**-252	2500:5	20	0.3	0.3	0.3	0.3	-	0.333	1	0.8
19**-302	3000:5	25	0.3	0.3	0.3	0.3	-	0.399	1	0.8

Note: When ordering, prefix catalog number with model designation required., i.e. 19RL-301, or 19SHT-301 etc.



19SHT

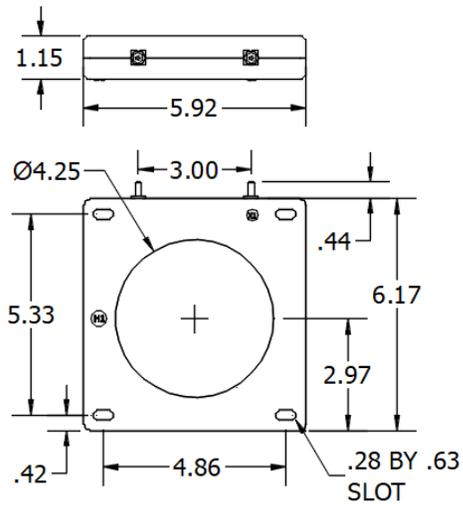


19RL

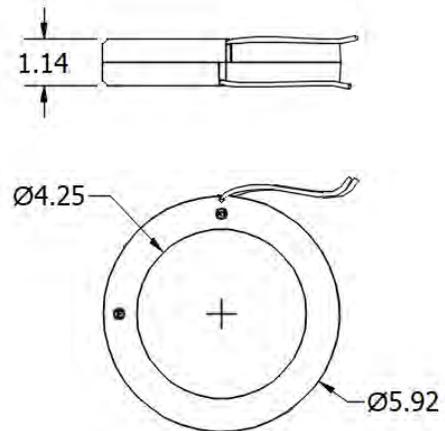
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



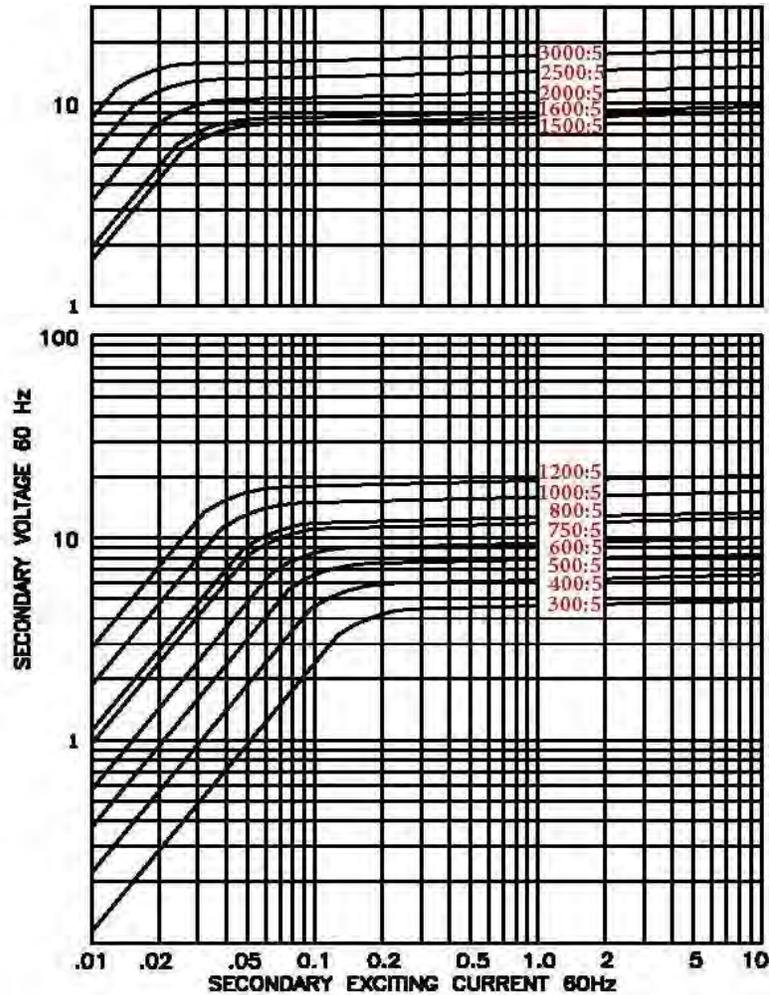
19 SHT



19RL



EXCITATION CURVE





Current Transformer

Model 170

rev 03182021

CERTIFICATIONS:



170SHT

170RL

APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

4.25"

APPROXIMATE WEIGHT:

3 lbs.

CONNECTIONS:

- Flexible leads are UL 1015 105° C CSA approved, #16 AWG, 24" long
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Also available as 170SHL with leads
- Mounting kit – 59-0221

Model	170SHT	170RL
Window Size	4.25	4.25
Width	6.73	6.73
Height	6.73	6.73
Depth	1.28	1.25

MODEL 170
Window Diameter 4.25"
Approximate weight: 3 lbs.

CATALOG NUMBER	CURRENT RATIO	V.A. FOR ± 1% CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
170 **---201	200:5	5	0.6	1.2	2.4	-	-	0.040	2	2
170 **---251	250:5	5	0.6	0.6	1.2	2.4	-	0.047	2	2
170 **---301	300:5	12.5	0.6	0.6	1.2	2.4	-	0.053	2	2
170 **---401	400:5	25	0.3	0.3	0.6	1.2	2.4	0.080	2	2
170 **---501	500:5	25	0.3	0.3	0.6	1.2	1.2	0.110	2	1.5
170 **---601	600:5	25	0.3	0.3	0.6	0.6	1.2	0.121	2	1.5
170 **---751	750:5	40	0.3	0.3	0.3	0.6	0.6	0.151	2	1.5
170 **---801	800:5	50	0.3	0.3	0.3	0.6	0.6	0.162	2	1.5
170 **---102	1000:5	75	0.3	0.3	0.3	0.6	0.6	0.265	1.33	1
170 **---122	1200:5	100	0.3	0.3	0.3	0.3	0.6	0.318	1.33	1
170 **---152	1500:5	80	0.3	0.3	0.3	0.3	0.6	0.344	1.33	1
170 **---162	1600:5	90	0.3	0.3	0.3	0.3	0.6	0.367	1.33	1
170 **---202	2000:5	100	0.3	0.3	0.3	0.3	0.3	0.459	1	0.8
170 **---252	2500:5	130	0.3	0.3	0.3	0.3	0.3	0.573	1	0.8
170 **---302	3000:5	160	0.3	0.3	0.3	0.3	0.3	0.424	1	1
170 **---352	3500:5	190	0.3	0.3	0.3	0.3	0.3	0.495	1	0.8
170 **---402	4000:5	200	0.3	0.3	0.3	0.3	0.3	0.646	1	0.8

Note: When ordering, prefix ** catalog # with model designation required, i.e. 170SHT-201, or 170RL-301



TTL Transformer Technologies Ltd.

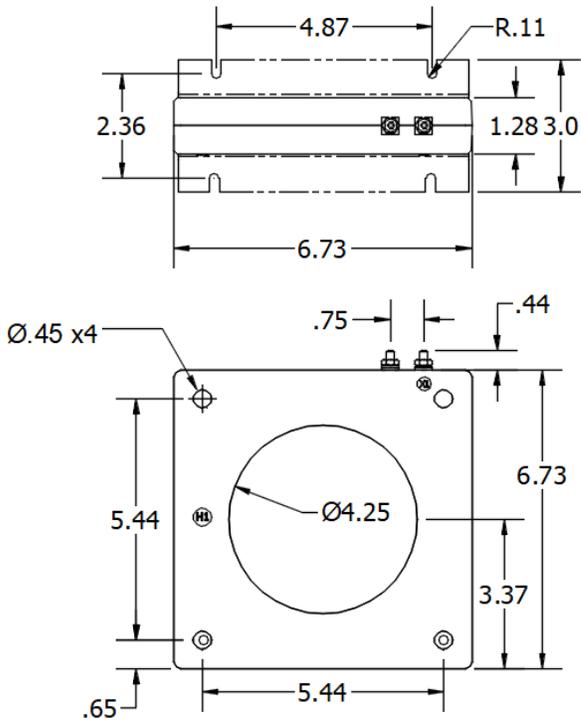


Current Transformer

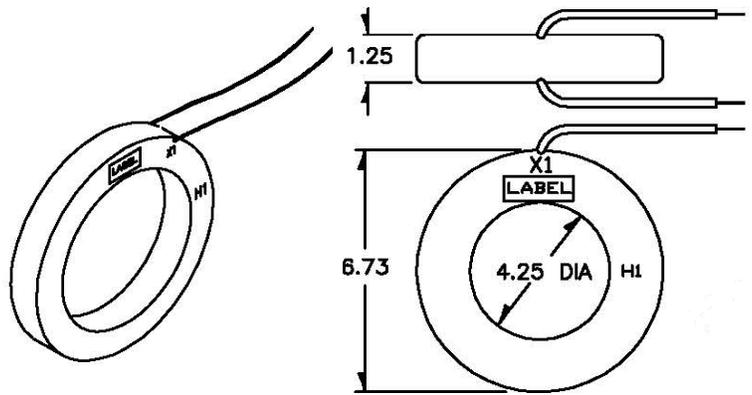
Model 170

rev 03182021

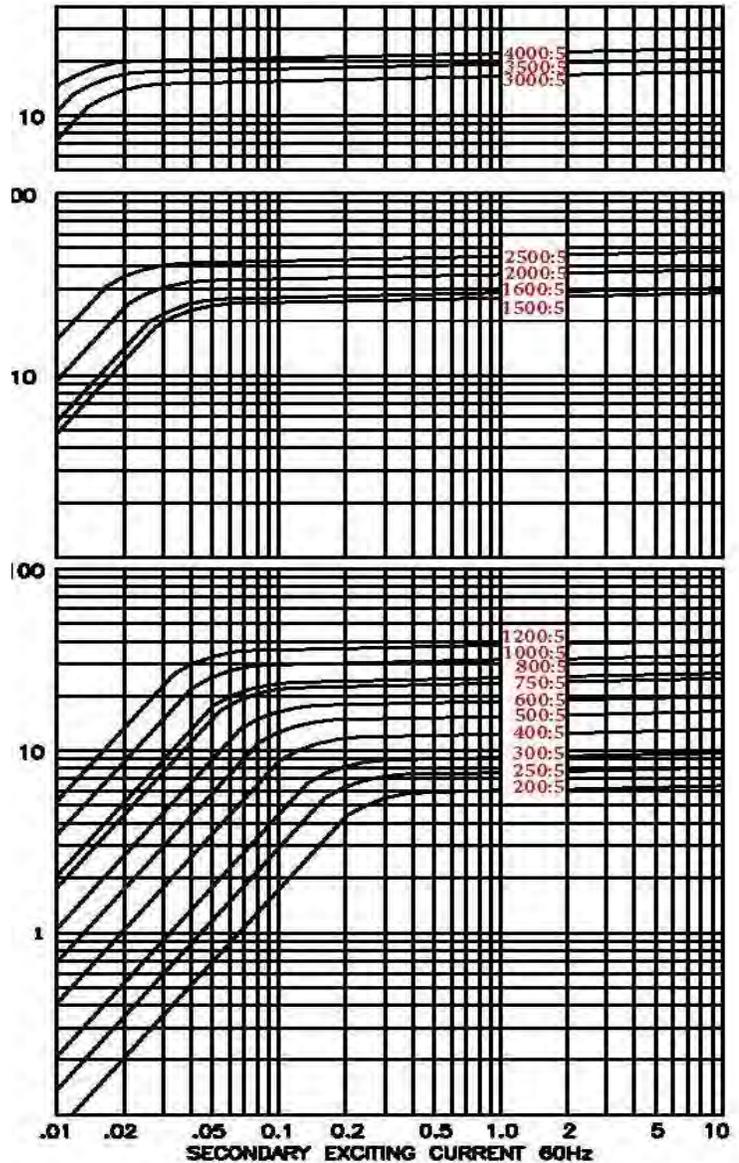
170SHT



170RL



EXCITATION CURVE





Current Transformer

Model 170SHT-0.333
rev 03182021

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

4.25"

APPROXIMATE WEIGHT:

3 lbs.

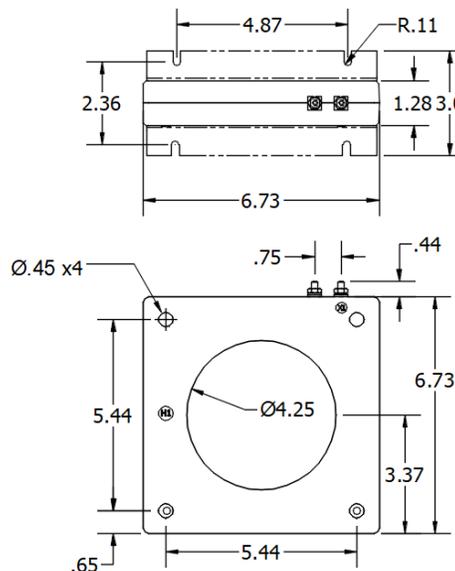
CONNECTIONS:

- Flexible leads are UL 1015 105° C CSA approved, #16 AWG, 24" long
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Mounting kit – 59-0221

Model	170SHT
Window Size	4.25
Width	6.73
Height	6.73
Depth	1.28

MODEL 170SHT
Window Diameter 4.25"
Approximate weight: 3 lbs.

CATALOG NUMBER	CURRENT VOLTAGE RATIO
170SHT-201-0.333	200:0.333
170SHT-251-0.333	250:0.333
170SHT-301-0.333	300:0.333
170SHT-401-0.333	400:0.333
170SHT-501-0.333	500:0.333
170SHT-601-0.333	600:0.333
170SHT-751-0.333	750:0.333
170SHT-801-0.333	800:0.333
170SHT-102-0.333	1000:0.333
170SHT-122-0.333	1200:0.333
170SHT-152-0.333	1500:0.333
170SHT-162-0.333	1600:0.333
170SHT-202-0.333	2000:0.333
170SHT-252-0.333	2500:0.333
170SHT-302-0.333	3000:0.333
170SHT-352-0.333	3500:0.333
170SHT-402-0.333	4000:0.333



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 117MR

APPLICATION:

Relaying

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

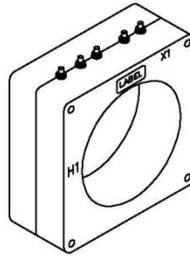
4.62"

APPROXIMATE WEIGHT:

13 lbs.

CONNECTIONS:

- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- The transformer winding is arranged so that the turns are fully distributed between all taps



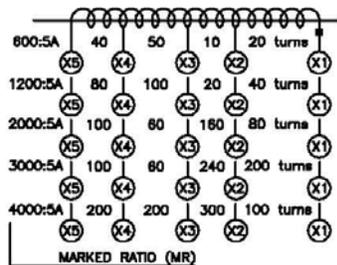
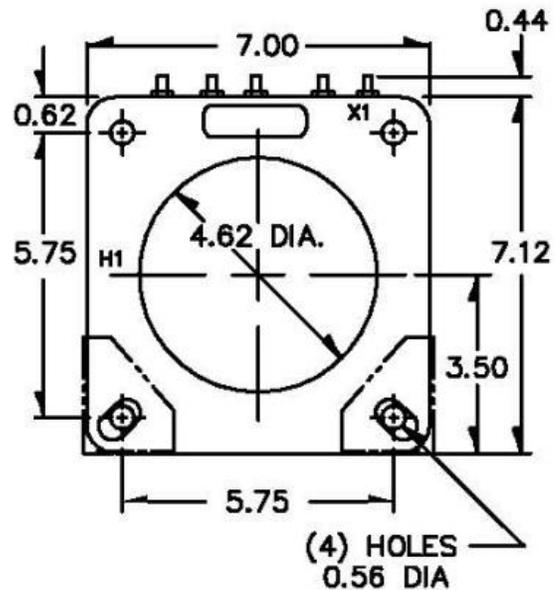
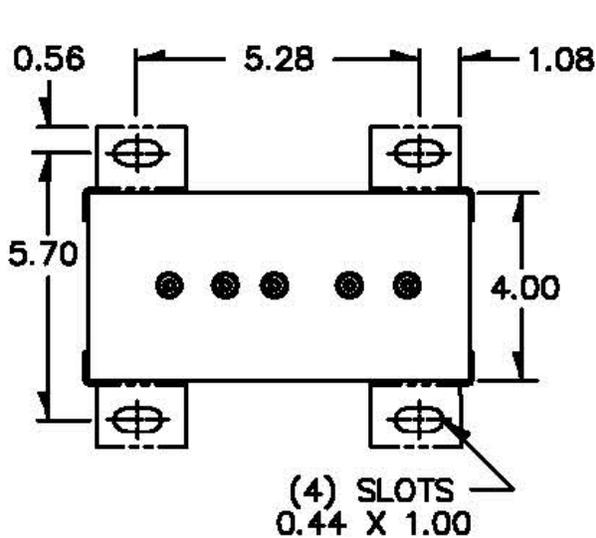
Model	117MR
Window Size	4.62
Width	7.00
Height	7.12
Depth	4.00

CERTIFICATIONS:



MODEL 117MR
Window Diameter 4.62"
Approximate weight: 13 lbs.

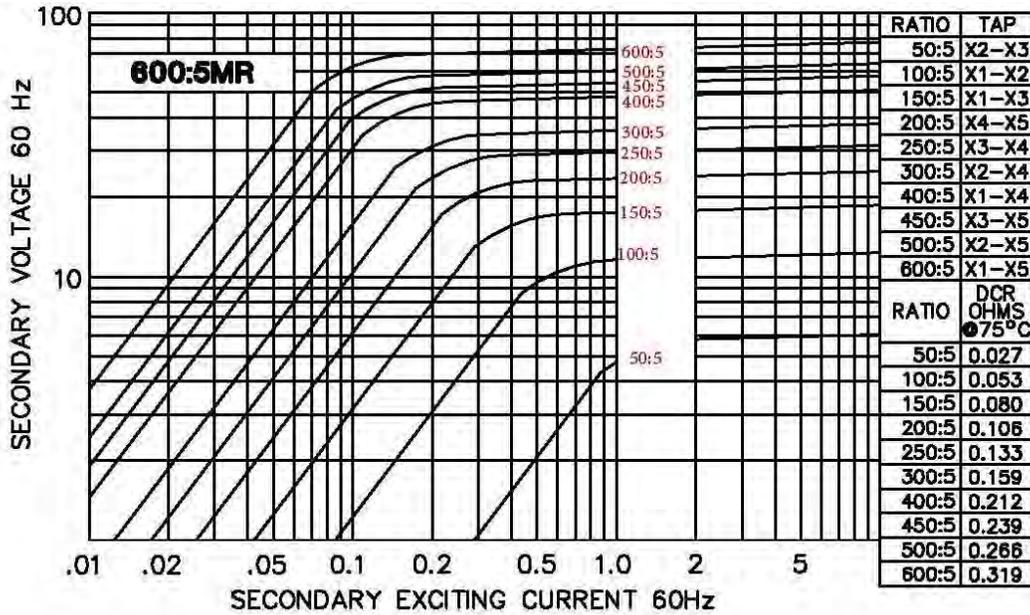
Catalog Number	Relay Class	Continuous Thermal	
		@ 30°C	@ 50°C
117-601MR	C20	2.0	1.5
117-122MR	C100	1.33	1.0
117-202MR	C50	1.0	0.6



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

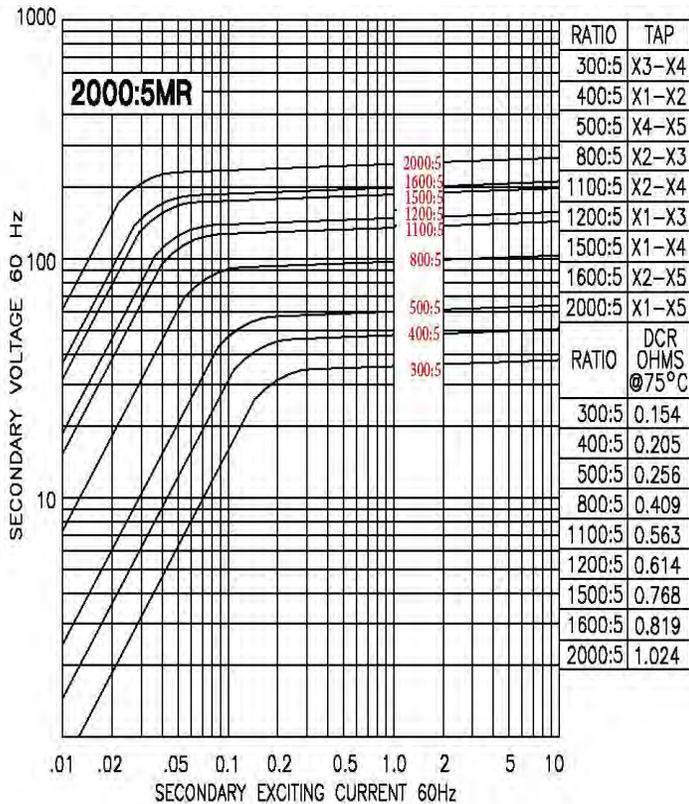


EXCITATION CURVE



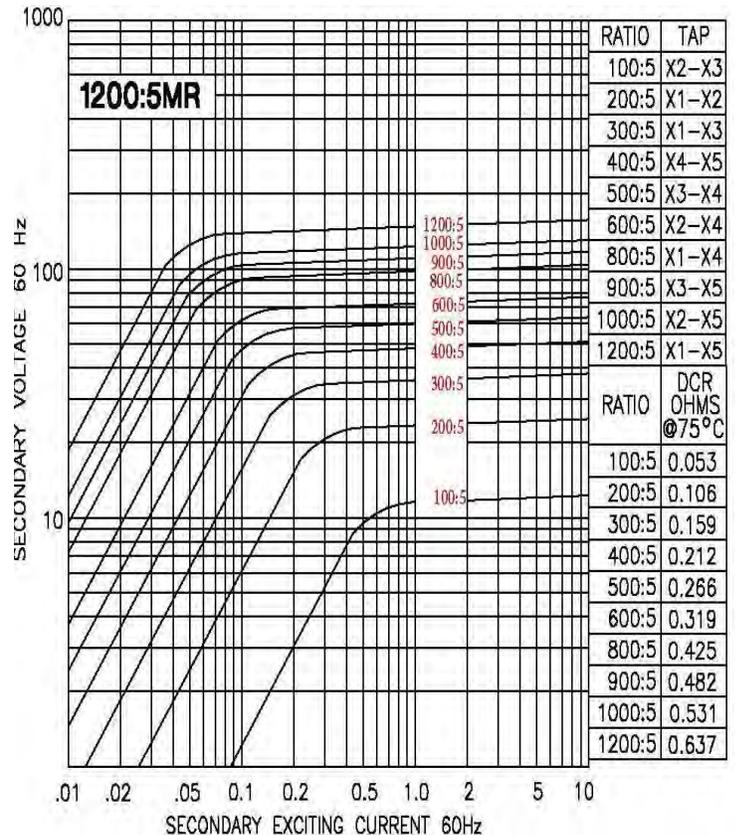
Model 117-601MR - rating C20

TRF= 2.0 @ 30°C, 1.5 @ 55°C amb.



Model 117-202MR - rating C50

TRF= 1.00 @ 30°C, 0.6 @ 55°C amb.



Model 117-122MR - rating C100

TRF= 1.33 @ 30°C, 1.0 @ 55°C amb.



Current Transformer

Model 120
rev 011218

CERTIFICATIONS:



Model	120
Window Size	5.75
Width	8.50
Height	8.50
Depth	2.17

APPLICATION:

Relaying and Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

5.75"

APPROXIMATE WEIGHT:

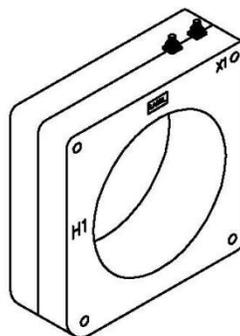
8.5 lbs.

CONNECTIONS:

- Multi-ratios available upon request
- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Mounting kits 59-0215 (CR) and 59-0216 (CL)

MODEL 120
Window Diameter 5.75"
Approximate weight: 11 lbs.

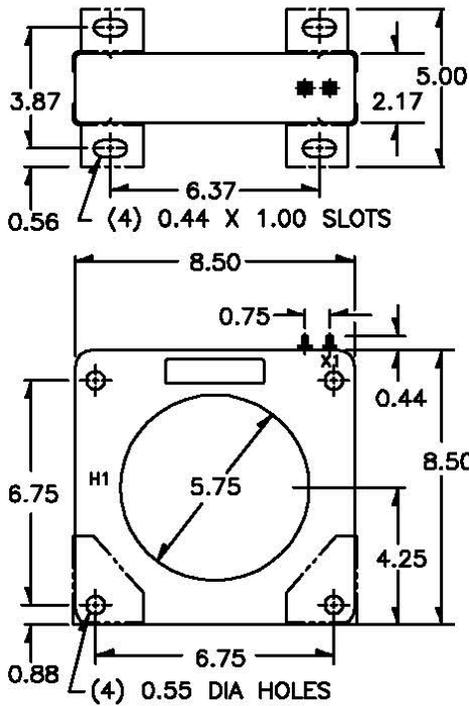
CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
120 - 201	200:5	-	1.2	1.2	2.4	4.8	4.8	0.053	2	2
120 - 301	300:5	C10	0.3	0.6	1.2	2.4	2.4	0.063	2	2
120 - 401	400:5	C10	0.3	0.3	0.6	1.2	2.4	0.080	2	2
120 - 501	500:5	C20	0.3	0.3	0.6	0.6	1.2	0.137	2	2
120 - 601	600:5	C20	0.3	0.3	0.3	0.6	0.6	0.165	2	2
120 - 801	800:5	C20	0.3	0.3	0.3	0.3	0.6	0.220	2	1.5
120 - 102	1000:5	C20	0.3	0.3	0.3	0.3	0.6	0.309	1.5	1.5
120 - 122	1200:5	C50	0.3	0.3	0.3	0.3	0.3	0.371	1.5	1.33
120 - 152	1500:5	C50	0.3	0.3	0.3	0.3	0.3	0.464	1.5	1
120 - 162	1600:5	C50	0.3	0.3	0.3	0.3	0.3	0.494	1.33	1
120 - 202	2000:5	C50	0.3	0.3	0.3	0.3	0.3	0.592	1.33	1
120 - 252	2500:5	C50	0.3	0.3	0.3	0.3	0.3	0.740	1	0.8
120 - 302	3000:5	C50	0.3	0.3	0.3	0.3	0.3	0.888	1	0.8
120 - 352	3500:5	C20	0.3	0.3	0.3	0.3	0.3	0.964	1	0.8
120 - 402	4000:5	C50	0.3	0.3	0.3	0.3	0.3	1.102	1	0.8



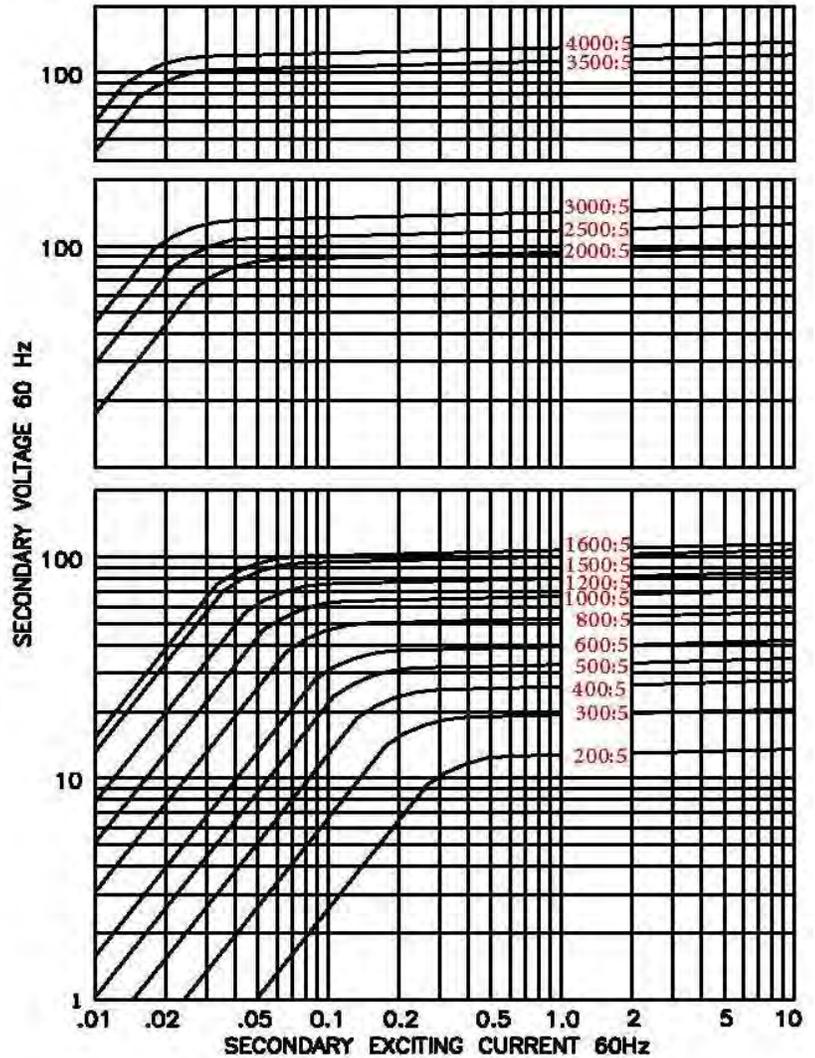
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Model 120



EXCITATION CURVE





Current Transformer

Model 135



CERTIFICATIONS:



APPLICATION:

Relaying and metering.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

5.75"

APPROXIMATE WEIGHT:

18 lbs.

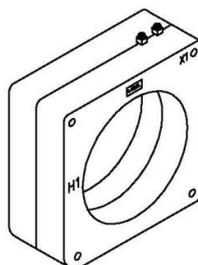
CONNECTIONS:

- Terminals are brass connections No. 10-32 UNF with one flat washer, lockwasher, and regular nut
- Multi-ratios available upon request
- Brackets 59-0215 (CR) and 59-0216 (CL)

Model	135
Window Size	5.75
Width	9.21
Height	9.21
Depth	3.00

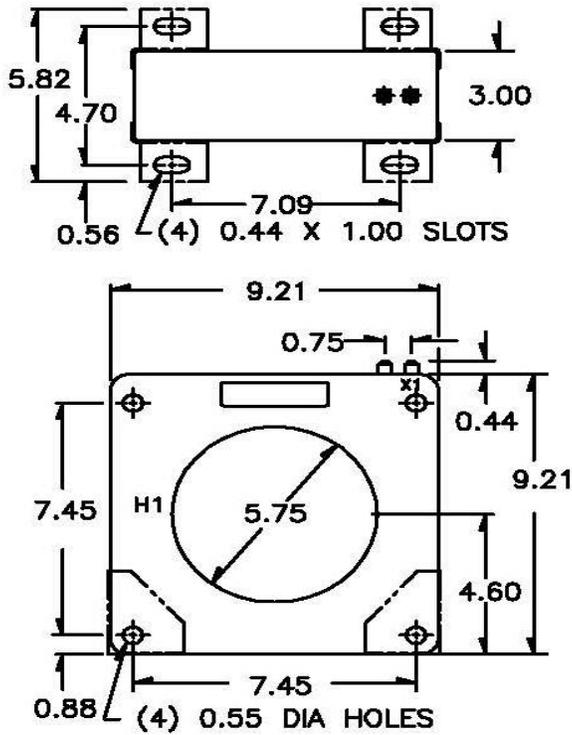
MODEL 135
Window Diameter 5.75"
Approximate weight: 18 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
135 - 500	50:5	-	4.8	-	-	-	-	0.015	2	2
135 - 750	75:5	-	2.4	4.8	-	-	-	0.027	2	2
135 - 101	100:5	-	1.2	2.4	4.8	-	-	0.036	2	2
135 - 151	150:5	C10	0.6	1.2	2.4	4.8	-	0.059	2	2
135 - 201	200:5	C10	0.6	0.6	1.2	2.4	4.8	0.078	2	2
135 - 251	250:5	C20	0.6	0.6	1.2	2.4	2.4	0.113	2	2
135 - 301	300:5	C20	0.3	0.3	0.6	1.2	2.4	0.117	2	2
135 - 401	400:5	C20	0.3	0.3	0.3	0.6	1.2	0.156	2	2
135 - 501	500:5	C50	0.3	0.3	0.3	0.3	0.6	0.181	2	2
135 - 601	600:5	C50	0.3	0.3	0.3	0.3	0.6	0.217	2	2
135 - 751	750:5	C50	0.3	0.3	0.3	0.3	0.6	0.339	2	1.5
135 - 801	800:5	C50	0.3	0.3	0.3	0.3	0.6	0.362	2	1.5
135 - 102	1000:5	C100	0.3	0.3	0.3	0.3	0.3	0.452	1.5	1.33
135 - 122	1200:5	C100	0.3	0.3	0.3	0.3	0.3	0.543	1.5	1.33
135 - 152	1500:5	C100	0.3	0.3	0.3	0.3	0.3	0.678	1.5	1
135 - 162	1600:5	C100	0.3	0.3	0.3	0.3	0.3	0.694	1.5	1
135 - 202	2000:5	C100	0.3	0.3	0.3	0.3	0.3	0.867	1.33	1
135 - 252	2500:5	C200	0.3	0.3	0.3	0.3	0.3	1.084	1	0.8
135 - 302	3000:5	C200	0.3	0.3	0.3	0.3	0.3	1.301	1	0.8
135 - 322	3200:5	C200	0.3	0.3	0.3	0.3	0.3	1.279	1	0.8
135 - 352	3500:5	C200	0.3	0.3	0.3	0.3	0.3	1.399	1	0.8
135 - 402	4000:5	C200	0.3	0.3	0.3	0.3	0.3	1.598	1	0.6
135 - 502	5000:5	C200	0.3	0.3	0.3	0.3	0.3	2.459	1	0.6

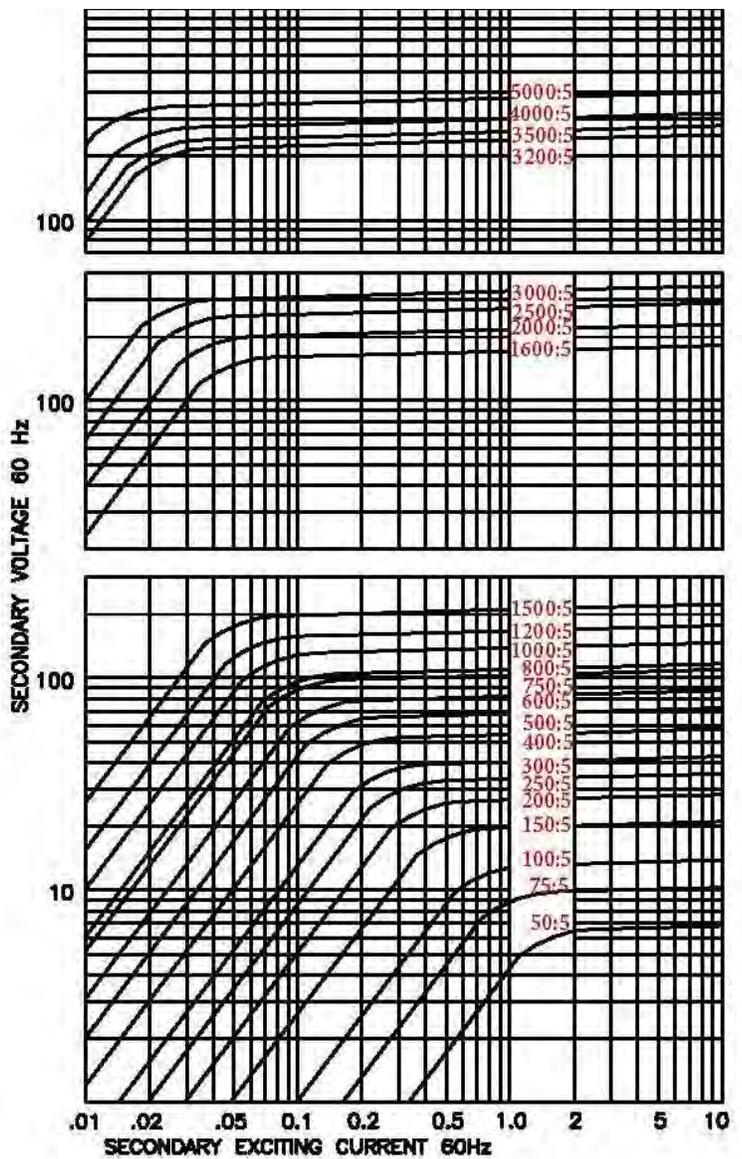


Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Model 135



EXCITATION CURVE



Model 135



Current Transformer

Model 135MR
rev 03182021

CERTIFICATIONS:



APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

5.75"

APPROXIMATE WEIGHT:

18 lbs.

CONNECTIONS:

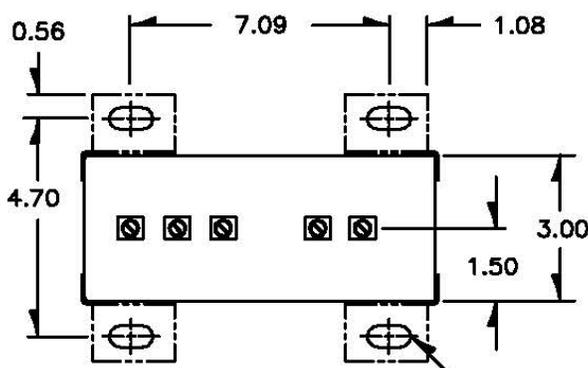
- Terminals are brass studs No. 10-32 UNF with one flat washer, lockwasher, and regular nut
- Brackets 59-0215 (CR) and 59-0216 (CL)



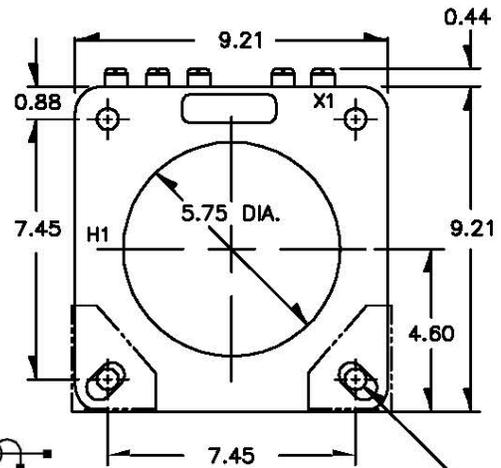
Model	135MR
Window Size	5.75
Width	9.21
Height	9.21
Depth	3.00

MODEL 135MR
Window Diameter 5.75"
Approximate weight: 18 lbs.

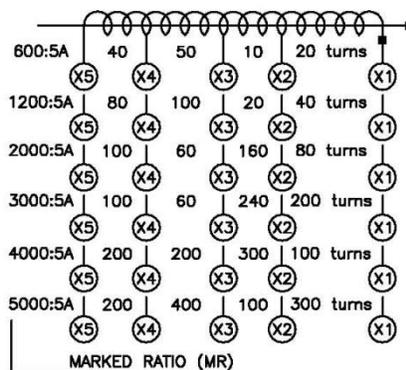
Catalog Number	Relay Class	Continuous Thermal	
		@ 30°C	@ 50°C
135-601MR	C50	2.0	2.0
135-122MR	C100	1.5	1.33
135-202MR	C100	1.0	0.8
135-302MR	C200	1.0	0.8
135-402MR	C200	1.0	0.6
135-502MR	C200	1.0	0.6



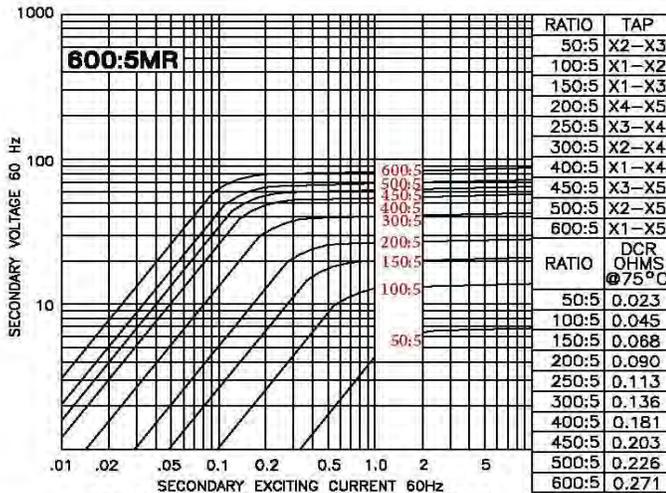
(4) SLOTS
0.44 X 1.00



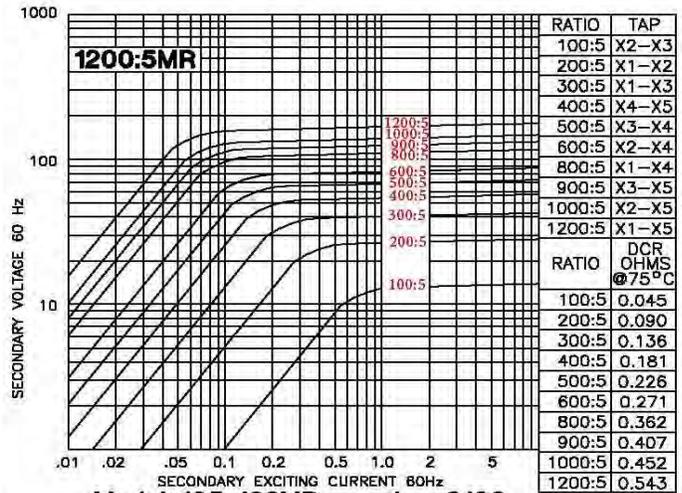
(4) HOLES
0.55 DIA



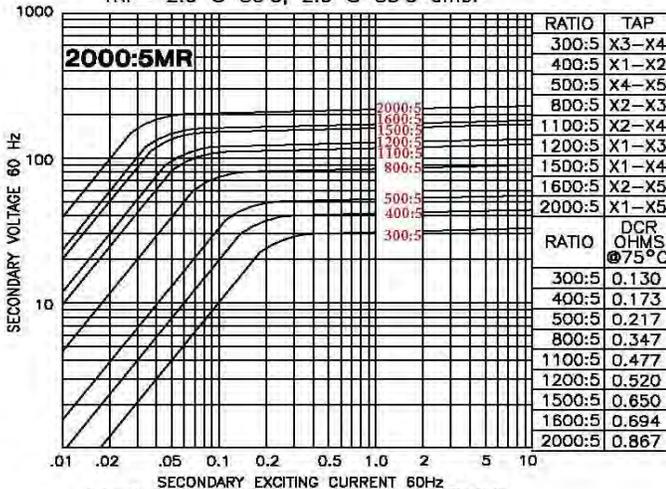
EXCITATION CURVE



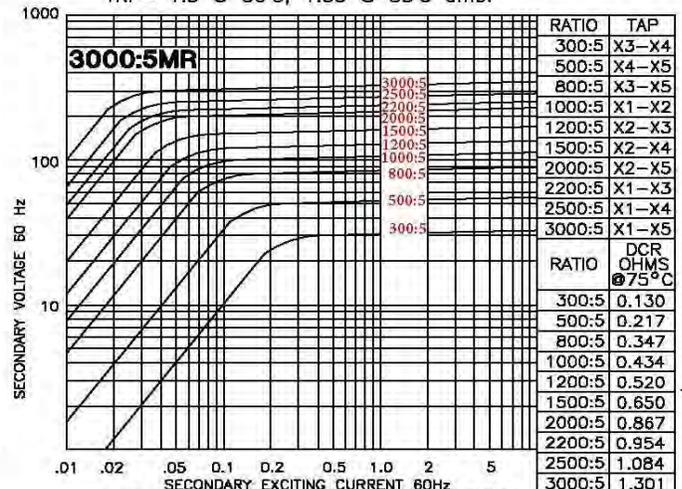
Model 135-601MR - rating C50
TRF= 2.0 @ 30°C, 2.0 @ 55°C amb.



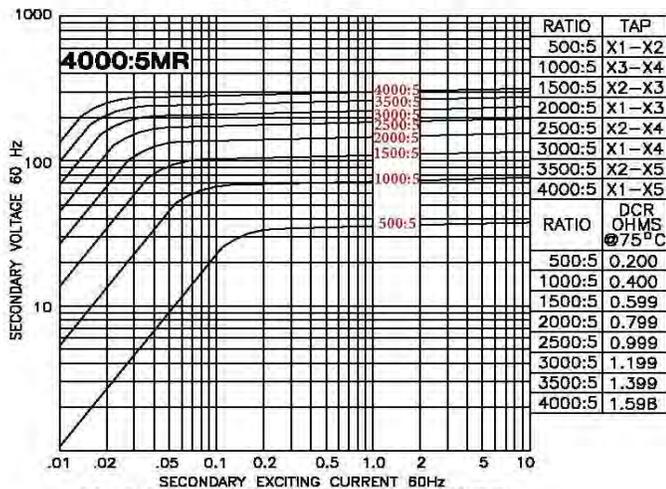
Model 135-122MR - rating C100
TRF= 1.5 @ 30°C, 1.33 @ 55°C amb.



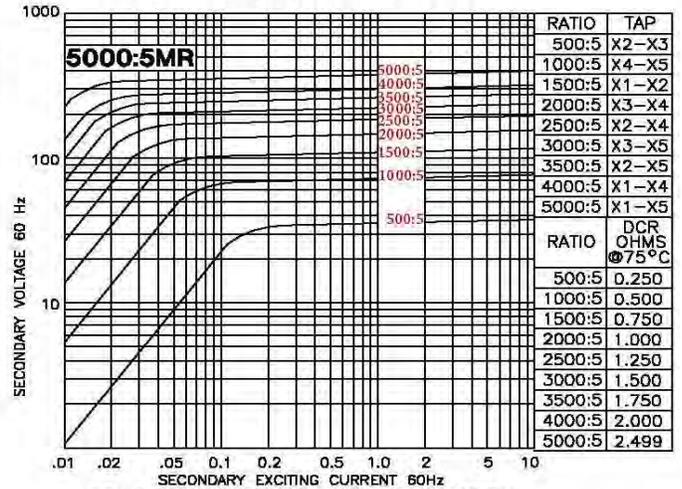
Model 135-202MR - rating C100
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Model 135-302MR - rating C200
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Model 135-402MR - rating C200
TRF= 1.0 @ 30°C, 0.6 @ 55°C amb.



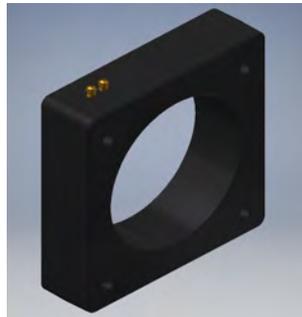
Model 135-502MR - rating C200
TRF= 1.0 @ 30°C, 0.6 @ 55°C amb.



Current Transformer

Model 144
rev 011218

CERTIFICATIONS:



APPLICATION:

Relaying and metering.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

6.00"

APPROXIMATE WEIGHT:

40 lbs.

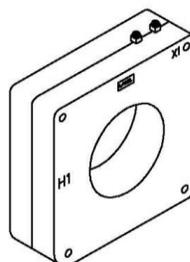
CONNECTIONS:

- Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer
- Multi-ratios available upon request
- Mounting Kit – 59-0215 (CR) and 59-0216 (CL)

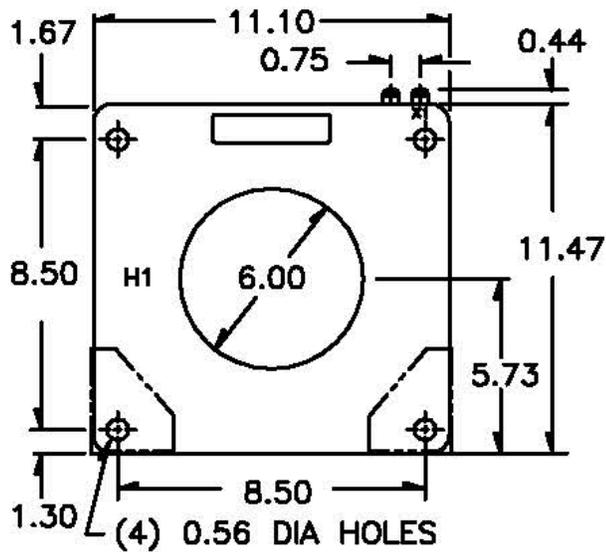
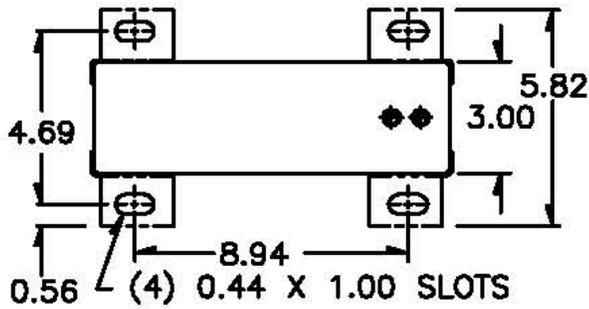
Model	144
Window Size	6.00
Width	11.10
Height	11.47
Depth	3.00

MODEL 144
Window Diameter 6.00"
Approximate weight: 40 lbs.

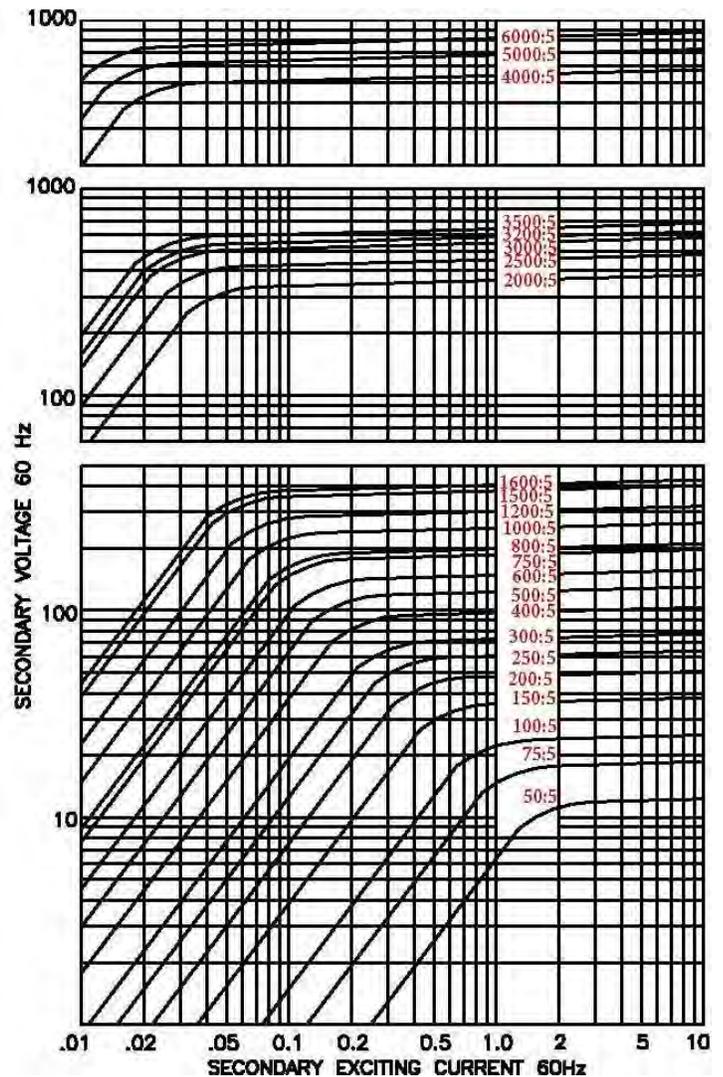
CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
144 – 500	50:5	-	2.4	4.8	-	-	-	0.020	2	2
144 – 750	75:5	C10	1.2	2.4	-	-	-	0.032	2	2
144 – 101	100:5	C10	1.2	1.2	2.4	4.8	-	0.040	2	2
144 – 151	150:5	C20	0.6	0.6	1.2	2.4	4.8	0.057	2	2
144 – 201	200:5	C20	0.6	0.6	1.2	2.4	2.4	0.067	2	2
144 – 251	250:5	C50	0.3	0.3	0.6	1.2	2.4	0.125	2	2
144 – 301	300:5	C50	0.3	0.3	0.6	0.6	1.2	0.150	2	2
144 – 401	400:5	C50	0.3	0.3	0.3	0.6	0.6	0.195	2	2
144 – 501	500:5	C100	0.3	0.3	0.3	0.6	0.6	0.282	2	2
144 – 601	600:5	C100	0.3	0.3	0.3	0.3	0.6	0.338	2	1.5
144 – 751	750:5	C100	0.3	0.3	0.3	0.3	0.3	0.213	2	2
144 – 801	800:5	C100	0.3	0.3	0.3	0.3	0.3	0.451	2	1.5
144 – 102	1000:5	C200	0.3	0.3	0.3	0.3	0.3	0.563	2	1.5
144 – 122	1200:5	C200	0.3	0.3	0.3	0.3	0.3	0.676	1.5	1.33
144 – 152	1500:5	C200	0.3	0.3	0.3	0.3	0.3	0.845	1.5	1
144 – 162	1600:5	C200	0.3	0.3	0.3	0.3	0.3	0.902	1.5	1
144 – 202	2000:5	C200	0.3	0.3	0.3	0.3	0.3	1.002	1.5	1
144 – 252	2500:5	C400	0.3	0.3	0.3	0.3	0.3	1.252	1.33	1
144 – 302	3000:5	C400	0.3	0.3	0.3	0.3	0.3	1.503	1	0.8
144 – 322	3200:5	C400	0.3	0.3	0.3	0.3	0.3	1.603	1	0.8
144 – 352	3500:5	C200	0.3	0.3	0.3	0.3	0.3	1.592	1	0.8
144 – 402	4000:5	C400	0.3	0.3	0.3	0.3	0.3	1.820	1	0.8
144 – 502	5000:5	C400	0.3	0.3	0.3	0.3	0.3	2.275	1	0.6
144 – 602	6000:5	C400	0.3	0.3	0.3	0.3	0.3	2.730	0.8	0.6



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



EXCITATION CURVE

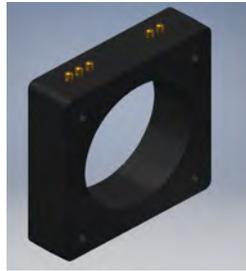




Current Transformer

Model 144MR
rev 03182021

CERTIFICATIONS:



APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

6.00"

APPROXIMATE WEIGHT:

40 lbs.

CONNECTIONS:

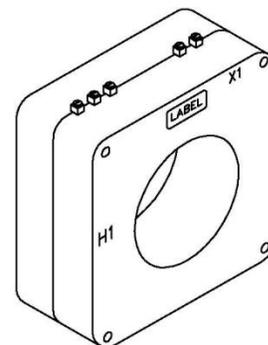
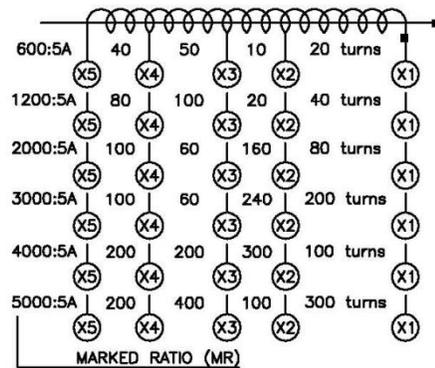
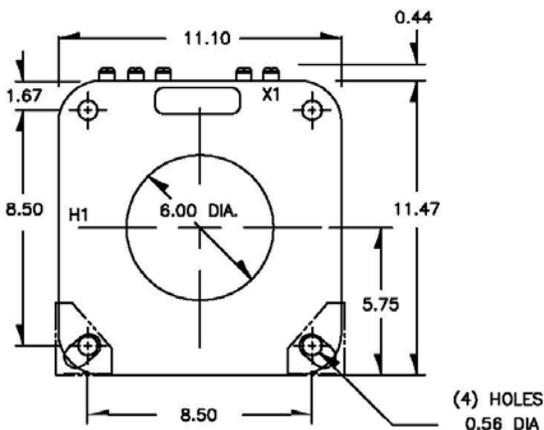
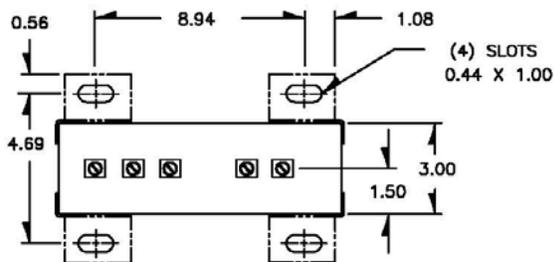
-Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer

-Mounting kit – 59-0215 (CR) and 59-0216 (CL)

Model	144MR
Window Size	6.00
Width	11.10
Height	11.47
Depth	3.00

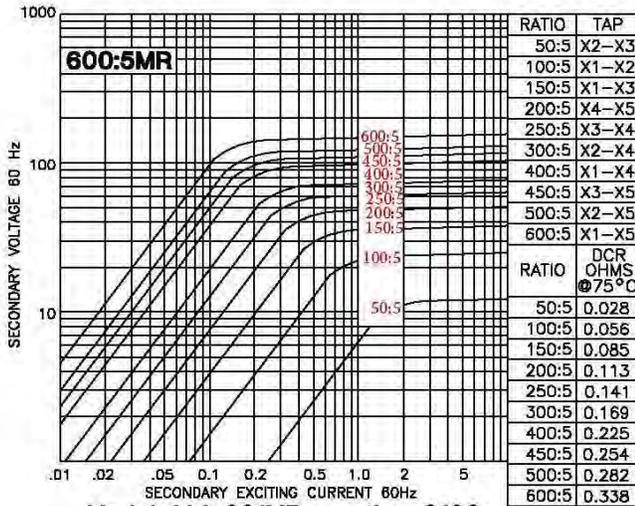
MODEL 144MR
Window Diameter 6.00"
Approximate weight: 40 lbs.

Catalog Number	Relay Class	Continuous Thermal	
		@ 30°C	@ 50°C
144-601MR	C100	2.0	1.5
144-122MR	C200	2.0	1.5
144-202MR	C200	1.5	1.0
144-302MR	C400	1.0	0.8
144-402MR	C400	1.0	0.8
144-502MR	C400	1.0	0.6

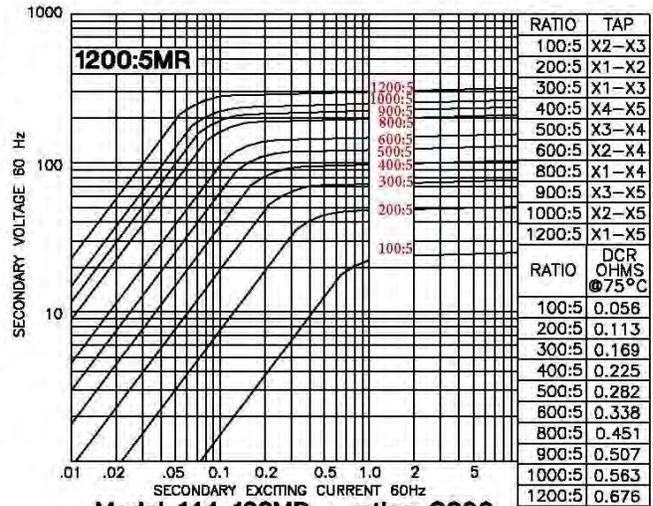


Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

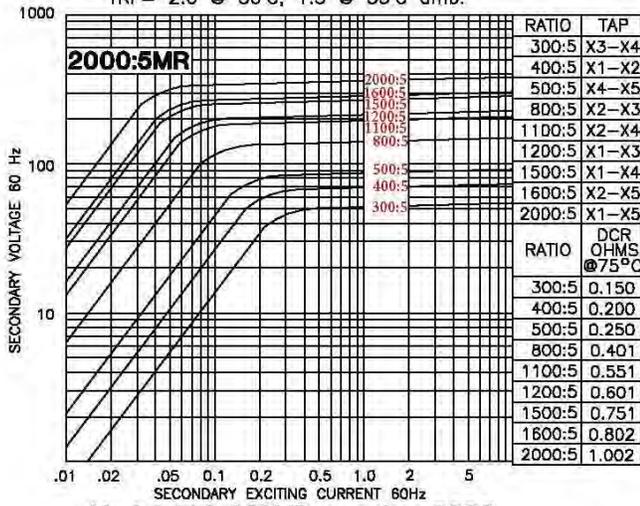
EXCITATION CURVE



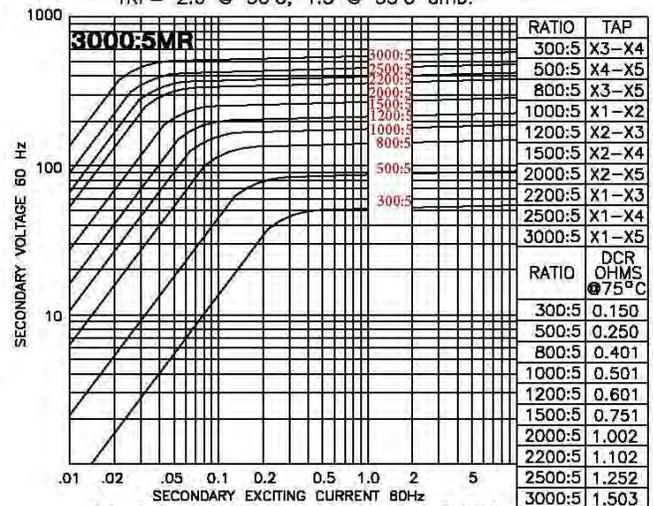
Model 144-601MR - rating C100
TRF= 2.0 @ 30°C, 1.5 @ 55°C amb.



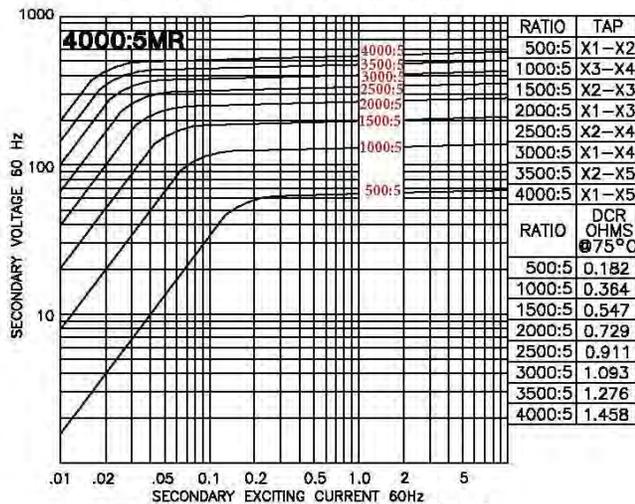
Model 144-122MR - rating C200
TRF= 2.0 @ 30°C, 1.5 @ 55°C amb.



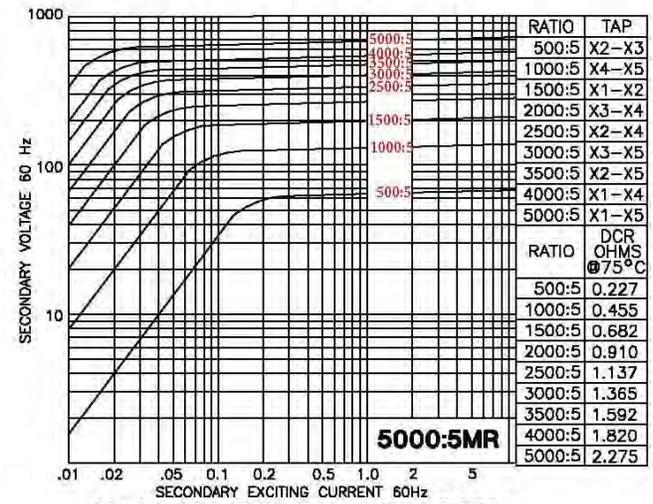
Model 144-202MR - rating C200
TRF= 1.5 @ 30°C, 1.0 @ 55°C amb.



Model 144-302MR - rating C400
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Model 144-402MR - rating C400
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



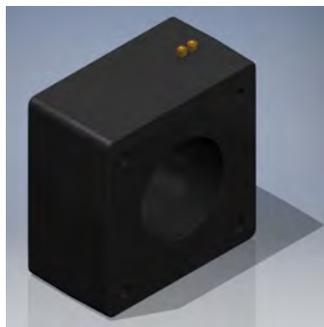
Model 144-502MR - rating C400
TRF= 1.0 @ 30°C, 0.6 @ 55°C amb.



Current Transformer

Model 145
rev 011218

CERTIFICATIONS:



APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

6.00"

APPROXIMATE WEIGHT:

83 lbs.

CONNECTIONS:

- Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer
- Multi-ratios available upon request
- Mounting Kit – 59-0215 (CR) and 59-0216 (CL)

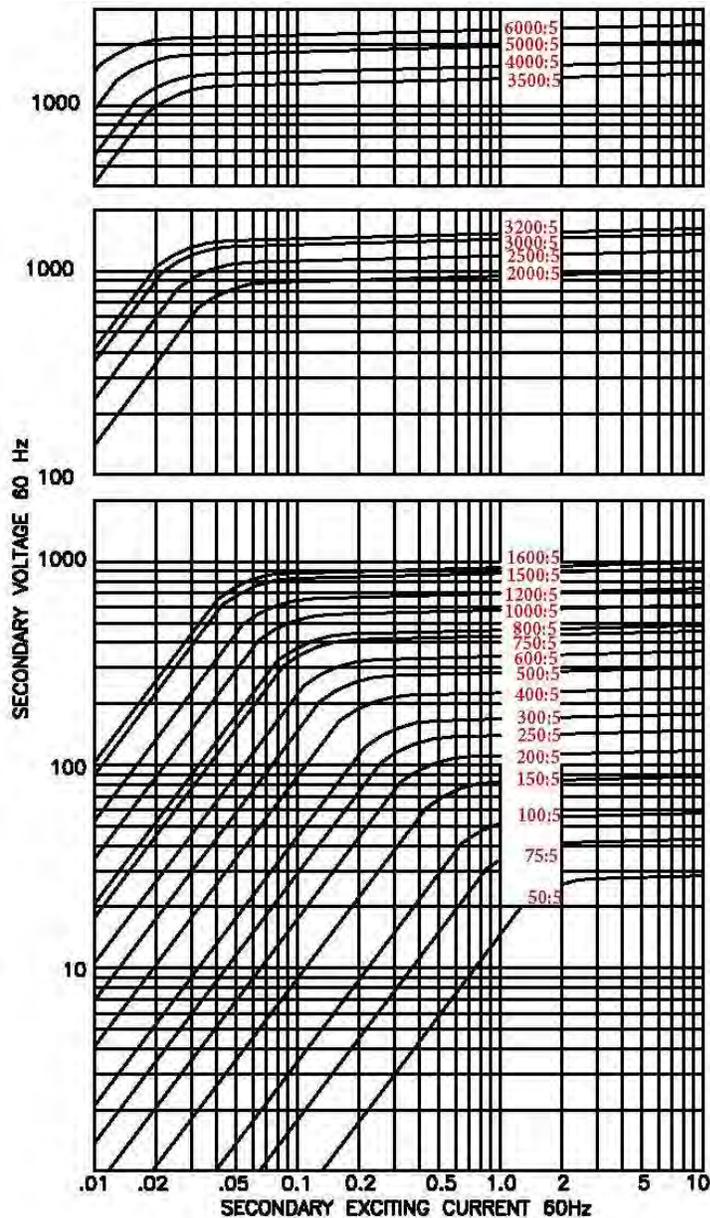
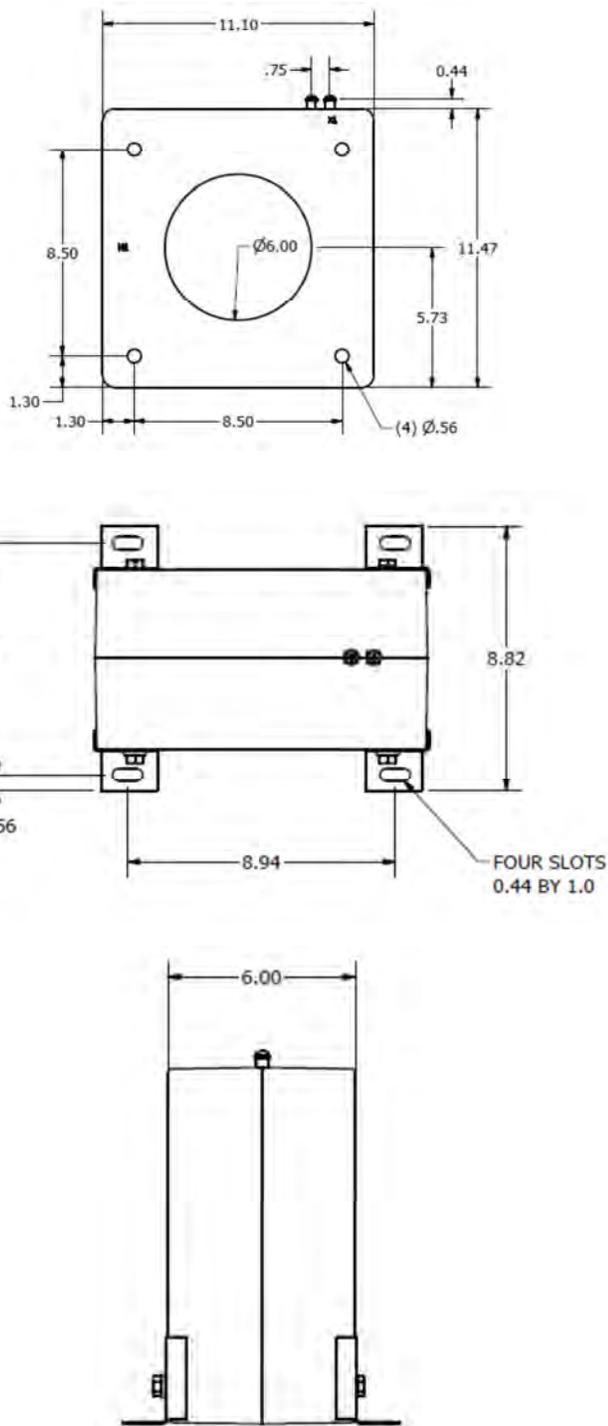
Model	145
Window Size	6.00
Width	11.10
Height	11.47
Depth	6.00

MODEL 145
Window Diameter 6.00"
Approximate weight: 83 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
145 – 500	50:5	C20	1.2	4.8	-	-	-	0.030	2	2
145 – 750	75:5	C20	1.2	2.4	4.8	4.8	-	0.045	2	2
145 – 101	100:5	C20	0.6	1.2	2.4	4.8	4.8	0.061	2	2
145 – 151	150:5	C50	0.6	0.6	1.2	2.4	2.4	0.091	2	2
145 – 201	200:5	C100	0.3	0.6	0.6	1.2	2.4	0.121	2	2
145 – 251	250:5	C100	0.3	0.3	0.6	0.6	1.2	0.152	2	2
145 – 301	300:5	C100	0.3	0.3	0.3	0.6	1.2	0.288	2	2
145 – 401	400:5	C200	0.3	0.3	0.3	0.3	0.6	0.384	2	2
145 – 501	500:5	C200	0.3	0.3	0.3	0.3	0.3	0.480	2	1.5
145 – 601	600:5	C200	0.3	0.3	0.3	0.3	0.3	0.576	2	1.5
145 – 751	750:5	C400	0.3	0.3	0.3	0.3	0.3	0.720	2	1.5
145 – 801	800:5	C400	0.3	0.3	0.3	0.3	0.3	0.768	2	1.5
145 – 102	1000:5	C400	0.3	0.3	0.3	0.3	0.3	0.960	1.5	1.33
145 – 122	1200:5	C400	0.3	0.3	0.3	0.3	0.3	1.153	1.5	1
145 – 152	1500:5	C800	0.3	0.3	0.3	0.3	0.3	1.441	1.5	1
145 – 162	1600:5	C800	0.3	0.3	0.3	0.3	0.3	1.537	1.33	1
145 – 202	2000:5	C800	0.3	0.3	0.3	0.3	0.3	1.829	1	1
145 – 252	2500:5	C800	0.3	0.3	0.3	0.3	0.3	2.286	1	0.8
145 – 302	3000:5	C800	0.3	0.3	0.3	0.3	0.3	2.743	1	0.8
145 – 322	3200:5	C800	0.3	0.3	0.3	0.3	0.3	2.926	1	0.8
145 – 352	3500:5	C800	0.3	0.3	0.3	0.3	0.3	3.040	1	0.8
145 – 402	4000:5	C800	0.3	0.3	0.3	0.3	0.3	3.474	1	0.6
145 – 502	5000:5	C800	0.3	0.3	0.3	0.3	0.3	4.342	0.8	0.6
145 – 602	6000:5	C800	0.3	0.3	0.3	0.3	0.3	5.211	0.8	0.6

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

EXCITATION CURVE





Current Transformer

Model 145 MR
rev 011218

CERTIFICATIONS:



E228202



223647



APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts, 10 kV BIL, full wave

WINDOW DIAMETER:

6.00"

APPROXIMATE WEIGHT:

83 lbs.

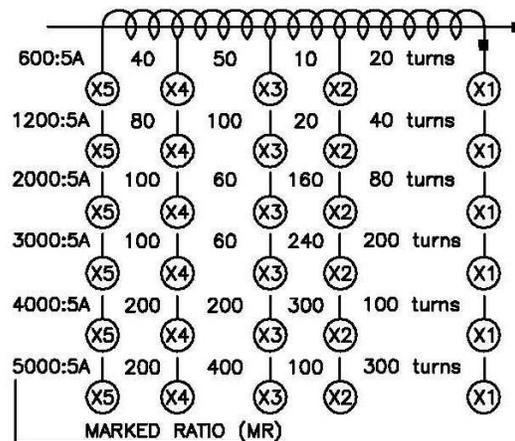
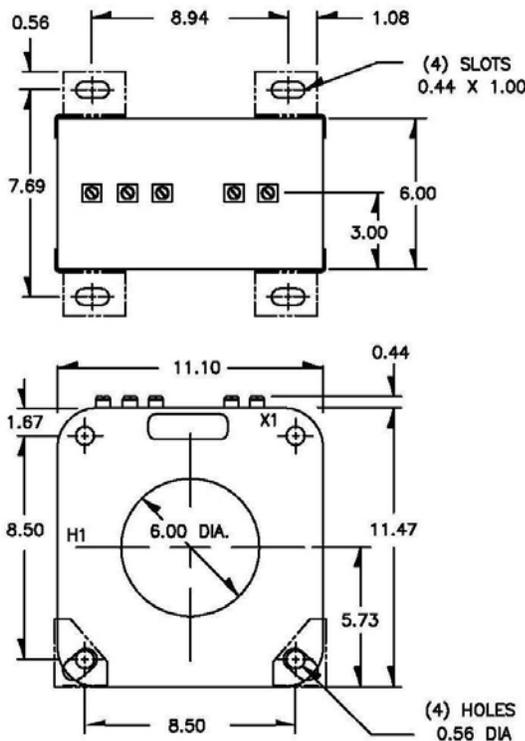
CONNECTONS:

-Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer

Model	145MR
Window Size	6.00
Width	11.10
Height	11.47
Depth	6.00

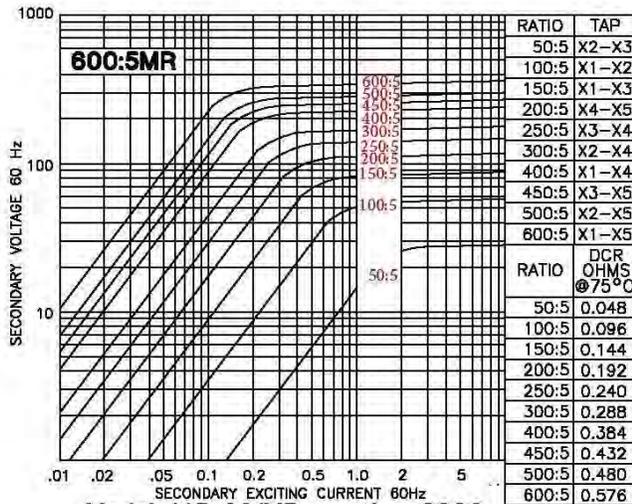
MODEL 145MR
Window Diameter 6.00"
Approximate weight: 83 lbs.

Catalog Number	Relay Class	Continuous Thermal	
		@ 30°C	@ 50°C
145-601MR	C200	2.0	1.5
145-122MR	C400	1.5	1.0
145-202MR	C800	1.33	1.0
145-302MR	C800	1.0	0.8
145-402MR	C800	1.0	0.6
145-502MR	C800	0.8	0.6

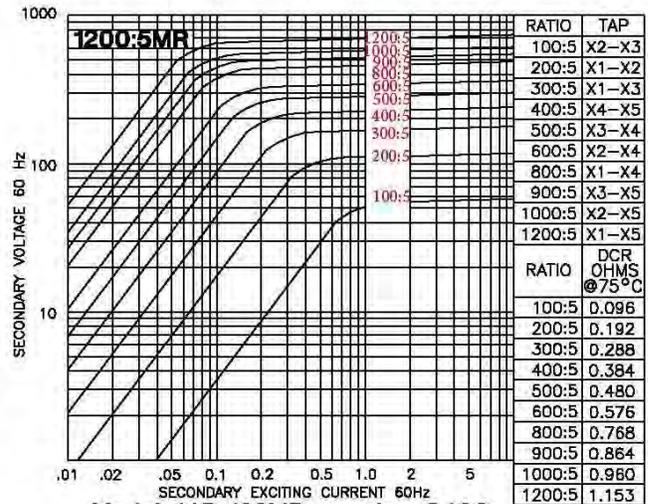


Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

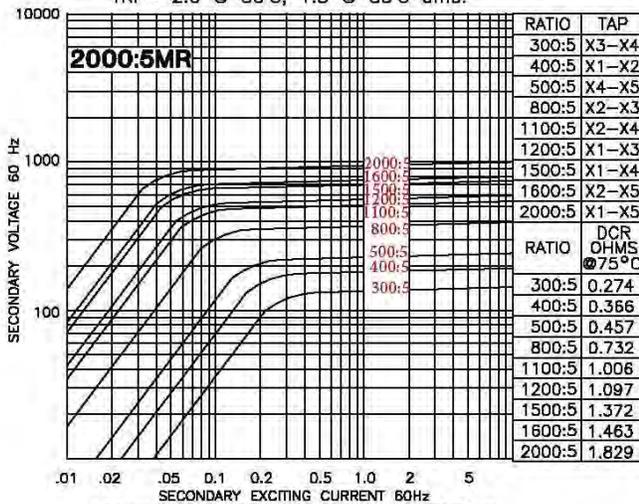
EXCITATION CURVE



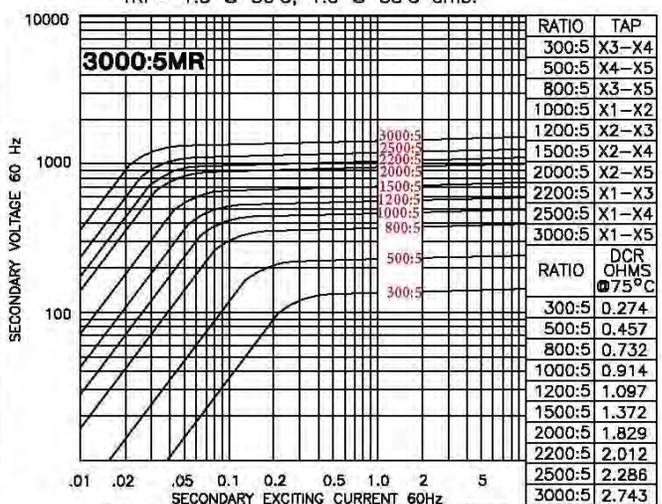
Model 145-601MR - rating C200
TRF= 2.0 @ 30°C, 1.5 @ 55°C amb.



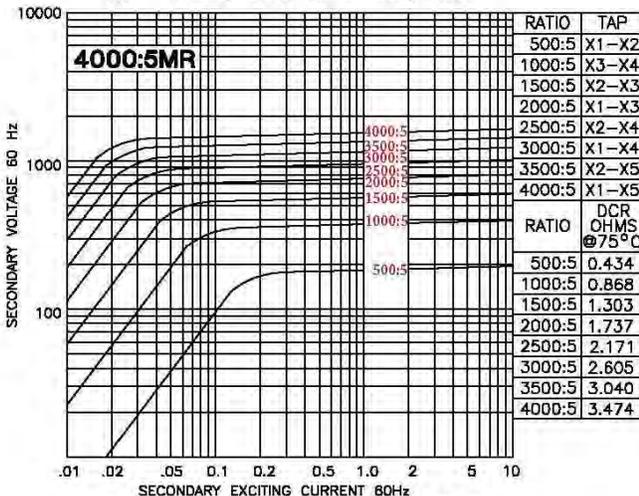
Model 145-122MR - rating C400
TRF= 1.5 @ 30°C, 1.0 @ 55°C amb.



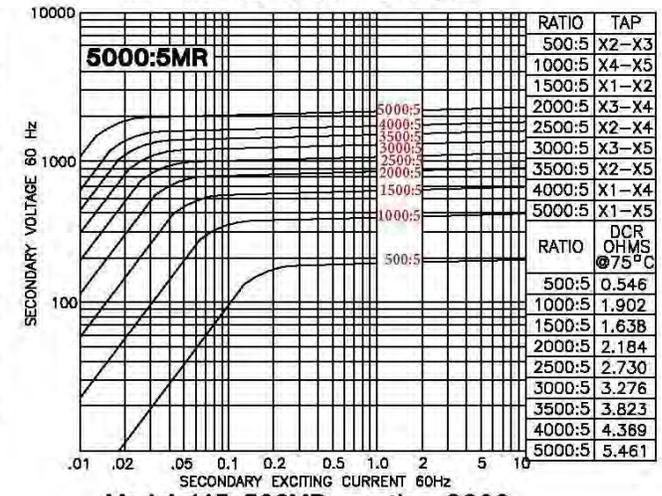
Model 145-202MR - rating C800
TRF= 1.33 @ 30°C, 1.0 @ 55°C amb.



Model 145-302MR - rating C800
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Model 145-402MR - rating C800
TRF= 1.0 @ 30°C, 0.6 @ 55°C amb.



Model 145-502MR - rating C800
TRF= 0.8 @ 30°C, 0.6 @ 55°C amb.



Current Transformer

Model 125

APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

6.31"

APPROXIMATE WEIGHT:

3 lbs.

CONNECTIONS:

- Terminals are brass studs No. 8-32 UNC with one flat washer, lockwasher, and regular nut
- Brackets 59-0215 (CR) and 59-0216 (CL)



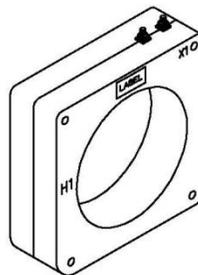
Model	125
Window Size	6.31
Width	8.50
Height	8.50
Depth	1.28

CERTIFICATIONS:



MODEL 125
Window Diameter 6.31"
Approximate weight: 3 lbs.

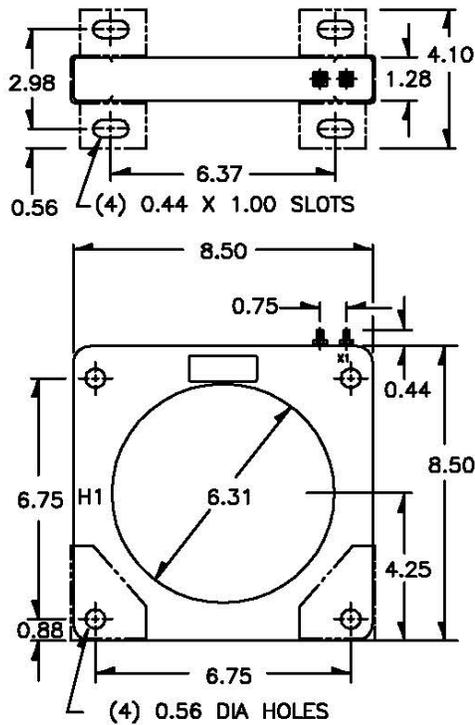
CATALOG NUMBER	CURRENT RATIO	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
		B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
125 - 601	600:5	0.3	0.3	1.2	1.2	2.4	0.071	1.5	1.33
125 - 751	750:5	0.3	0.3	0.6	1.2	2.4	0.143	1.5	1.33
125 - 801	800:5	0.3	0.3	0.6	1.2	2.4	0.116	1.5	1.33
125 - 102	1000:5	0.3	0.3	0.3	0.6	1.2	0.187	1.5	1.33
125 - 122	1200:5	0.3	0.3	0.3	0.6	1.2	0.224	1.5	1.33
125 - 152	1500:5	0.3	0.3	0.3	0.3	0.6	0.285	1.5	1.33
125 - 162	1600:5	0.3	0.3	0.3	0.3	0.6	0.304	1.5	1.33
125 - 202	2000:5	0.3	0.3	0.3	0.3	0.6	0.280	1.5	1.0
125 - 252	2500:5	0.3	0.3	0.3	0.3	0.6	0.351	1.33	1.0
125 - 302	3000:5	0.3	0.3	0.3	0.3	0.6	0.421	1.33	1.0
125 - 352	3500:5	0.3	0.3	0.3	0.3	0.3	0.491	1.33	1.0
125 - 402	4000:5	0.3	0.3	0.3	0.3	0.3	0.696	1.0	0.8



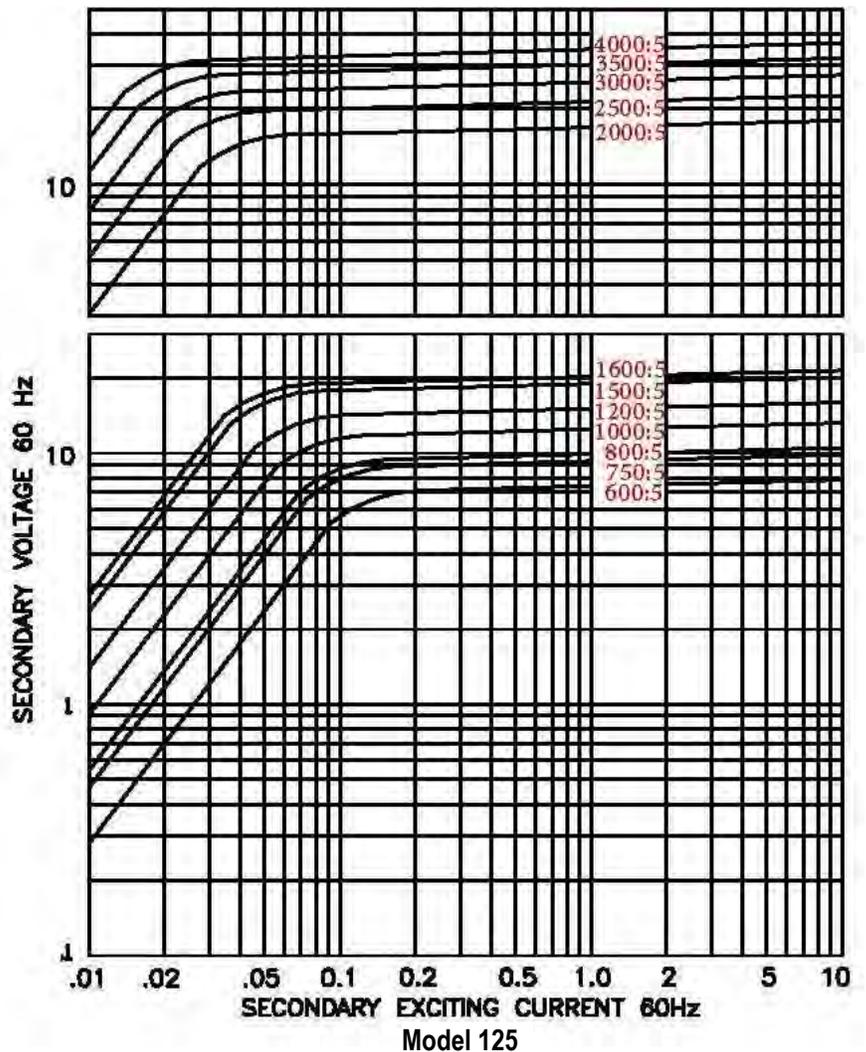
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Model 125



EXCITATION CURVE



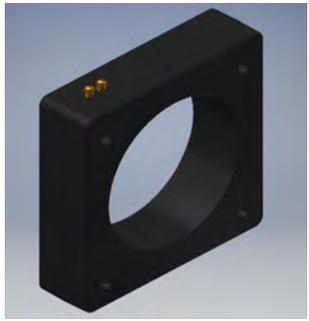
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 142
rev 011218

CERTIFICATIONS:



- APPLICATION:**
Relaying and metering.
- FREQUENCY:**
50-400 Hz.
- INSULATION LEVEL:**
600 Volts. 10 kV BIL. full wave
- WINDOW DIAMETER:**
7.25"
- APPROXIMATE WEIGHT:**
31 lbs.
- CONNECTIONS:**

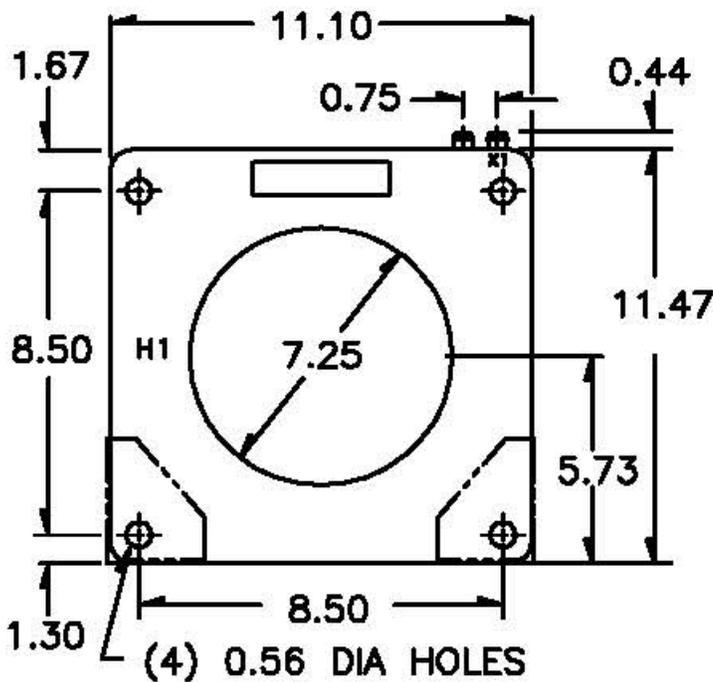
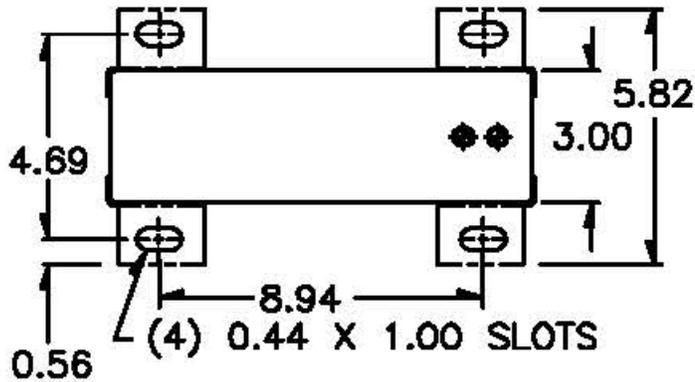
- Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer
- Multi-ratios available upon request
- Mounting Kit – 59-0215 (CR) and 59-0216 (CL)

Model	142
Window Size	7.25
Width	11.10
Height	11.47
Depth	3.00

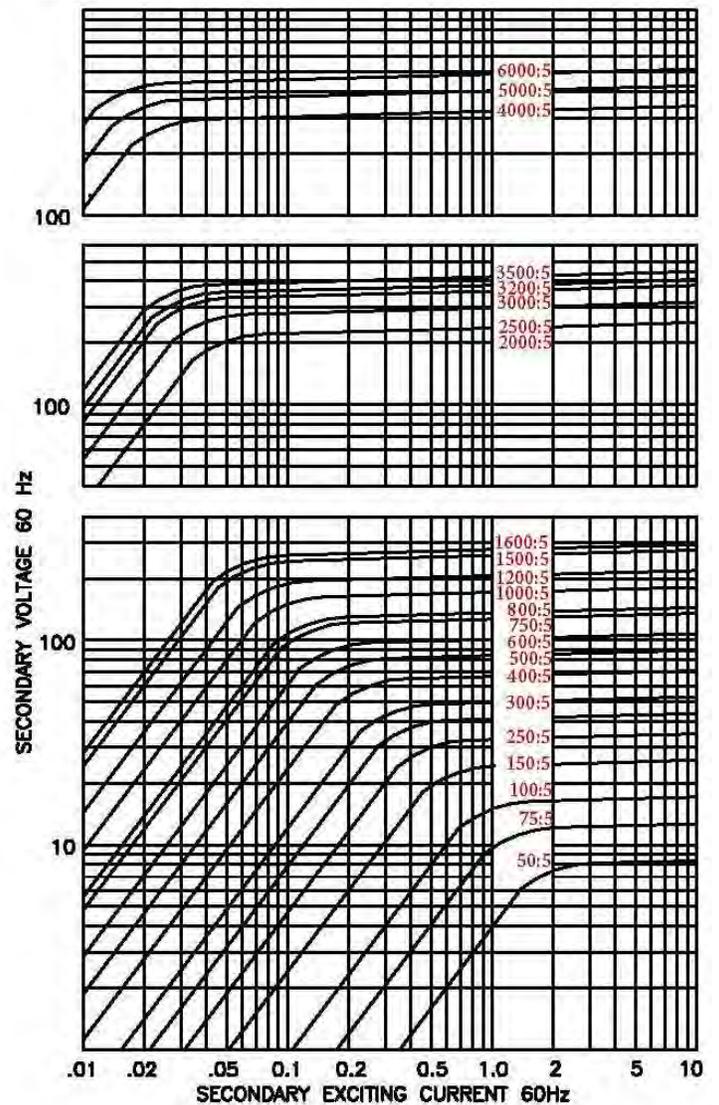
MODEL 142
Window Diameter 7.25"
Approximate weight: 31 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
142 – 500	50:5	-	-	-	-	-	-	0.031	2	2
142 – 750	75:5	-	2.4	4.8	-	-	-	0.035	2	2
142 – 101	100:5	C10	1.2	2.4	4.8	-	-	0.051	2	2
142 – 151	150:5	C10	1.2	1.2	2.4	4.8	-	0.070	2	2
142 – 201	200:5	C20	0.6	0.6	1.2	2.4	4.8	0.102	2	2
142 – 251	250:5	C20	0.6	0.6	1.2	1.2	2.4	0.127	2	2
142 – 301	300:5	C30	0.3	0.3	0.6	1.2	2.4	0.153	2	2
142 – 401	400:5	C50	0.3	0.3	0.3	0.6	1.2	0.196	2	2
142 – 501	500:5	C50	0.3	0.3	0.3	0.6	0.6	0.252	2	2
142 – 601	600:5	C50	0.3	0.3	0.3	0.3	0.6	0.255	2	2
142 – 751	750:5	C100	0.3	0.3	0.3	0.3	0.3	0.304	2	1.5
142 – 801	800:5	C100	0.3	0.3	0.3	0.3	0.3	0.336	2	1.5
142 – 102	1000:5	C100	0.3	0.3	0.3	0.3	0.3	0.486	2	1.5
142 – 122	1200:5	C100	0.3	0.3	0.3	0.3	0.3	0.735	1.5	1
142 – 152	1500:5	C200	0.3	0.3	0.3	0.3	0.3	0.918	1.5	1
142 – 162	1600:5	C200	0.3	0.3	0.3	0.3	0.3	0.979	1.33	1
142 – 202	2000:5	C200	0.3	0.3	0.3	0.3	0.3	0.544	2	1.5
142 – 252	2500:5	C200	0.3	0.3	0.3	0.3	0.3	1.066	1.5	1
142 – 302	3000:5	C200	0.3	0.3	0.3	0.3	0.3	1.280	1	0.8
142 – 322	3200:5	C200	0.3	0.3	0.3	0.3	0.3	1.365	1	0.8
142 – 352	3500:5	C200	0.3	0.3	0.3	0.3	0.3	1.493	1	0.8
142 – 402	4000:5	C200	0.3	0.3	0.3	0.3	0.3	1.452	1	0.8
142 – 502	5000:5	C200	0.3	0.3	0.3	0.3	0.3	1.915	1	0.8
142 – 602	6000:5	C200	0.3	0.3	0.3	0.3	0.3	2.298	1	0.6

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



EXCITATION CURVE

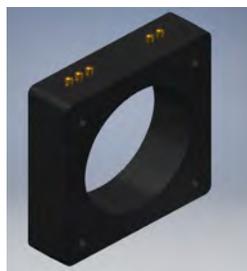




Current Transformer

Model 142MR
rev 011218

CERTIFICATIONS:



APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

7.25"

APPROXIMATE WEIGHT:

31 lbs.

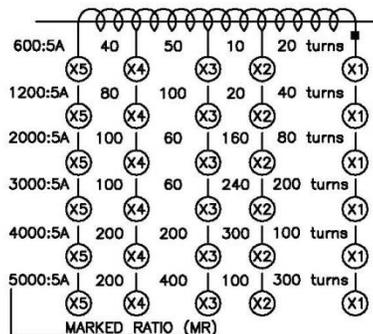
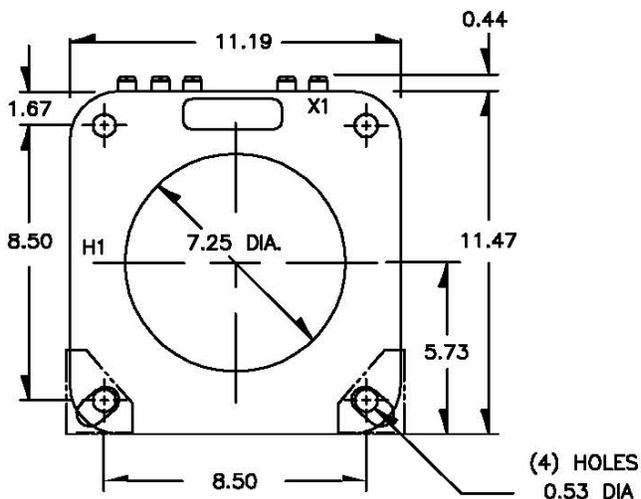
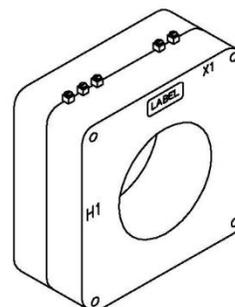
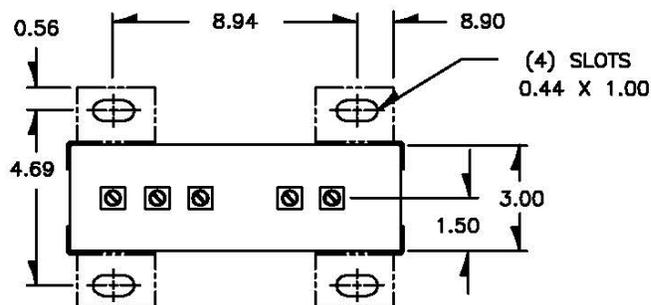
CONNECTIONS:

- Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer
- Mounting Kit – 59-0215 (CR) and 59-0216 (CL)

Model	142MR
Window Size	7.25
Width	11.10
Height	11.47
Depth	3.00

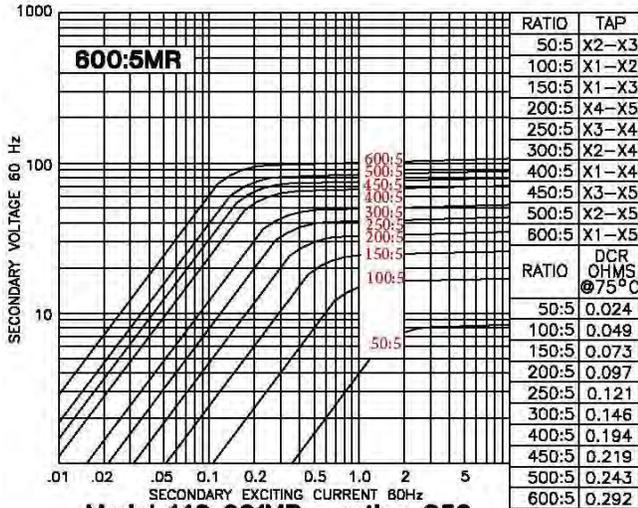
MODEL 142MR
Window Diameter 7.25"
Approximate weight: 31 lbs.

Catalog Number	Relay Class	Continuous Thermal	
		@ 30°C	@ 50°C
142-601MR	C50	2.0	2.0
142-122MR	C200	1.5	1.0
142-202MR	C200	2.0	1.5
142-302MR	C200	1.0	0.8
142-402MR	C200	1.0	0.8
142-502MR	C200	1.0	0.8

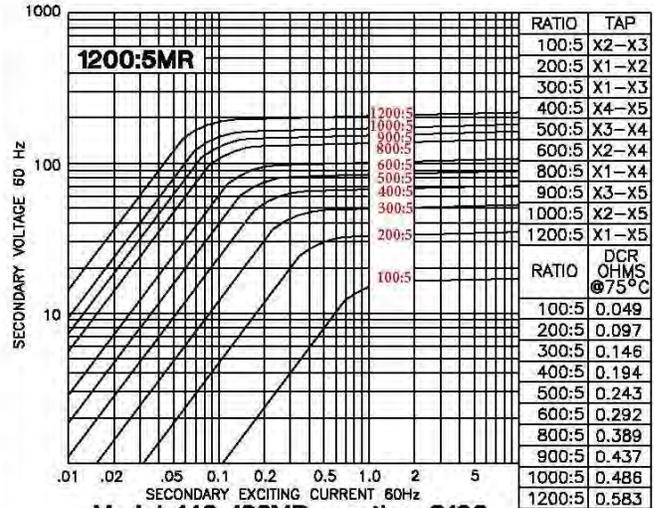


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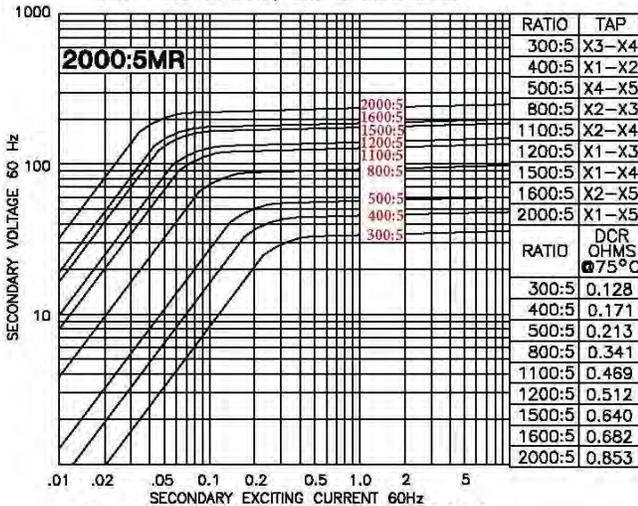
EXCITATION CURVE



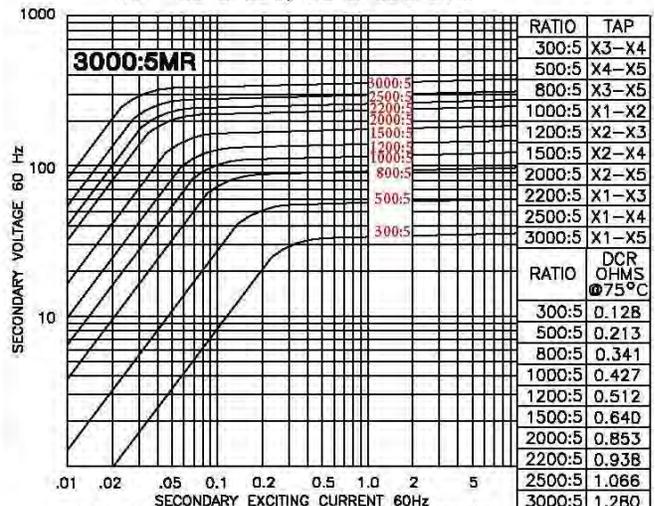
Model 142-601MR - rating C50
TRF= 2.0 @ 30°C, 2.0 @ 55°C amb.



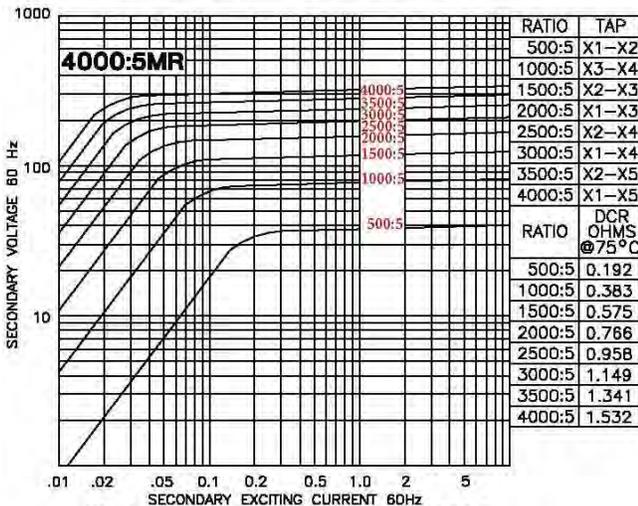
Model 142-122MR - rating C100
TRF= 1.5 @ 30°C, 1.0 @ 55°C amb.



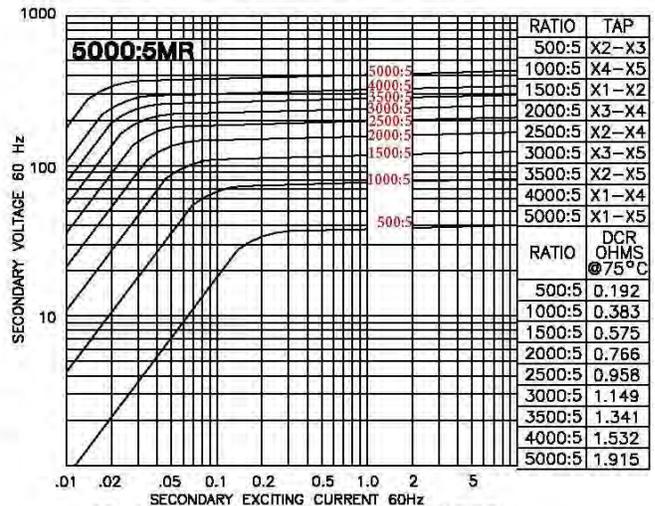
Model 142-202MR - rating C200
TRF= 2.0 @ 30°C, 1.5 @ 55°C amb.



Model 142-302MR - rating C200
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Model 142-402MR - rating C200
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Model 142-502MR - rating C200
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Current Transformer

Model 143
rev 011218

CERTIFICATIONS:



E228202



APPLICATION:

Relaying and metering.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

7.31"

APPROXIMATE WEIGHT:

60 lbs.

CONNECTIONS:

- Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer
- Multi-ratios available upon request
- Mounting Kit – 59-0215 (CR) and 59-0216 (CL)

Model	143
Window Size	7.31
Width	11.10
Height	11.47
Depth	6.00

MODEL 143
Window Diameter 7.31"
Approximate weight: 60 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
143 – 500	50:5	C20	4.8	4.8	-	-	-	0.014	2	2
143 – 750	75:5	C20	2.4	2.4	-	-	-	0.042	2	2
143 – 101	100:5	C20	1.2	2.4	4.8	-	-	0.056	2	2
143 – 151	150:5	C20	0.6	0.6	1.2	4.8	4.8	0.121	2	2
143 – 201	200:5	C50	0.3	0.3	0.6	2.4	2.4	0.161	2	2
143 – 251	250:5	C50	0.3	0.3	0.6	1.2	2.4	0.175	2	2
143 – 301	300:5	C100	0.3	0.3	0.3	1.2	1.2	0.241	2	2
143 – 401	400:5	C100	0.3	0.3	0.3	0.6	0.6	0.322	2	2
143 – 501	500:5	C100	0.3	0.3	0.3	0.3	0.6	0.441	2	2
143 – 601	600:5	C200	0.3	0.3	0.3	0.3	0.3	0.530	2	1.5
143 – 751	750:5	C200	0.3	0.3	0.3	0.3	0.3	0.662	2	1.5
143 – 801	800:5	C200	0.3	0.3	0.3	0.3	0.3	0.706	2	1.5
143 – 102	1000:5	C200	0.3	0.3	0.3	0.3	0.3	0.883	1.5	1.33
143 – 122	1200:5	C400	0.3	0.3	0.3	0.3	0.3	1.059	1.5	1
143 – 152	1500:5	C400	0.3	0.3	0.3	0.3	0.3	1.324	1.5	1
143 – 162	1600:5	C400	0.3	0.3	0.3	0.3	0.3	1.413	1.33	1
143 – 202	2000:5	C400	0.3	0.3	0.3	0.3	0.3	1.678	1.33	1
143 – 252	2500:5	C400	0.3	0.3	0.3	0.3	0.3	2.097	1	0.8
143 – 302	3000:5	C800	0.3	0.3	0.3	0.3	0.3	2.516	1	0.8
143 – 322	3200:5	C800	0.3	0.3	0.3	0.3	0.3	2.684	1	0.8
143 – 352	3500:5	C800	0.3	0.3	0.3	0.3	0.3	2.936	1	0.8
143 – 402	4000:5	C800	0.3	0.3	0.3	0.3	0.3	3.353	1	0.6
143 – 502	5000:5	C800	0.3	0.3	0.3	0.3	0.3	3.983	1	0.6
143 – 602	6000:5	C800	0.3	0.3	0.3	0.3	0.3	4.780	0.8	0.6

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 143MR
rev 03182021

CERTIFICATIONS:



APPLICATION:

Relaying and metering.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

7.31"

APPROXIMATE WEIGHT:

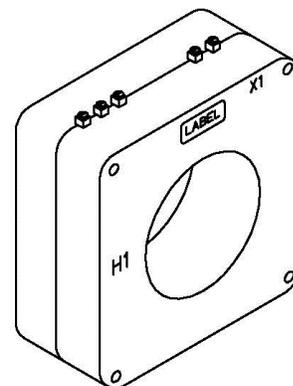
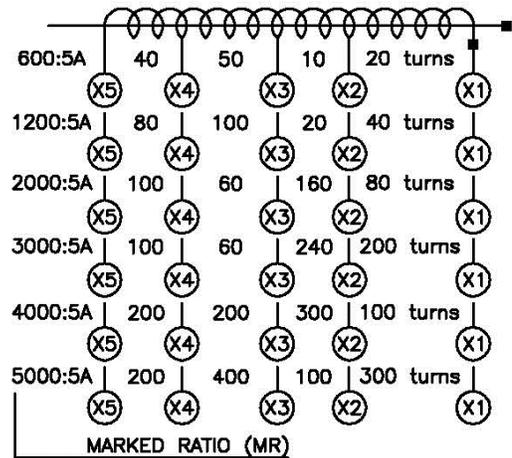
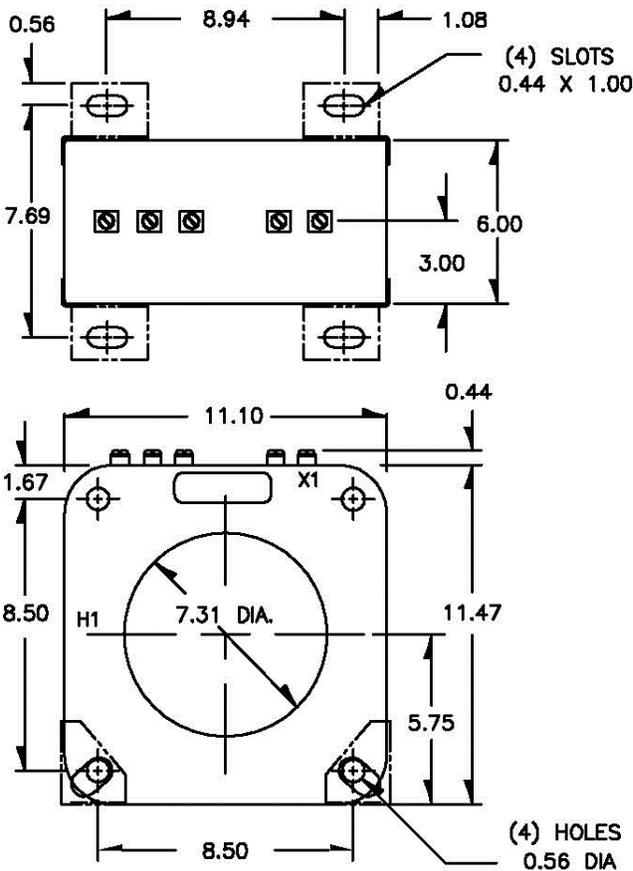
60 lbs.

CONNECTIONS:

- Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer
- Mounting kit – 59-0215 (CR) and 59-0216 (CL)

Model	143MR
Window Size	7.31
Width	11.10
Height	11.47
Depth	6.00

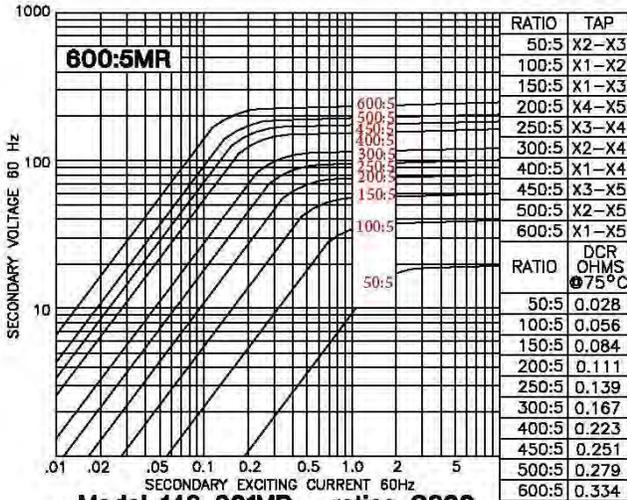
MODEL 143MR
Window Diameter 7.31"
Approximate weight: 60 lbs.



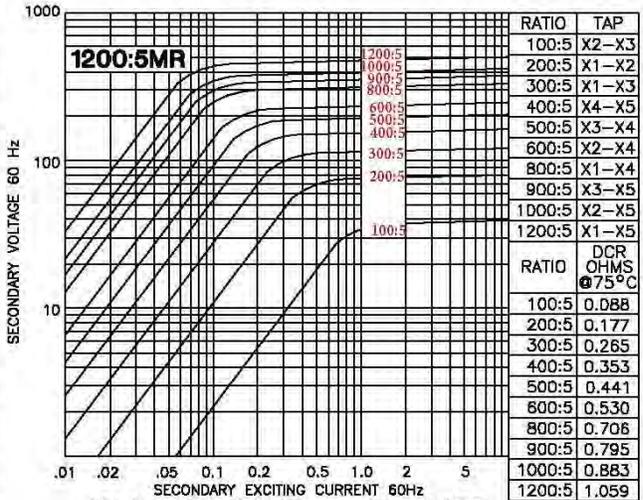
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



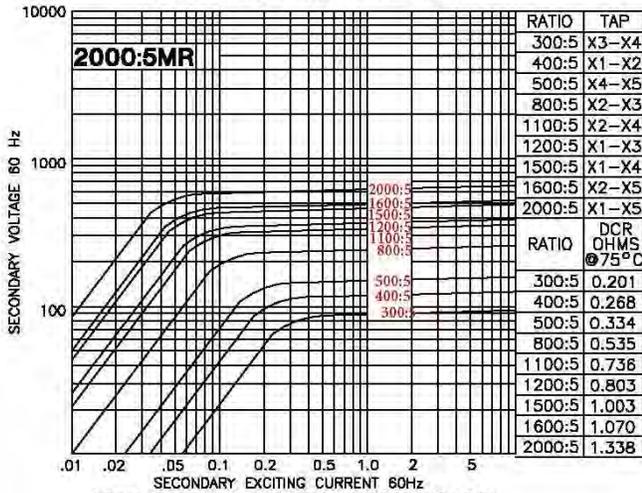
EXCITATION CURVE



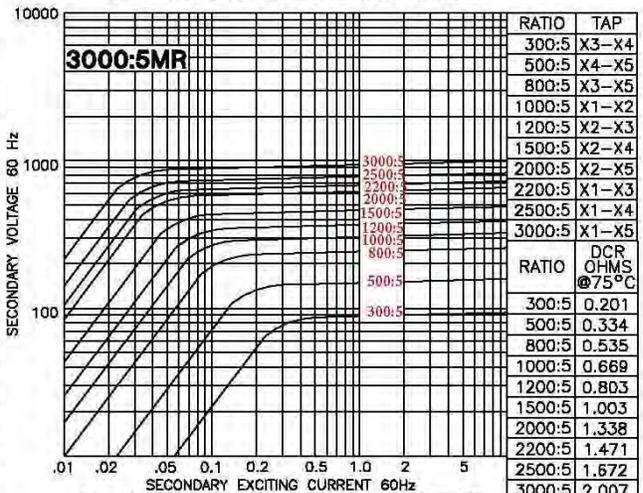
Model 143-601MR - rating C200
TRF= 2.0 @ 30°C, 1.5 @ 55°C amb.



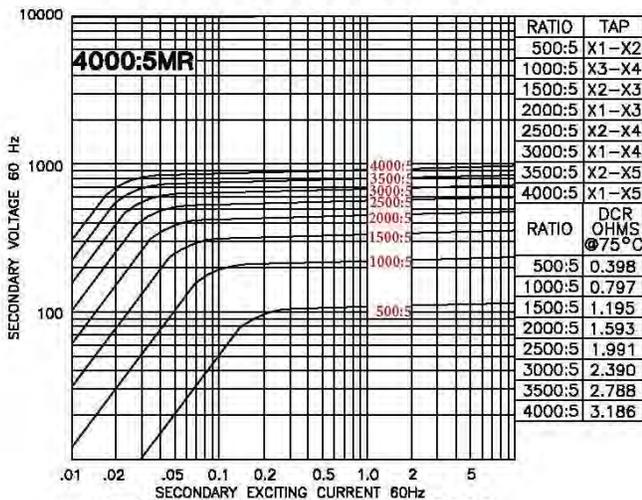
Model 143-122MR - rating C400
TRF= 1.5 @ 30°C, 1.0 @ 55°C amb.



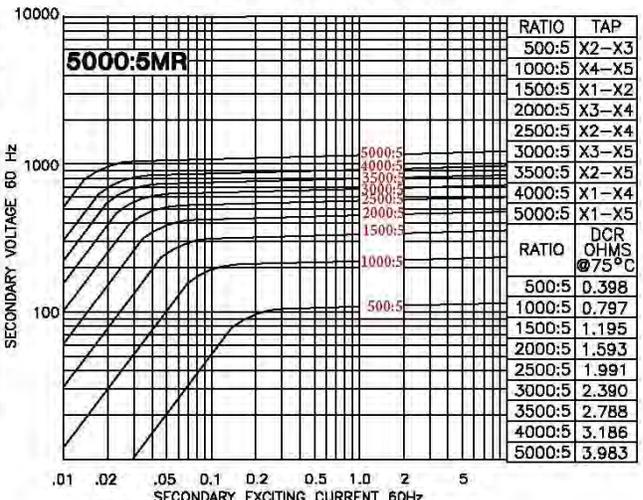
Model 143-202MR - rating C400
TRF= 1.33 @ 30°C, 1.0 @ 55°C amb.



Model 143-302MR - rating C800
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Model 143-402MR - rating C800
TRF= 1.0 @ 30°C, 0.6 @ 55°C amb.



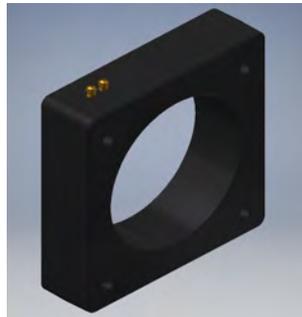
Model 143-502MR - rating C800
TRF= 1.0 @ 30°C, 0.6 @ 55°C amb.



Current Transformer

Model 140
rev 011218

CERTIFICATIONS:



APPLICATION:

Relaying and metering.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

8.13"

APPROXIMATE WEIGHT:

22 lbs.

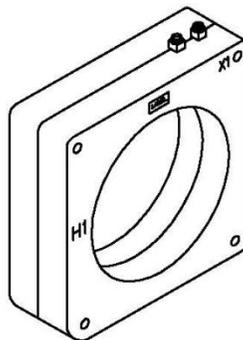
CONNECTIONS:

- Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer
- Multi-ratios available upon request
- Mounting Kit – 59-0215 (CR) and 59-0216 (CL)

Model	140
Window Size	8.13
Width	11.10
Height	11.47
Depth	3.00

MODEL 140
Window Diameter 8.13"
Approximate weight: 22 lbs.

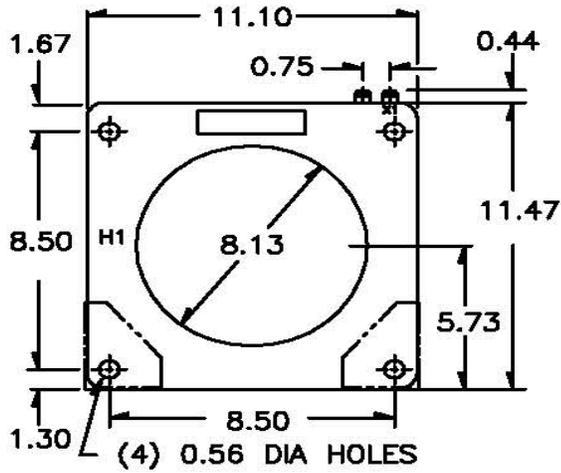
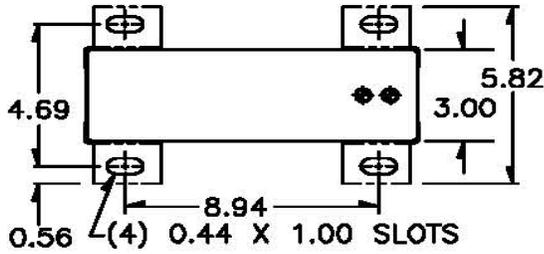
CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
140 – 500	50:5	-	-	-	-	-	-	0.022	2	2
140 – 101	100:5	-	2.4	4.8	-	-	-	0.043	2	2
140 – 201	200:5	C10	1.2	1.2	2.4	4.8	-	0.088	2	2
140 – 251	250:5	C20	1.2	1.2	2.4	2.4	4.8	0.110	2	2
140 – 301	300:5	C20	0.6	1.2	1.2	2.4	2.4	0.131	2	2
140 – 401	400:5	C20	0.3	0.3	0.6	1.2	2.4	0.150	2	2
140 – 501	500:5	C20	0.3	0.3	0.6	1.2	1.2	0.216	2	2
140 – 601	600:5	C50	0.3	0.3	0.3	0.6	1.2	0.276	2	2
140 – 801	800:5	C50	0.3	0.3	0.3	0.3	0.6	0.351	2	2
140 – 102	1000:5	C50	0.3	0.3	0.3	0.3	0.6	0.432	2	1.5
140 – 122	1200:5	C100	0.3	0.3	0.3	0.3	0.3	0.529	1.5	1.5
140 – 152	1500:5	C100	0.3	0.3	0.3	0.3	0.3	0.657	1.5	1
140 – 202	2000:5	C100	0.3	0.3	0.3	0.3	0.3	0.865	1.33	1
140 – 252	2500:5	C100	0.3	0.3	0.3	0.3	0.3	1.009	1.33	1
140 – 302	3000:5	C100	0.3	0.3	0.3	0.3	0.3	1.211	1	0.8
140 – 402	4000:5	C200	0.3	0.3	0.3	0.3	0.3	1.614	1	0.8
140 – 502	5000:5	C50	0.3	0.3	0.3	0.3	0.3	1.836	1	0.8
140 – 602	6000:5	C100	0.3	0.3	0.3	0.3	0.3	2.203	1	0.6



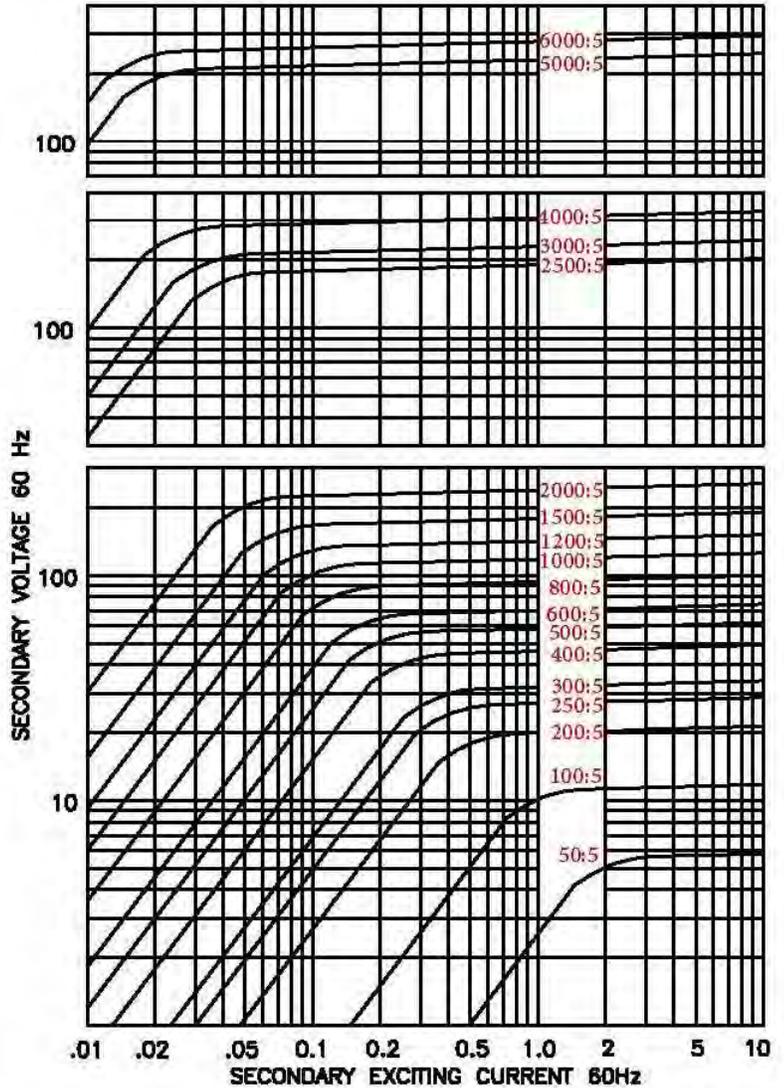
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Model 140



EXCITATION CURVE



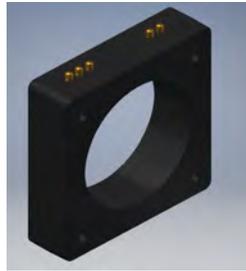
Model 140



Current Transformer

Model 140MR
rev 011218

CERTIFICATIONS:



APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

8.13"

APPROXIMATE WEIGHT:

22 lbs.

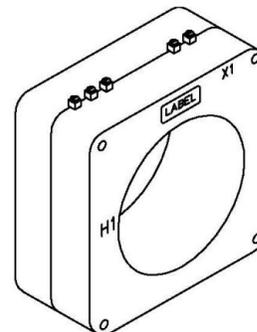
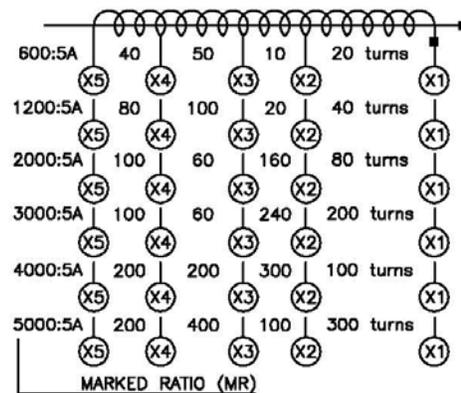
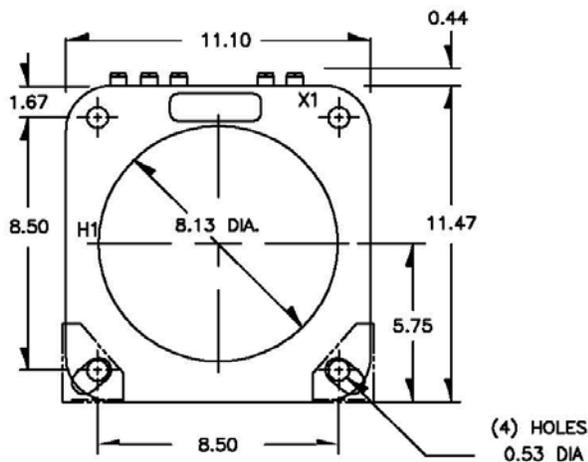
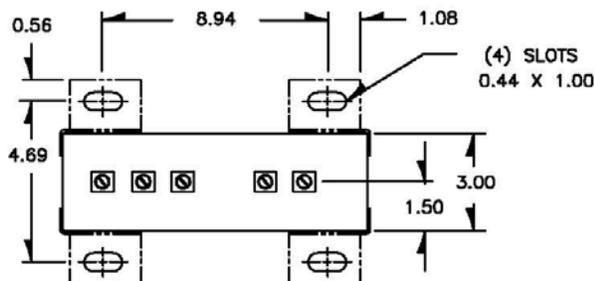
CONNECTIONS:

- Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer
- Mounting Kit – 59-0215 (CR) and 59-0216 (CL)

Model	140MR
Window Size	8.13
Width	11.10
Height	11.47
Depth	3.00

MODEL 140MR
Window Diameter 8.13"
Approximate weight: 22 lbs.

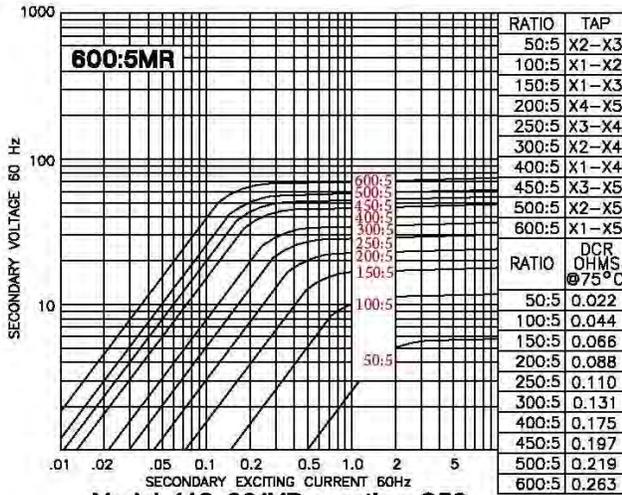
Catalog Number	Relay Class	Continuous Thermal	
		@ 30°C	@ 50°C
140-601MR	C50	2.0	2.0
140-122MR	C100	1.5	1.5
140-202MR	C100	1.33	1.0
140-302MR	C100	1.0	0.8
140-402MR	C100	1.0	0.8
140-502MR	C50	1.0	0.8



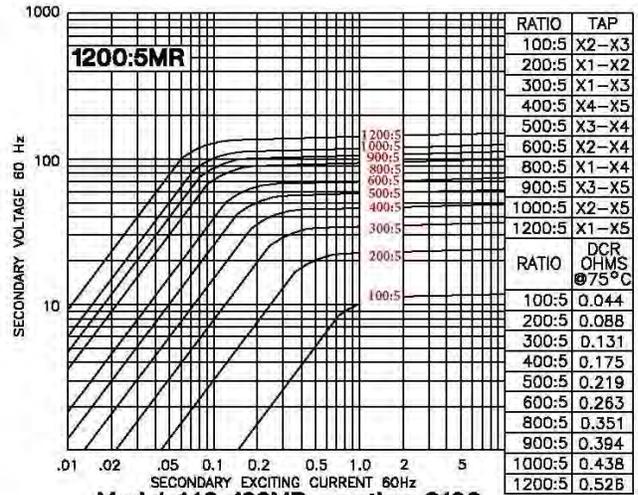
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



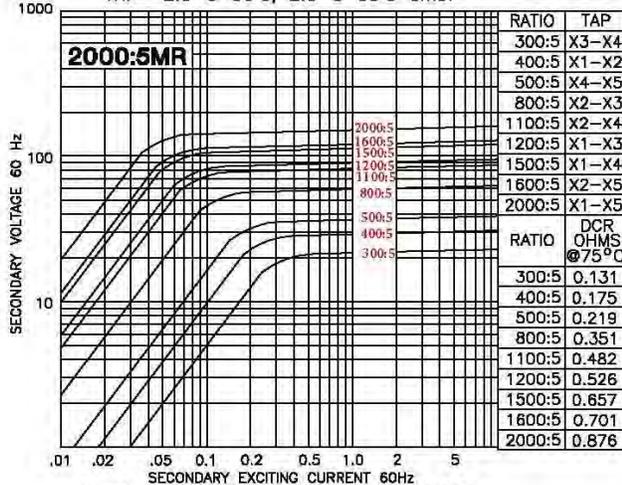
EXCITATION CURVE



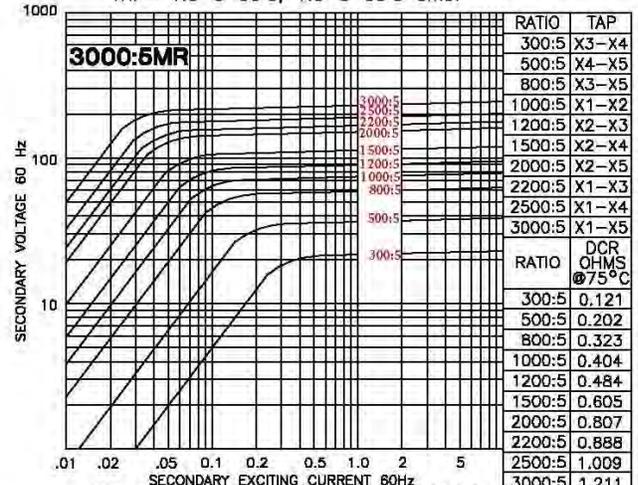
Model 140-601MR - rating C50
TRF= 2.0 @ 30°C, 2.0 @ 55°C amb.



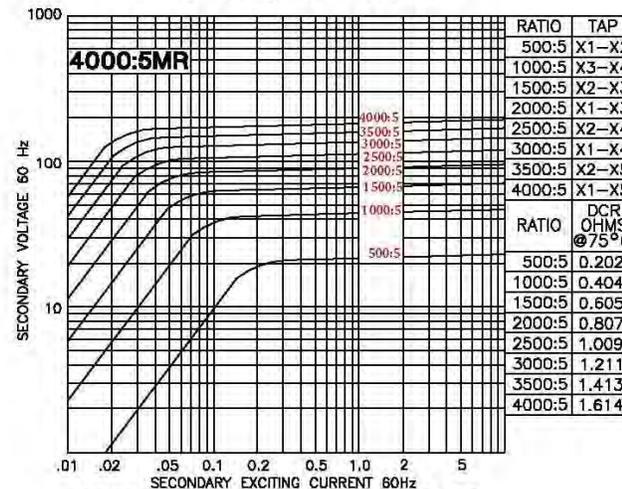
Model 140-122MR - rating C100
TRF= 1.5 @ 30°C, 1.5 @ 55°C amb.



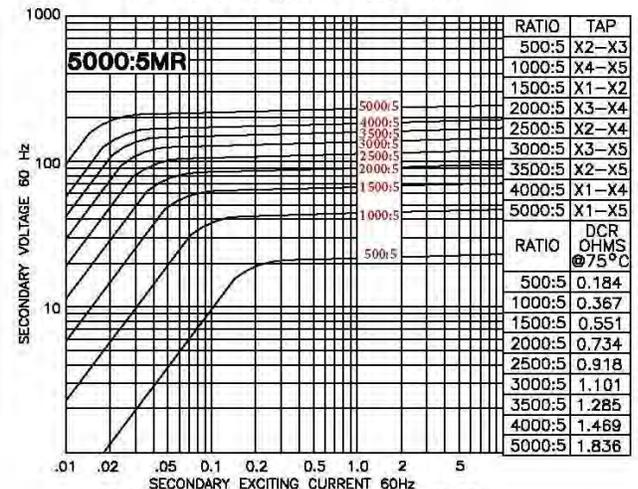
Model 140-202MR - rating C100
TRF= 1.33 @ 30°C, 1.0 @ 55°C amb.



Model 140-302MR - rating C100
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Model 140-402MR - rating C200
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Model 140-502MR - rating C50
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Current Transformer

Model 141
rev 011218

CERTIFICATIONS:



APPLICATION:

Relaying and metering.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

8.13"

APPROXIMATE WEIGHT:

44 lbs.

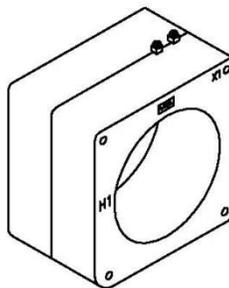
CONNECTIONS:

Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer

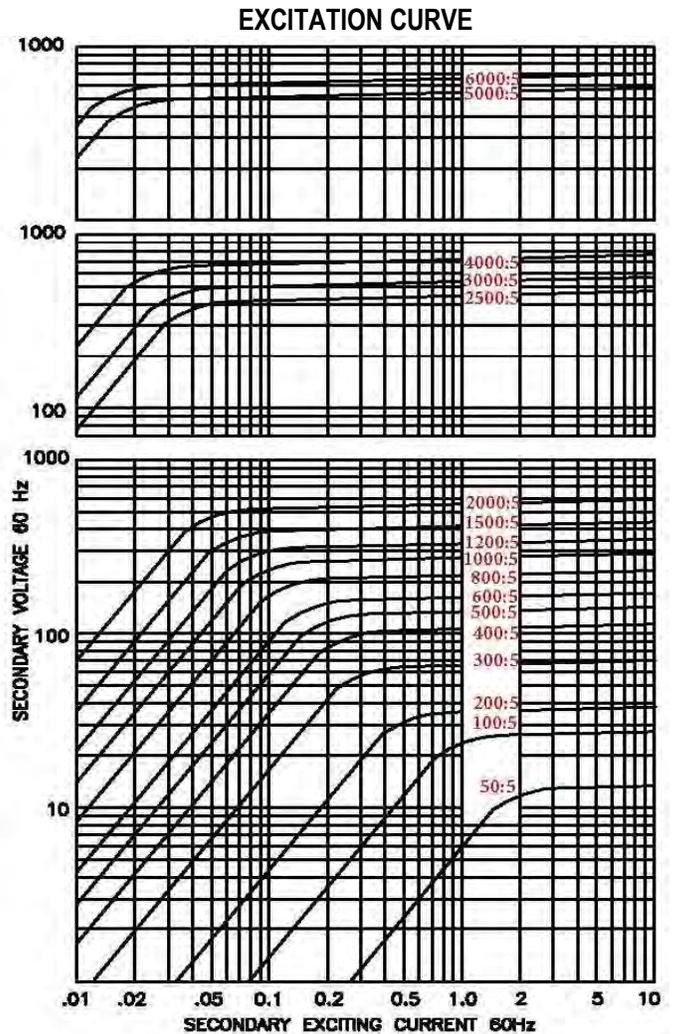
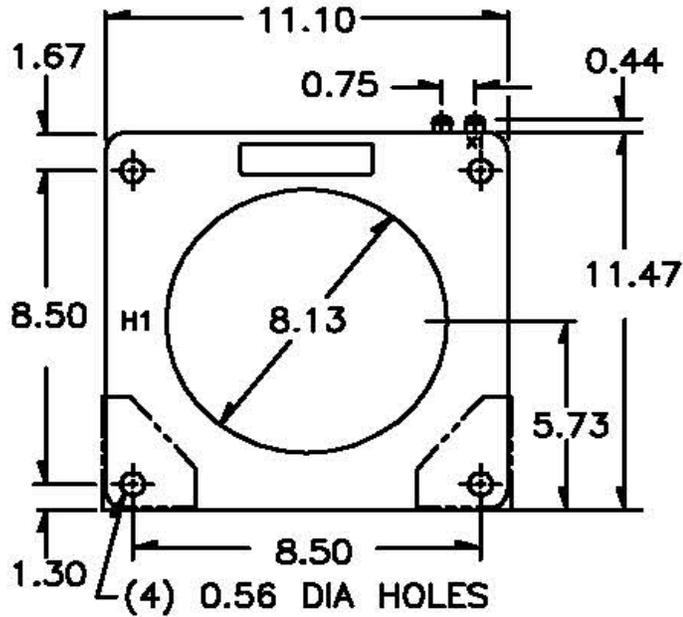
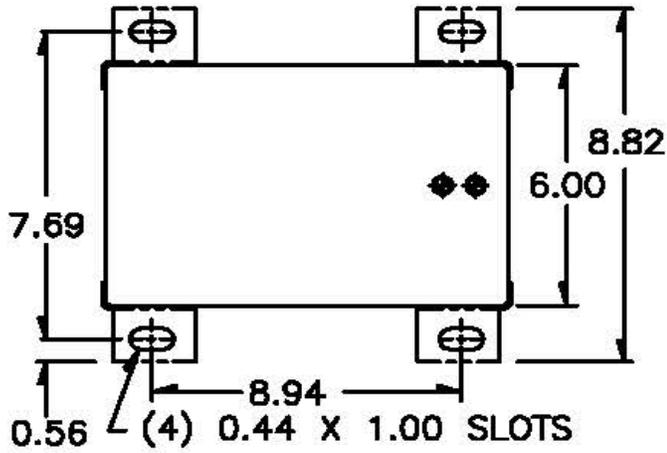
Model	141
Window Size	8.13
Width	11.10
Height	11.47
Depth	6.00

MODEL 141
Window Diameter 8.13"
Approximate weight: 44 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	CONTINUOUS THERMAL RATING FACTOR	
			B0.1	B0.2	B0.5	B0.9	B1.8		@ 30°C	@ 55°C
141 - 500	50:5	C10	4.8	-	-	-	-	0.033	2	2
141 - 101	100:5	C10	2.4	2.4	-	-	-	0.066	2	2
141 - 201	200:5	C20	0.6	1.2	1.2	2.4	4.8	0.117	2	2
141 - 301	300:5	C50	0.6	0.6	1.2	1.2	2.4	0.248	2	2
141 - 401	400:5	C50	0.3	0.3	0.6	0.6	1.2	0.277	2	2
141 - 501	500:5	C100	0.3	0.3	0.3	0.6	0.6	0.415	2	2
141 - 601	600:5	C100	0.3	0.3	0.3	0.3	0.6	0.498	2	1.5
141 - 801	800:5	C100	0.3	0.3	0.3	0.3	0.3	0.664	2	1.5
141 - 102	1000:5	C200	0.3	0.3	0.3	0.3	0.3	0.829	2	1.5
141 - 122	1200:5	C200	0.3	0.3	0.3	0.3	0.3	1.009	2	1.5
141 - 152	1500:5	C400	0.3	0.3	0.3	0.3	0.3	1.253	2	1.5
141 - 202	2000:5	C400	0.3	0.3	0.3	0.3	0.3	1.659	1.33	1
141 - 252	2500:5	C400	0.3	0.3	0.3	0.3	0.3	0.963	1.5	1.33
141 - 302	3000:5	C400	0.3	0.3	0.3	0.3	0.3	2.356	1.5	1
141 - 402	4000:5	C400	0.3	0.3	0.3	0.3	0.3	3.141	1	0.8
141 - 502	5000:5	C200	0.3	0.3	0.3	0.3	0.3	2.862	1	0.8
141 - 602	6000:5	C400	0.3	0.3	0.3	0.3	0.3	4.302	1	0.8



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Current Transformer

Model 141MR
rev 011218

CERTIFICATIONS:



APPLICATION:

Relaying and metering.

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

8.13"

APPROXIMATE WEIGHT:

44 lbs.

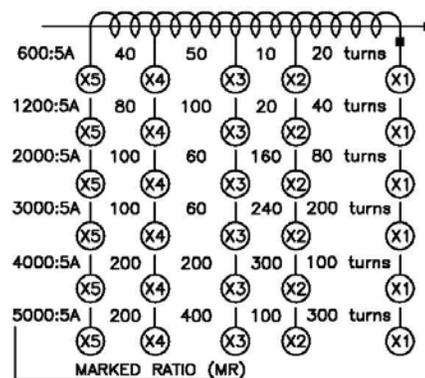
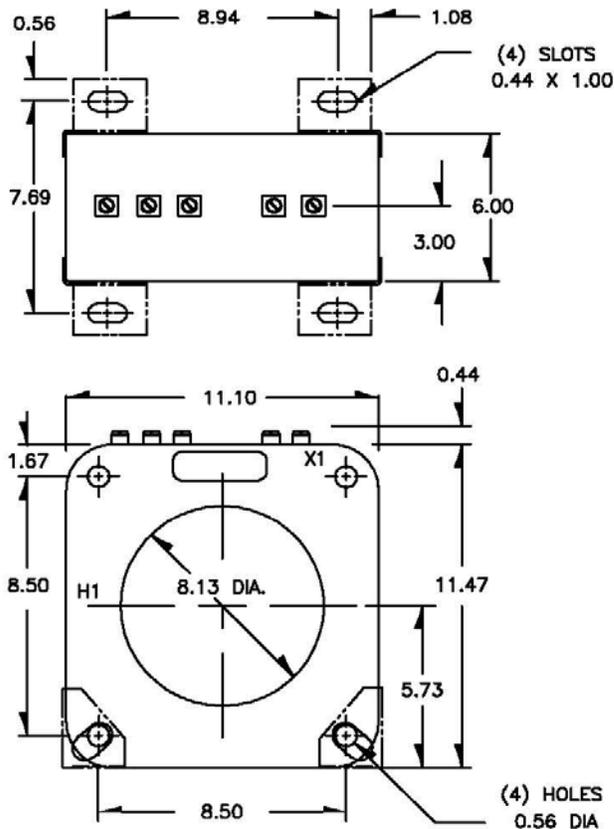
CONNECTIONS:

-Terminals are brass screws No. 10-32 UNF with one flat washer and a split lock washer

Model	141MR
Window Size	8.13
Width	11.10
Height	11.47
Depth	6.00

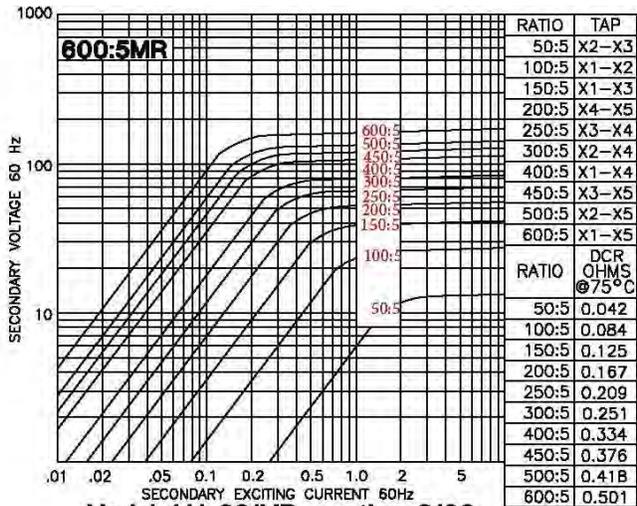
MODEL 141MR
Window Diameter 8.13"
Approximate weight: 44 lbs.

Catalog Number	Relay Class	Continuous Thermal	
		@ 30°C	@ 50°C
141-601MR	C100	2.0	1.5
141-122MR	C200	2.0	1.5
141-202MR	C400	1.33	1.0
141-302MR	C400	1.5	1.33
141-402MR	C400	1.0	0.8
141-502MR	C200	1.0	0.8

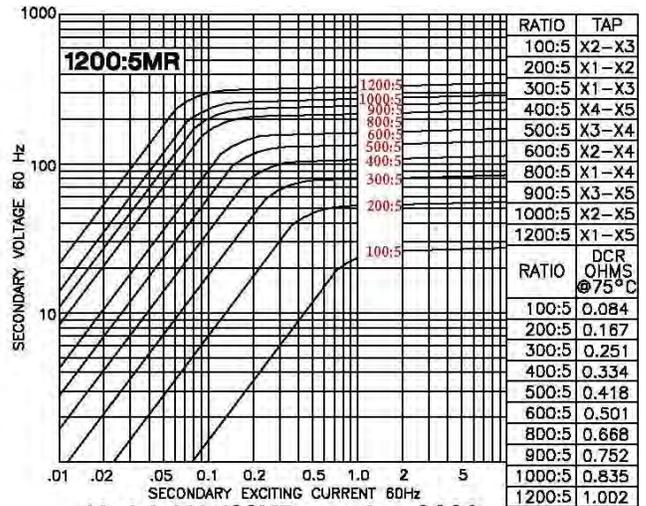


Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

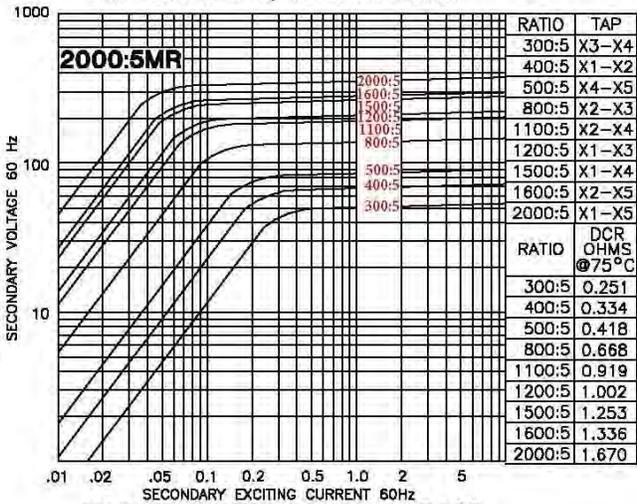
EXCITATION CURVE



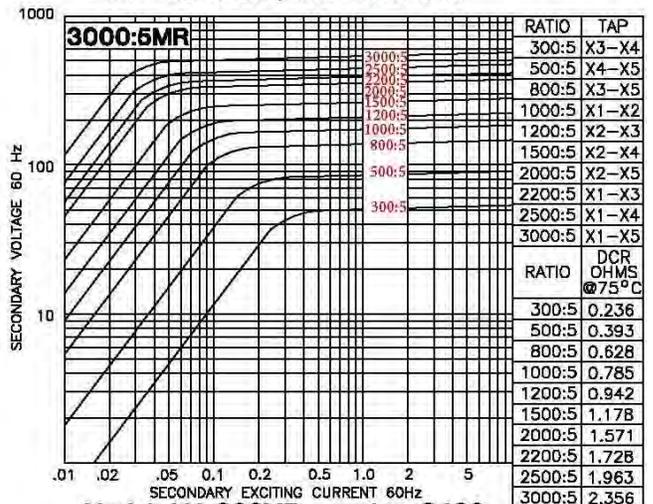
Model 141-60MR - rating C100
TRF= 2.0 @ 30°C, 1.5 @ 55°C amb.



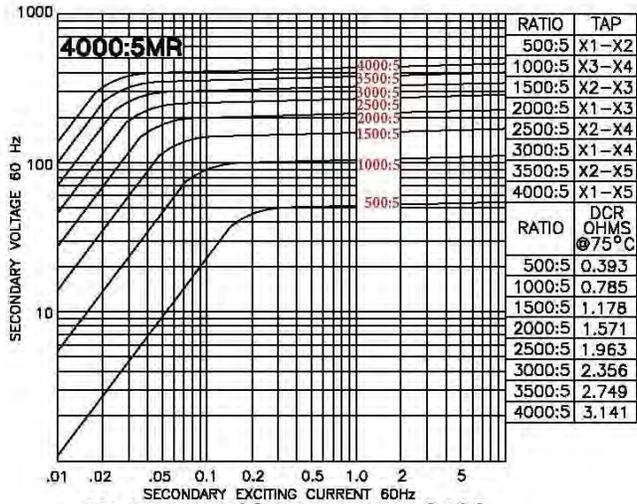
Model 141-122MR - rating C200
TRF= 2.0 @ 30°C, 1.5 @ 55°C amb.



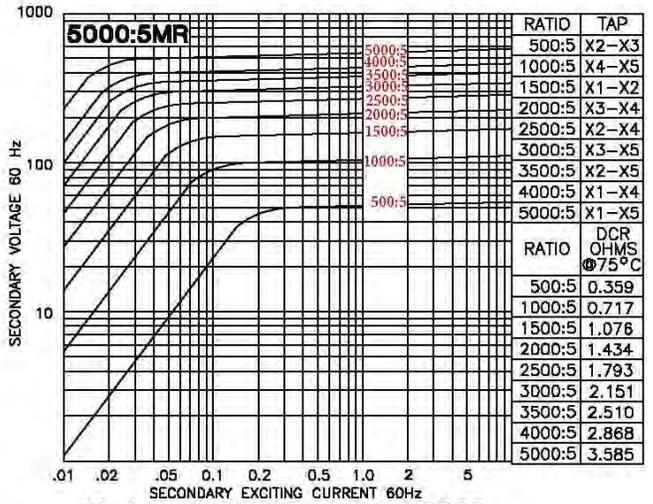
Model 141-202MR - rating C400
TRF= 1.33 @ 30°C, 1.0 @ 55°C amb.



Model 141-302MR - rating C400
TRF= 1.5 @ 30°C, 1.33 @ 55°C amb.



Model 141-402MR - rating C400
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.



Model 141-502MR - rating C200
TRF= 1.0 @ 30°C, 0.8 @ 55°C amb.

Current Transformer

Model 190 and 190X

Rev 020720

APPLICATION:

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

0.6 kV, BIL 10 kV full wave

APPROXIMATE WEIGHT:

4 lbs.

CONNECTIONS:

-Terminals are brass studs No. 8-32 with one flatwasher, lockwasher and regular nut, for ratios up to 25:5 and ¼-20 studs for higher ratios.



Catalog Number	V.A. ± 1% Class	ANSI Metering Class at 60 Hz					
		B0.1	B0.2	B0.5	B0.9	B1.8	
190-2-XXX	12.5	0.6	0.6	1.2	2.4	-	
190-4-XXX	30.0	0.3	0.3	0.3	0.3	1.2	

Ratio	1:5	2.5:5	5:5	7.5:5	10:5	15:5	20:5	25:5	30:5	40:5	50:5	
Suffix	001	0025	005	0075	010	015	020	025	030*	040*	050*	*1/4-20 stud terminals

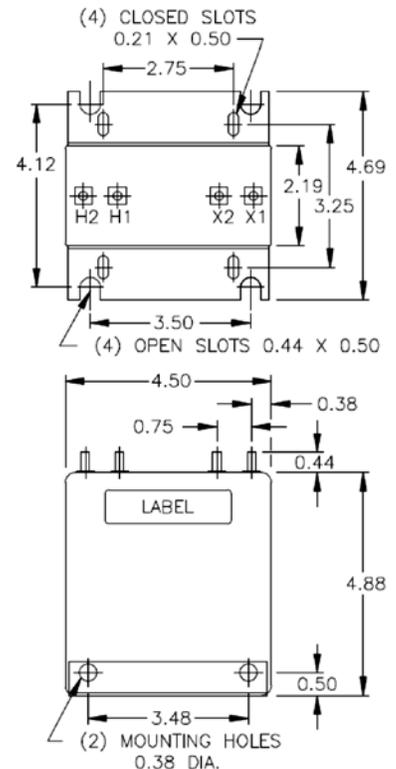
The Model 190 is a low ratio primary current transformer, suitable for primary currents up to 50 amperes. The table below lists the most common current ratings.

Model 190 Wound Primary & 190X Auxiliary Transformer

ANSI Metering Class: 0.3 B0.5

The Model 190X is an auxiliary transformer for use in the secondary of main current transformers to change the ratio for metering applications. Since the Model 190X is used in the secondary of another current transformer it has no voltage rating. It is given a 2,500 volt 60 Hz potential test. It is designed to be used on circuits not to exceed 600 volts to ground or between windings.

Catalog Number	Current Ratio	Catalog Number	Current Ratio
190X0100	5:0.1	190X6250	5:6.25
190X0200	5:0.2	190X7500	5:7.5
190X0250	5:0.25	190X8000	5:8
190X0500	5:0.5	190X10000	5:10
190X0625	5:0.625	190X12500	5:12.5
190X1000	5:1	190X15000	5:15
190X1250	5:1.25	190X1500-5	1.5:5
190X1667	5:1.667	190X1667-5	1.667:5
190X2000	5:2	190X2500-5	2.5:5
190X2395	5:2.395	190X2875-5	2.875:5
190X2500	5:2.5	190X7500-5	7.5:5
190X2890	5:2.89	190X10000-5	10:5
190X3000	5:3	190X0500-1	0.5:1
190X3330	5:3.33	190X0923-1	0.923:1
190X3750	5:3.75	190X0400-10	0.4:10
190X4000	5:4	190XSUM-2**	5+5:5
190X5000	5:5	190XSUM-4**	5+5+5+5:5
190X5330	5:5.33	190XSUM-5**	5+5+5+5+5:5



**The circuits of up to five secondaries may be totalized. Equal or unequal line current transformers can be summed with this transformer. Advise the ratios of the line current transformers to be totalized for unequal ratios. Output terminals are X1-X2.

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



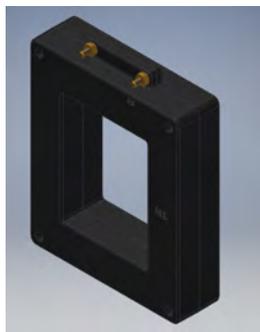
Current Transformer

Model 560
rev 02222024

CERTIFICATIONS:



223647



APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts, 10 kV BIL, full wave

CONTINUOUS THERMAL RATING FACTOR:

1.33 at 30°C amb., 1.0 at 55°C amb.

INSULATION SYSTEM:

Temperature Class H (180°C.)

WINDOW DIAMETER:

3.25" x 4.25"

APPROXIMATE WEIGHT:

3.5 lbs.

CONNECTIONS:

Secondary terminals are No. 10-32 brass studs with one flat

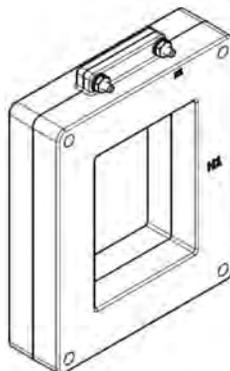
Model	560
Window Size	3.25 x 4.25
Width	5.75
Height	6.88
Depth	1.63

MODEL 560

Window Diameter 3.25" x 4.25"

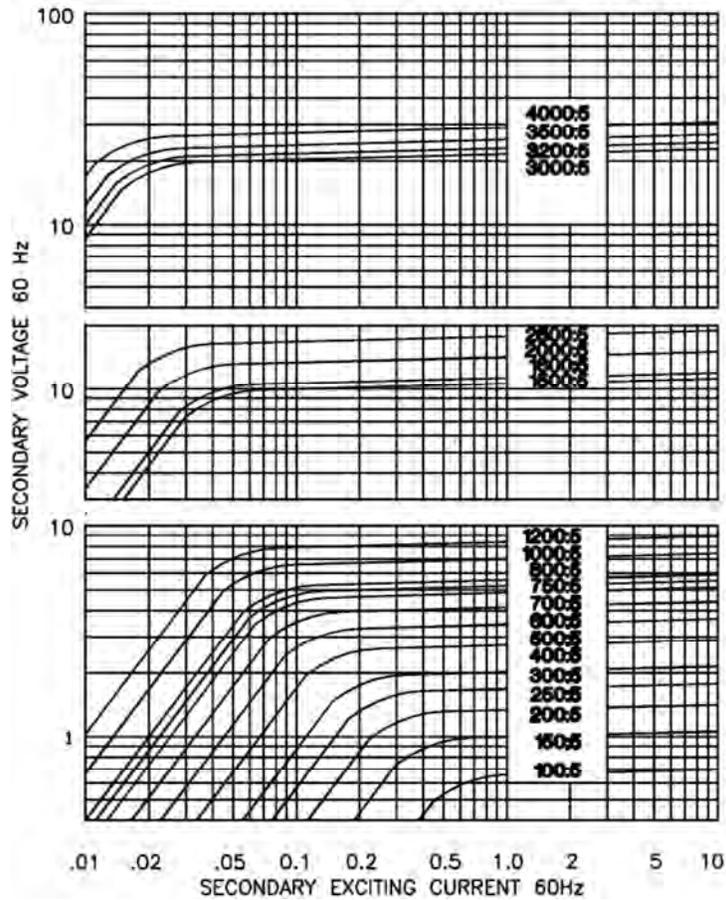
Approximate weight: 6 lbs.

CATALOG NUMBER	CURRENT RATIO	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		B0.1	B0.2	B0.5	B0.9	B1.8	
560-101	100:5	2.4	-	-	-	-	0.012
560-151	150:5	1.2	2.4	-	-	-	0.017
560-201	200:5	1.2	1.2	-	-	-	0.023
560-251	250:5	0.6	1.2	2.4	-	-	0.038
560-301	300:5	0.6	0.6	1.2	-	-	0.045
560-401	400:5	0.6	0.6	1.2	2.4	-	0.095
560-501	500:5	0.3	0.3	0.6	1.2	2.4	0.118
560-601	600:5	0.3	0.3	0.6	1.2	1.2	0.142
560-751	750:5	0.3	0.3	0.3	0.6	1.2	0.178
560-801	800:5	0.3	0.3	0.3	0.6	0.6	0.190
560-102	1000:5	0.3	0.3	0.3	0.6	0.6	0.211
560-122	1200:5	0.3	0.3	0.3	0.3	0.6	0.253
560-152	1500:5	0.3	0.3	0.3	0.3	0.6	0.368
560-162	1600:5	0.3	0.3	0.3	0.3	0.6	0.262
560-202	2000:5	0.3	0.3	0.3	0.3	0.6	0.328
560-252	2500:5	0.3	0.3	0.3	0.3	0.3	0.410
560-302	3000:5	0.3	0.3	0.3	0.3	0.3	0.347
560-322	3200:5	0.3	0.3	0.3	0.3	0.3	0.370
560-402	4000:5	0.3	0.3	0.3	0.3	0.3	0.462

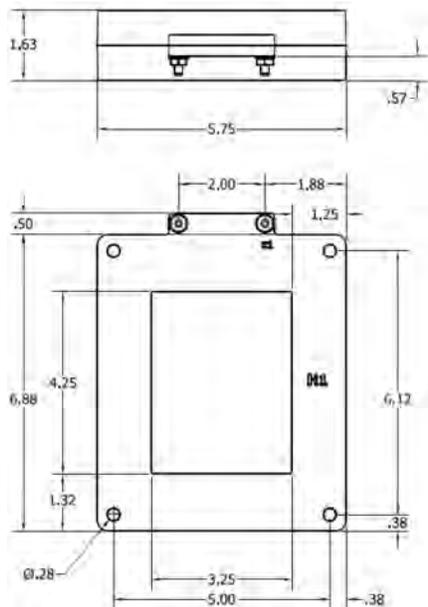


Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

EXCITATION CURVE



DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 561
rev 02222024

APPLICATION:

Relaying and Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

CONTINUOUS THERMAL RATING FACTOR:

1.33 at 30°C amb., 1.0 at 55°C amb.

INSULATION SYSTEM:

Temperature Class H (150°C.)

WINDOW DIAMETER:

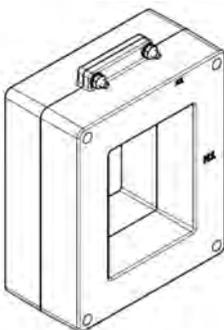
3.25" x 4.25"

APPROXIMATE WEIGHT:

8 lbs.

CONNECTIONS:

Secondary terminals are No. 10-32 brass studs with one flat



Model	561
Window Size	3.25 x 4.25
Width	5.75
Height	6.88
Depth	2.88

CERTIFICATIONS:

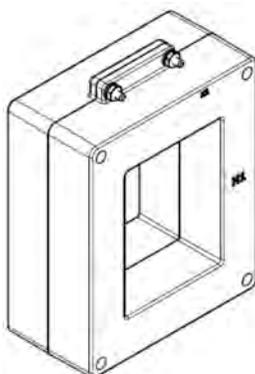


223647



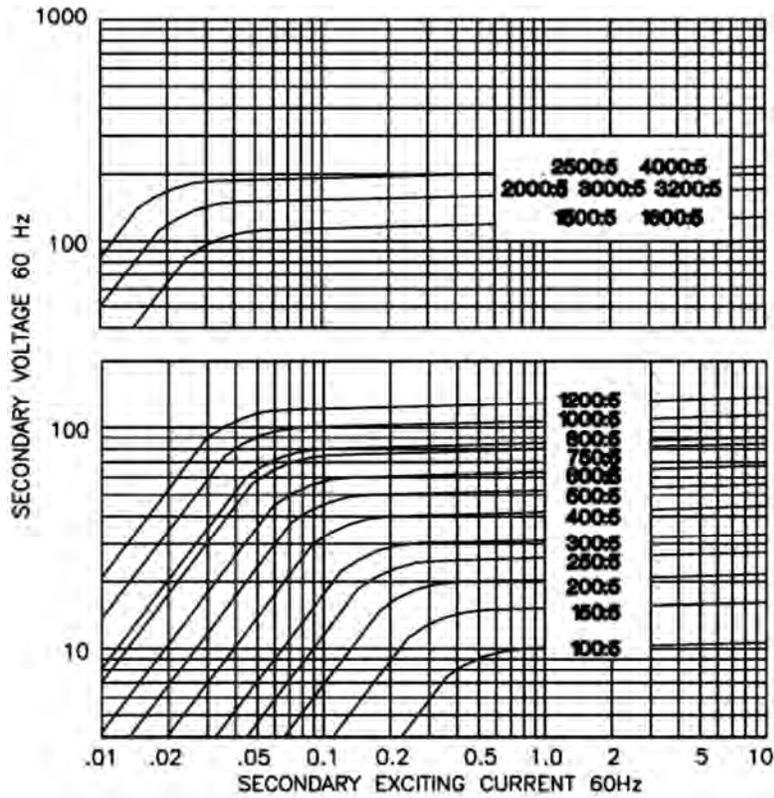
MODEL 561
Window Diameter 3.25" x 4.25"
Approximate weight: 8 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
			B0.1	B0.2	B0.5	BO.9	B1.8	
561-101	100:5	-	2.4	-	-	-	-	0.021
561-151	150:5	C10	1.2	2.4	-	-	-	0.032
561-201	200:5	C10	0.6	1.2	2.4	2.4	-	0.043
561-251	250:5	C20	0.6	0.6	1.2	2.4	-	0.054
561-301	300:5	C20	0.3	0.6	1.2	1.2	2.4	0.064
561-401	400:5	C20	0.6	0.3	0.6	1.2	1.2	0.086
561-501	500:5	C20	0.3	0.3	0.3	0.6	0.6	0.170
561-601	600:5	C20	0.3	0.3	0.3	0.3	0.6	0.161
561-751	750:5	C50	0.3	0.3	0.3	0.3	0.6	0.202
561-801	800:5	C50	0.3	0.3	0.3	0.3	0.6	0.340
561-102	1000:5	C50	0.3	0.3	0.3	0.3	0.3	0.425
561-122	1200:5	C100	0.3	0.3	0.3	0.3	0.3	0.510
561-152	1500:5	C50	0.3	0.3	0.3	0.3	0.3	0.766
561-162	1600:5	C50	0.3	0.3	0.3	0.3	0.3	1.817
561-202	2000:5	C100	0.3	0.3	0.3	0.3	0.3	1.021
561-252	2500:5	C100	0.3	0.3	0.3	0.3	0.3	1.276
561-302	3000:5	C50	0.3	0.3	0.3	0.3	0.3	1.396
561-322	3200:5	C50	0.3	0.3	0.3	0.3	0.3	1.489
561-402	4000:5	C100	0.3	0.3	0.3	0.3	0.3	1.861

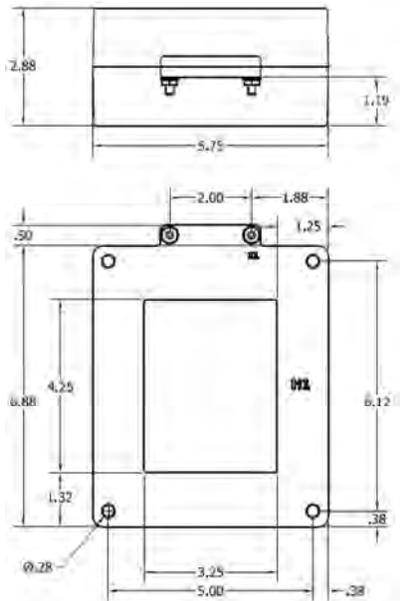


Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

EXCITATION CURVE



DIMENSIONS



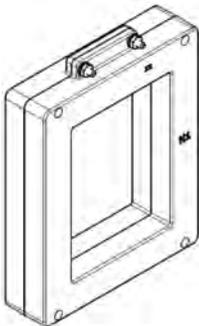
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 562
rev 11152021

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

CONTINUOUS THERMAL RATING FACTOR:

1.33 at 30°C amb., 1.0 at 55°C amb.

INSULATION SYSTEM:

Temperature Class H (150°C.)

WINDOW DIAMETER:

4.00" x 5.38"

APPROXIMATE WEIGHT:

8 lbs.

CONNECTIONS:

Secondary terminals are No. 10-32 brass studs with one flat

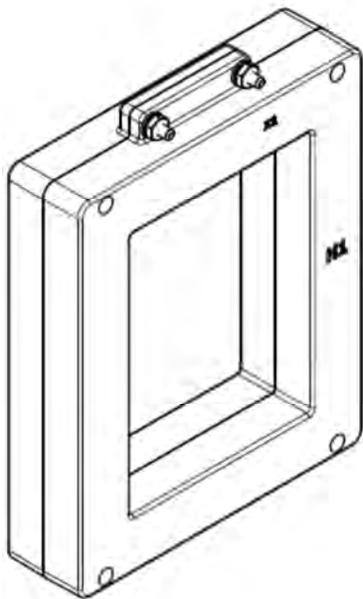
Model	562
Window Size	4.00 x 5.38
Width	6.30
Height	7.63
Depth	1.63

MODEL 562

Window Diameter 4.00" x 5.38"

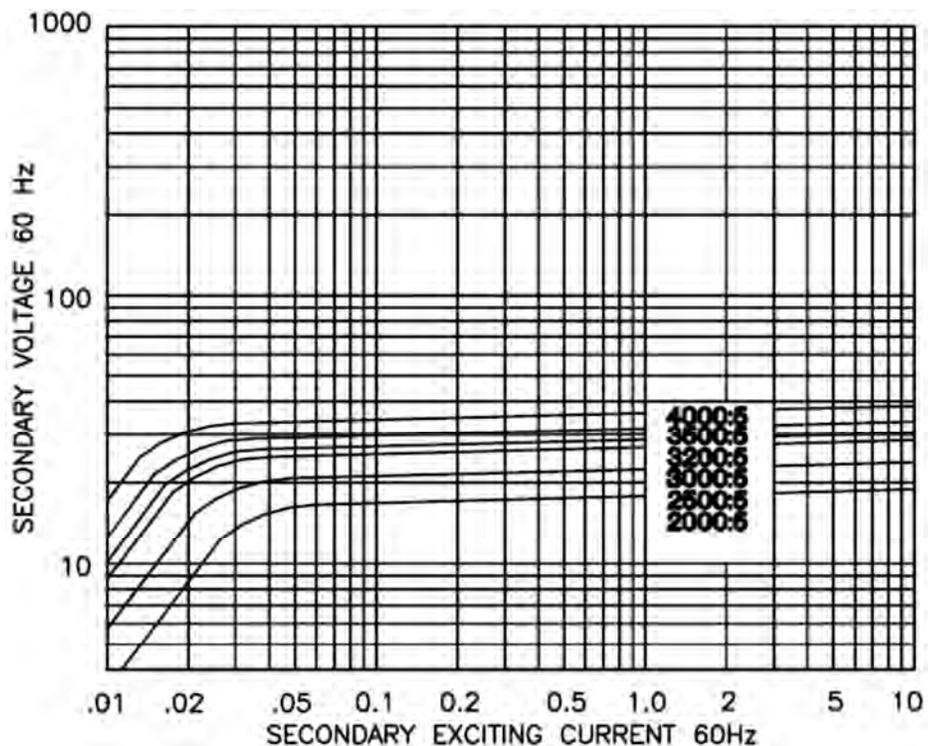
Approximate weight: 8 lbs.

CATALOG NUMBER	CURRENT RATIO	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		B0.1	B0.2	B0.5	B0.9	B1.8	
562-202	2000:5	0.3	0.3	0.3	0.6	0.6	0.345
562-252	2500:5	0.3	0.3	0.3	0.3	0.6	0.431
562-302	3000:5	0.3	0.3	0.3	0.3	0.6	0.517
562-322	3200:5	0.3	0.3	0.3	0.3	0.6	0.552
562-352	3500:5	0.3	0.3	0.3	0.3	0.3	0.604
562-402	4000:5	0.6	0.3	0.3	0.3	0.3	0.600

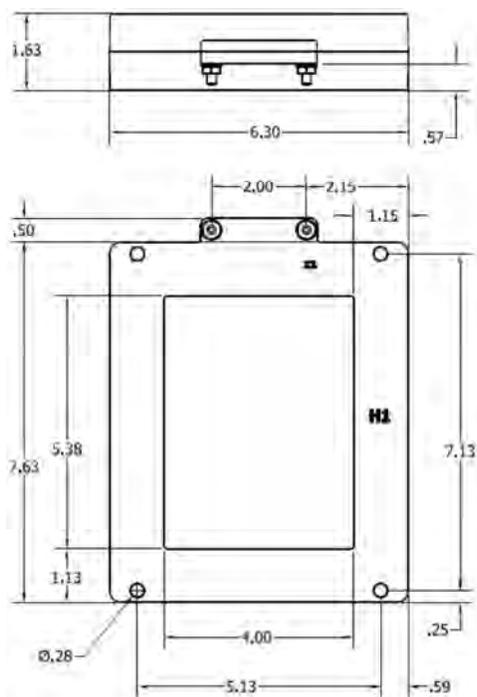


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EXCITATION CURVE



DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Extended Lead 100 to 240 inch Leads

Model 562-Long Lead
rev 111821

CERTIFICATIONS:



APPLICATION

Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

CONTINUOUS THERMAL RATING FACTOR:

1.33 at 30°C amb., 1.0 at 55°C amb.

INSULATION SYSTEM:

Temperature Class H (150°C.)

WINDOW DIAMETER:

4.00" x 5.38"

APPROXIMATE WEIGHT:

8 lbs.

CONNECTIONS:

-Flexible leads are UL 1015 105°C, #16 AWG

-Non-standard length to be specified



Model	562
Window Size	4.00 x 5.38
Width	6.30
Height	7.63
Depth	1.63

MODEL 562

Window Diameter 4.00" x 5.38"

Approximate weight: 8 lbs.

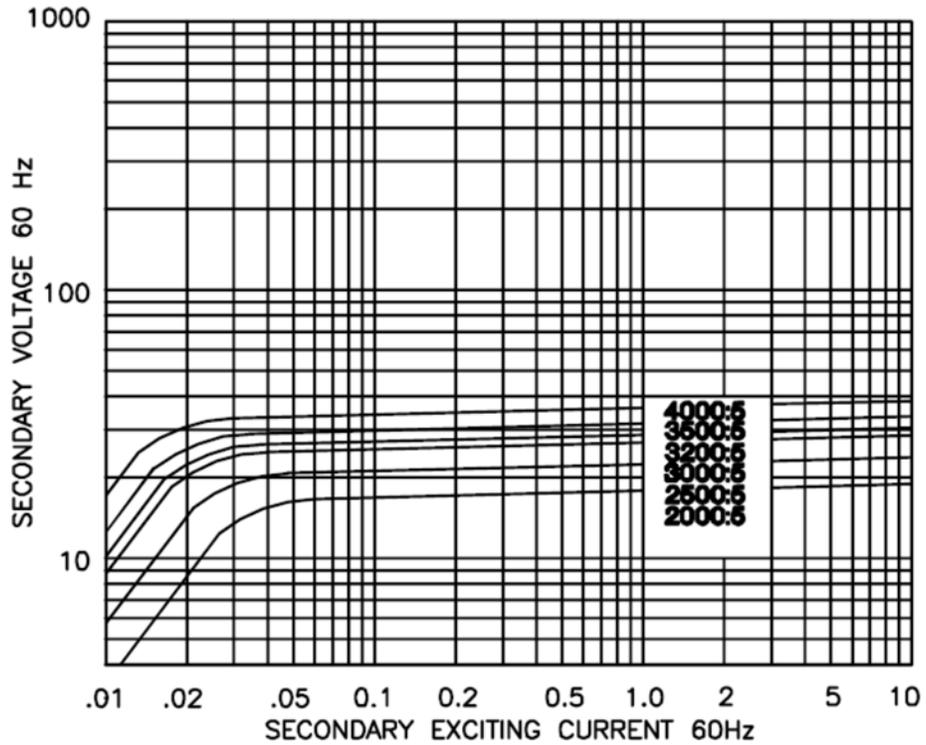
CATALOG NUMBER	CURRENT RATIO	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		B0.1	B0.2	B0.5	BO.9	B1.8	
562-122-LL-XXX	1200:5	0.6	0.6	0.6	1.2	N/A	0.115
562-202-LL-XXX	2000:5	0.3	0.3	0.6	0.6	0.6	0.345
562-252-LL-XXX	2500:5	0.3	0.3	0.6	0.6	0.6	0.431
562-302-LL-XXX	3000:5	0.3	0.3	0.6	0.6	0.6	0.517
562-322-LL-XXX	3200:5	0.3	0.3	0.6	0.6	0.6	0.552
562-352-LL-XXX	3500:5	0.3	0.3	0.6	0.6	0.6	0.604
562-402-LL-XXX	4000:5	0.3	0.3	0.6	0.6	0.6	0.600

XXX = 100 to 240 inch leads

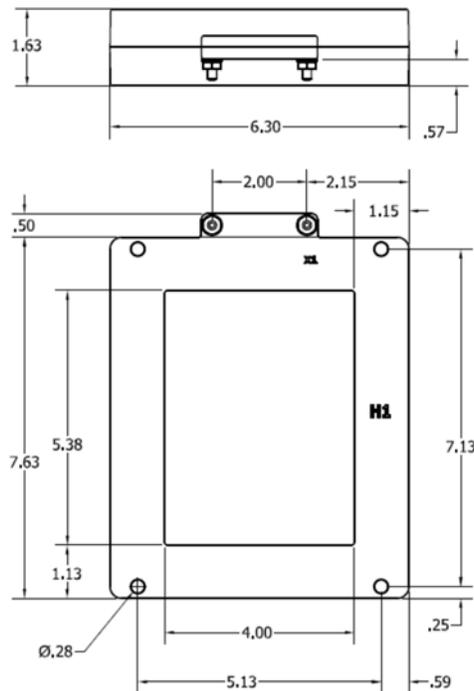


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EXCITATION CURVE



DIMENSIONS

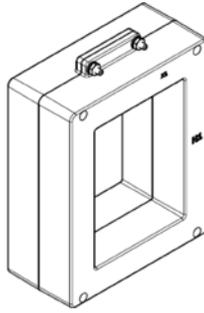


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Current Transformer

Model 563
rev 11152021

CERTIFICATIONS:



APPLICATION:

Relaying and Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

INSULATION SYSTEM:

Temperature Class H (150°C.)

WINDOW DIAMETER:

4.00" x 5.38"

APPROXIMATE WEIGHT:

12 lbs.

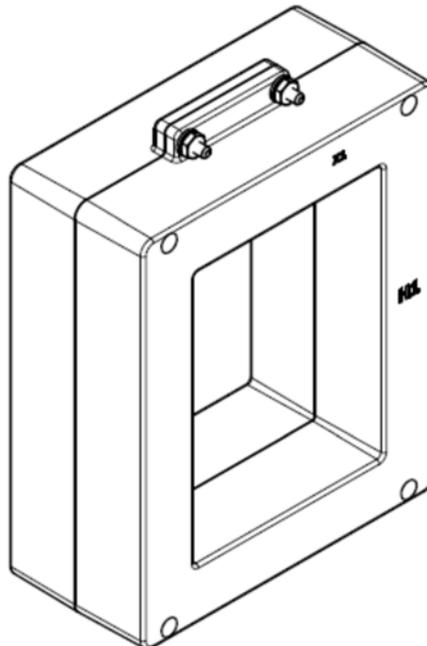
CONNECTIONS:

Secondary terminals are No. 10-32 brass studs with one flat

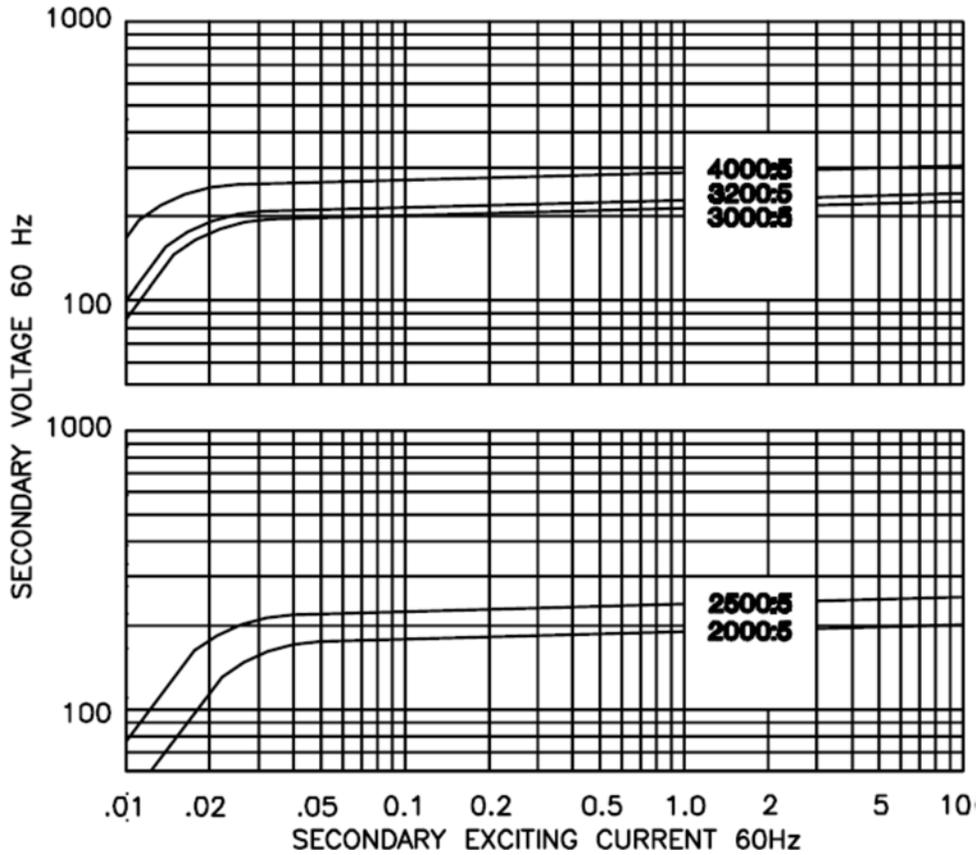
Model	563
Window Size	4.00 x 5.38
Width	6.30
Height	7.63
Depth	2.88

MODEL 563
Window Diameter 4.00" x 5.38"
Approximate weight: 12 lbs.

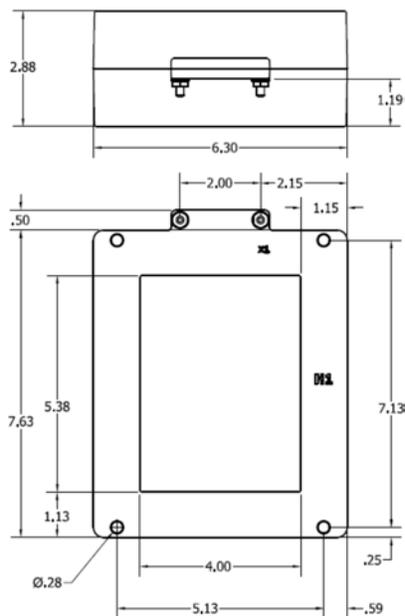
CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)	THERMAL RATING
			B.1	B.2	B0.5	B0.9	B1.8		
563-202	2000:5	C50	0.3	0.3	0.3	0.3	0.3	0.995	1.3
563-252	2500:5	C50	0.3	0.3	0.3	0.3	0.3	1.244	1.3
563-302	3000:5	C20	0.3	0.3	0.3	0.3	0.3	1.382	1.3
563-322	3200:5	C20	0.3	0.3	0.3	0.3	0.3	1.474	1.3
563-402	4000:5	C20	0.3	0.3	0.3	0.3	0.3	1.842	1.3
563-502	5000:5	C20	0.3	0.3	0.3	0.3	0.3	2.158	1.0



EXCITATION CURVE



DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 592
rev 03182021

CERTIFICATIONS:



APPLICATION:

Relaying

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

CONTINUOUS THERMAL RATING FACTOR:

2.0 at 30°C amb., 1.5 at 55°C amb.

INSULATION SYSTEM:

Cast in polyurethane resin. Temp. class 130 deg. C.
Red

WINDOW DIAMETER:

5.00" x 14.00"

APPROXIMATE WEIGHT:

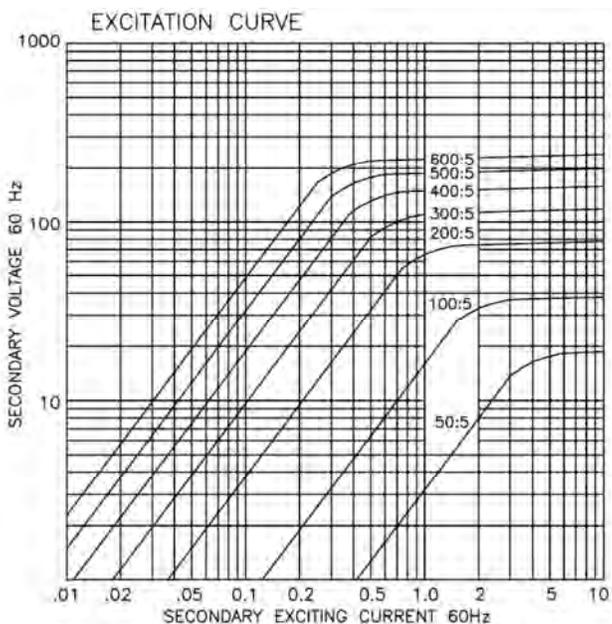
150 lbs.

CONNECTIONS:

Secondary terminals are No. 10-32 brass studs with one flat washer, lockwasher and regular nut.

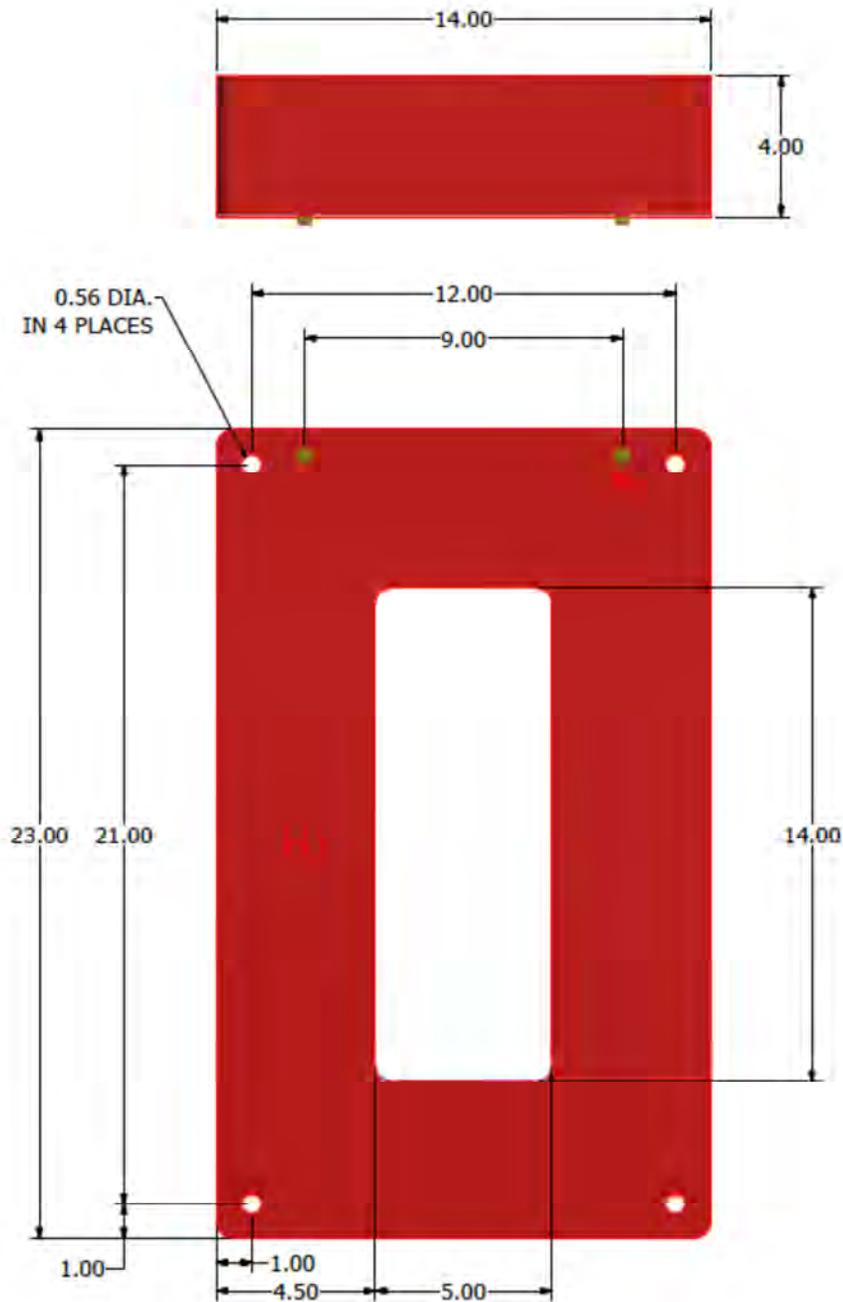
Model	592
Window Size	5.00 x 14.00
Width	14.00
Height	23.00
Depth	4.00

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
592-500	50:5	C15	0.014
592-101	100:5	C30	0.028
592-201	200:5	C60	0.056
592-301	300:5	C100	0.097
592-401	400:5	C120	0.123
592-501	500:5	C150	0.161
592-601	600:5	C200	0.193



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DIMENSIONS





Current Transformer

Model 593
rev 08012023

CERTIFICATIONS:



APPLICATION:

Relaying

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

CONTINUOUS THERMAL RATING FACTOR:

2.0 at 30°C amb., 2.0 at 55°C amb.

WINDOW DIAMETER:

8.06" x 22.06"

APPROXIMATE WEIGHT:

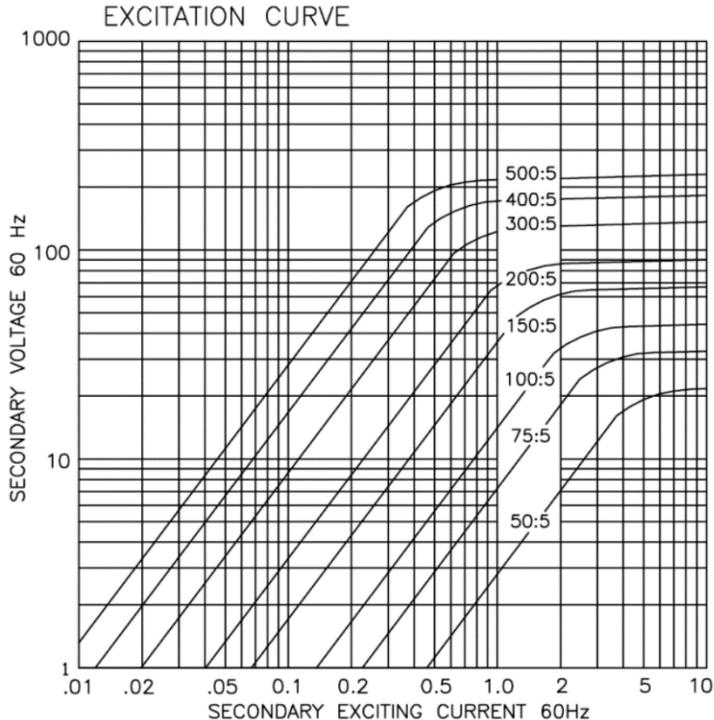
150 lbs.

CONNECTIONS:

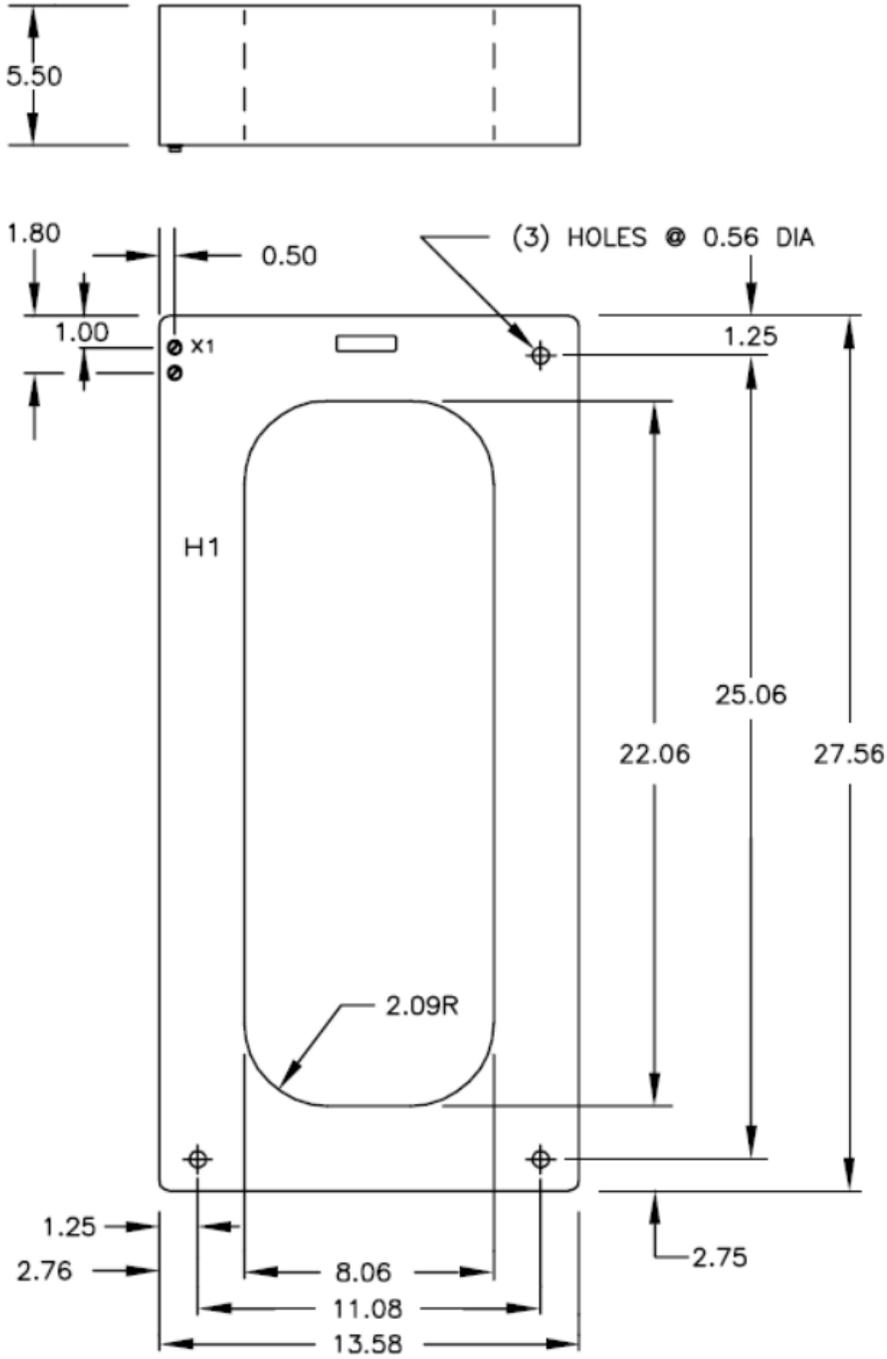
Secondary terminals are No. 10-32 brass studs with one flat washer, lockwasher and regular nut.

Model	593
Window Size	8.06 x 22.06
Width	13.58
Height	27.56
Depth	5.5

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
593-500	50:5	C10	0.013
593-750	75:5	C20	0.020
593-101	100:5	C30	0.027
593-151	150:5	C50	0.040
593-201	200:5	C50	0.054
593-301	300:5	C100	0.081
593-401	400:5	C100	0.108
593-501	500:5	C200	0.134



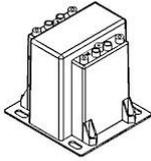
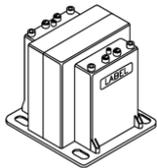
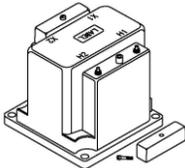
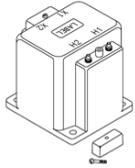
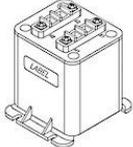
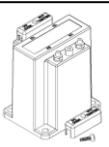
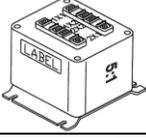
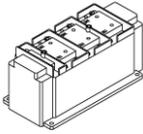
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



VOLTAGE TRANSFORMERS

For Metering and Instrumentation

600V Voltage Transformers

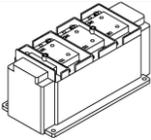
MODEL 450		Page 3-3
MODEL 456		Page 3-4
MODEL 460		Page 3-5
MODEL 465		Page 3-6
MODEL 467		Page 3-7
MODEL 468		Page 3-8
MODEL 2VT460		Page 3-9
MODEL 2VT469		Page 3-10
MODEL 3VTL460		Page 3-11

600V Voltage Transformers

VOLTAGE TRANSFORMERS

For Metering and Instrumentation

600V Voltage Transformers

MODEL 3VTL460MR		Page 3-12
MODEL 3VTN460		Page 3-13
MODEL 3VTN468		Page 3-14



Voltage Transformer

Model 450

FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

ACCURACY CLASS:

0.3 W, X, M & Y, 1.2Z

@0.3 W, 0.6 X, M & Y

THERMAL RATING:

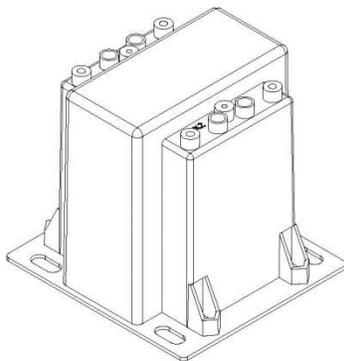
750 VA AT 30°C. AMB, 500 VA AT 55°C. amb.

APPROXIMATE WEIGHT:

25 lbs.

CONNECTIONS:

-The primary and secondary terminals are No. 10-32 screws into 3/8" deep brass inserts are fitted with one lockwasher and flat washer and are contained in a sealable terminal cover



CERTIFICATIONS:



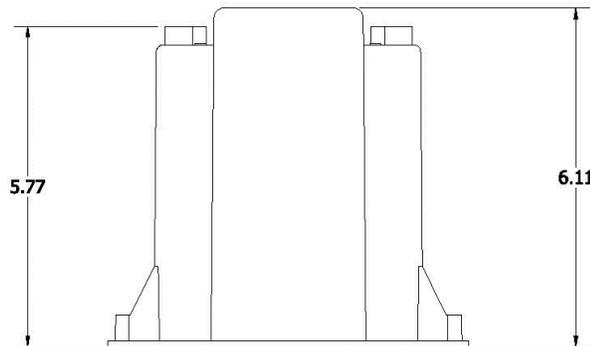
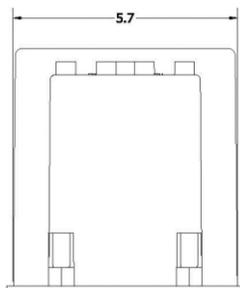
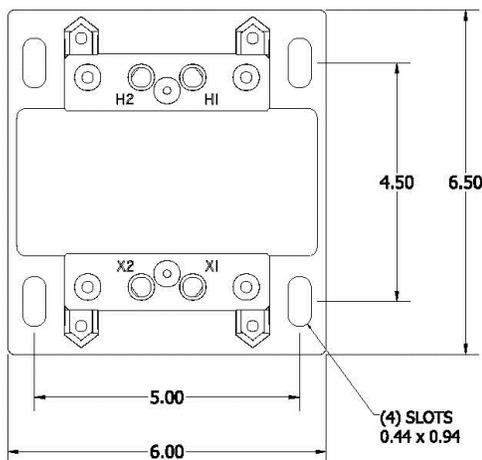
MODEL 450

Approximate weight: 25 lbs.

CATALOG NUMBER NOT FUSED	VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
**450-069	69.3:120	0.58:1	15.0
**450-120	120:120	1:1	10.0
450-208	208:120	1.73:1	8.0
450-240	240:120	2:1	8.0
450-277	277:120	2.31:1	8.0
450-288	288:120	2.4:1	6.0
450-300	300:120	2.5:1	6.0
450-346	346:120	2.88:1	5.0
450-480*	480:120	4:1	4.0
450-600*	600:120	5:1	3.0

*Models marked ** have Accuracy Class of 0.3 W, 0.6 X, M & Y – All others without asterisks are 0.3 W, X, M & Y, 1.2Z

- Core and coil assembly is encased in a thermoplastic shell and filled with resin.
- These transformers are designed for operation line to line. They may also be operated line to ground or line to neutral at reduced voltage, (58% of rated volts).
- It is desirable to use an 8.0 Amp BBS type or equal fuse in the secondary to protect the transformer.
- With two exceptions these transformers are ANSI C57.13 group 1. Those marked * are group 2.
- Model designed specifically for 50Hz operation are available with reduced performance consult factory for details.



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Voltage Transformer

Model 456
rev 02142024

CERTIFICATIONS:



Model	456
Width	6.00
Height	6.11
Depth	6.50

FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

ACCURACY CLASS:

0.3 W, X & M, 0.6 Y

Those marked with ** are

0.6 W, X, M & Y

THERMAL RATING:

500 VA AT 30°C. amb., 300 VA AT 55°C. amb.

APPROXIMATE WEIGHT:

18.5 lbs.

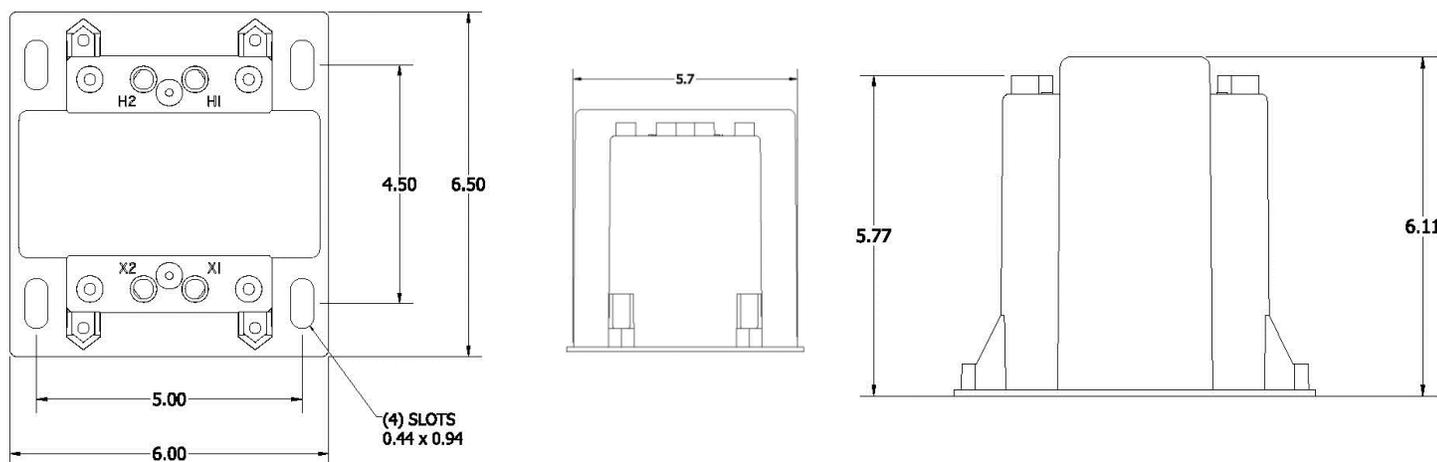
CONNECTIONS:

-Terminals are brass studs No. 10-32 with one lockwasher, flat washer, and regular nut

MODEL 456
Approximate weight: 18.5 lbs.

CATALOG NUMBER	VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
NOT FUSED			
**456-069	69.3:120	0.58:1	12
**456-120	120:120	1:1	10
456-208	208:120	1.73:1	6
456-240	240:120	2:1	6
456-277	277:120	2.31:1	6
456-288	288:120	2.4:1	5
456-300	300:120	2.5:1	4
456-346	346:120	2.88:1	4
456-480*	480:120	4:1	3
456-600*	600:120	5:1	2

- Each transformer has two plastic terminal covers.
- The core and coil assembly is encased in a thermoplastic shell and filled with resin.
- These transformers are designed for operation line to line. They may also be operated line to ground or line to neutral at reduced voltage (58% of rated volts).
- It is desirable to use a 1.6 amp fuse in the secondary to protect the transformer.
- With two exceptions these transformers are ANSI C57.13 group 1. Those marked * are group 2.
- Models designed specifically for 50 Hz operation are available with reduced performance consult factory for details.



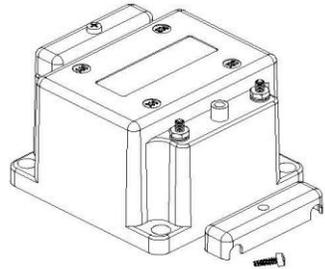
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Voltage Transformer

Model 460
rev 03262024

CERTIFICATIONS:



Model	460
Width	4.50
Height	3.50
Depth	4.63

FREQUENCY:

SEE CHART

STANDARD SECONDARY VOLTAGE:

120 Volts @ 60Hz, 110 Volts @ 50Hz

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

ACCURACY CLASS:

0.6 W, 1.2 X at 60 Hz

THERMAL RATING:

150 VA AT 30°C. AMB, 100 VA AT 55°C. amb.

APPROXIMATE WEIGHT:

7.75 lbs.

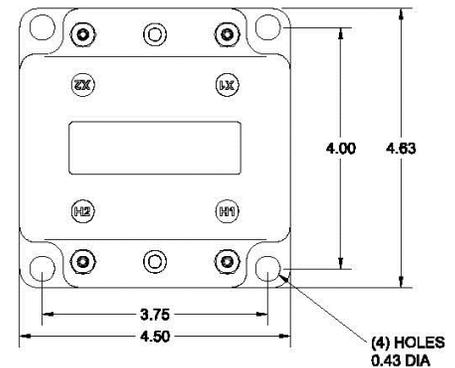
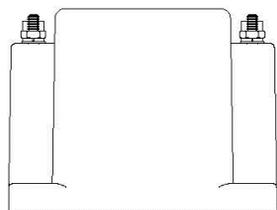
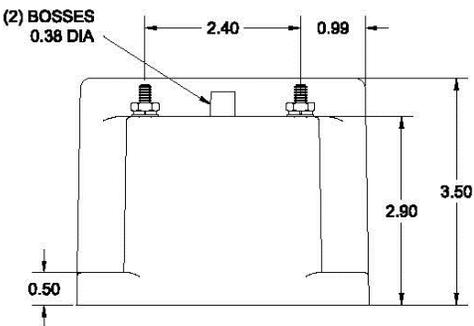
CONNECTIONS:

-Terminals are brass studs No. 10-32 with one lockwasher, flat washer, and regular nut

MODEL 460
Approximate weight: 7.75 lbs.

CATALOG NUMBER NOT FUSED	VOLTAGE RATING	VOLT (TURN) RATIO	REC. PRIMARY FUSE RATING	FREQUENCY
460-069	69.3:120	0.58:1	5	60 Hz
460-120	120:120	1:1	4	60 Hz
460-208	208:120	1.73:1	2	60 Hz
460-240	240:120	2:1	2	60 Hz
460-277	277:120	2.31:1	2	60 Hz
460-288	288:120	2.4:1	1.5	60 Hz
460-300	300:120	2.5:1	1.5	60 Hz
460-346	346:120	2.88:1	1.5	60 Hz
460-480*	480:120	4:1	1	60 Hz
460-600*	600:120	5:1	0.75	60 Hz
460-690**	690:110	6.27:1	0.5	50 Hz

- Each transformer has two plastic terminal covers.
- The core and coil assembly is encased in a thermoplastic shell and filled with resin.
- These transformers are designed for operation line to line. They may also be operated line to ground or line to neutral at reduced voltage (58% of rated volts).
- It is desirable to use a 1.6 amp fuse in the secondary to protect the transformer.
- With three exceptions these transformers are ANSI C57.13 group 1. Those marked * are group 2 and those marked ** are IEC
- Models designed specifically for 50 Hz operation are available with reduced performance consult factory for details.



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Voltage Transformer

Model 465
rev 02222024

CERTIFICATIONS:



223647



Model	465
Width	3.63
Height	4.25
Depth	3.75

FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

ACCURACY CLASS:

0.6 W. 1.2 X at 60 Hz

THERMAL RATING:

150 VA AT 30°C. amb., 100 VA AT 55°C. amb.

APPROXIMATE WEIGHT:

7.75 lbs.

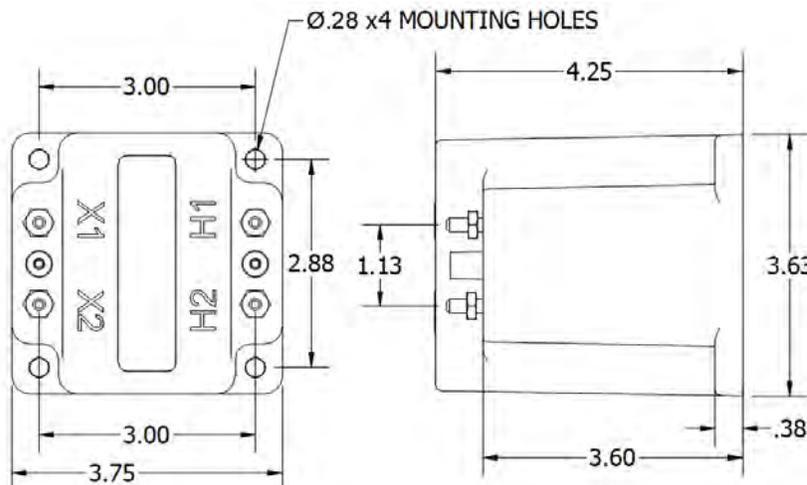
CONNECTIONS:

-Terminals are brass studs No. 10-32 with one lockwasher, flat washer, and regular nut

MODEL 465
Approximate weight: 7.75 lbs.

CATALOG NUMBER NOT FUSED	VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
465-069	69.3:120	0.58:1	5
465-120	120:120	1:1	4
465-208	208:120	1.73:1	2
465-240	240:120	2:1	2
465-277	277:120	2.31:1	2
465-288	288:120	2.4:1	1.5
465-300	300:120	2.5:1	1.5
465-346	346:120	2.88:1	1.5
465-480*	480:120	4:1	1
465-600*	600:120	5:1	0.75

- Each transformer has two plastic terminal covers.
- The core and coil assembly is encased in a thermoplastic shell and filled with resin.
- These transformers are designed for operation line to line. They may also be operated line to ground or line to neutral at reduced voltage (58% of rated volts).
- It is desirable to use a 1.6 amp fuse in the secondary to protect the transformer.
- With two exceptions these transformers are ANSI C57.13 group 1. Those marked * are group 2.
- Models designed specifically for 50 Hz operation are available with reduced performance consult factory for details.



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Voltage Transformer

Model 467
rev 03182021

FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

ACCURACY CLASS:

± 1% at all burdens up to 5 VA at 1.0 and 0.95 P.F.

THERMAL RATING:

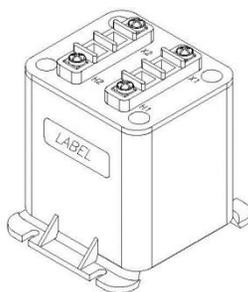
40 VA at 30°C . amb, 27 VA at 55°C. amb

APPROXIMATE WEIGHT:

2.5 lbs.

CONNECTIONS:

-Terminals are No. 6-32 screws with one lockwasher and one flat washer



CERTIFICATIONS:

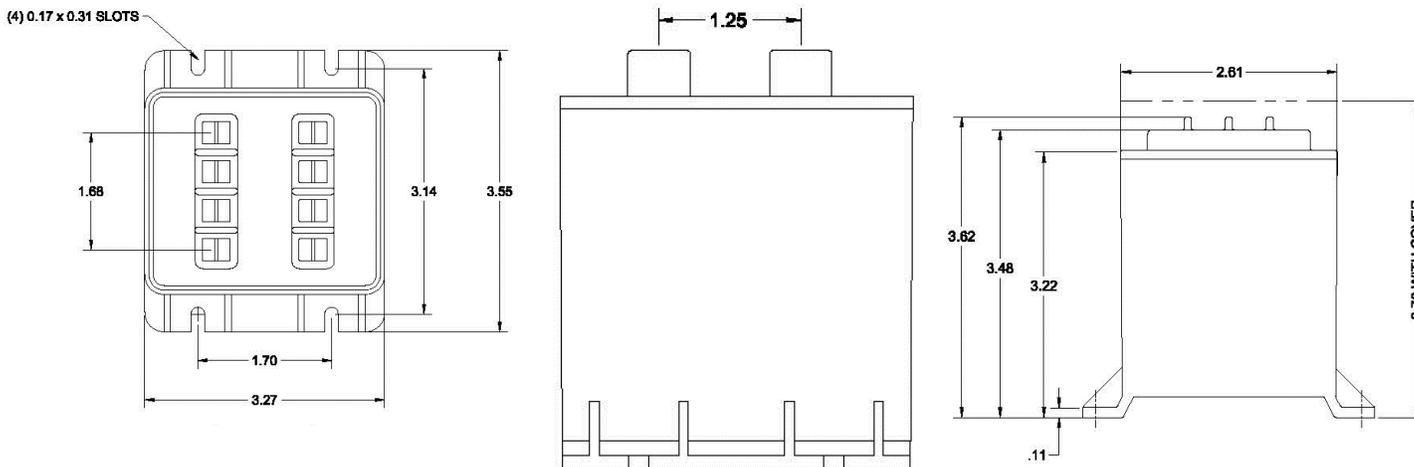


Model	467
Width	3.27
Height	3.76
Depth	3.55

MODEL 467
Approximate weight: 2.5 lbs.

CATALOG NUMBER	VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
467-069	69.3:120	0.58:1	1.5
467-120	120:120	1:1	1
467-208	208:120	1.73:1	0.5
467-240	240:120	2:1	0.5
467-277	277:120	2.31:1	0.5
467-288	288:120	2.4:1	0.4
467-300	300:120	2.5:1	0.4
467-346	346:120	2.88:1	0.4
467-480*	480:120	4:1	0.25
467-600*	600:120	5:1	0.25

- The core and coil assembly is encased in a thermoplastic shell and filled with resin.
- Each transformer has a clear plastic terminal cover.
- These transformers are designed for operation line to line. They may also be operated line to ground or line to neutral at reduced voltage (58% of rated volts).
- It is desirable to use a 0.40 amp fuse in the secondary to protect the transformer.
- With two exceptions these transformers are ANSI C57.13 group 1. Those marked * are group 2.
- Models designed specifically for 50Hz operation are available with reduced performance consult factory for details.



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Voltage Transformer

Model 468
rev 050418

CERTIFICATIONS:



FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

ACCURACY CLASS:

± 0.6% at all burdens up to 7.5 VA and ±1.5% 20 VA Burden.

THERMAL RATING:

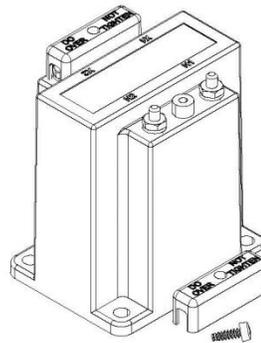
75 VA AT 30°c . amb., 50 VA AT 55°c. amb.

APPROXIMATE WEIGHT:

4 lbs.

CONNECTIONS:

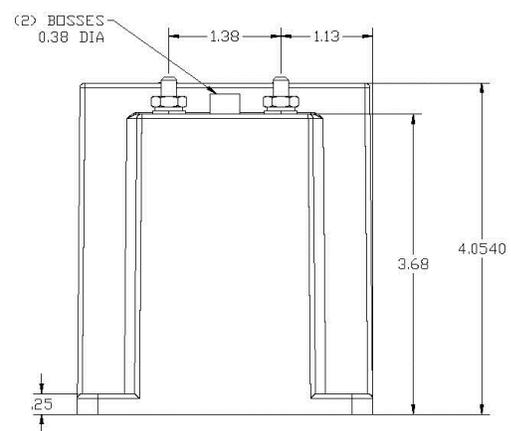
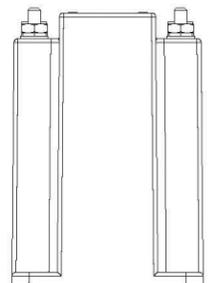
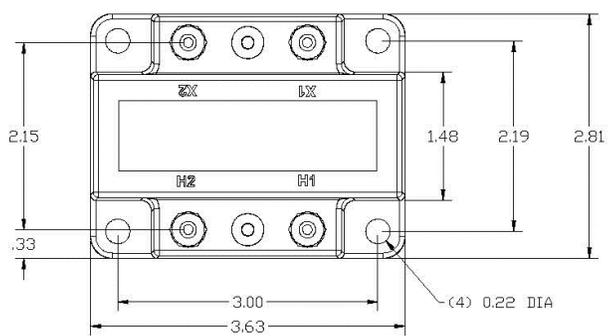
-Terminals are brass studs No. 10-32 screws with one lockwasher, one flat washer, and regular nut.



MODEL 468
Approximate weight: 4 lbs.

CATALOG NUMBER	VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
468-069	69.3:120	0.58:1	3
468-120	120:120	1:1	2
468-208	208:120	1.73:1	1
468-240	240:120	2:1	1
468-277	277:120	2.31:1	1
468-288	288:120	2.4:1	0.75
468-300	300:120	2.5:1	0.75
468-346	346:120	2.88:1	0.75
468-480*	480:120	4:1	0.50
468-600*	600:120	5:1	0.40

- The core and coil assembly is encased in a thermoplastic shell and filled with resin.
- Each transformer has two plastic terminal covers.
- These transformers are designed for operation line to line. They may also be operated line to ground or line to neutral at reduced voltage (58% of rated volts).
- It is desirable to use a 0.80 amp fuse in the secondary to protect the transformer.
- With two exceptions these transformers are ANSI C57. 13 group 1. Those marked * are group 2.



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3 Phase Voltage Transformer

Model 2VT460-600MR
rev 02222024

FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts Line-to-2X1

ACCURACY CLASS: (Per Phase)

± 1% at all burdens up to 2 VA

INSULATION LEVEL

600 Volts, 10 kV BIL. full wave

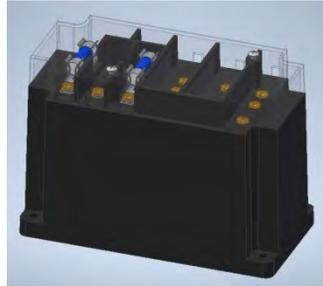
THERMAL RATING: (Per Phase)

25 VA at 30°C amb.

15 VA at 55°C. amb.

APPROXIMATE WEIGHT:

15.5 lbs.



CERTIFICATIONS:



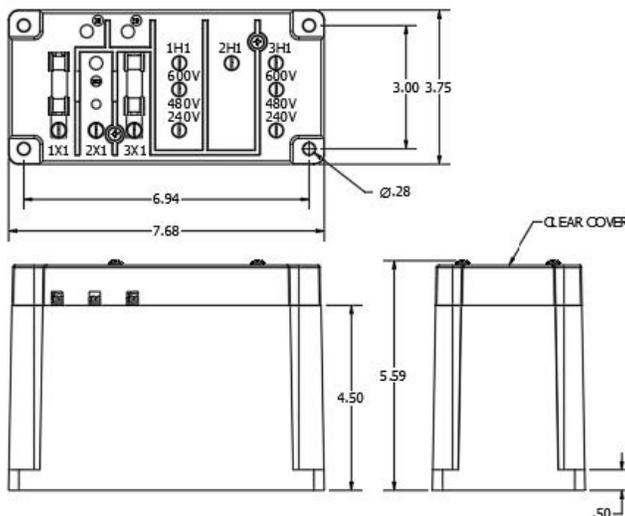
223647



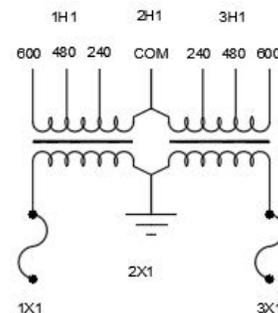
- The model 2VT460-600MR is an assembly of two Multi-tapped transformers in one case.
- The primary and secondary terminals are No. 6-32 screws and fitted with one lock washer and flat washer.
- The core and coil assembly are encased in a thermoplastic shell and filled with resin.

- Spacing between live parts per U.L. 1558.
- The transformer has three taps 600 "5 to 1", 480 "4 to 1", 240 "2 to 1" All to 120 vac
- The transformer has a clear plastic terminal cover.
- Taps are changed by moving three wires "see picture"
- A 0.40 amp fuse in recommend to protect the transformer

MODEL 2VT460-600MR		TAPS		
Catalog Number	Connections	240	480	600
2VT460-600MR	Screws			
2VT460-600MR-FF	Secondary Fuses			
2VT460-600MR-CCC-X1	Secondary Clips Only	2 to 1	4 to 1	5 to 1



CONNECTION DIAGRAM



- The core and coil assembly is encased in a thermoplastic shell and filled with resin.
- Transformers are designed for open delta connection.

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Voltage Transformer

Model 2VT469

FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

ACCURACY CLASS:

± 1% at all burdens up to 5 VA at 1.0 and 0.95 P.F.

THERMAL RATING:

40 VA AT 30°c . amb

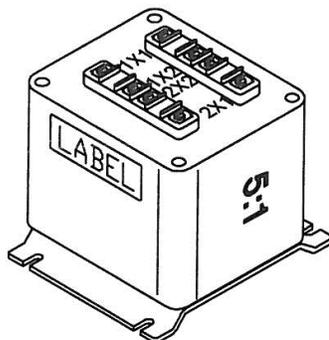
27 VA AT 55°c. amb.

APPROXIMATE WEIGHT:

4.5 lbs.

CONNECTIONS:

Terminals are No. 6-32 screws with one lockwasher and one flat washer



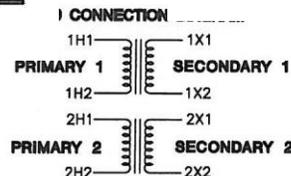
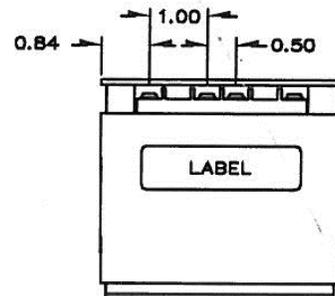
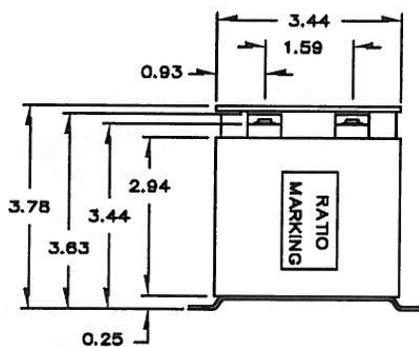
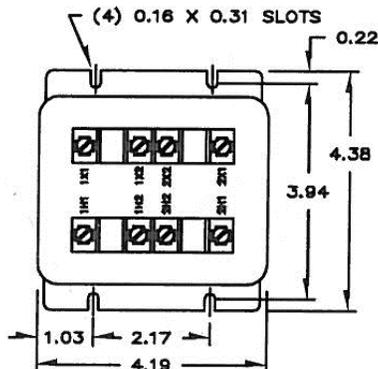
CERTIFICATIONS:



MODEL 2VT469
Approximate weight: 4.5 lbs.

CATALOG NUMBER	VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
2VT469-069	69.3:120	0.58:1	1.5
2VT469-120	120:120	1:1	1
2VT469-208	208:120	1.73:1	0.5
2VT469-240	240:120	2:1	0.5
2VT469-277	277:120	2.31:1	0.5
2VT469-288	288:120	2.4:1	0.4
2VT469-300	300:120	2.5:1	0.4
2VT469-346	346:120	2.88:1	0.4
2VT469-480*	480:120	4:1	0.25
2VT469-600*	600:120	5:1	0.25

- The core and coil assembly is encased in a thermoplastic shell and filled with resin.
- A clear plastic terminal cover is provided with each unit.
- These transformers are designed for operation line to line. They may also be operated line to ground or line to neutral at reduced voltage, (58% of rated volts).
- It is desirable to use a 0.40 amp fuse in the secondary to protect the transformer.
- With two exceptions these transformers are ANSI C57.13 group 1. Those marked * are group 2.
- Model 469 is an assembly of two transformers in one case with all terminals accessible, for open delta connection.





3 Phase Voltage Transformer

Model 3VTL460

FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts Line-to-Line

ACCURACY CLASS: (Per Phase)

0.6 W, 1.2 X at 60 Hz

INSULATION LEVEL:

600 Volts, 10 kV BIL, full wave

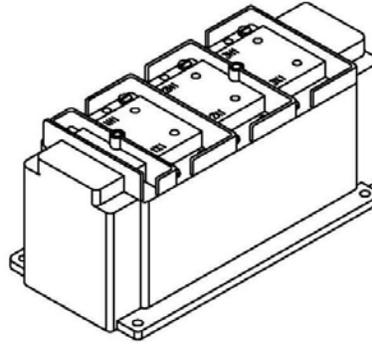
THERMAL RATING: (Per Phase)

150 VA at 30°C amb.

100 VA at 55°C. amb.

APPROXIMATE WEIGHT:

24 lbs.



CERTIFICATIONS:



E228202



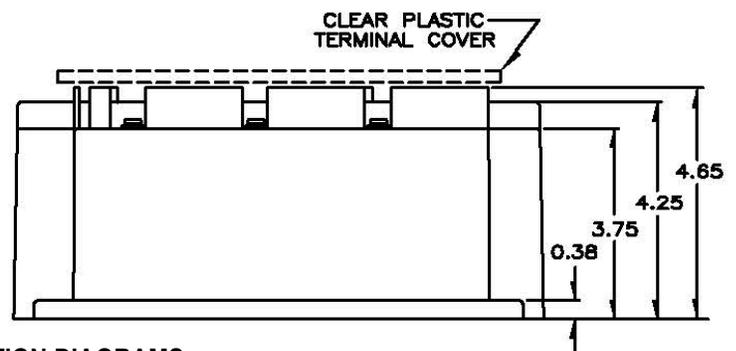
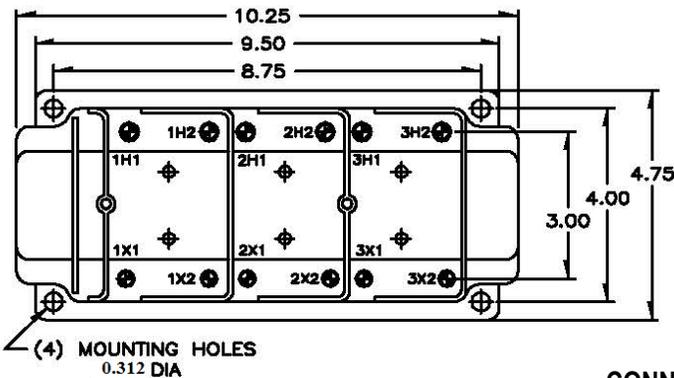
223647



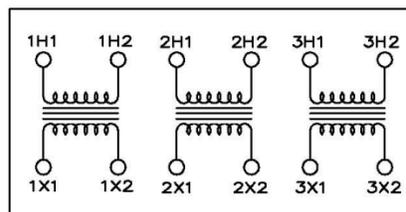
- The model 3VTL460 is an assembly of three transformers in one case.
- The primary and secondary terminals are No. 8-32 screws into 1/2" deep brass inserts fitted with one lockwasher and flat washer.
- The core and coil assembly is encased in a thermoplastic shell and filled with resin.
- These transformers are designed for operation line to line. All terminals are accessible.
- Spacing between live parts per U.L. 1558.
- The transformer has a clear plastic terminal cover.

MODEL 3VTL460
Approximate weight: 24 lbs.

CATALOG NUMBER	LINE TO LINE VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
3VTL460-120	120:120	1:1	4.0
3VTL460-208	208:120	1.73:1	2.0
3VTL460-240	240:120	2:1	2.0
3VTL460-288	288:120	2.4:1	1.5
3VTL460-480	480:120	4:1	1.0
3VTL460-600	600:120	5:1	0.75



CONNECTION DIAGRAMS





3 Phase Voltage Transformer

Model 3VTL460MR
rev 03182021

CERTIFICATIONS:



FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts Line-to-neutral

ACCURACY CLASS: (Per Phase)

± 1% at all burdens up to 2 VA

INSULATION LEVEL

600 Volts, 10 kV BIL. full wave

THERMAL RATING: (Per Phase)

25 VA at 30°C amb.

15 VA at 55°C. amb.

APPROXIMATE WEIGHT:

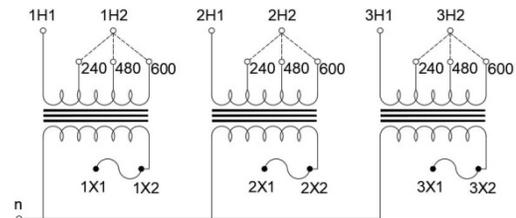
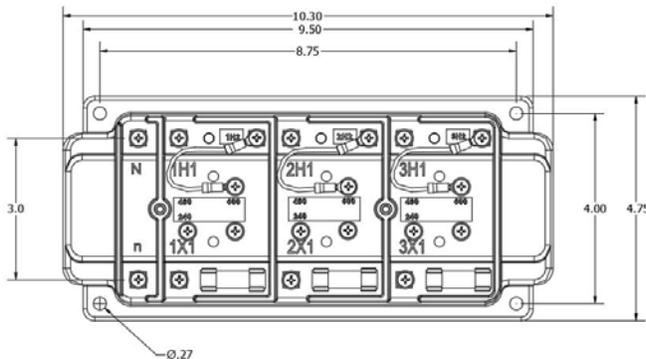
8 lbs.



- The model 3VTL460MR is an assembly of three Multi-tapped transformers in one case.
- The primary and secondary terminals are No. 6-32 screws and fitted with one lock washer and flat washer.
- The core and coil assembly are encased in a thermoplastic shell and filled with resin.
- These transformers are designed for operation line to neutral.
- Spacing between live parts per U.L. 1558.
- The transformer has three taps 600 "5 to 1", 480 "4 to 1", 240 "2 to 1" All to 120 vac
- The transformer has a clear plastic terminal cover.
- Only ground N/n terminals if source is 3 phase, 4 wire effectively grounded.
- Taps are changed by moving three wires "seepicture"
- A 0.40 amp fuse in recommend to protect the transformer

MODEL 3VTL460-MR		TAPS		
Catalog Number	Connections	240	480	600
3VTL460-600MR	Screws	2 to 1	4 to 1	5 to 1
3VTL460-600MR-FFF	Fuses			
3VTL460-600MR-CCC	Clips only			
3VTL460-600MR-CCC-X1	Secondary Clips Only			

CONNECTION DIAGRAMS



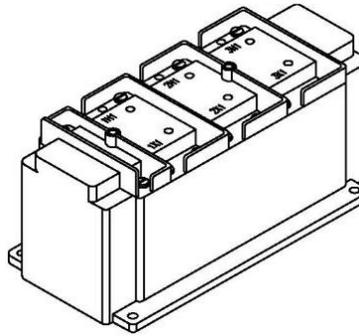
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



3 Phase Voltage Transformer

Model 3VTN460
rev 061319

CERTIFICATIONS:



FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts Line-to-neutral

ACCURACY CLASS: (Per Phase)

0.6 W, 1.2 X at 60 Hz.

INSULATION LEVEL:

600 Volts, 10 kV BIL, full wave

THERMAL RATING: (Per Phase)

150 VA at 30°C amb.

100 VA at 55°C. amb.

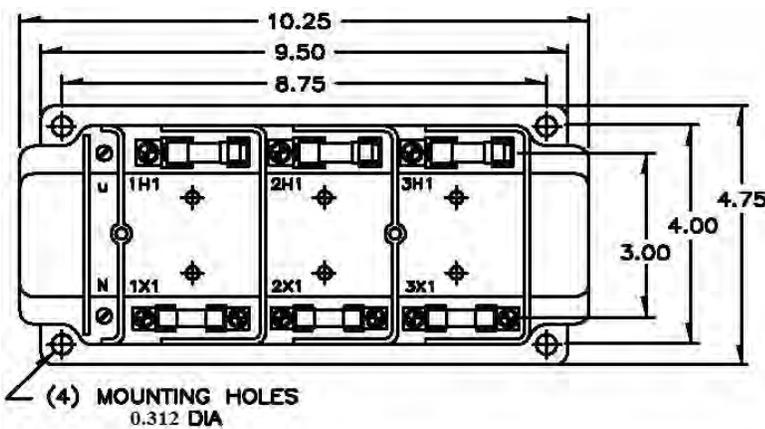
APPROXIMATE WEIGHT:

24 lbs.

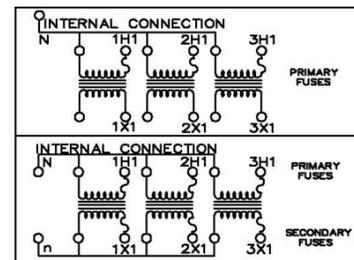
- The model 3VTN460 is an assembly of three transformers in one case.
- The primary and secondary terminals are No. 6-32 screws and fitted with one lockwasher and flat washer.
- The core and coil assembly is encased in a thermoplastic shell and filled with resin.
- These transformers are designed for operation line to neutral.
- Spacing between live parts per U.L. 1558.
- It is desirable to use a 1.6 amp BBS type or equal fuse in the secondary to protect the transformer.
- The transformer has a clear plastic terminal cover.
- Only ground N/n terminals if source is 3 phase, 4 wire effectively grounded.

MODEL 3VTN460
Approximate weight: 24 lbs.

CATALOG NUMBER		LINE TO NEUTRAL VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
PRIMARY FUSES ONLY	PRIMARY AND SECONDARY FUSES			
3VTN460-069*	3VTN460-069FF*	69.3:120	0.58:1	5.0
3VTN460-120F*	3VTN460-120FF*	120:120	1:1	4.0
3VTN460-240F*	3VTN460-240FF*	240:120	2:1	2.0
3VTN460-277F*	3VTN460-277FF*	277:120	2.31:1	2.0
3VTN460-300F*	3VTN460-300FF*	300:120	2.5:1	1.5
3VTN460-346F*	3VTN460-346FF*	346:120	2.88:1	1.5



CONNECTION DIAGRAMS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



3 Phase Voltage Transformer

Model 3VTN468
rev 02222024

FREQUENCY:

60 Hz.

STANDARD SECONDARY VOLTAGE:

120 Volts

ACCURACY CLASS: (Per Phase)

± 0.6% at 7.5 VA

INSULATION LEVEL

600 Volts, 10 kV BIL. full wave

THERMAL RATING: (Per Phase)

75 VA at 30°C amb.

50 VA at 55°C. amb.

APPROXIMATE WEIGHT:

8 lbs.



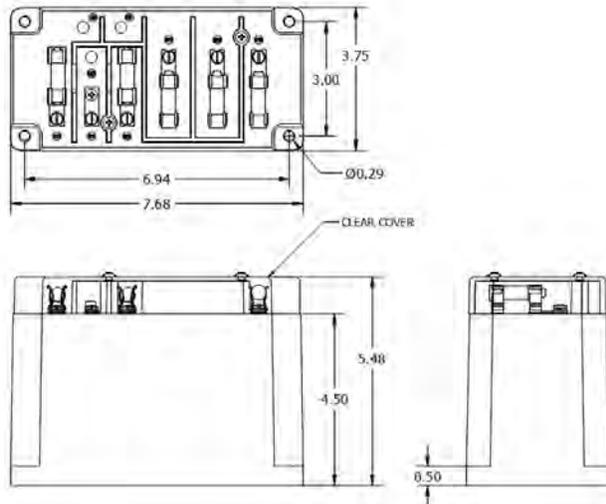
CERTIFICATIONS:



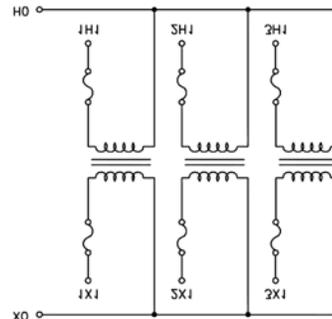
- The primary and secondary terminals are No. 8-32 screws and fitted with one lock washer and flat washer.
- The core and coil assembly are encased in a thermoplastic shell and filled with resin.
- These transformers are designed for application to Y connected systems.
- Models designed specifically for 50Hz operation are available with reduced performance. Consult factory for details.
- Only ground XO/HO terminals of source is 3 phase, 4 wire effectively grounded.
- Primary fuses are class CC rejection type
- It is desirable to use a 0.80 amp BBS type or equal fuse in the secondary to protect the transformer.
- Supplied with a clear plastic terminal cover.

MODEL 3VTN468

CATALOG NUMBERS					
NOT FUSED	PRIMARY FUSES ONLY	PRIMARY AND SECONDARY FUSES	LINE/NEUTRAL VOLTAGE RATING	TURNS RATION	REC. PRIMARY FUSE RATING
3VTN468-069	3VTN468-069F	3VTN468-069FF	69.3:120	0.58:1	3.0
3VTN468-120	3VTN468-120F	3VTN468-120FF	120:120	1:1	2.0
3VTN468-208	3VTN468-208F	3VTN468-208FF	208:120	1.73:1	1.0
3VTN468-240	3VTN468-240F	3VTN468-240FF	240:120	2:1	1.0
3VTN468-277	3VTN468-277F	3VTN468-277FF	277:120	2.31:1	1.0
3VTN468-288	3VTN468-288F	3VTN468-288FF	288:120	2.4:1	0.75
3VTN468-300	3VTN468-300F	3VTN468-300FF	300:120	2.5:1	0.75
3VTN468-346	3VTN468-346F	3VTN468-346FF	346:120	2.88:1	0.75



CONNECTION DIAGRAM



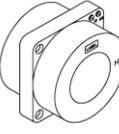
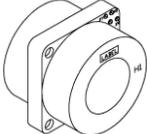
- The core and coil assembly is encased in a thermoplastic shell and filled with resin.

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

CURRENT TRANSFORMERS

For Metering and Instrumentation

600V Current Transformers
ANSI Rated Bushing Type

WINDOW SIZES 6.50"		Page 4-2
MODEL 780 WINDOW SIZES 6.50"		Page 4-4
MODEL 781MR WINDOW SIZES 6.50"		Page 4-6
MODEL 785 WINDOW SIZES 6.50"		Page 4-7
MODEL 786MR		

600V Current Transformers ANSI Rated Bushing Type



Current Transformer

Model 780
rev 090117

CERTIFICATIONS:



APPLICATION:

Relaying and Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

CONTINUOUS THERMAL RATING FACTOR:

50:5 thru 1200:5 2.0 at 30°C amb, 1.5 at 55°C amb,
1500:5 thru 4000:5 1.5 at 30°C amb., 1.33 at 55°C amb.

WINDOW DIAMETER:

6.50"

APPROXIMATE WEIGHT:

30 lbs.

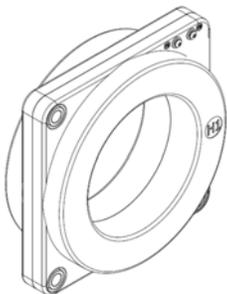
CONNECTIONS:

-Secondary terminals are No. 10-32 brass screws with one flat washer, lockwasher and regular nut.

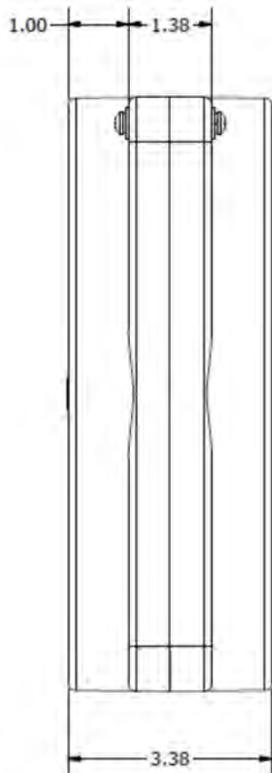
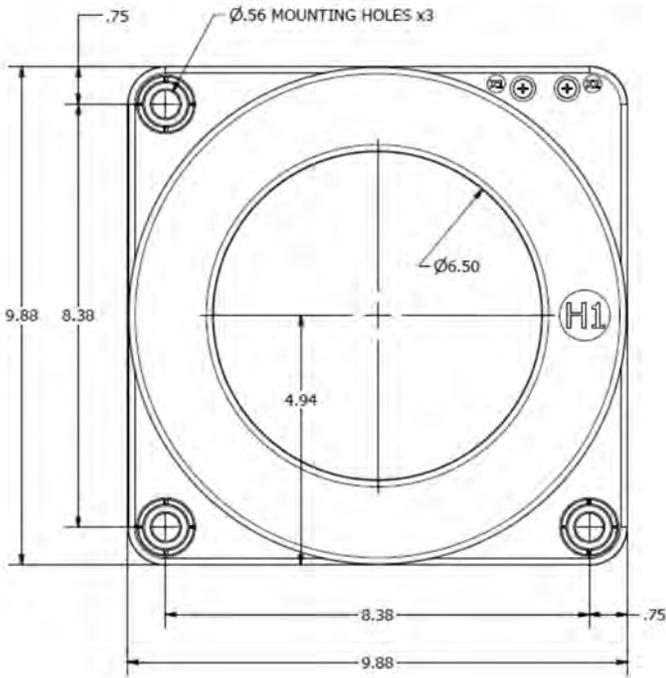
Model	780
Window Size	6.50
Width	9.88
Height	9.88
Depth	3.38

MODEL 780
Window Diameter 6.50"
Approximate weight: 30 lbs.

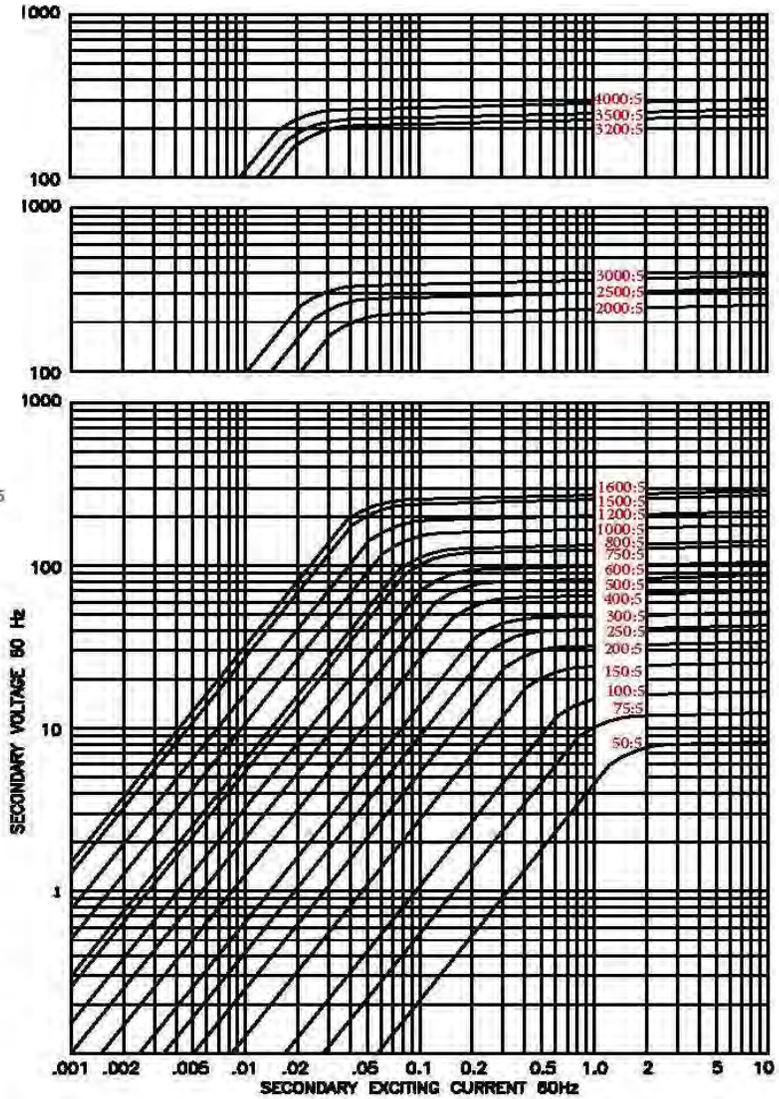
CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
			B0.1	B0.2	B0.5	B0.9	B1.8	
780-500	50:5	-	4.8	-	-	-	-	0.008
780-750	75:5	C10	4.8	4.8	-	-	-	0.016
780-101	100:5	C10	1.2	2.4	4.8	-	-	0.027
780-151	150:5	C20	0.6	1.2	2.4	2.4	4.8	0.042
780-201	200:5	C20	0.6	0.6	1.2	2.4	4.8	0.054
780-251	250:5	C20	0.6	0.6	0.6	1.2	2.4	0.067
780-301	300:5	C20	0.3	0.6	0.6	1.2	2.4	0.097
780-401	400:5	C50	0.3	0.3	0.6	0.6	1.2	0.129
780-501	500:5	C50	0.3	0.3	0.3	0.6	0.6	0.161
780-601	600:5	C100	0.3	0.3	0.3	0.3	0.6	0.193
780-751	750:5	C100	0.3	0.3	0.3	0.3	0.6	0.242
780-801	800:5	C100	0.3	0.3	0.3	0.3	0.3	0.258
780-102	1000:5	C100	0.3	0.3	0.3	0.3	0.3	0.322
780-122	1200:5	C200	0.3	0.3	0.3	0.3	0.3	0.387
780-152	1500:5	C200	0.3	0.3	0.3	0.3	0.3	0.608
780-162	1600:5	C200	0.3	0.3	0.3	0.3	0.3	0.649
780-202	2000:5	C200	0.3	0.3	0.3	0.3	0.3	0.588
780-252	2500:5	C200	0.3	0.3	0.3	0.3	0.3	0.735
780-302	3000:5	C200	0.3	0.3	0.3	0.3	0.3	1.105
780-322	3200:5	C200	0.3	0.3	0.3	0.3	0.3	0.859
780-352	3500:5	C200	0.3	0.3	0.3	0.3	0.3	0.940
780-402	4000:5	C200	0.3	0.3	0.3	0.3	0.3	1.074
780-502	5000:5	C200	0.3	0.3	0.3	0.3	0.3	1.858



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



EXCITATION CURVES



Model 780



Current Transformer

Model 781MR

APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

WINDOW DIAMETER:

6.5"

APPROXIMATE WEIGHT:

31 lbs.

CONTINUOUS THERMAL CURRENT RATING FACTOR:

2.0 at 30°c amb., 1.5 at 55°c amb

CONNECTIONS:

-Secondary terminals are No. 10-32 brass screws with one flat washer, lockwasher, and regular nut



Model	781MR
Window Size	6.50
Width	9.88
Height	9.88
Depth	3.38

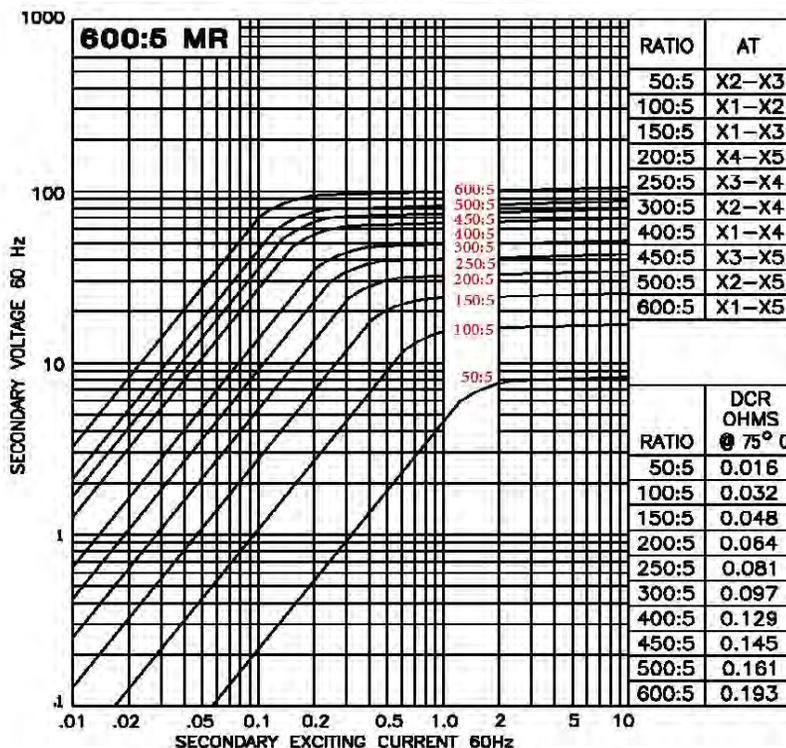
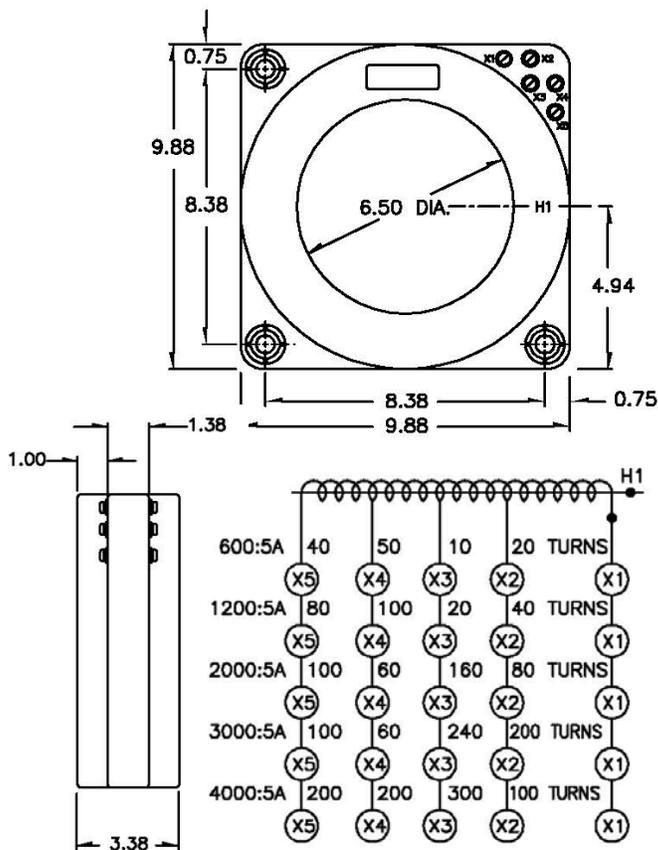
CERTIFICATIONS:



MODEL 781MR
Window Diameter 6.5"
Approximate weight: 31 lbs.

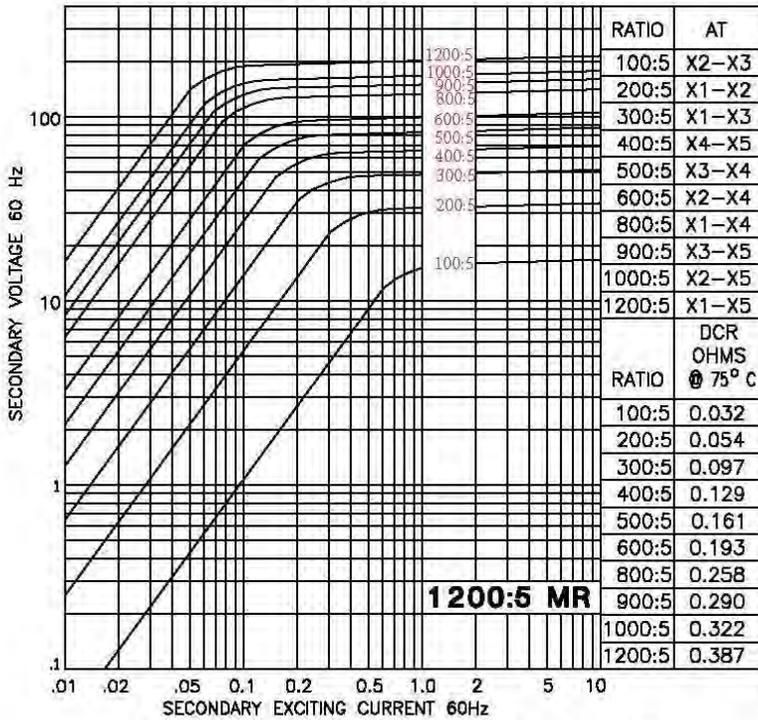
Catalog Number	Relay Class	ANSI Metering Class at 60Hz	Continuous Thermal	
			@ 30°C	@ 50°C
781-601MR	C100	0.3 B0.5	2.0	1.5
781-122MR	C200	0.3 B1.8	2.0	1.5
781-202MR	C200	0.3 B1.8	2.0	1.5
781-302MR	C200	0.3 B1.8	1.33	1.33
781-402MR	C200	0.3 B1.8	1.33	0.8

EXCITATION CURVE

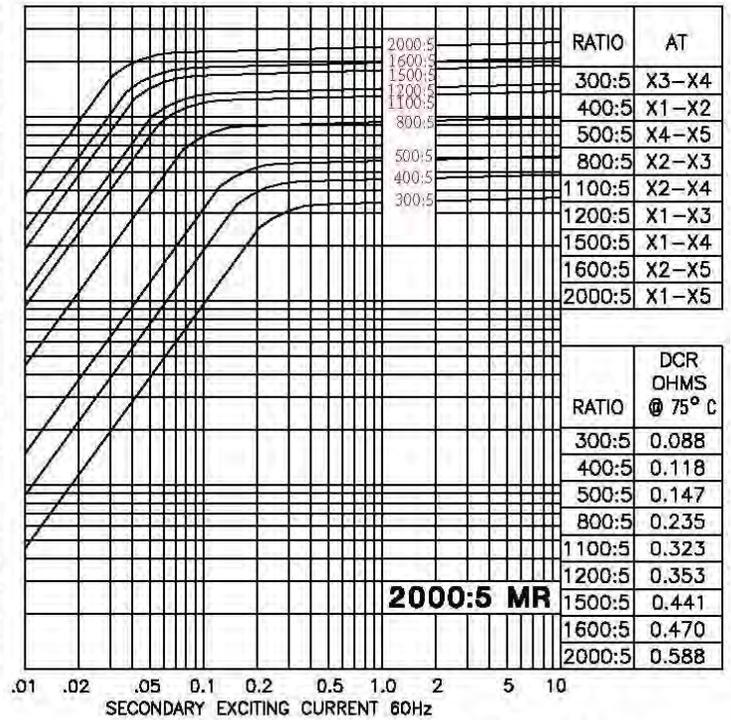


MODEL 781 - 601MR - rating C100

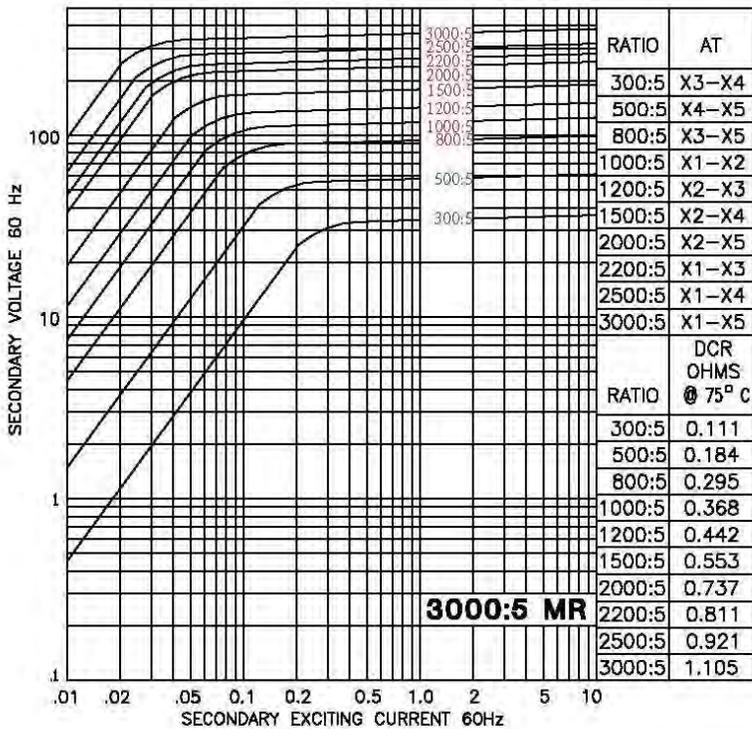
EXCITATION CURVES



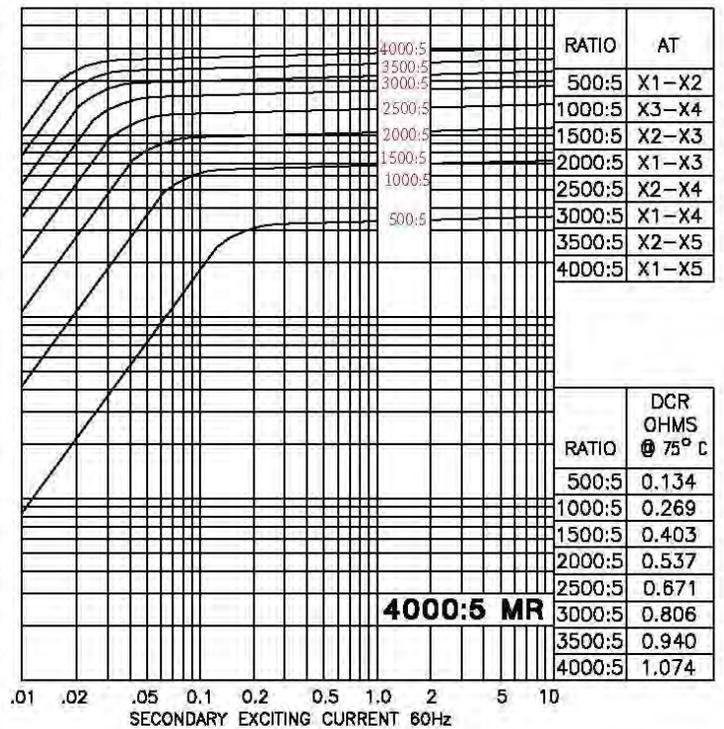
MODEL 781 - 122MR - rating C200



MODEL 781 - 202MR - rating C200



MODEL 781 - 302MR - rating C200



MODEL 781 - 402MR - rating C200



Current Transformer

Model 785

APPLICATION:

Relaying and Metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. full wave

CONTINUOUS THERMAL CURRENT RATING FACTOR:

50:5 thru 1200:5 2.0 at 30°C amb., 1.5 at 55°C amb.
 1500:5 thru 2500:5 1.5 at 30°C amb., 1.33 at 55°C amb.
 3000:5 thru 4000:5 1.33 at 30°C amb., 1.0 at 55°C amb.

WINDOW DIAMETER:

6.5"

APPROXIMATE WEIGHT:

58 lbs.

CONNECTIONS:

-Secondary terminals are No. 10-32 brass screws with one flat washer, lockwasher, and regular nut.



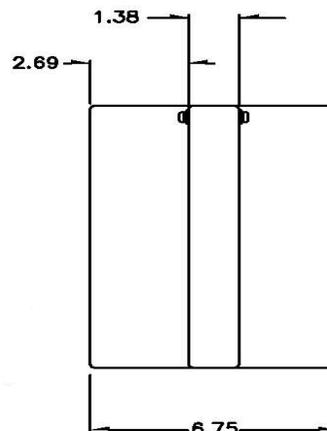
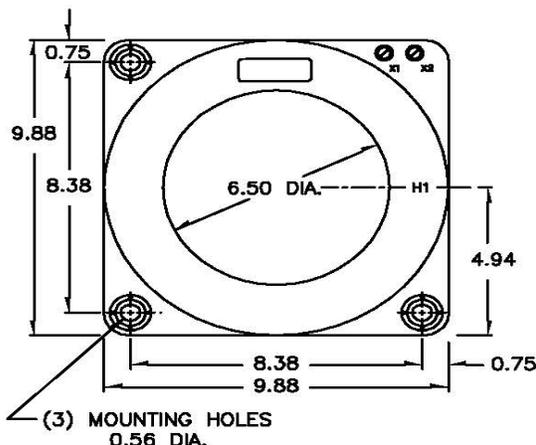
CERTIFICATIONS:



Model	785
Window Size	6.50
Width	9.88
Height	9.88
Depth	6.75

MODEL 785
 Window Diameter 6.5"
 Approximate weight: 58 lbs.

CATALOG NUMBER	CURRENT RATIO	RELAY CLASS	ANSI METERING CLASS AT 60 HZ				
			B0.1	B0.2	B0.5	B0.9	B1.8
785-500	50:5	C10	2.4	4.8	-	-	-
785-750	75:5	C20	1.2	1.2	4.8	-	-
785-101	100:5	C20	0.6	1.2	2.4	-	-
785-151	150:5	C50	0.6	0.6	1.2	2.4	-
785-201	200:5	C50	0.3	0.3	0.6	1.2	2.4
785-251	250:5	C50	0.3	0.3	0.6	1.2	2.4
785-301	300:5	C100	0.3	0.3	0.3	0.6	1.2
785-401	400:5	C100	0.3	0.3	0.3	0.6	1.2
785-501	500:5	C100	0.3	0.3	0.3	0.3	0.6
785-601	600:5	C200	0.3	0.3	0.3	0.3	0.6
785-751	750:5	C200	0.3	0.3	0.3	0.3	0.3
785-801	800:5	C200	0.3	0.3	0.3	0.3	0.3
785-102	1000:5	C200	0.3	0.3	0.3	0.3	0.3
785-122	1200:5	C400	0.3	0.3	0.3	0.3	0.3
785-152	1500:5	C400	0.3	0.3	0.3	0.3	0.3
785-162	1600:5	C400	0.3	0.3	0.3	0.3	0.3
785-202	2000:5	C400	0.3	0.3	0.3	0.3	0.3
785-252	2500:5	C400	0.3	0.3	0.3	0.3	0.3
785-302	3000:5	C400	0.3	0.3	0.3	0.3	0.3
785-402	4000:5	C400	0.3	0.3	0.3	0.3	0.3



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model 786MR
rev 03182021

CERTIFICATIONS:



Model	786MR
Window Size	6.50
Width	9.88
Height	9.88
Depth	6.75

APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

INSULATION LEVEL:

600 Volts. 10 kV BIL. Full wave

CONTINUOUS THERMAL CURRENT RATING FACTOR:

2.0 at 30°C amb., 1.5 at 55°C amb

WINDOW DIAMETER:

6.5"

APPROXIMATE WEIGHT:

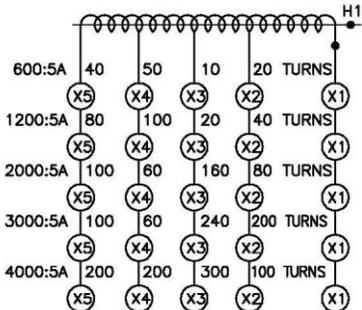
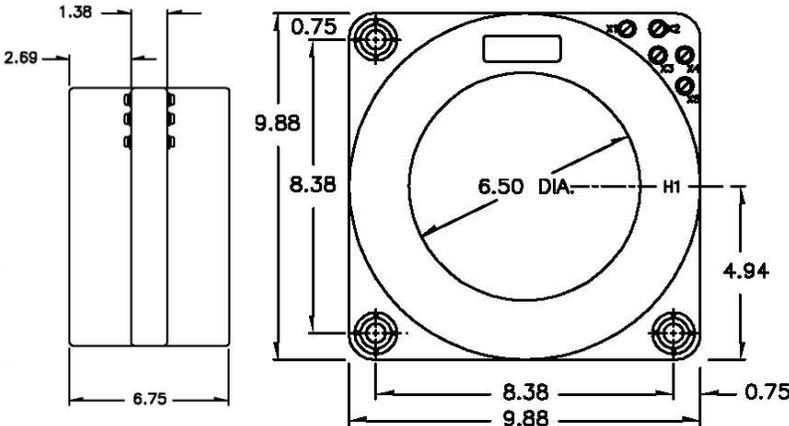
58lbs.

CONNECTIONS:

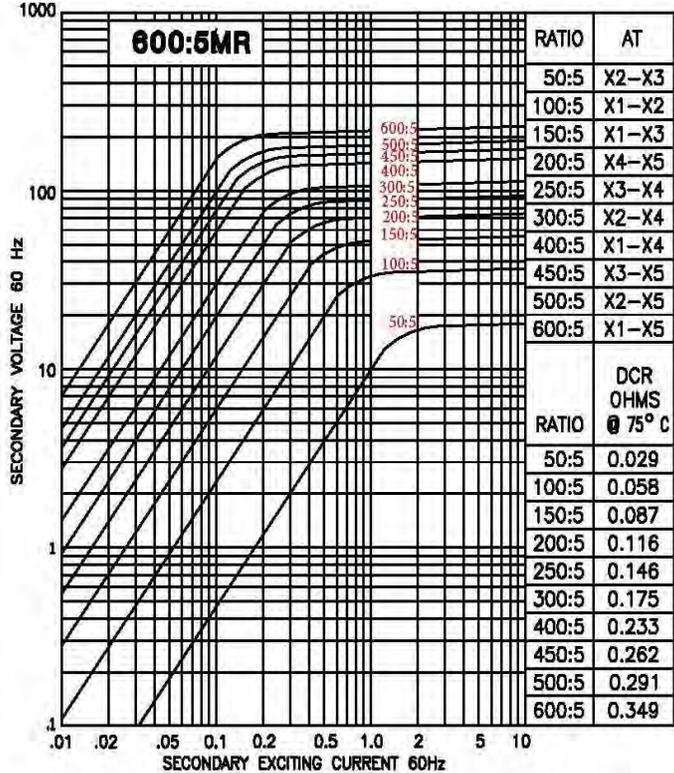
-Secondary terminals are brass studs No. 10-32 with one flat washer, lockwasher, and regular nut

MODEL 786MR
Window Diameter 6.5"
Approximate weight: 58 lbs.

Catalog Number	Relay Class	ANSI Metering Class at 60Hz	Continuous Thermal	
			@ 30°C	@ 50°C
786-601MR	C200	0.6 B0.9	2.0	1.5
786-122MR	C400	0.3 B1.8	2.0	1.5
786-202MR	C400	0.3 B1.8	2.0	1.5
786-302MR	C400	0.3 B1.8	1.33	1.0
786-402MR	C400	0.3 B1.8	1.33	1.0



EXCITATION CURVE

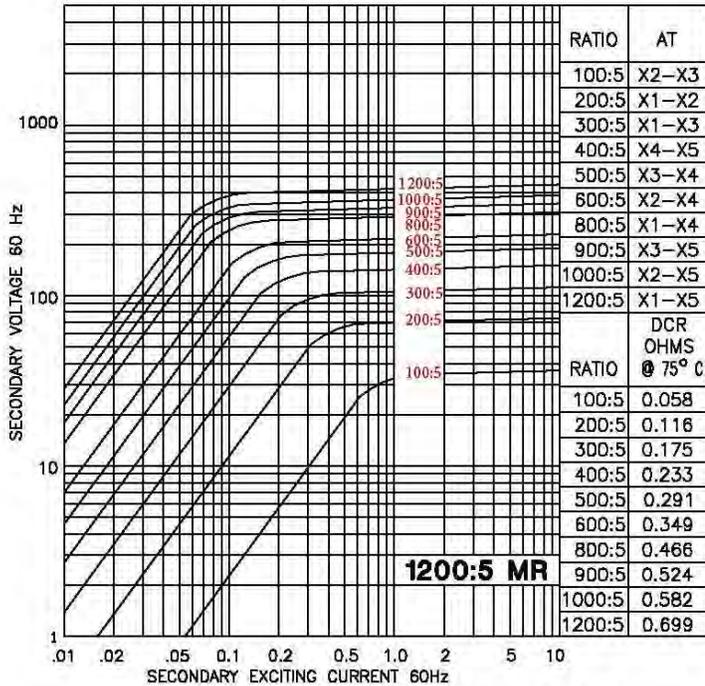


MODEL 786 - 601MR - rating C200

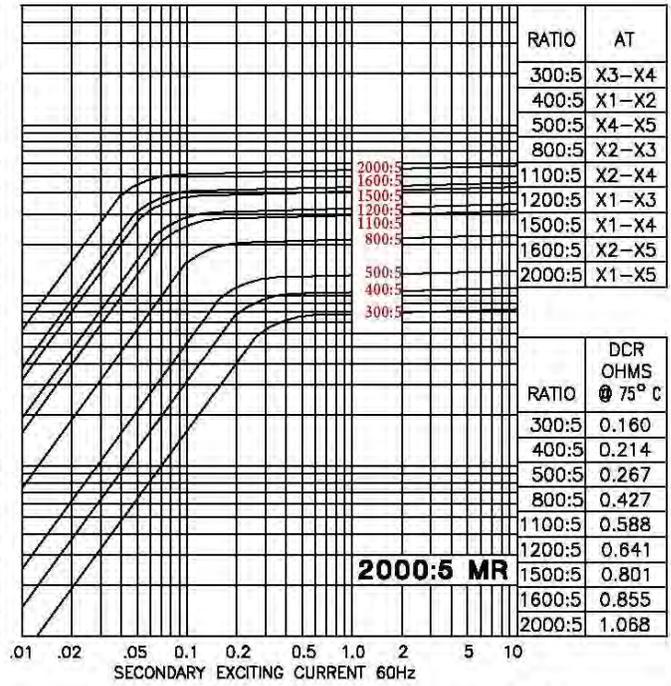
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



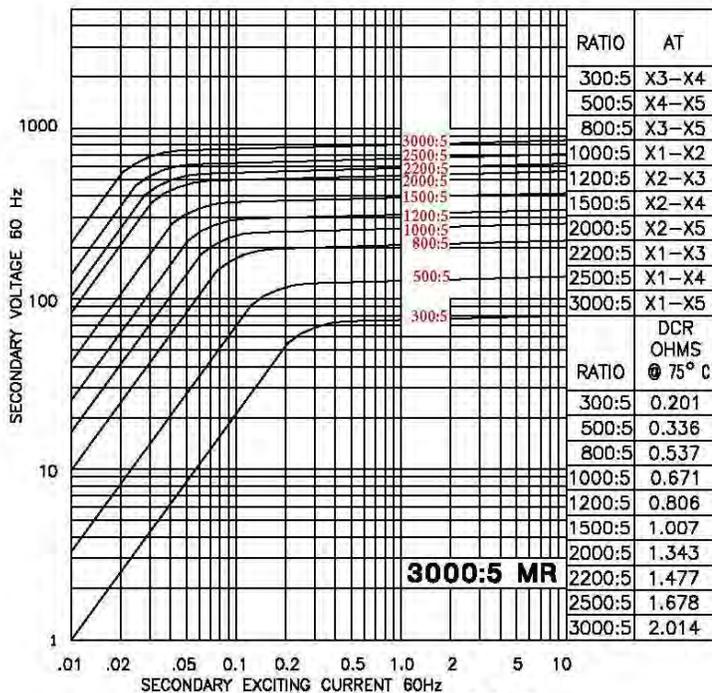
EXCITATION CURVE



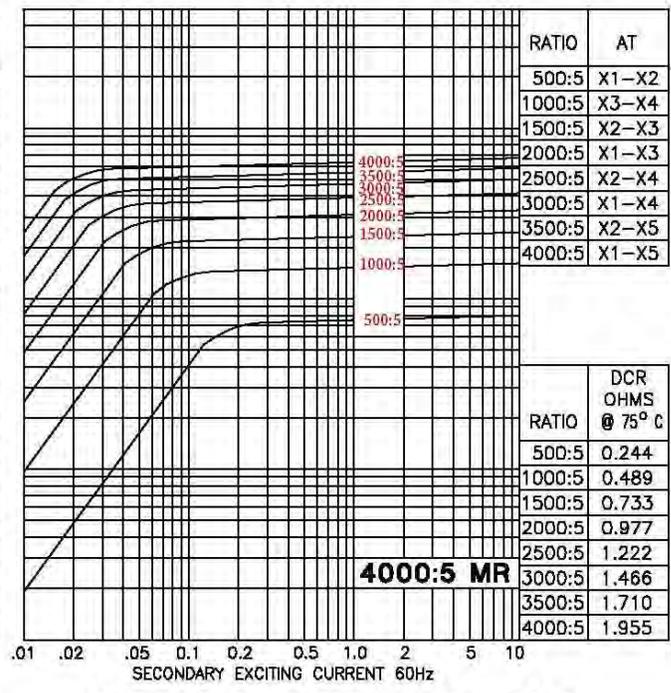
MODEL 786 - 122MR - rating C400



MODEL 786 - 202MR - rating C400



MODEL 786 - 302MR - C400



MODEL 786 - 402MR - rating C400

CURRENT TRANSFORMERS

For Metering and Instrumentation

720V Current Transformers
IEC Rated Busbar Type

WINDOW SIZES 30 x 10mm, 25 x 15mm, 20 x 20mm Diameter 25mm		Page 5-3
MODEL IE53J		
WINDOW SIZES 20 x 6mm Diameter 21mm		Page 5-4
MODEL IE53Q		
WINDOW SIZES 15 x 5mm Diameter 16mm		Page 5-5
MODEL IE55E		
WINDOW SIZES 40 x 10mm Diameter 32mm		Page 5-6
MODEL IE63N		
WINDOW SIZES 20 x 10mm Diameter 23mm		Page 5-7
MODEL IE65F		
WINDOW SIZES 50 x 10mm, 40 x 40mm, Diameter 42mm		Page 5-8
MODEL IE93L		
WINDOW SIZES 64 x 12.6mm, 60 x 30mm		Page 5-9
MODEL IE93R		
WINDOW SIZES 76.5 x 19mm, 60 x 30mm		Page 5-10
MODEL IE93S		

720V Current Transformers IEC Rated Busbar Type

CURRENT TRANSFORMERS

For Metering and Instrumentation

720V Current Transformers
IEC Rated Busbar Type

WINDOW SIZES 40 x 10mm, 30 x 30mm, Diameter 36mm		Page 5-11
MODEL IEA5G		
WINDOW SIZES 20 x 6mm Diameter 21mm		Page 5-12
MODEL IEA5Y		
WINDOW SIZES 80 x 30mm, 60 x 30mm, 50 x 50mm Diameter 63mm		Page 5-13
MODEL IEB5D		
WINDOW SIZES 104 x 35mm		Page 5-14
MODEL IEB5Z		
WINDOW SIZES 160 x 50mm		Page 5-15
MODEL IEC5T		
WINDOW SIZES 160 x 50mm		Page 5-16
MODEL IED5T		



Current Transformer

Model IE53J

rev 032916

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.22 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IE53J-FIXING-KIT

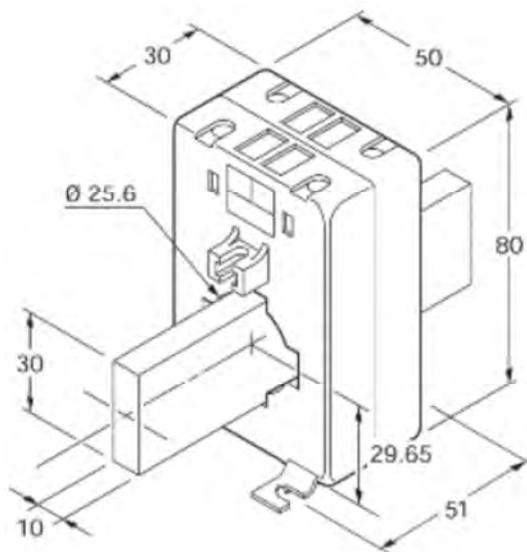
Model	IE53J
Window Size	30 x 10mm 25 x 15mm 20 x 20mm 25mm diameter
Width	50mm
Height	80mm
Depth	30mm

MODEL IE53J

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1
IE53J-100/5	100:5	1.25	-
IE53J-125/5	125:5	1.25	-
IE53J-150/5	150:5	2.5	-
IE53J-160/5	160:5	2.5	-
IE53J-200/5	200:5	2.5	2.5
IE53J-250/5	250:5	3.75	2.5
IE53J-300/5	300:5	5	3.75
IE53J-400/5	400:5	7.5	3.75

Note: Change the end suffix to depict required secondary. For example IE53J-200/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IE53Q
rev 032916

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.25 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IE53Q-FIXING-KIT

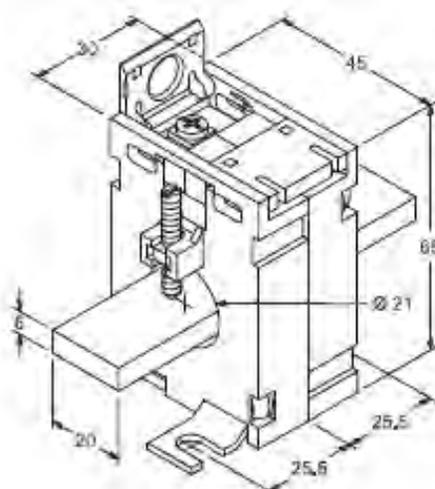
Model	IE53Q
Window Size	20 x 6mm 21mm diameter
Width	45mm
Height	65mm
Depth	30mm

MODEL IE53Q

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1
IE53Q-50/5	50:5	1	-
IE53Q-60/5	60:5	1.25	-
IE53Q-75/5	75:5	1.5	-
IE53Q-80/5	80:5	1.25	-
IE53Q-100/5	100:5	2.5	1.5
IE53Q-125/5	125:5	3	2.5
IE53Q-150/5	150:5	3.75	2.5
IE53Q-200/5	200:5	5	3.75
IE53Q-250/5	250:5	-	5
IE53Q-300/5	300:5	7.5	5

Note: Change the end suffix to depict required secondary. For example IE53Q-200/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IE55E
rev 032916

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.40 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IE55E-FIXING-KIT

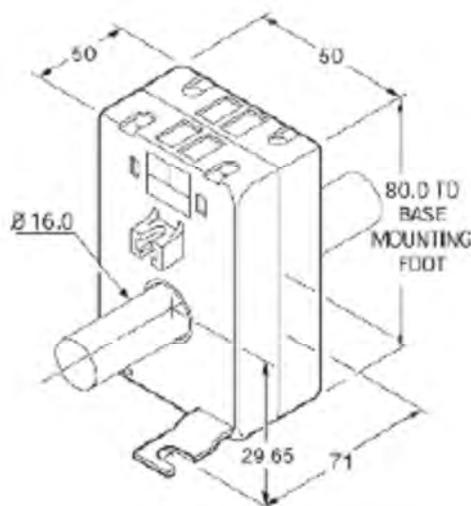
Model	IE55E
Window Size	15 x 5mm 16mm diameter
Width	50mm
Height	80mm
Depth	50mm

MODEL IE55E

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1
IE55E-30/5	30:5	1.25	-
IE55E-40/5	40:5	2.5	-
IE55E-50/5	50:5	2.5	-
IE55E-60/5	60:5	3.75	2.5
IE55E-75/5	75:5	5	3.75
IE55E-80/5	80:5	5	3.75
IE55E-100/5	100:5	7.5	5

Note: Change the end suffix to depict required secondary. For example IE55E-80/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IE63N
rev 032916

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.30 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IE63N-FIXING-KIT

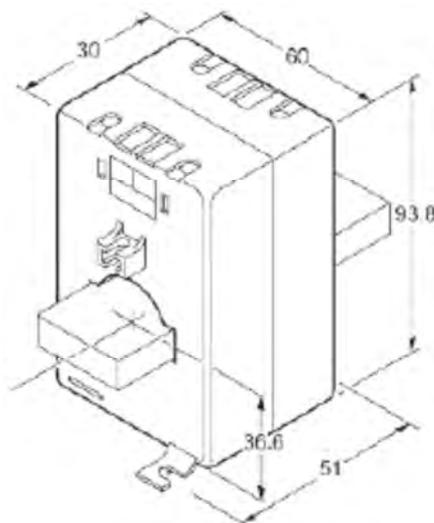
Model	IE63N
Window Size	40 x 10mm 32mm diameter
Width	60mm
Height	94mm
Depth	30mm

MODEL IE63N

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1	VA at Class 0.5
IE63N-200/5	200:5	2.5	-	-
IE63N-250/5	250:5	3.75	2.5	-
IE63N-300/5	300:5	5	3.75	-
IE63N-400/5	400:5	7.5	5	-
IE63N-500/5	500:5	10	7.5	3.75
IE63N-600/5	600:5	10	7.5	5
IE63N-750/5	750:5	15	10	7.5
IE63N-800/5	800:5	15	10	7.5

Note: Change the end suffix to depict required secondary. For example IE63N-500/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IE65F
rev 032916

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.40 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IE65F-FIXING-KIT

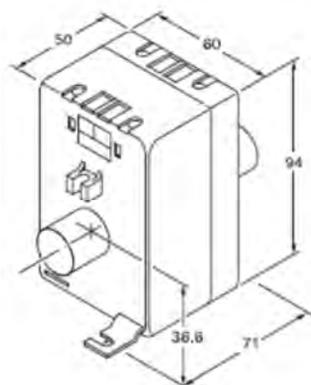
Model	IE65F
Window Size	20 x 10mm 23mm diameter
Width	60mm
Height	94mm
Depth	50mm

MODEL IE65F

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1	VA at Class 0.5
IE65F-30/5	30:5	1.25	-	-
IE65F-40/5	40:5	2.5	-	-
IE65F-50/5	50:5	2.5	-	-
IE65F-60/5	60:5	3.75	-	-
IE65F-75/5	75:5	5	2.5	-
IE65F-80/5	80:5	5	2.5	-
IE65F-100/5	100:5	7.5	5	2.5
IE65F-125/5	125:5	7.5	5	2.5
IE65F-150/5	150:5	15	10	5
IE65F-200/5	200:5	20	15	7.5
IE65F-250/5	250:5	20	20	10
IE65F-300/5	300:5	30	30	10

Note: Change the end suffix to depict required secondary. For example IE65F-125/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IE93L
rev 03182021

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.45 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IE93L-FIXING-KIT

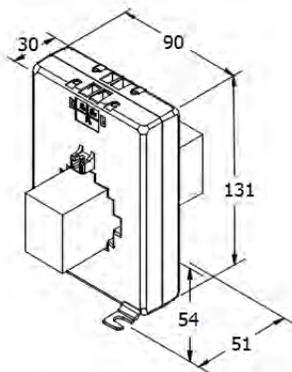
Model	IE93L
Window Size	50 x 10mm 40 x 30mm 42mm diameter
Width	90mm
Height	131mm
Depth	30mm

MODEL IE93L

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1	VA at Class 0.5
IE93L-400/5	400:5	15	7.5	3.75
IE93L-500/5	500:5	20	15	5
IE93L-600/5	600:5	30	20	10
IE93L-750/5	750:5	20	15	7.5
IE93L-800/5	800:5	20	15	10
IE93L-1000/5	1000:5	20	20	15
IE93L-1200/5	1200:5	30	30	20
IE93L-1250/5	1250:5	30	30	20
IE93L-1500/5	1500:5	30	30	20
IE93L-1600/5	1600:5	30	30	20

Note: Change the end suffix to depict required secondary. For example IE93L-750/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IE93R
rev 032916

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.60 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IE93R-FIXING-KIT

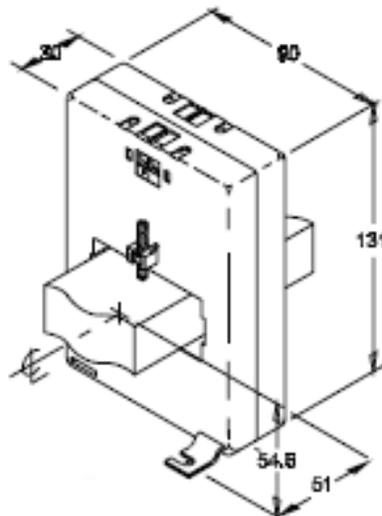
Model	IE93R
Window Size	64 x 12.6mm 60 x 30mm
Width	90mm
Height	131mm
Depth	30mm

MODEL IE93R

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1	VA at Class 0.5
IE93R-800/5	800:5	10	10	5
IE93R-1000/5	1000:5	15	10	7.5
IE93R-1200/5	1200:5	20	15	10
IE93R-1250/5	1250:5	20	15	10
IE93R-1500/5	1500:5	20	20	15
IE93R-1600/5	1600:5	20	20	15
IE93R-2000/5	2000:5	30	20	20

Note: Change the end suffix to depict required secondary. For example IE93R-800/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IE93S
rev 032916

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.60 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IE93S-FIXING-KIT

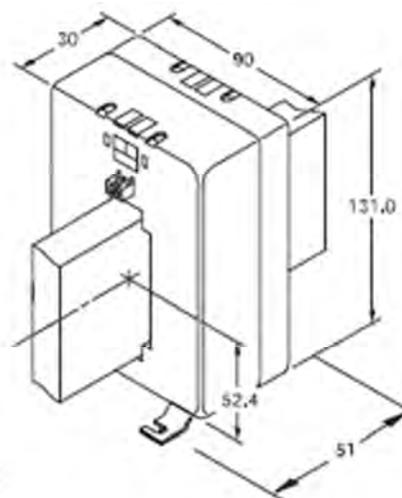
Model	IE93S
Window Size	76.5 x 19mm 60 x 30mm
Width	90mm
Height	131mm
Depth	30mm

MODEL IE93S

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1	VA at Class 0.5
IE93S-800/5	800:5	10	10	5
IE93S-1000/5	1000:5	15	10	7.5
IE93S-1200/5	1200:5	20	15	10
IE93S-1250/5	1250:5	20	20	15
IE93S-1500/5	1500:5	20	20	15
IE93S-1600/5	1600:5	30	20	15
IE93S-2000/5	2000:5	30	20	15

Note: Change the end suffix to depict required secondary. For example IE93S-1200/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IEA5G
rev 032916

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.60 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IEA5G-FIXING-KIT

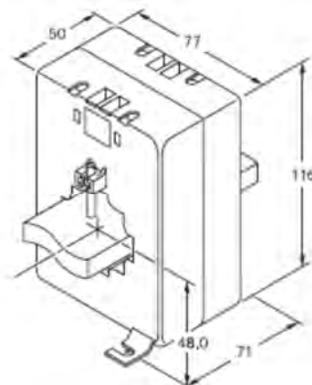
Model	IEA5G
Window Size	40 x 10mm 30 x 30mm 36mm diameter
Width	77mm
Height	116mm
Depth	50mm

MODEL IEA5G

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1	VA at Class 0.5
IEA5G-100/5	100:5	2.5	-	-
IEA5G-125/5	125:5	5	2.5	-
IEA5G-150/5	150:5	5	3.75	-
IEA5G-200/5	200:5	10	5	2.5
IEA5G-250/5	250:5	10	7.5	5
IEA5G-300/5	300:5	10	7.5	5
IEA5G-400/5	400:5	10	7.5	5
IEA5G-500/5	500:5	10	7.5	5
IEA5G-600/5	600:6	10	10	7.5
IEA5G-750/5	750:5	15	10	10
IEA5G-800/5	800:5	15	10	10
IEA5G-1000/5	1000:5	20	15	15

Note: Change the end suffix to depict required secondary. For example IEA5G-125/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IEA5Y
rev 03182021

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.45 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IEA5Y-FIXING-KIT

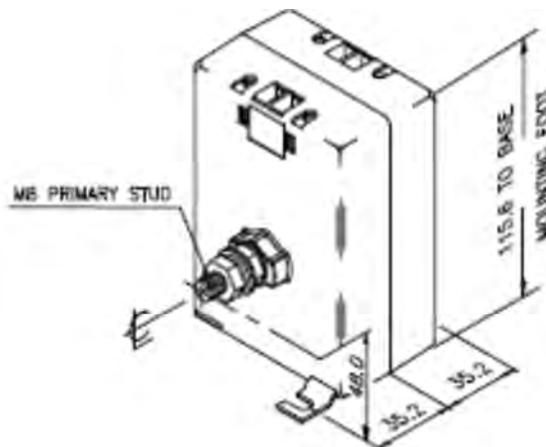
Model	IEA5Y
Stud Size	M8
Width	45mm
Height	65mm
Depth	30mm

MODEL IEA5Y

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1
IEA5Y-1/5	1:5	7.5	5
IEA5Y-5/5	5:5	7.5	5
IEA5Y-10/5	10:5	7.5	5
IEA5Y-15/5	15:5	7.5	5
IEA5Y-20/5	20:5	7.5	5
IEA5Y-30/5	30:5	7.5	5
IEA5Y-40/5	40:5	7.5	5

Note: Change the end suffix to depict required secondary. For example IEA5Y-30/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IEB5D
rev 032916

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.50 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

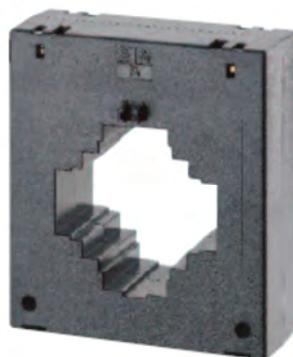
Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IEB5D-FIXING-KIT



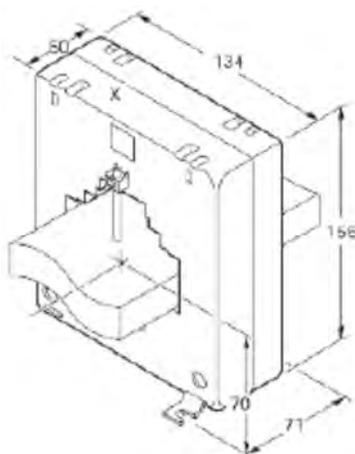
Model	IEB5D
Window Size	80 x 30mm
	60 x 30mm
	50 x 50mm
	63mm diameter
Width	134mm
Height	156mm
Depth	50mm

MODEL IEB5D

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1	VA at Class 0.5
IEB5D-400/5	400:5	15	10	7.5
IEB5D-500/5	500:5	20	15	10
IEB5D-600/5	600:5	15	10	5
IEB5D-750/5	750:5	15	10	5
IEB5D-800/5	800:5	20	15	7.5
IEB5D-1000/5	1000:5	22.5	20	10
IEB5D-1200/5	1200:5	30	20	15
IEB5D-1250/5	1250:5	30	20	15
IEB5D-1500/5	1500:5	30	20	15
IEB5D-1600/5	1600:5	40	30	20
IEB5D-2000/5	2000:5	50	40	30

Note: Change the end suffix to depict required secondary. For example IEB5D-800/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IEB5Z
rev 071316

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

0.70 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IEB5Z-FIXING-KIT



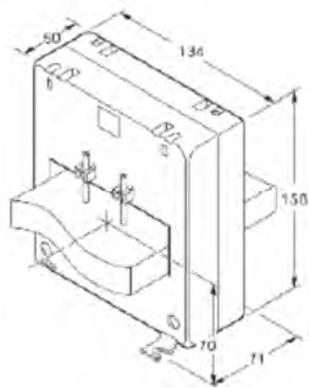
Model	IEB5Z
Window Size	104 x 35mm 35mm diameter
Width	134mm
Height	156mm
Depth	50mm

MODEL IEB5Z

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1	VA at Class 0.5
IEB5Z-750/5	750:5	15	7.5	2.5
IEB5Z-800/5	800:5	20	10	2.5
IEB5Z-1000/5	1000:5	22.5	15	2.5
IEB5Z-1200/5	1200:5	30	20	10
IEB5Z-1250/5	1250:5	30	20	15
IEB5Z-1500/5	1500:5	30	20	15
IEB5Z-1600/5	1600:5	30	20	15
IEB5Z-2000/5	2000:5	30	20	15
IEB5Z-2400/5	2400:5	30	20	15
IEB5Z-2500/5	2500:5	30	20	15
IEB5Z-3000/5	3000:5	30	20	15
IEB5Z-4000/5	4000:5	30	20	15

Note: Change the end suffix to depict required secondary. For example IEB5Z-800/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IEC5T
rev 03182021

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

1.6 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IEC5T-FIXING-KIT

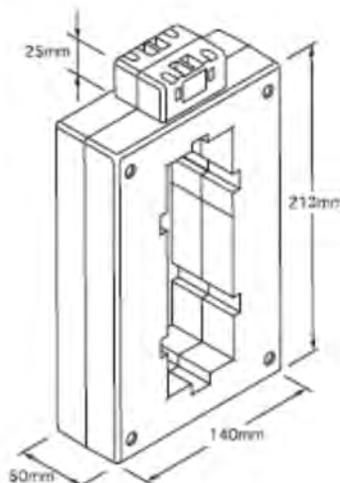
Model	IEC5T
Window Size	160 x 50mm
Width	140mm
Height	238mm
Depth	50mm

MODEL IEC5T

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1	VA at Class 0.5
IEC5T-1600/5	1600:5	45	30	20
IEC5T-2000/5	2000:5	45	30	20
IEC5T-2500/5	2500:5	60	45	30
IEC5T-3000/5	3000:5	60	45	30
IEC5T-3200/5	3200:5	60	45	30
IEC5T-4000/5	4000:5	60	45	30
IEC5T-5000/5	5000:5	60	45	30
IEC5T-6000/5	6000:5	60	45	30

Note: Change the end suffix to depict required secondary. For example IEC5T-4000/1.

DIMENSIONS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Current Transformer

Model IED5T
rev 03182021

CERTIFICATIONS:



APPLICATION:

Metering

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

720 Volts. 10 kV BIL. full wave

APPROXIMATE WEIGHT:

1.5 kg

CONNECTIONS:

Secondary terminals screw clamp up to 10mm² cable. 'Fast on' 6.3mm type. Integral Terminal Cover IP20B

ENCLOSURE CODE:

IP40

INSULATION CLASS:

Class E BS2757 IEC85

COMPLIES WITH / APPROVALS:

IEC60044-1:2003 / BSEN61010-1, EN60044-1

MOUNTING HARDWARE OPTION:

Order p/n: IED5T-FIXING-KIT

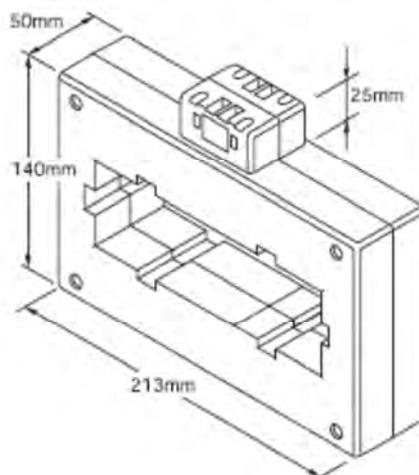
Model	IED5T
Window Size	160 x 50mm
Width	213mm
Height	165mm
Depth	50mm

MODEL IED5T

CATALOG NUMBER	CURRENT RATIO	VA at Class 3	VA at Class 1	VA at Class 0.5
IED5T-1600/5	1600:5	45	30	20
IED5T-2000/5	2000:5	45	30	20
IED5T-2500/5	2500:5	60	45	30
IED5T-3000/5	3000:5	60	45	30
IED5T-3200/5	3200:5	60	45	30
IED5T-4000/5	4000:5	60	45	30
IED5T-5000/5	5000:5	60	45	30
IED5T-6000/5	6000:5	60	45	30

Note: Change the end suffix to depict required secondary. For example IED5T-3200/1.

DIMENSIONS



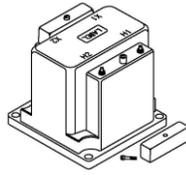
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

VOLTAGE TRANSFORMERS

For Metering and Instrumentation

720V Voltage Transformers (IEC)

Page 6-2



MODEL 460I

720V Voltage Transformers IEC Rated



Voltage Transformer

Model 460I
rev 03182021

CERTIFICATIONS:



Model	460I
Width	4.50
Height	3.50
Depth	4.63

FREQUENCY:

50 Hz.

STANDARD SECONDARY VOLTAGE:

110 Volts

INSULATION LEVEL:

720 Volts.

ACCURACY CLASS:

0.5 @ 10VA, 1.0 @ 20VA

THERMAL RATING:

125VA AT 30°C. amb., 75VA AT 55°C. amb.

APPROXIMATE WEIGHT:

3.5 kg

CONNECTIONS:

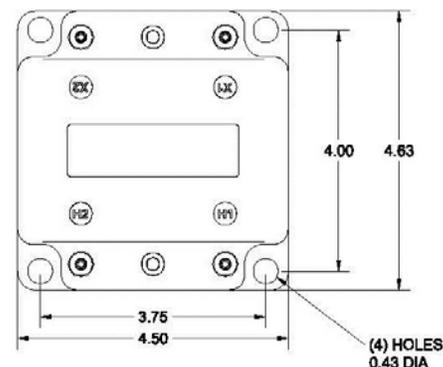
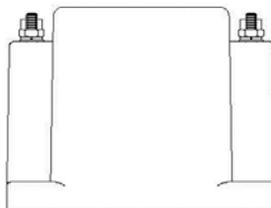
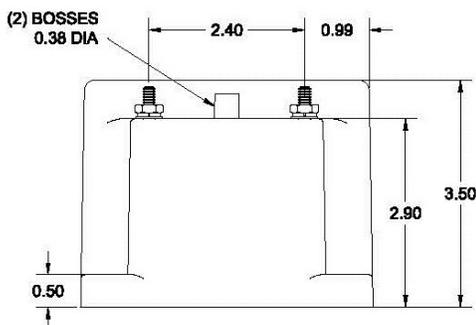
-Terminals are brass studs ASA 10-32 with one lockwasher, flat washer, and regular nut

MODEL 460I

Approximate weight: 3.5 kg

CATALOG NUMBER	VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
NOT FUSED			
460I-110	110:110	1:1	3
460I-220	220:110	2:1	2
460I-380	380:110	3.45:1	1
460I-400	400:110	3.64:1	1
460I-416	416:110	3.78:1	1
460I-440	440:110	4:1	1

- Each transformer has two plastic terminal covers.
- The core and coil assembly is encased in a thermoplastic shell and filled with resin.
- These transformers are designed for operation line to line. They may also be operated line to ground or line to neutral at reduced voltage (58% of rated volts).
- It is desirable to use a 1.75 amp fuse in the secondary to protect the transformer.

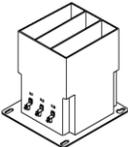
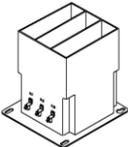
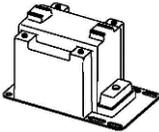
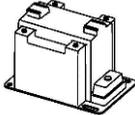
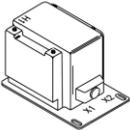
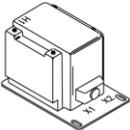
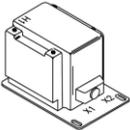


Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

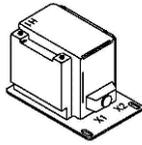
VOLTAGE TRANSFORMERS

For Metering and Instrumentation

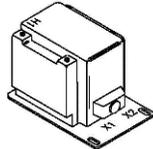
MV Voltage Transformers

MODEL PT3-60		Page 7-3
MODEL 3PT3-60		Page 7-4
MODEL PTG3-1-60 PTG3-2-60		Page 7-5
MODEL PTW3-1-60 PTW3-2-60		Page 7-6
MODEL PTG4-1-75 PTG4-2-75		Page 7-9
MODEL PTG4T-1-75 PTG4T-2-75		Page 7-11
MODEL PTW4-1-75 PTW4-2-75		Page 7-13

MODEL PTG5-1-110
PTG5-2-110



MODEL PTW5-1-110
PTW5-2-110

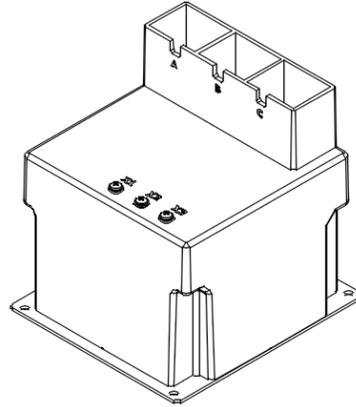




Indoor Voltage Transformer

Model PT3-60

CERTIFICATIONS:



ACCURACY CLASS:

0.3 WX, 0.6M, 1.2Y at 100% rated voltage with 120V based ANSI burden

FREQUENCY:

50/60 Hz.

THERMAL RATING:

300 VA total, 150 VA at 30°C. amb.

200 VA total, 100 VA at 50° C. amb.

STANDARD SECONDARY

110/120 volts

MAXIMUM SYSTEM VOLTAGE:

7.2 kV, BIL 60kV full wave

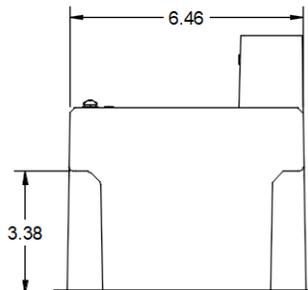
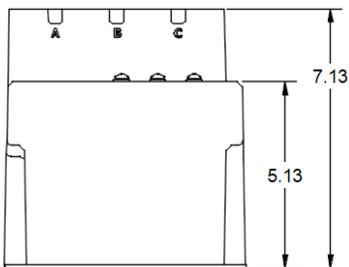
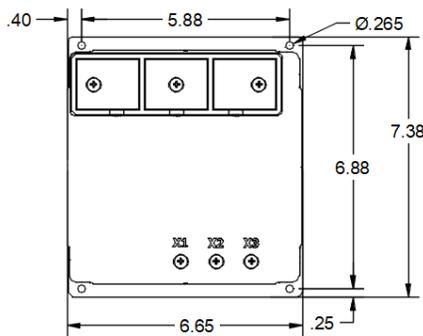
APPROXIMATE WEIGHT:

26 lbs.

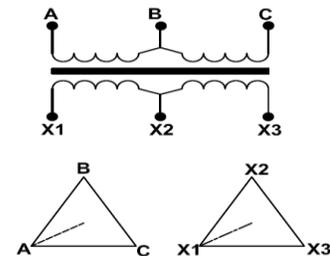
- Primary terminals are No. 10-32 brass screws with one flatwasher and lockwasher.
- The core and coil assembly is encased in a plastic enclosure and vacuum encapsulated in polyurethane resin.

- The transformers are tested for partial discharge to Canadian Standards CAN 3-C13-M83. This test can also be carried out to IEC requirements if requested.
- Recommended Spacing is for guidance only. The user needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge; high altitude.

CATALOG NUMBER	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	FREQUENCY Hz	THERMAL RATING	SUGGESTED FUSE RATING
PT3-60-841	840	7:1	120	60	0.3 kVA	1.0 E
PT3-60-242	2400	20:1	120	60	0.3 kVA	1.0 E
PT3-60-332	3300	30:1	110	50	0.3 kVA	1.0 E
PT3-60-422	4200	35:1	120	60	0.3 kVA	1.0 E
PT3-60-482	4800	40:1	120	60	0.3 kVA	1.0 E
PT3-60-555	5500	50:1	110	50	0.3 kVA	0.5 E
PT3-60-602	6000	50:1	120	60	0.3 kVA	0.5 E
PT3-60-662	6600	60:1	110	50	0.3 kVA	0.5 E
PT3-60-722	7200	60:1	120	60	0.3 kVA	0.5 E



CONNECTION DIAGRAM



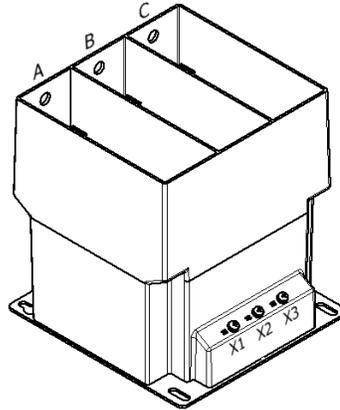
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Indoor Voltage Transformer

Model 3PT3-60
Rev 100821

CERTIFICATIONS:



ACCURACY CLASS:

0.3 WX, 0.6M, 1.2Y at 100% rated voltage with 120V based ANSI burden

FREQUENCY:

50/60 Hz.

THERMAL RATING:

700 VA total, 350 VA per phase, at 30°C. amb.
450 VA total, 225 VA per phase, at 55°C. amb.

STANDARD SECONDARY VOLTAGE:

120 volts

MAXIMUM SYSTEM VOLTAGE: 7

7.2 kV, BIL 60kV full wave

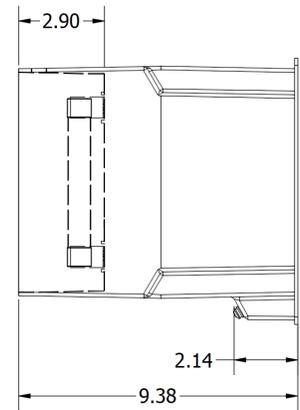
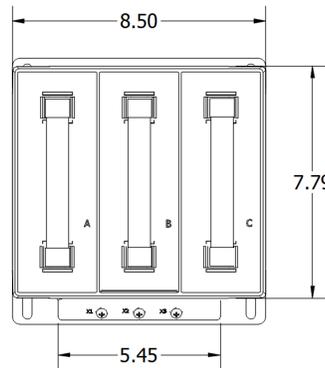
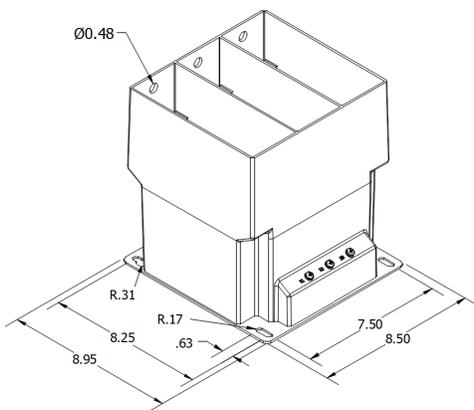
APPROXIMATE WEIGHT:

38 lbs.

- Primary terminals are No. 10-32 brass screws with one flatwasher and lockwasher.
- The core and coil assembly is encased in a plastic enclosure and vacuum encapsulated in polyurethane resin.

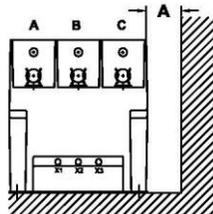
- The transformers are tested for partial discharge to Canadian Standards CAN 3-C13-M83. This test can also be carried out to IEC requirements if requested.
- Recommended Spacing is for guidance only. The user needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge; high altitude.

CATALOG NUMBER	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	FREQUENCY Hz	THERMAL RATING	SUGGESTED FUSE RATING
3PT3-60-841-FFF	840	7:1	120	60	0.7 kVA	1.0 E
3PT3-60-242-FFF	2400	20:1	120	60	0.7 kVA	1.0 E
3PT3-60-332-FFF	3300	30:1	110	50	0.7 kVA	1.0 E
3PT3-60-422-FFF	4200	35:1	120	60	0.7 kVA	1.0 E
3PT3-60-482-FFF	4800	40:1	120	60	0.7 kVA	1.0 E
3PT3-60-555-FFF	5500	50:1	110	50	0.7 kVA	0.5 E
3PT3-60-602-FFF	6000	50:1	120	60	0.7 kVA	0.5 E
3PT3-60-662-FFF	6600	60:1	110	50	0.7 kVA	0.5 E
3PT3-60-722-FFF	7200	60:1	120	60	0.7 kVA	0.5 E

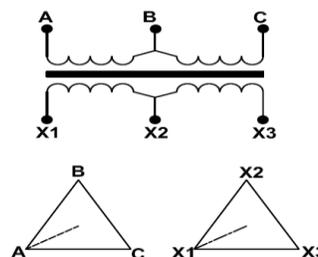


RECOMMENDED SPACING

A - CASE TO GROUND = 1.5" MIN



CONNECTION DIAGRAM



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

CERTIFICATIONS:



ACCURACY CLASS:

0.3 WXY, 1.2Z at 100% rated voltage with 120V based ANSI burden; 0.3 WX, 0.6 M, 1.2 Y at 58% rated voltage with 69.3V based ANSI burden

FREQUENCY:

60 Hz.

MAXIMUM SYSTEM VOLTAGE:

5.6kV, BIL 60kV full wave

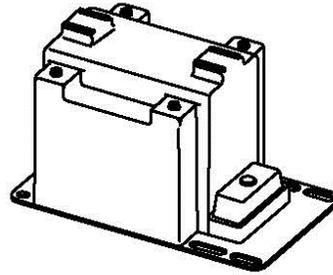
THERMAL RATING:

750 VA at 30°C. amb.

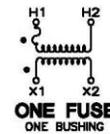
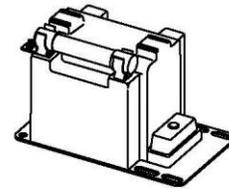
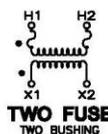
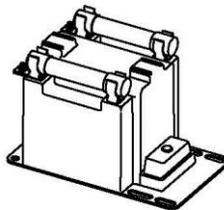
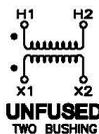
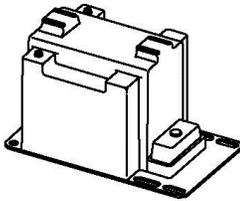
500 VA at 55°C. amb.

APPROXIMATE WEIGHT:

34 lbs.. unfused



- Primary terminals that are unfused are ¼ - 20 brass screws with one flat washer and lockwasher.
- Primary terminals that are fused are ¼ - 20 brass screws with one flat washer, lockwasher, and two nuts.
- Secondary terminals are No. 10-32 brass screws with one flat washer and lockwasher.
- The core and coil assembly is encased in a plastic enclosure and vacuum encapsulated in polyurethane resin.
- Thermal burden rating is for 120 volt secondaries
- Plated steel mounting base.
- Fuses have 1" Dia Caps and 5" clip centers.
- Switchgear style is similar to fused style. No fuse or fuse clip is provided, but inserts for fuse clips are supplied.



GROUP	ONE BUSHING (b)			RFR _{FR} (c)	CATALOG NUMBERS		
					FUSES	FUSE CLIPS ONLY (d)	SWITCHGEAR STYLE
4A	2400	20:1	120	230	PTG3-1-60-242F	PTG3-1-60-242CSorCL	PTG3-1-60-242S
4B	4200	35:1	120	230	PTG3-1-60-422F	PTG3-1-60-422CSorCL	PTG3-1-60-422S
4B	4800	40:1	120	230	PTG3-1-60-482F	PTG3-1-60-482CSorCL	PTG3-1-60-482S

GROUP	TWO BUSHING (a)				CATALOG NUMBERS		
	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	UNFUSED	FUSES	FUSE CLIPS ONLY (d)	SWITCHGEAR STYLE
1	2400	20:1	120	PTG3-2-60-242	PTG3-2-60-242FF	PTG3-2-60-242CCSorCL	PTG3-2-60-242SS
2	3300	30:1	110-50Hz	PTG3-2-60-332	PTG3-2-60-332FF	PTG3-2-60-332CCSorCL	PTG3-2-60-332SS
2	4200	35:1	120	PTG3-2-60-422	PTG3-2-60-422FF	PTG3-2-60-422CCSorCL	PTG3-2-60-422SS
2	4800	40:1	120	PTG3-2-60-482	PTG3-2-60-482FF	PTG3-2-60-482CCSorCL	PTG3-2-60-482SS

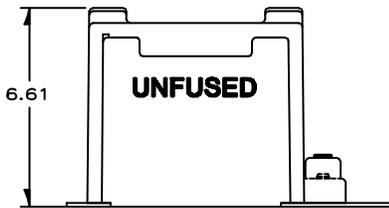
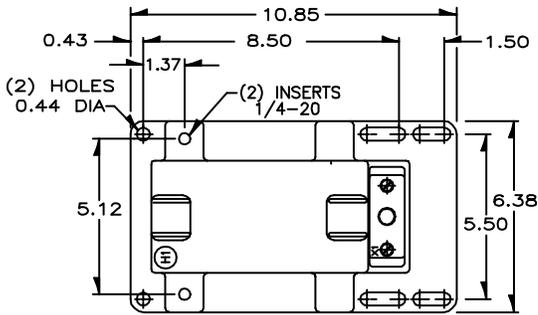
(a) Two fuse transformers should not be used for Y connections. It is preferred practice to connect one lead from each voltage transformer directly to the neutral terminal using a fuse in the line side of the primary only. By using this connection, a transformer can never be made "live" from the line side by reason of a blown fuse in the neutral side. For continuous operation, the transformer primary voltage should not exceed 110% of rated value.

(b) Voltage transformers connected line-to-ground cannot be considered to be grounding transformers and must not be operated with the secondaries in closed delta because excessive currents may flow in the delta.

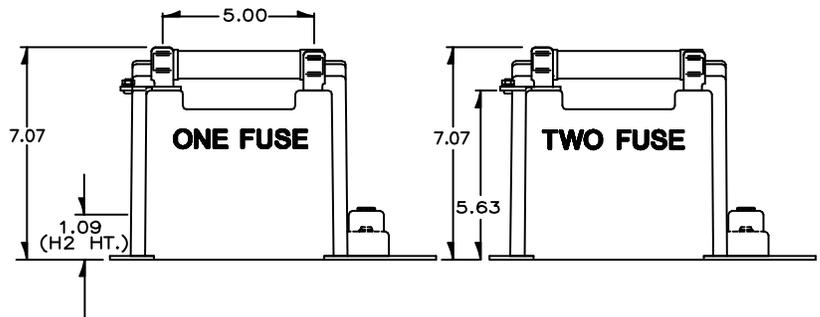
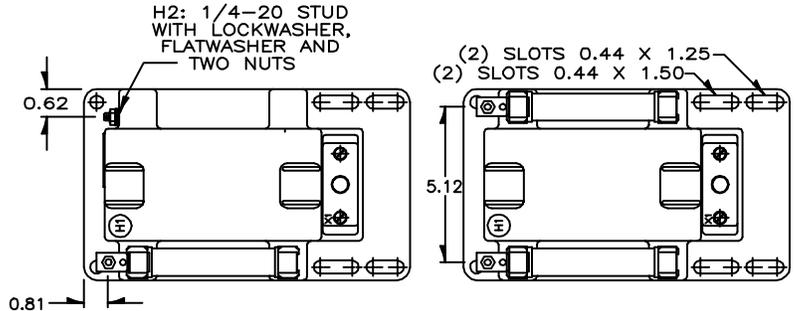
(c) Fuse clips noted as "CCS" or "CS" accept fuses with 1" Dia. Caps and 5" clip centers. Fuse clips noted as "CCL" or "CL" accept fuses with 1.63" Dia. Caps and 5.88" clip centers

NOTE: It is recommended the system line-to-line voltage not exceed the transformer maximum system voltage level.

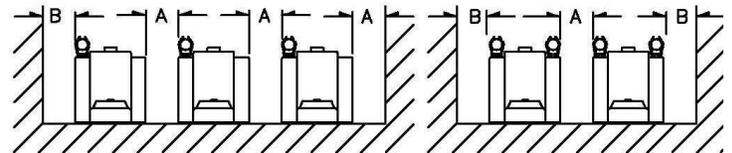
PTG3-1-60



PTG3-2-60



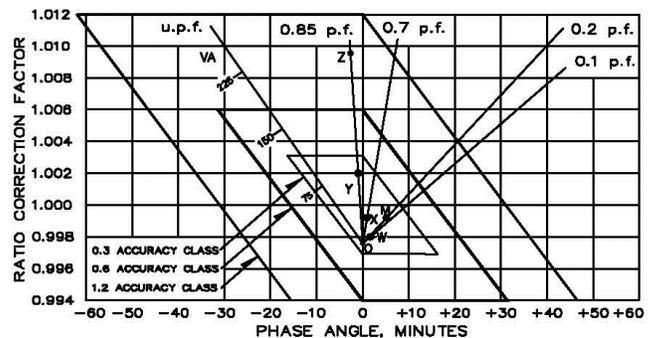
Recommended spacing is for guidance only. User needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge, high altitude; and other considerations like configuration.



FUSE FOR MODEL PTG3 TRANSFORMER	RATING VOLTS	INTERRUPTING AMPERES (SYM)	SUGGESTED RATING * CONTINUOUS AMPERES	CAP DIA. INCHES	LENGTH INCHES	CLIP CENTERS INCHES
2400:120V	5.5kV	45,000	2.0E	1.0	5.63	5.00
3300:110V	5.5kV	45,000	2.0E	1.0	5.63	5.00
4200:120V	5.5kV	45,000	1.0E	1.0	5.63	5.00
4800:120V	5.5kV	45,000	1.0E	1.0	5.63	5.00

CIRCLE DIAGRAM

The circle diagram can be used to predict the performance of a transformer for various loads and power factors. A convenient scale of volt-amperes is shown on the unity power factor line (u.p.f.) and commences at the zero or no-load locus. To use the diagram, measure the known V.A. and scribe an arc about the "zero" locus of a length that contains the angle of the burden power factor. The point at which the arc terminates is the error locus in phase angle minutes and ratio correction factor.





Indoor Voltage Transformer

**Models PTW3-1-60
PTW3-2-60**

CERTIFICATIONS:



ACCURACY CLASS:

0.3 WXY, 1.2Z at 100% rated voltage with 120V based ANSI burden; 0.6 WX, 1.2 MY, 1.2 Y at 58% rated voltage with 69.3V based ANSI burden

FREQUENCY:

60 Hz.

MAXIMUM SYSTEM VOLTAGE:

5.6kV, BIL 60kV full wave

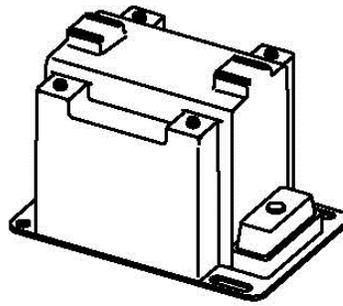
THERMAL RATING:

750 VA at 30°C. amb.

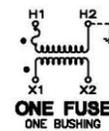
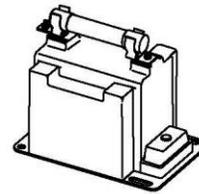
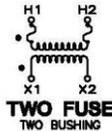
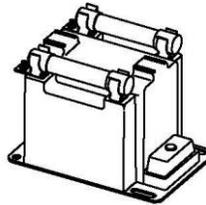
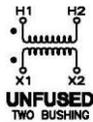
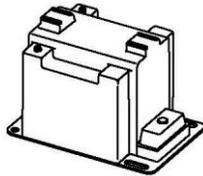
500 VA at 55°C. amb.

APPROXIMATE WEIGHT:

34 lbs.. unfused



- Primary terminals that are unfused are ¼ - 20 brass screws with one flat washer and lockwasher.
- Primary terminals that are fused are ¼ - 20 brass screws with one flat washer, lockwasher and two nuts.
- Secondary terminals are No. 10-32 brass screws with one flat washer and lockwasher.
- The core and coil assembly is encased in a plastic enclosure and vacuum encapsulated in polyurethane resin.
- Thermal burden rating is for 120 volt secondaries
- Plated steel mounting base.
- Fuses have 1" Dia Caps and 5" clip centers.
- Switchgear style is similar to fused style. No fuse or fuse clip is provided, but inserts for fuse clips are supplied.



GROUP	ONE BUSHING (b)				RFR FR (c)	CATALOG NUMBERS		
						FUSES	FUSE CLIPS ONLY (d)	SWITCHGEAR STYLE
4A	2400	20:1	120	230	PTW3-1-60-242F	PTW3-1-60-242CSorCL	PTW3-1-60-242S	
4B	4200	35:1	120	230	PTW3-1-60-422F	PTW3-1-60-422CSorCL	PTW3-1-60-422S	
4B	4800	40:1	120	230	PTW3-1-60-482F	PTW3-1-60-482CSorCL	PTW3-1-60-482S	

GROUP	TWO BUSHING (a)				CATALOG NUMBERS		
	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	UNFUSED	FUSES	FUSE CLIPS ONLY (d)	SWITCHGEAR STYLE
1	2400	20:1	120	PTW3-2-60-242	PTW3-2-60-242FF	PTW3-2-60-242CCSorCCL	PTW3-2-60-242SS
2	3300	30:1	110-50Hz	PTW3-2-60-332	PTW3-2-60-332FF	PTW3-2-60-332CCSorCCL	PTW3-2-60-332SS
2	4200	35:1	120	PTW3-2-60-422	PTW3-2-60-422FF	PTW3-2-60-422CCSorCCL	PTW3-2-60-422SS
2	4800	40:1	120	PTW3-2-60-482	PTW3-2-60-482FF	PTW3-2-60-482CCSorCCL	PTW3-2-60-482SS

- (a) Two fuse transformers should not be used for Y connections. It is preferred practice to connect one lead from each voltage transformer directly to the neutral terminal using a fuse in the line side of the primary only. By using this connection, a transformer can never be made "live" from the line side by reason of a blown fuse in the neutral side. For continuous operation, the transformer primary voltage should not exceed 110% of rated value.
- (b) Voltage transformers connected line-to-ground cannot be considered to be grounding transformers and must not be operated with the secondaries in closed delta because excessive currents may flow in the delta.
- (c) Fuse clips noted as "CCS" or "CS" accept fuses with 1" Dia. Caps and 5" clip centers. Fuse clips noted as "CCL" or "CL" accept fuses with 1.63" Dia. Caps and 5.88" clip centers
- NOTE:** It is recommended the system line-to-line voltage not exceed the transformer maximum system voltage level.

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



TTL Transformer Technologies Ltd.

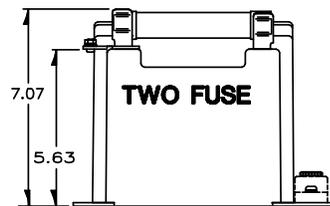
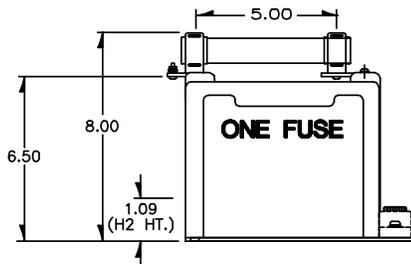
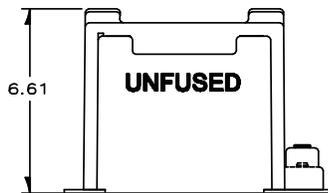
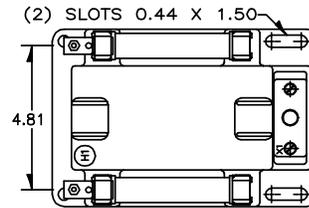
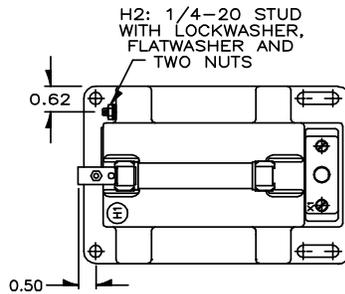
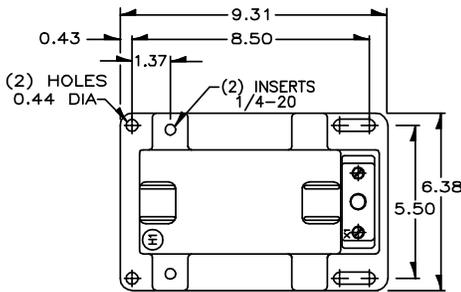


Indoor Voltage Transformer

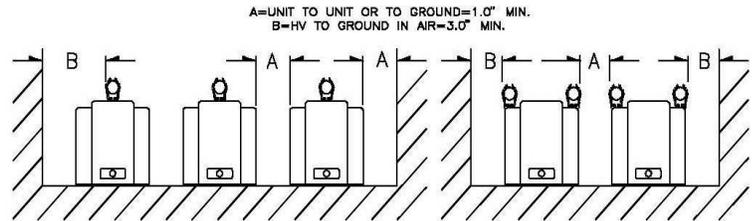
**Models PTW3-1-60
PTW3-2-60**

PTW3-2-60

PTW3-1-60



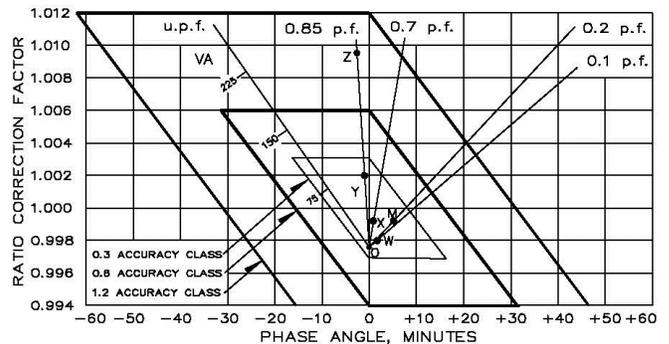
Recommended spacing is for guidance only. User needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge, high altitude; and other considerations like configuration.



FUSE FOR MODEL PTW3 TRANSFORMER	RATING VOLTS	INTERRUPTING AMPERES (SYM)	SUGGESTED RATING * CONTINUOUS AMPERES	CAP DIA. INCHES	LENGTH INCHES	CLIP CENTERS INCHES
2400:120V	5.5kV	45,000	2.0E	1.0	5.63	5.00
3300:110V	5.5kV	45,000	2.0E	1.0	5.63	5.00
4200:120V	5.5kV	45,000	1.0E	1.0	5.63	5.00
4800:120V	5.5kV	45,000	1.0E	1.0	5.63	5.00

The circle diagram can be used to predict the performance of a transformer for various loads and power factors. A convenient scale of volt-amperes is shown on the unity power factor line (u.p.f.) and commences at the zero or no-load locus. To use the diagram, measure the known V.A. and scribe an arc about the "zero" locus of a length that contains the angle of the burden power factor. The point at which the arc terminates is the error locus in phase angle minutes and ratio correction factor.

CIRCLE DIAGRAM



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Indoor Voltage Transformer

**Models PTG4-1-75
PTG4-2-75**
rev 053023

ACCURACY CLASS:

0.3 WXYZ, 1.2Z2 at 100% rated voltage with 120V based ANSI burden.
0.3 WXMY, 1.2Z at 58% rated voltage with 69.3V based ANSI burden.

FREQUENCY:

60 Hz.

MAXIMUM SYSTEM VOLTAGE:

12 kV, BIL 75kV full wave

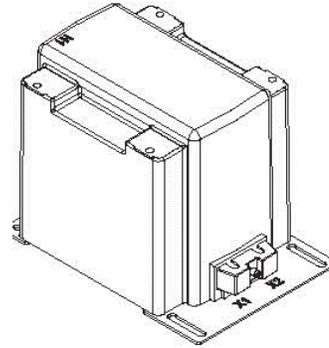
THERMAL RATING:

1000 va AT 30°C amb.

750 VA at 55°C. amb.

APPROXIMATE WEIGHT:

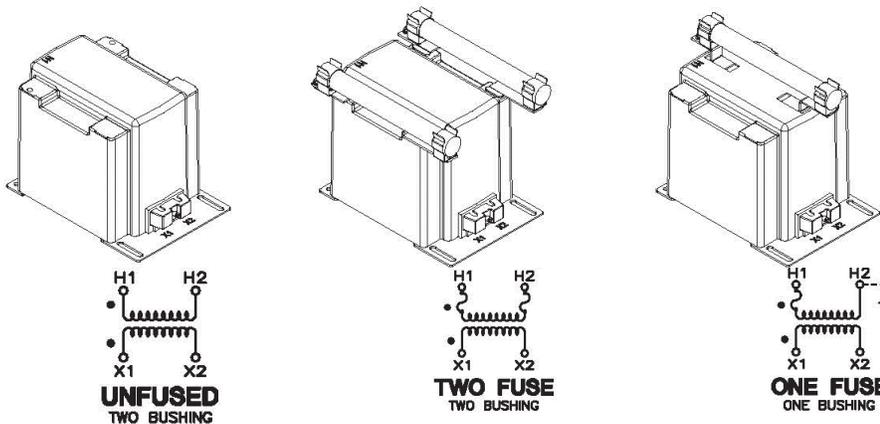
60 lbs., unfused



CERTIFICATIONS:



- Primary terminals that are unfused are 1/4-20 brass screws with one lockwasher and flat washer.
- Primary terminals that are fused are 1/4-20 brass screws with one flat washer, lockwasher and two nuts.
- Secondary terminals are No. 10-32 brass screws with one flat washer and lockwasher.
- The transformers are tested for partial discharge to Canadian Standards CAN 3-C13-M83. This test can also be carried out to IEC requirements if requested.
- The core and coil assembly is vacuum encapsulated in polyurethane resin.
- Thermal burden rating is for 120 volt secondaries
- Plated steel mounting base.
- Fuses have 1.63" Dia Caps and 11.50" clip centers.
- Switchgear style is similar to fused style. No fuse or fuse clip is provided, but inserts for fuse clips are supplied.
- A test cord is provided with each unit.



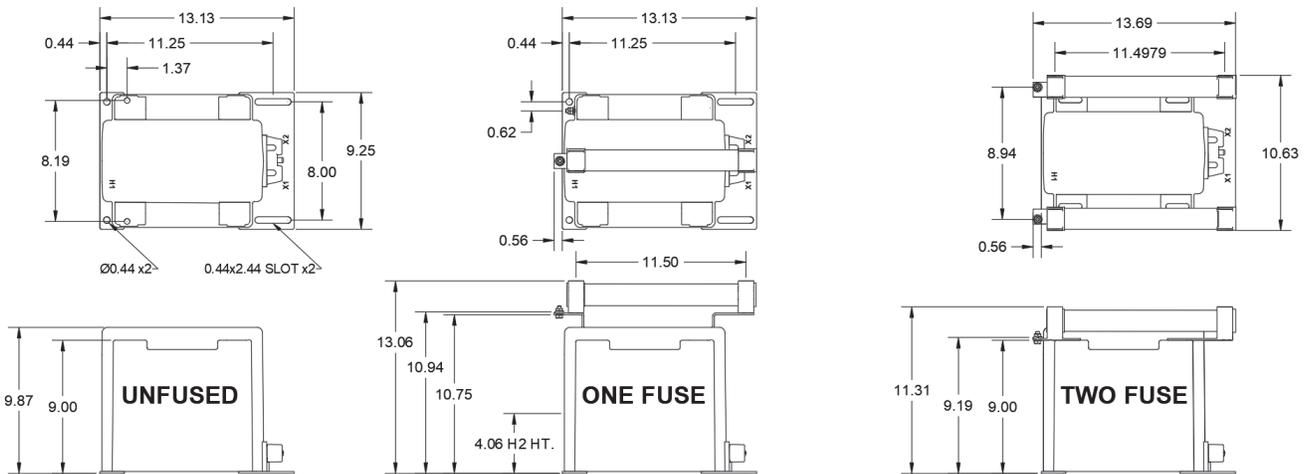
GROUP	PRIMARY VOLTAGE	ONE BUSHING(b)			R FR (c)	FUSES	CATALOG NUMBERS	
		RATIO	SECONDARY VOLTAGE	FUSE CLIPS ONLY			SWITCHGEAR STYLE	
4A	4200	35:1	120	65	PTG4-1-75-422F	PTG4-1-75-422C	PTG4-1-75-422S	
4A	4800	40:1	120	65	PTG4-1-75-482F	PTG4-1-75-482C	PTG4-1-75-482S	
4B	6600	60:1	110-50Hz	65	PTG4-1-75-662F	PTG4-1-75-662C	PTG4-1-75-662S	
4B	7200	60:1	120	65	PTG4-1-75-722F	PTG4-1-75-722C	PTG4-1-75-722S	
4B	8400	70:1	120	65	PTG4-1-75-842F	PTG4-1-75-842C	PTG4-1-75-842S	
4B	11000	100:1	110-50Hz	65	PTG4-1-75-113F	PTG4-1-75-113C	PTG4-1-75-113S	
4B	12000	100:1	120	65	PTG4-1-75-123F	PTG4-1-75-123C	PTG4-1-75-123S	

GROUP	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	TWO BUSHING(a)			
				UNFUSED	FUSES	FUSE CLIPS ONLY	SWITCHGEAR STYLE
1	4200	35:1	120	PTG4-2-75-422	PTG4-2-75-422FF	PTG4-2-75-422CC	PTG4-2-75-422SS
1	4800	40:1	120	PTG4-2-75-482	PTG4-2-75-482FF	PTG4-2-75-482CC	PTG4-2-75-482SS
2	6600	60:1	110-50Hz	PTG4-2-75-662	PTG4-2-75-662FF	PTG4-2-75-662CC	PTG4-2-75-662SS
2	7200	60:1	120	PTG4-2-75-722	PTG4-2-75-722FF	PTG4-2-75-722CC	PTG4-2-75-722SS
2	8400	70:1	120	PTG4-2-75-842	PTG4-2-75-842FF	PTG4-2-75-842CC	PTG4-2-75-842SS
2	11000	100:1	110-50Hz	PTG4-2-75-113	PTG4-2-75-113FF	PTG4-2-75-113CC	PTG4-2-75-113SS
2	12000	100:1	120	PTG4-2-75-123	PTG4-2-75-123FF	PTG4-2-75-123CC	PTG4-2-75-123SS

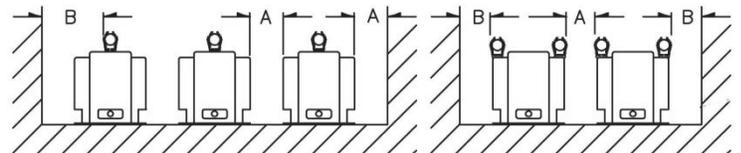
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



- (a) Two fuse transformers should not be used for Y connections. It is preferred practice to connect one lead from each voltage transformer directly to the neutral terminal using a fuse in the line side of the primary only. By using this connection, a transformer can never be made "live" from the line side by reason of a blown fuse in the neutral side. For continuous operation, the transformer primary voltage should not exceed 110% of rated value.
- (b) Voltage transformers connected line-to-ground cannot be considered to be grounding transformers and must not be operated with the secondaries in closed delta because excessive currents may flow in the delta.
- (c) Possibility of ferroresonance should be considered.

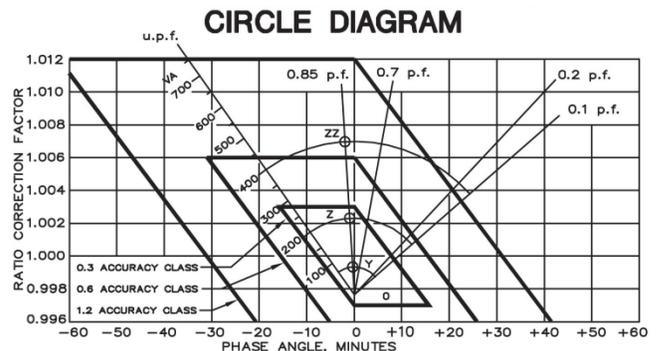


Recommended spacing is for guidance only. User needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge, high altitude; and other considerations like configuration.



FUSE FOR MODEL PTG4 TRANSFORMER	RATING VOLTS	INTERRUPTING AMPERES (SYM)	SUGGESTED RATING * CONTINUOUS AMPERES	CAP DIA. INCHES	LENGTH INCHES	CLIP CENTERS INCHES
4200:120V	12 kV	50,000	2.0E	0.812	10	9.5
4800:120V	12 kV	50,000	2.0E	0.812	10	9.5
6600:110V	12 kV	50,000	1.0E	0.812	10	9.5
7200:120V	12 kV	50,000	1.0E	0.812	10	9.5
8400:120V	12 kV	50,000	1.0E	0.812	10	9.5
11000:110V	12 kV	50,000	0.5E	0.812	10	9.5
12000:120V	12 kV	50,000	0.5E	0.812	10	9.5

The circle diagram can be used to predict the performance of a transformer for various loads and power factors. A convenient scale of volt-amperes is shown on the unity power factor line (u.p.f.) and commences at the zero or no-load locus. To use the diagram, measure the known V.A. and scribe an arc about the "zero" locus of a length that contains the angle of the burden power factor. The point at which the arc terminates is the error locus in phase angle minutes and ratio correction factor.



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Indoor Voltage Transformer

**Models PTG4T-1-75
PTG4T-2-75 rev 53023**

ACCURACY CLASS:

0.3 WXY, 1.2Z at 100% rated voltage with 120V based ANSI burden.
0.3 WXY, 1.2Z at 58% rated voltage with 69.3V based ANSI burden.

FREQUENCY:

60 Hz.

MAXIMUM SYSTEM VOLTAGE:

12 kV, BIL 75kV full wave

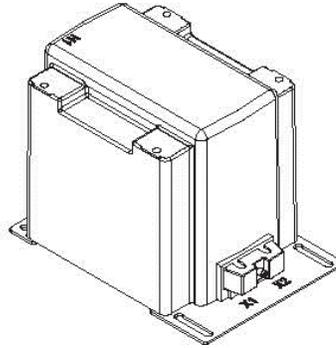
THERMAL RATING:

1000 va AT 30°C amb.

750 VA at 55°C. amb.

APPROXIMATE WEIGHT:

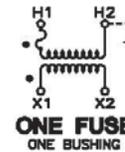
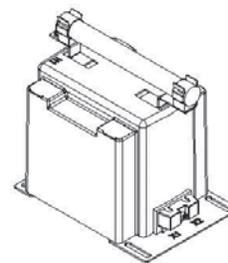
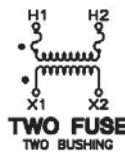
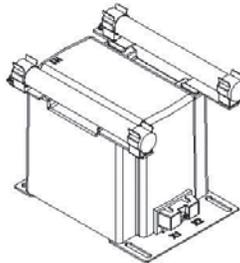
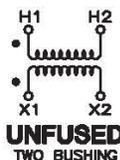
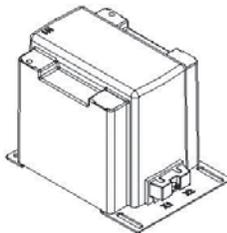
60 lbs., unfused



CERTIFICATIONS:



- Primary terminals that are unfused are 1/4-20 brass screws with one lockwasher and flat washer.
- Primary terminals that are fused are 1/4-20 brass screws with one flat washer, lockwasher and two nuts.
- Secondary terminals are No. 10-32 brass screws with one flat washer and lockwasher.
- The transformers are tested for partial discharge to Canadian Standards CAN 3-C13-M83. This test can also be carried out to IEC requirements if requested.
- The core and coil assembly is vacuum encapsulated in polyurethane resin.
- Thermal burden rating is for 120 volt secondaries
- Plated steel mounting base.
- Fuses have 0.81" Dia Caps and 9.5" clip centers.
- Switchgear style is similar to fused style. No fuse or fuse clip is provided, but inserts for fuse clips are supplied.
- A test cord is provided with each unit.

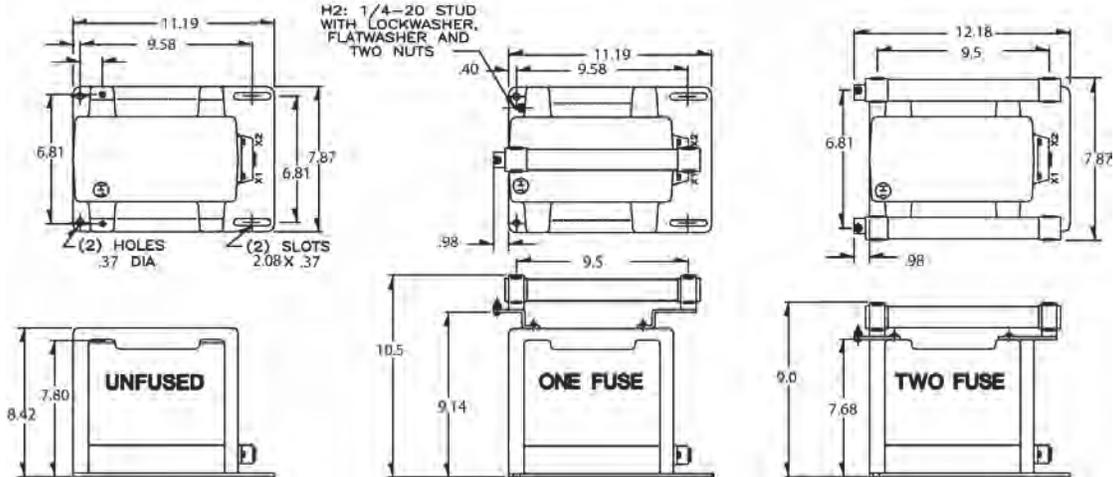


ONE BUSHING(b)					CATALOG NUMBERS		
GROUP	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	R FR (c)	FUSES	FUSE CLIPS ONLY	SWITCHGEAR STYLE
4A	4200	35:1	120	65	PTG4T-1-75-422F	PTG4T-1-75-422C	PTG4T-1-75-422S
4A	4800	40:1	120	65	PTG4T-1-75-482F	PTG4T-1-75-482C	PTG4T-1-75-482S
4B	6600	60:1	110-50Hz	65	PTG4T-1-75-662F	PTG4T-1-75-662C	PTG4T-1-75-662S
4B	7200	60:1	120	65	PTG4T-1-75-722F	PTG4T-1-75-722C	PTG4T-1-75-722S
4B	8400	70:1	120	65	PTG4T-1-75-842F	PTG4T-1-75-842C	PTG4T-1-75-842S
4B	11000	100:1	110-50Hz	65	PTG4T-1-75-113F	PTG4T-1-75-113C	PTG4T-1-75-113S
4B	12000	100:1	120	65	PTG4T-1-75-123F	PTG4T-1-75-123C	PTG4T-1-75-123S

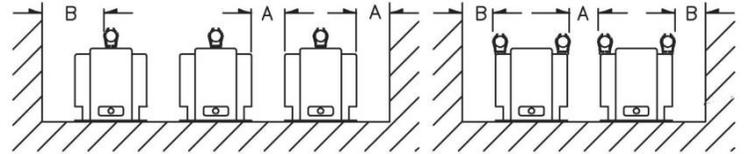
TWO BUSHING(a)					CATALOG		
GROUP	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	UNFUSED	FUSES	FUSE CLIPS ONLY	SWITCHGEAR STYLE
1	4200	35:1	120	PTG4T-2-75-422	PTG4T-2-75-422FF	PTG4T-2-75-422CC	PTG4T-2-75-422SS
1	4800	40:1	120	PTG4T-2-75-482	PTG4T-2-75-482FF	PTG4T-2-75-482CC	PTG4T-2-75-482SS
2	6600	60:1	110-50Hz	PTG4T-2-75-662	PTG4T-2-75-662FF	PTG4T-2-75-662CC	PTG4T-2-75-662SS
2	7200	60:1	120	PTG4T-2-75-722	PTG4T-2-75-722FF	PTG4T-2-75-722CC	PTG4T-2-75-722SS
2	8400	70:1	120	PTG4T-2-75-842	PTG4T-2-75-842FF	PTG4T-2-75-842CC	PTG4T-2-75-842SS
2	11000	100:1	110-50Hz	PTG4T-2-75-113	PTG4T-2-75-113FF	PTG4T-2-75-113CC	PTG4T-2-75-113SS
2	12000	100:1	120	PTG4T-2-75-123	PTG4T-2-75-123FF	PTG4T-2-75-123CC	PTG4T-2-75-123SS

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- (a) Two fuse transformers should not be used for Y connections. It is preferred practice to connect one lead from each voltage transformer directly to the neutral terminal using a fuse in the line side of the primary only. By using this connection, a transformer can never be made "live" from the line side by reason of a blown fuse in the neutral side. For continuous operation, the transformer primary voltage should not exceed 110% of rated value.
- (b) Voltage transformers connected line-to-ground cannot be considered to be grounding transformers and must not be operated with the secondaries in closed delta because excessive currents may flow in the delta.
- (c) Possibility of ferroresonance should be considered.

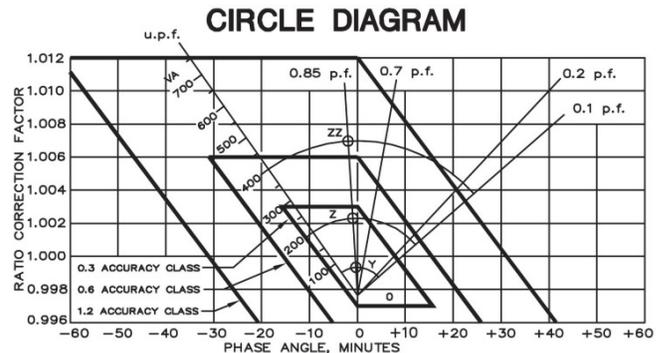


Recommended spacing is for guidance only. User needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge, high altitude; and other considerations like configuration.



FUSE FOR MODEL PTG4 TRANSFORMER	RATING VOLTS	INTERRUPTING AMPERES (SYM)	SUGGESTED RATING * CONTINUOUS AMPERES	CAP DIA. INCHES	LENGTH INCHES	CLIP CENTERS INCHES
4200:120V	12 kV	50,000	2.0E	0.812	10	9.5
4800:120V	12 kV	50,000	2.0E	0.812	10	9.5
6600:110V	12 kV	50,000	1.0E	0.812	10	9.5
7200:120V	12 kV	50,000	1.0E	0.812	10	9.5
8400:120V	12 kV	50,000	1.0E	0.812	10	9.5
11000:110V	12 kV	50,000	0.5E	0.812	10	9.5
12000:120V	12 kV	50,000	0.5E	0.812	10	9.5

The circle diagram can be used to predict the performance of a transformer for various loads and power factors. A convenient scale of volt-amperes is shown on the unity power factor line (u.p.f.) and commences at the zero or no-load locus. To use the diagram, measure the known V.A. and scribe an arc about the "zero" locus of a length that contains the angle of the burden power factor. The point at which the arc terminates is the error locus in phase angle minutes and ratio correction factor.



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Indoor Voltage Transformer

**Models PTW4-1-75
PTW4-2-75 rev 051323**

ACCURACY CLASS:

0.3 WXY, 1.2Z at 100% rated voltage with 120V based ANSI burden.
0.3 WXY, 1.2Z at 58% rated voltage with 69.3V based ANSI burden.

FREQUENCY:

60 Hz.

MAXIMUM SYSTEM VOLTAGE:

12 kV, BIL 75kV full wave

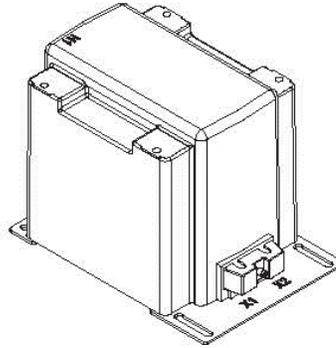
THERMAL RATING:

1500 va AT 30°C amb.

1000 VA at 55°C. amb.

APPROXIMATE WEIGHT:

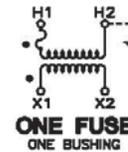
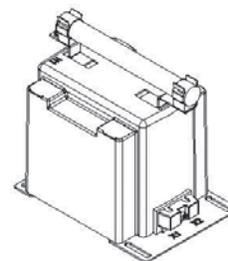
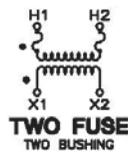
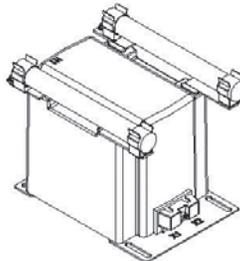
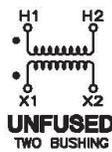
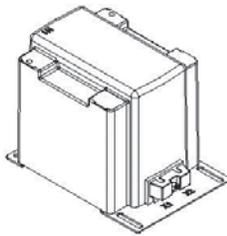
85 lbs., unfused



CERTIFICATIONS:



- Primary terminals that are unfused are 1/4-20 brass screws with one lockwasher and flat washer.
- Primary terminals that are fused are 1/4-20 brass screws with one flat washer, lockwasher and two nuts.
- Secondary terminals are No. 10-32 brass screws with one flat washer and lockwasher.
- The transformers are tested for partial discharge to Canadian Standards CAN 3-C13-M83. This test can also be carried out to IEC requirements if requested.
- The core and coil assembly is vacuum encapsulated in polyurethane resin.
- Thermal burden rating is for 120 volt secondaries
- Plated steel mounting base.
- Fuses have 1.63" Dia Caps and 11.50" clip centers.
- Switchgear style is similar to fused style. No fuse or fuse clip is provided, but inserts for fuse clips are supplied.
- A test cord is provided with each unit.

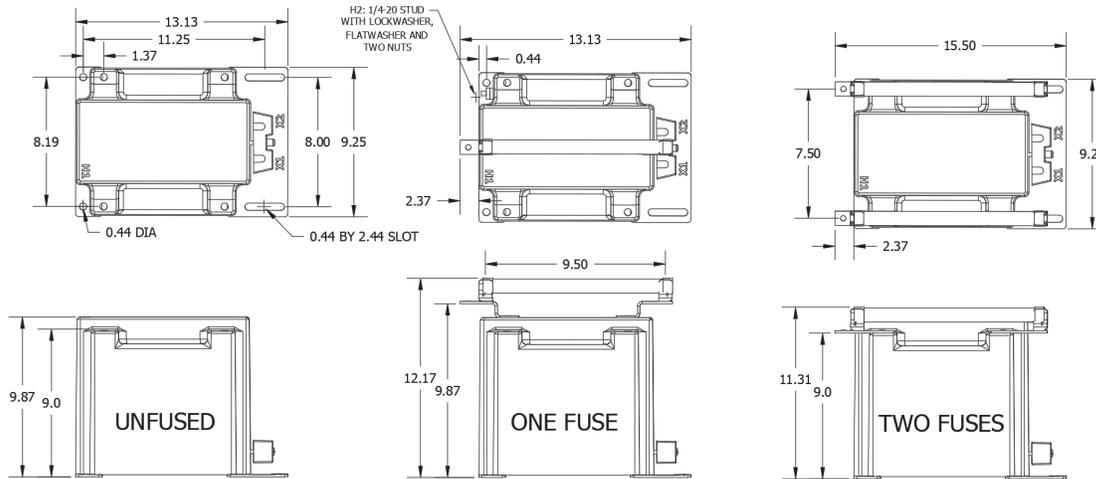


ONE BUSHING(b)					CATALOG NUMBERS		
GROUP	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	R FR (c)	FUSES	FUSE CLIPS ONLY	SWITCHGEAR STYLE
4A	4200	35:1	120	65	PTW4-1-75-422F	PTW4-1-75-422C	PTW4-1-75-422S
4A	4800	40:1	120	65	PTW4-1-75-482F	PTW4-1-75-482C	PTW4-1-75-482S
4B	6600	60:1	110-50Hz	65	PTW4-1-75-662F	PTW4-1-75-662C	PTW4-1-75-662S
4B	7200	60:1	120	65	PTW4-1-75-722F	PTW4-1-75-722C	PTW4-1-75-722S
4B	8400	70:1	120	65	PTW4-1-75-842F	PTW4-1-75-842C	PTW4-1-75-842S
4B	11000	100:1	110-50Hz	65	PTW4-1-75-113F	PTW4-1-75-113C	PTW4-1-75-113S
4B	12000	100:1	120	65	PTW4-1-75-123F	PTW4-1-75-123C	PTW4-1-75-123S

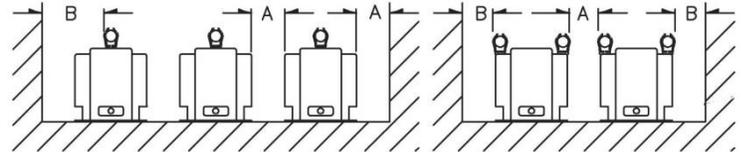
TWO BUSHING(a)					CATALOG		
GROUP	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	UNFUSED	FUSES	FUSE CLIPS ONLY	SWITCHGEAR STYLE
1	4200	35:1	120	PTW4-2-75-422	PTW4-2-75-422FF	PTW4-2-75-422CC	PTW4-2-75-422SS
1	4800	40:1	120	PTW4-2-75-482	PTW4-2-75-482FF	PTW4-2-75-482CC	PTW4-2-75-482SS
2	6600	60:1	110-50Hz	PTW4-2-75-662	PTW4-2-75-662FF	PTW4-2-75-662CC	PTW4-2-75-662SS
2	7200	60:1	120	PTW4-2-75-722	PTW4-2-75-722FF	PTW4-2-75-722CC	PTW4-2-75-722SS
2	8400	70:1	120	PTW4-2-75-842	PTW4-2-75-842FF	PTW4-2-75-842CC	PTW4-2-75-842SS
2	11000	100:1	110-50Hz	PTW4-2-75-113	PTW4-2-75-113FF	PTW4-2-75-113CC	PTW4-2-75-113SS
2	12000	100:1	120	PTW4-2-75-123	PTW4-2-75-123FF	PTW4-2-75-123CC	PTW4-2-75-123SS

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- (a) Two fuse transformers should not be used for Y connections. It is preferred practice to connect one lead from each voltage transformer directly to the neutral terminal using a fuse in the line side of the primary only. By using this connection, a transformer can never be made "live" from the line side by reason of a blown fuse in the neutral side. For continuous operation, the transformer primary voltage should not exceed 110% of rated value.
- (b) Voltage transformers connected line-to-ground cannot be considered to be grounding transformers and must not be operated with the secondaries in closed delta because excessive currents may flow in the delta.
- (c) Possibility of ferroresonance should be considered.

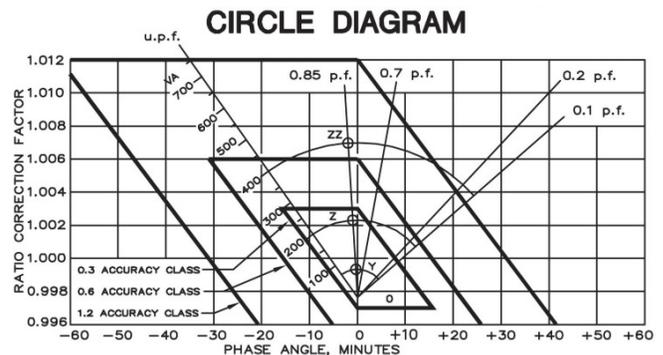


Recommended spacing is for guidance only. User needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge, high altitude; and other considerations like configuration.



FUSE FOR MODEL PTW4 TRANSFORMER	RATING VOLTS	INTERRUPTING AMPERES (SYM)	SUGGESTED RATING * CONTINUOUS AMPERES	CAP DIA. INCHES	LENGTH INCHES	CLIP CENTERS INCHES
4200:120V	12 kV	50,000	2.0E	0.812	10	9.5
4800:120V	12 kV	50,000	2.0E	0.812	10	9.5
6600:110V	12 kV	50,000	1.0E	0.812	10	9.5
7200:120V	12 kV	50,000	1.0E	0.812	10	9.5
8400:120V	12 kV	50,000	1.0E	0.812	10	9.5
11000:110V	12 kV	50,000	0.5E	0.812	10	9.5
12000:120V	12 kV	50,000	0.5E	0.812	10	9.5

The circle diagram can be used to predict the performance of a transformer for various loads and power factors. A convenient scale of volt-amperes is shown on the unity power factor line (u.p.f.) and commences at the zero or no-load locus. To use the diagram, measure the known V.A. and scribe an arc about the "zero" locus of a length that contains the angle of the burden power factor. The point at which the arc terminates is the error locus in phase angle minutes and ratio correction factor.



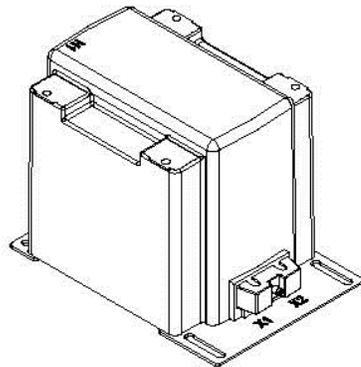
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Indoor Voltage Transformer

**Models PTG5-1-110
PTG5-2-110**

CERTIFICATIONS:



ACCURACY CLASS:

0.3 WXYZ, 1.2ZZ at 100% rated voltage with 120V based ANSI burden; 0.3 WXY, 1.2Z at 58% rated voltage with 69.3V based ANSI burden

FREQUENCY:

60 Hz.

MAXIMUM SYSTEM VOLTAGE:

15.5kV, BIL 110kV full wave

THERMAL RATING:

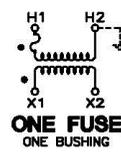
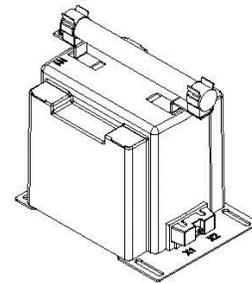
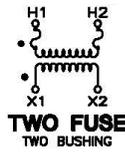
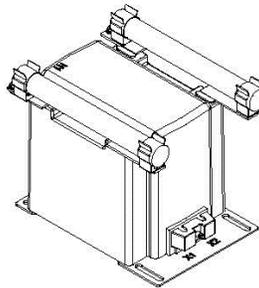
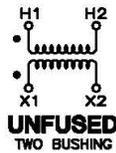
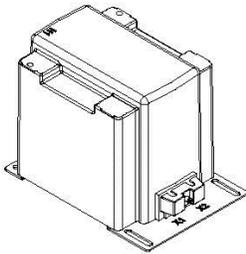
1500 VA at 30°C. amb.

1000 VA at 55°C. amb.

APPROXIMATE WEIGHT:

85 lbs., unfused

- Primary terminals that are unfused are ¼ - 20 brass screws with one flat washer and lockwasher, unless otherwise specified.
- Primary terminals that are fused are ¼ - 20 brass screws with one flat washer, lockwasher and two nuts.
- Secondary terminals are No. 10-32 brass screws with one flat washer and lockwasher.
- The core and coil assembly is vacuum encapsulated in polyurethane resin.
- Thermal burden rating is for 120 volt secondaries
- Plated steel mounting base.
- Fuses have 1.63" Dia Caps and 11.50" clip centers.
- Switchgear style is similar to fused style. No fuse or fuse clip is provided, but inserts for fuse clips are supplied.
- A test cord is provided with each unit.

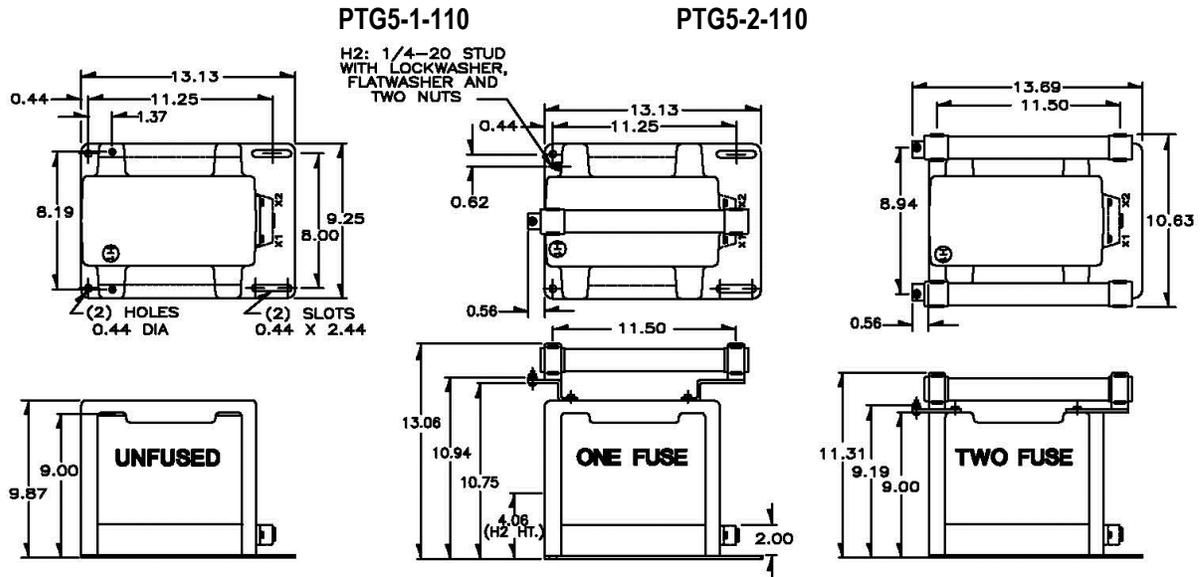


GROUP	ONE BUSHING (b)			RFR FR (c)	CATALOG NUMBERS		
					FUSES	FUSE CLIPS ONLY	SWITCHGEAR STYLE
4A	7200	60:1	120	65	PTG5-1-110-722F	PTG5-1-110-722C	PTG5-1-110-722S
4A	8400	70:1	120	65	PTG5-1-110-842F	PTG5-1-110-842C	PTG5-1-110-842S
4B	11000	100:1	110-50Hz	65	PTG5-1-110-113F	PTG5-1-110-113C	PTG5-1-110-113S
4B	12000	100:1	120	65	PTG5-1-110-123F	PTG5-1-110-123C	PTG5-1-110-123S
4B	13200	110:1	120	65	PTG5-1-110-1322F	PTG5-1-110-1322C	PTG5-1-110-1322S
4B	14400	120:1	120	65	PTG5-1-110-1442F	PTG5-1-110-1442C	PTG5-1-110-1442S

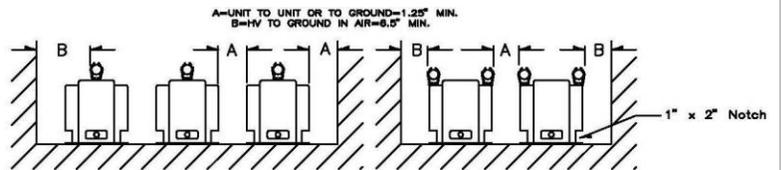
GROUP	TWO BUSHING (a)				CATALOG NUMBERS			
	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	UNFUSED	FUSES	FUSE CLIPS ONLY	SWITCHGEAR STYLE	
1	7200	60:1	120	PTG5-2-110-722	PTG5-2-110-722FF	PTG5-2-110-722CC	PTG5-2-110-722SS	
1	8400	70:1	120	PTG5-2-110-842	PTG5-2-110-842FF	PTG5-2-110-842CC	PTG5-2-110-842SS	
2	11000	100:1	110-50Hz	PTG5-2-110-113	PTG5-2-110-113FF	PTG5-2-110-113CC	PTG5-2-110-113SS	
2	12000	100:1	120	PTG5-2-110-123	PTG5-2-110-123FF	PTG5-2-110-123CC	PTG5-2-110-123SS	
2	13200	110:1	120	PTG5-2-110-1322	PTG5-2-110-1322FF	PTG5-2-110-1322CC	PTG5-2-110-1322SS	
2	14400	120:1	120	PTG5-2-110-1442	PTG5-2-110-1442FF	PTG5-2-110-1442CC	PTG5-2-110-1442SS	

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- (a) Two fuse transformers should not be used for Y connections. It is preferred practice to connect one lead from each voltage transformer directly to the neutral terminal using a fuse in the line side of the primary only. By using this connection, a transformer can never be made "live" from the line side by reason of a blown fuse in the neutral side. For continuous operation, the transformer primary voltage should not exceed 100% of rated value.
- (b) Voltage transformers connected line-to-ground cannot be considered to be grounding transformers and must not be operated with the secondaries in closed delta because excessive currents may flow in the delta.
- (c) Possibility of ferroresonance should be considered.

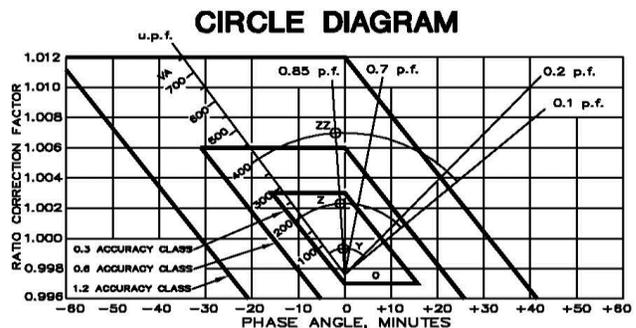


Recommended spacing is for guidance only. User needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge, high altitude; and other considerations like configuration.



FUSE FOR MODEL PTG5 TRANSFORMER	RATING VOLTS	INTERRUPTING AMPERES (SYM)	SUGGESTED RATING * CONTINUOUS AMPERES	CAP DIA. INCHES	LENGTH INCHES	CLIP CENTERS INCHES
7200:120V	15.5kV	80,000	1.0E	1.63	13	11.50
8400:120V	15.5kV	80,000	1.0E	1.63	13	11.50
11000:110V	15.5kV	80,000	0.5E	1.63	13	11.50
12000:120V	15.5kV	80,000	0.5E	1.63	13	11.50
13200:120V	15.5kV	80,000	0.5E	1.63	13	11.50
14400:120V	15.5kV	80,000	0.5E	1.63	13	11.50

The circle diagram can be used to predict the performance of a transformer for various loads and power factors. A convenient scale of volt-amperes is shown on the unity power factor line (u.p.f.) and commences at the zero or no-load locus. To use the diagram, measure the known V.A. and scribe an arc about the "zero" locus of a length that contains the angle of the burden power factor. The point at which the arc terminates is the error locus in phase angle minutes and ratio correction factor.



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Indoor Voltage Transformer

**Models PTW5-1-110
PTW5-2-110**

Manufactured to meet the requirements of ANSI/IEEE C57.13

ACCURACY CLASS:

0.3 WXYZ, 1.2ZZ at 100% rated voltage with 120V based ANSI burden; 0.3 WXY, 1.2Z at 58% rated voltage with 69.3V based ANSI burden

FREQUENCY:

60 Hz.

MAXIMUM SYSTEM VOLTAGE:

15.5kV, BIL 110kV full wave

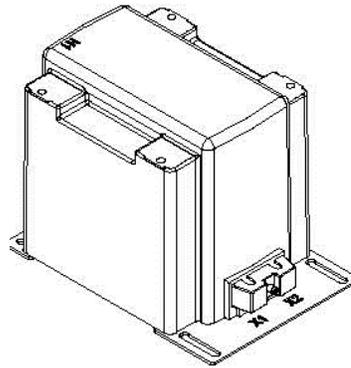
THERMAL RATING:

1500 VA at 30°C. amb.

1000 VA at 55°C. amb.

APPROXIMATE WEIGHT:

85 lbs., unfused

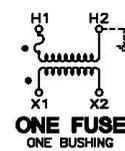
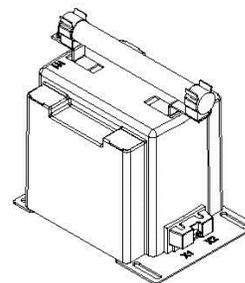
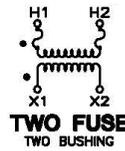
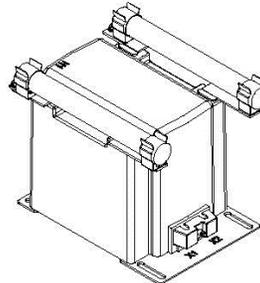
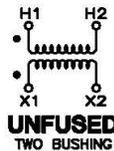
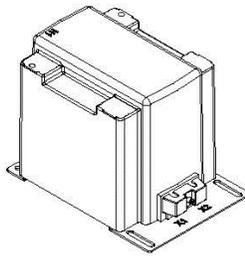


CERTIFICATIONS:



- Primary terminals that are unfused are ¼ - 20 brass screws with one flat washer and lockwasher, unless otherwise specified.
- Primary terminals that are fused are ¼ - 20 brass screws with one flat washer, lockwasher and two nuts.
- Secondary terminals are No. 10-32 brass screws with one flat washer and lockwasher.
- The core and coil assembly is vacuum encapsulated in polyurethane resin.

- Thermal burden rating is for 120 volt secondaries
- Plated steel mounting base.
- Fuses have 1.63" Dia Caps and 11.50" clip centers.
- Switchgear style is similar to fused style. No fuse or fuse clip is provided, but inserts for fuse clips are supplied.



GROUP	ONE BUSHING (b)			RFR FR (c)	CATALOG NUMBERS		
					FUSES	FUSE CLIPS ONLY	SWITCHGEAR STYLE
4A	7200	60:1	120	65	PTW5-1-110-722F	PTW5-1-110-722C	PTW5-1-110-722S
4A	8400	70:1	120	65	PTW5-1-110-842F	PTW5-1-110-842C	PTW5-1-110-842S
4B	11000	100:1	110-50Hz	65	PTW5-1-110-113F	PTW5-1-110-113C	PTW5-1-110-113S
4B	12000	100:1	120	65	PTW5-1-110-123F	PTW5-1-110-123C	PTW5-1-110-123S
4B	13200	110:1	120	65	PTW5-1-110-1322F	PTW5-1-110-1322C	PTW5-1-110-1322S
4B	14400	120:1	120	65	PTW5-1-110-1442F	PTW5-1-110-1442C	PTW5-1-110-1442S

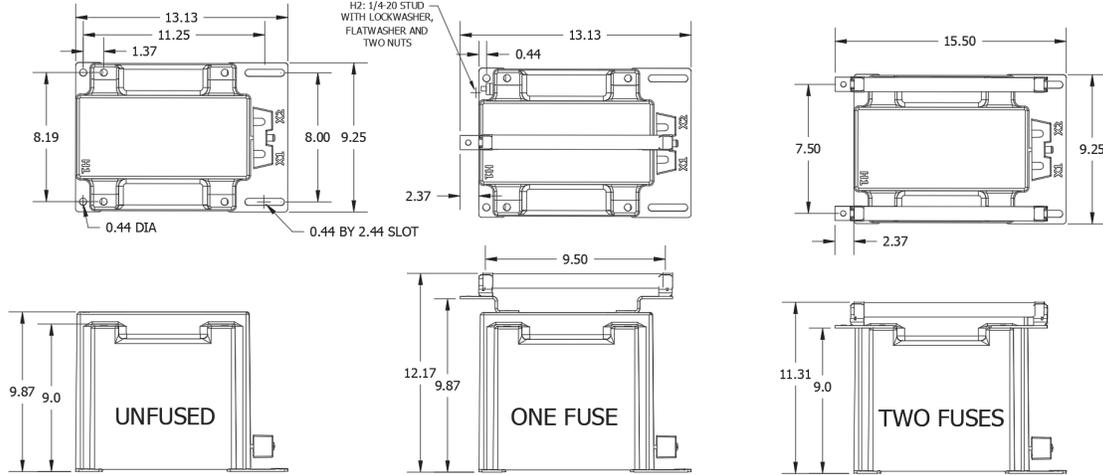
GROUP	TWO BUSHING (a)				CATALOG NUMBERS			
	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	UNFUSED	FUSES	FUSE CLIPS ONLY	SWITCHGEAR STYLE	
1	7200	60:1	120	PTW5-2-110-722	PTW5-2-110-722FF	PTW5-2-110-722CC	PTW5-2-110-722SS	
1	8400	70:1	120	PTW5-2-110-842	PTW5-2-110-842FF	PTW5-2-110-842CC	PTW5-2-110-842SS	
2	11000	100:1	110-50Hz	PTW5-2-110-113	PTW5-2-110-113FF	PTW5-2-110-113CC	PTW5-2-110-113SS	
2	12000	100:1	120	PTW5-2-110-123	PTW5-2-110-123FF	PTW5-2-110-123CC	PTW5-2-110-123SS	
2	13200	110:1	120	PTW5-2-110-1322	PTW5-2-110-1322FF	PTW5-2-110-1322CC	PTW5-2-110-1322SS	
2	14400	120:1	120	PTW5-2-110-1442	PTW5-2-110-1442FF	PTW5-2-110-1442CC	PTW5-2-110-1442SS	

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

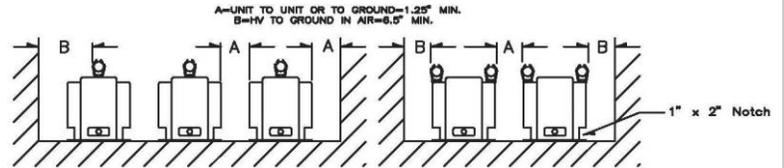
- (a) Two fuse transformers should not be used for Y connections. It is preferred practice to connect one lead from each voltage transformer directly to the neutral terminal using a fuse in the line side of the primary only. By using this connection, a transformer can never be made "live" from the line side by reason of a blown fuse in the neutral side. For continuous operation, the transformer primary voltage should not exceed 100% of rated value.
- (b) Voltage transformers connected line-to-ground cannot be considered to be grounding transformers and must not be operated with the secondaries in closed delta because excessive currents may flow in the delta.
- (c) Possibility of ferroresonance should be considered.

PTW5-1-110

PTW5-2-110

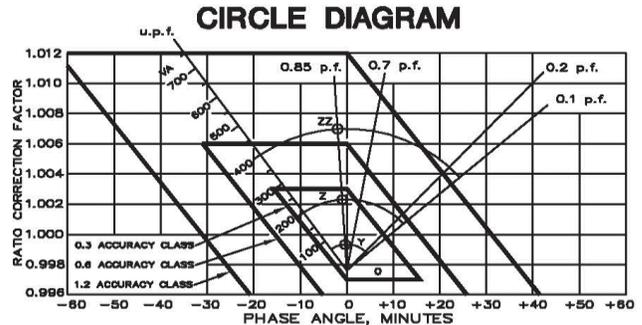


Recommended spacing is for guidance only. User needs to set appropriate values to assure performance for: high potential test; impulse test; high humidity; partial discharge, high altitude; and other considerations like configuration.



FUSE FOR MODEL PTW5 TRANSFORMER	RATING VOLTS	INTERRUPTING AMPERES (SYM)	SUGGESTED RATING * CONTINUOUS AMPERES	CAP DIA. INCHES	LENGTH INCHES	CLIP CENTERS INCHES
7200:120V	15.5kV	80,000	1.0E	1.63	13	11.50
8400:120V	15.5kV	80,000	1.0E	1.63	13	11.50
11000:110V	15.5kV	80,000	0.5E	1.63	13	11.50
12000:120V	15.5kV	80,000	0.5E	1.63	13	11.50
13200:120V	15.5kV	80,000	0.5E	1.63	13	11.50
14400:120V	15.5kV	80,000	0.5E	1.63	13	11.50

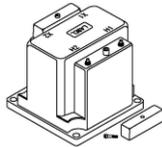
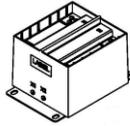
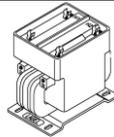
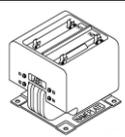
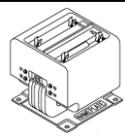
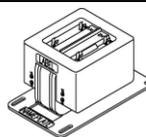
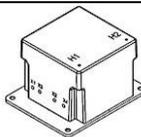
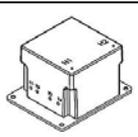
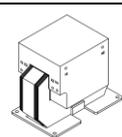
The circle diagram can be used to predict the performance of a transformer for various loads and power factors. A convenient scale of volt-amperes is shown on the unity power factor line (u.p.f.) and commences at the zero or no-load locus. To use the diagram, measure the known V.A. and scribe an arc about the "zero" locus of a length that contains the angle of the burden power factor. The point at which the arc terminates is the error locus in phase angle minutes and ratio correction factor.



VOLTAGE TRANSFORMERS

For Metering and Instrumentation

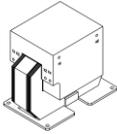
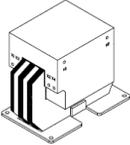
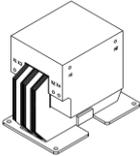
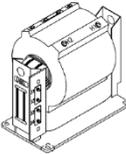
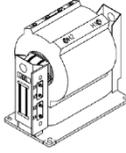
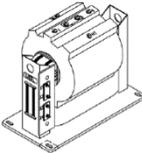
MV Control Power Transformers

MODEL CPT3-45-0.3		Page 8-4
MODEL CPT3-60-0.5		Page 8-5
MODEL CPT3-60-1.0		Page 8-6
MODEL CPT3-60-1.5		Page 8-7
MODEL CPT3-60-2		Page 8-8
MODEL CPT3-60-3		Page 8-9
MODEL CPT3-60-05-6		Page 8-10
MODEL CPT3-60-05-5		Page 8-11
MODEL CPT3-60-075-6		Page 8-12

VOLTAGE TRANSFORMERS

For Metering and Instrumentation

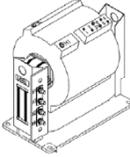
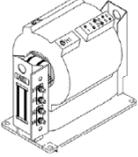
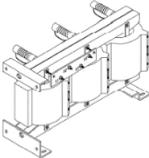
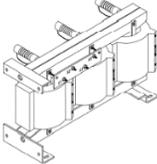
MV Control Power Transformers

MODEL CPT3-60-075-5		Page 8-13
MODEL CPT3-60-2-6		Page 8-14
MODEL CPT3-60-2-5		Page 8-15
MODEL CPT3-60-5 MODEL CPT5-95-5		Page 8-16
MODEL CPT3-60-10 MODEL CPT5-95-10		Page 8-17
MODEL CPT3-60-15 MODEL CPT5-95-15		Page 8-18
MODEL CPTS3-60-5 MODEL CPTS5-95-5		Page 8-19

VOLTAGE TRANSFORMERS

For Metering and Instrumentation

MV Control Power Transformers

MODEL CPTS3-60-10 MODEL CPTS5-95-10		Page 8-20
MODEL CPTS3-60-15 MODEL CPTS5-95-15		Page 8-21
MODEL 3CPT3-60-15 MODEL 3CPT5-95-15		Page 8-22
MODEL 3CPT3-60-30 MODEL 3CPT5-95-30 MODEL 3CPT3-60-45 MODEL 3CPT5-95-45		Page 8-24



Control Power Transformer

Model CPT3-45-0.3

rev 03182021

CERTIFICATIONS:



APPLICATION:

To provide control power in distribution equipment and motor starters. May also be used for indicating and recording voltmeters.

FREQUENCY:

See below.

ACCURACY:

+ 1% at 25 VA.

INSULATION LEVEL:

5 kV, 45 kV BIL. full wave

THERMAL RATING:

At 30°C. amb., see below

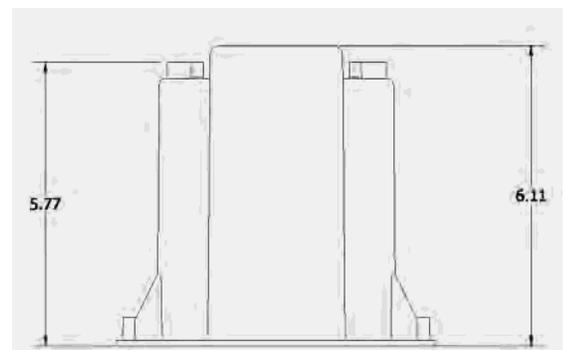
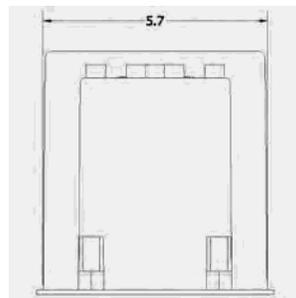
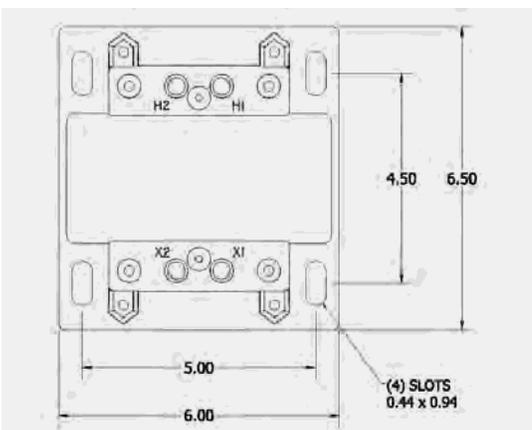
APPROXIMATE WEIGHT:

18 lbs.

Model	CPT3-45-0.3
Width	6.00
Height	6.11
Depth	6.50

- Primary fuses are not supplied, but are recommended. Use a 5kV class 0.5E fuse for all ratings 4160V and above, and 1E fuse for all ratings 3300V and below.
- Primary and secondary terminals are brass screws No. 10-32 with on flat washer and lockwasher.
- The transformer winding is vacuum encapsulated in a polyurethane resin.
- Plated steel mounting base.
- For indoor use.

CATALOG NUMBER	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	THERMAL RATING
CPT3-45-0.3-841	840	7:1	120	300VA
CPT3-45-0.3-122	1200	10:1	120	300VA
CPT3-45-0.3-242	2400	20:1	120	300VA
CPT3-45-0.3-332	3300	20:1	120	200VA
CPT3-45-0.3-4161	4160	34.7:1	110	200VA
CPT3-45-0.3-482	4800	40:1	120	200VA



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA



Control Power Transformer

Model CPT3-60-0.5

rev 03182021

CERTIFICATIONS:



APPLICATION:

To provide control power in distribution equipment and motor starters. May also be used for indicating and recording voltmeters.

FREQUENCY:

60 Hz.

ACCURACY:

+ 1% at 100 VA.

INSULATION LEVEL:

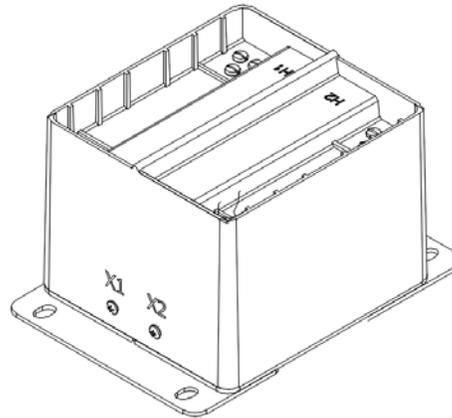
5 kV, 60 kV BIL. full wave

THERMAL RATING:

At 30°C. amb., see below

APPROXIMATE WEIGHT:

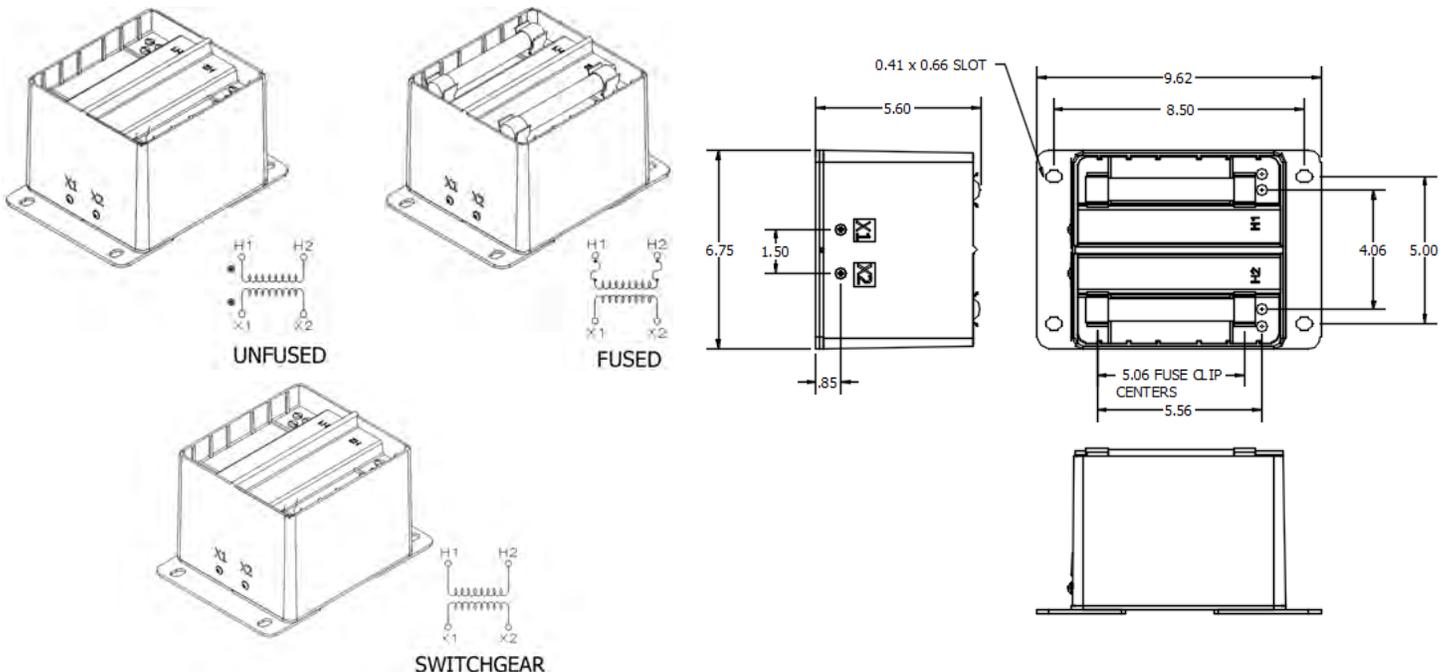
22 lbs.



- Suggested fuse rating: See below, 50kA RMS Symmetrical. Fuse diameter is 0.81 inches. Higher fuse ratings available at users option.
- Primary and secondary terminals are brass screws No. 10-32 with on flat washer and lockwasher.
- The transformer winding is vacuum encapsulated in a polyurethane resin.
- Plated steel mounting base is removable. CPT can be mounted with base as shown, with base rotated 90 degrees, or without a base.
- For indoor use.

PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	THERMAL RATING	CATALOG NUMBERS				SUGGESTED FUSE RATING CONTINUOUS AMPERES
				UNFUSED (a)	FUSED	FUSE CLIPS ONLY	SWITCHGEAR	
2400	20:1	120	500VA	CPT3-60-0.5-242	CPT3-60-0.5-242FF	CPT3-60-0.5-242CC	CPT3-60-0.5-242SS	2.0E
3300	30:1	110-50Hz	450VA	CPT3-60-0.5-332	CPT3-60-0.5-332FF	CPT3-60-0.5-332CC	CPT3-60-0.5-332SS	1.0E
4200	35:1	120	500VA	CPT3-60-0.5-422	CPT3-60-0.5-422FF	CPT3-60-0.5-422CC	CPT3-60-0.5-422SS	1.0E
4800	40:1	120	450VA	CPT3-60-0.5-482	CPT3-60-0.5-482FF	CPT3-60-0.5-482CC	CPT3-60-0.5-482SS	1.0E
6600	60:1	110-50Hz	300VA	CPT3-60-0.5-662	CPT3-60-0.5-662FF	CPT3-60-0.5-662CC	CPT3-60-0.5-662SS	0.5E
7200	60:1	120	300VA	CPT3-60-0.5-722	CPT3-60-0.5-722FF	CPT3-60-0.5-722CC	CPT3-60-0.5-722SS	0.5E

(a) FUSES MUST BE MOUNTED SEPARATELY



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

CERTIFICATIONS:



APPLICATION:

To provide control power in distribution equipment and motor starters.

FREQUENCY:

See below

INSULATION LEVEL:

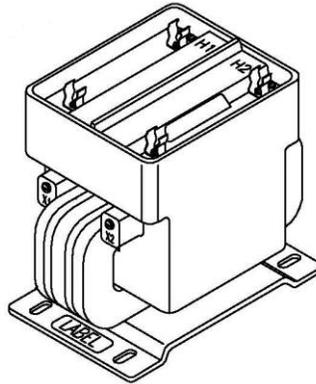
5 kV, 60 kV BIL, full wave

THERMAL RATING:

At 30°C. amb., see below.

APPROXIMATE WEIGHT:

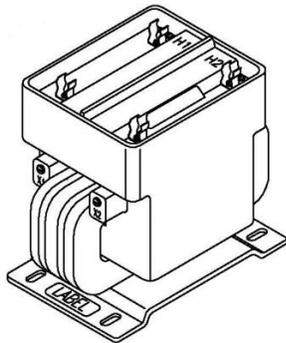
40 lbs.



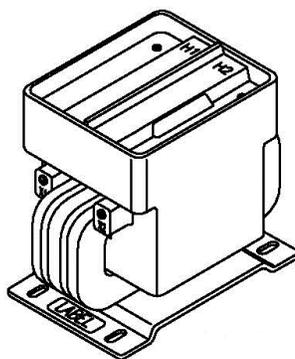
- An optional clear molded cover is available for added safety when desired.
- Primary and secondary terminals are brass screws No. 10-32 with one flat washer and lockwasher.
- The transformer winding is vacuum encapsulated in polyurethane resin.
- Plated steel mounting base.
- For indoor use.

CATALOG NUMBER	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	FREQUENCY	THERMAL RATING	PRIMARY FUSE
CPT3-60-1.0-242FF	2400V	20:1	120V	60Hz	1.0kVA	2E
CPT3-60-1.0-332FF	3300V	30:1	110V	50Hz	0.8kVA	2E
CPT3-60-1.0-4161FF	4160V	34.7:1	120V	60Hz	1.0kVA	2E
CPT3-60-1.0-482FF	4800V	40:1	120V	60Hz	1.0kVA	2E
CPT3-60-1.0-662FF	6600V	60:1	110V	50Hz	0.6kVA	1E
CPT3-60-1.0-722FF	7200V	60:1	120V	60Hz	0.6kVA	1E

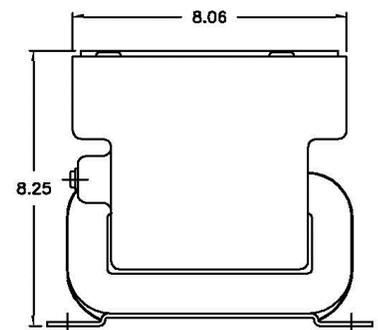
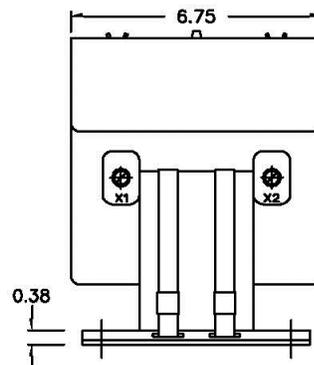
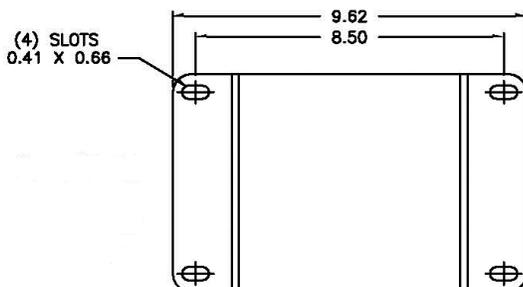
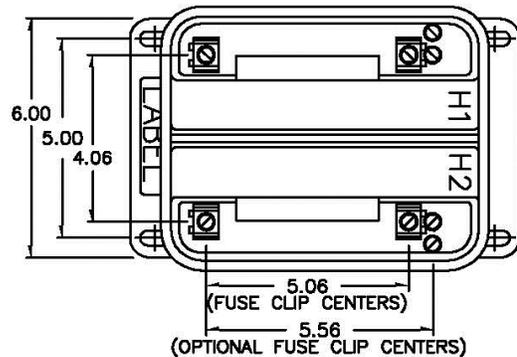
*For fuse clips only, change FF to CC



FUSED STYLE



UNFUSED STYLE



BASE PLATE



Control Power Transformer

Model CPT3-60-1.5

CERTIFICATIONS:



APPLICATION:

To provide control power in distribution equipment and motor starters

FREQUENCY:

See below

INSULATION LEVEL:

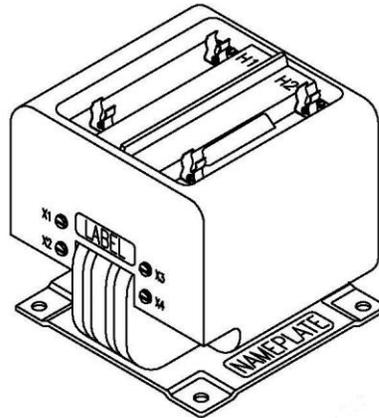
5 kV, 60 kV BIL. full wave

THERMAL RATING:

1.5 kVA at 30°C. amb.

APPROXIMATE WEIGHT:

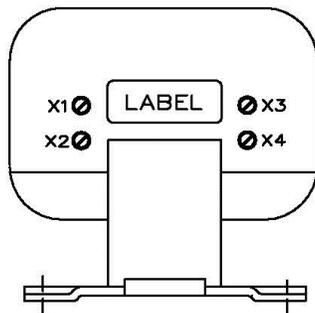
54 lbs.



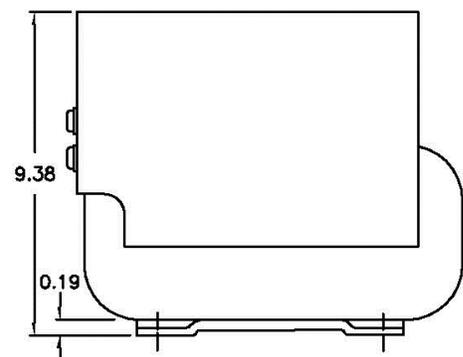
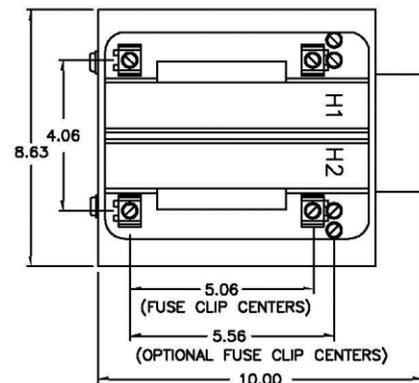
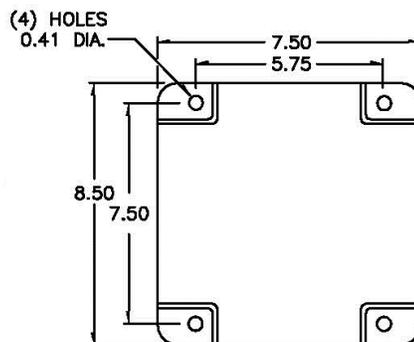
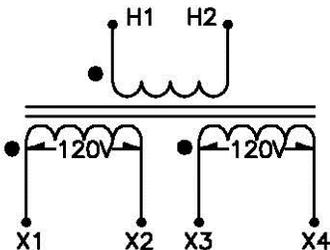
- Primary terminals are brass screws No. 10-32 with one flat washer and lockwasher.
- Secondary terminals are brass screws No. 10-32 with one flat washer and lockwasher.
- The transformer winding is vacuum encapsulated in polyurethane resin.
- Plated steel mounting base
- For indoor use.

CATALOG NUMBER	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	FREQUENCY	PRIMARY FUSE
CPT3-60-1.5-242FF	2400V	20:1	120/240V	60Hz	3E
CPT3-60-1.5-332FF	3300V	30:1	110/220V	50Hz	2E
CPT3-60-1.5-4161FF	4160V	34.7:1	120/240V	60Hz	2E
CPT3-60-1.5-482FF	4800V	40.1	120/240V	60Hz	2E

*For fuse clips only, change FF to CC



CONNECTION DIAGRAM





Control Power Transformer

Model CPT3-60-2

CERTIFICATIONS:



APPLICATION:

To provide control power in distribution equipment and motor starters

FREQUENCY:

See below

INSULATION LEVEL:

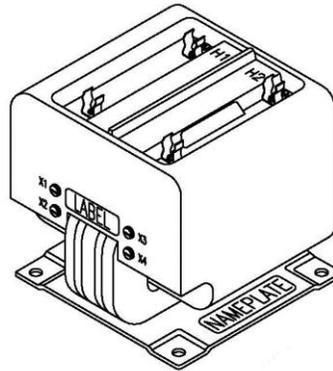
5 kV, 60 kV BIL, full wave

THERMAL RATING:

At 30°C. amb., see below

APPROXIMATE WEIGHT:

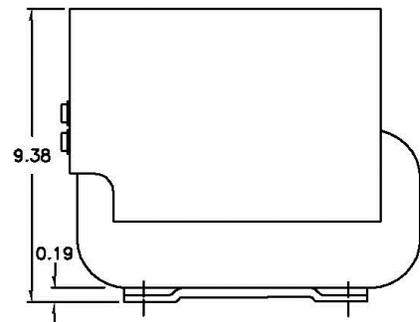
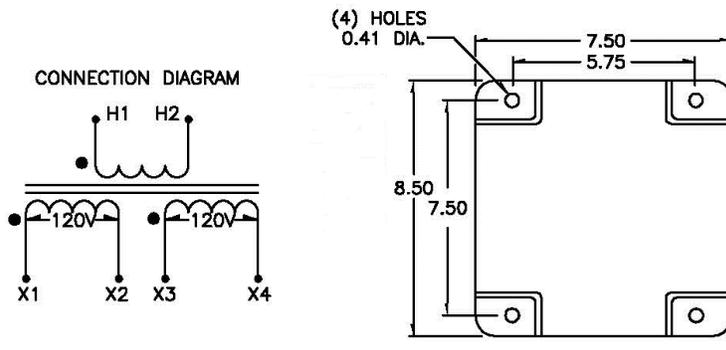
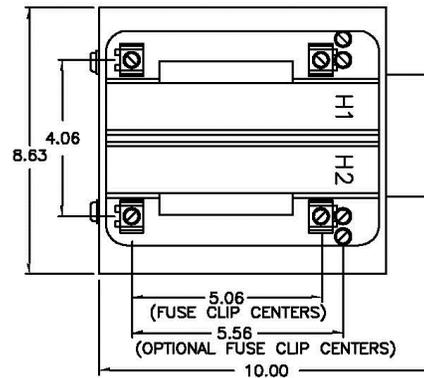
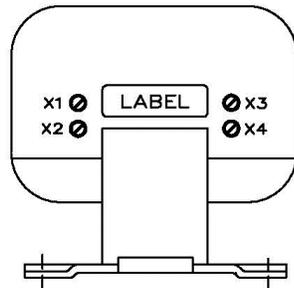
63 lbs.



- Primary terminals are brass screws No. 10-32 with one flat washer and lockwasher.
- Secondary terminals are brass screws No. 10-32 with one flat washer and lockwasher.
- The transformer winding is vacuum encapsulated in polyurethane resin
- Plated steel mounting base
- For indoor use

CATALOG NUMBER	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	FREQUENCY	THERMAL RATING	PRIMARY FUSE
CPT3-60-2-242FF	2400V	20:1	120/240V	60Hz	2.0kVA	3E
CPT3-60-2-332FF	3300V	30:1	110/220V	50Hz	1.8kVA	2E
CPT3-60-2-4161FF	4160V	34.7:1	120/240V	60Hz	2.0kVA	2E
CPT3-60-2-482FF	4800V	40:1	120/240V	60Hz	2.0kVA	2E

*For fuse clips only, change FF to CC



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

APPLICATION:

To provide control power in distribution equipment and motor starters

FREQUENCY:

60 Hz.

INSULATION LEVEL:

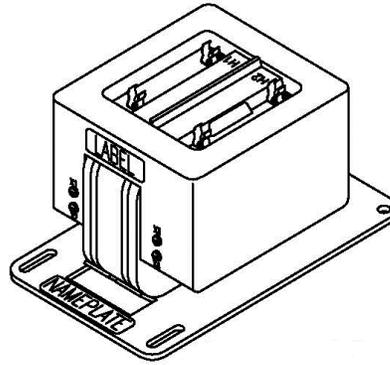
5 kV, 60 kV BIL. full wave

THERMAL RATING:

3 kVA at 30°C. amb.

APPROXIMATE WEIGHT:

85 lbs.

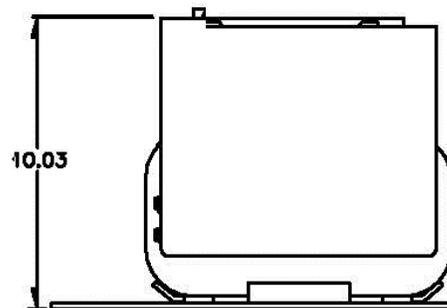
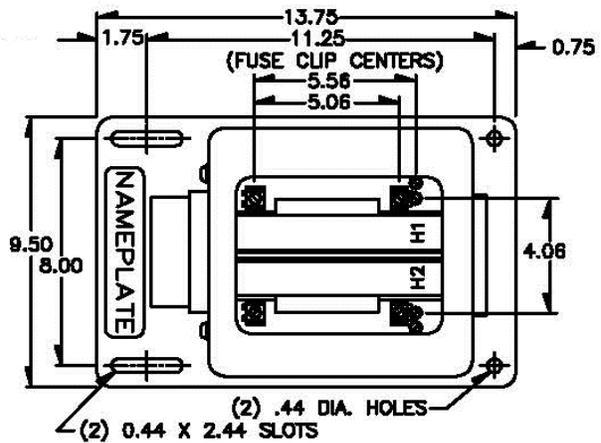
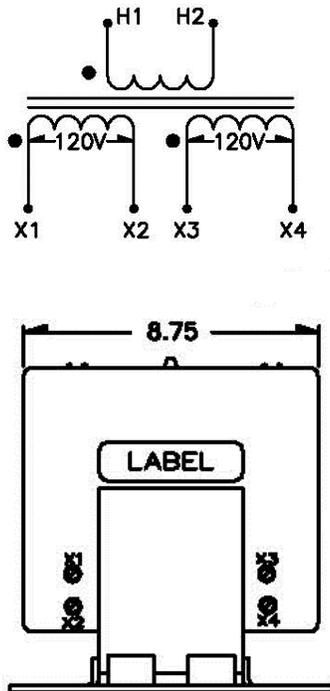


CERTIFICATIONS:



CATALOG NUMBER	PRIMARY VOLTAGE	RATIO AT 120 V	SECONDARY VOLTAGE	CATALOG NUMBER	PRIMARY FUSE
CPT3-60-3-242-XXX	2400	20:1	120/240	CPT3-60-3-242FF	5E
CPT3-60-3-4161-XXX	4160	34.7:1	120/240	CPT3-60-3-4161FF	3E
CPT3-60-3-482-XXX	4800	40:1	120/240	CPT3-60-3-482FF	3E

- Primary terminals are brass screws No. 10-32 with one flat washer and lockwasher or HV lead kit shown below.
- Secondary terminals are brass screws No. ¼ - 20 with one flat washer and lockwasher.
- The transformer winding is vacuum encapsulated in polyurethane resin.
- Plated steel mounting base
- For indoor use





Control Power Transformer

Model CPT3-60-05-6

CERTIFICATIONS:



APPLICATION:

To provide power in Motor Control centers and Distribution Switchgear

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

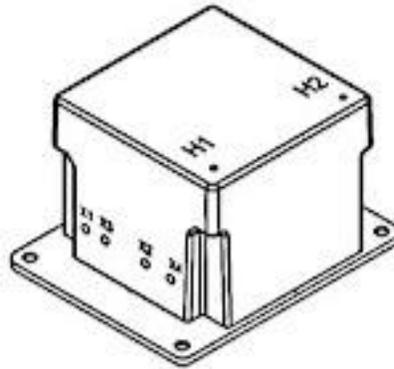
6.9 kV, 60 kV BIL. full wave

THERMAL RATING:

At 30°C. amb.

APPROXIMATE WEIGHT:

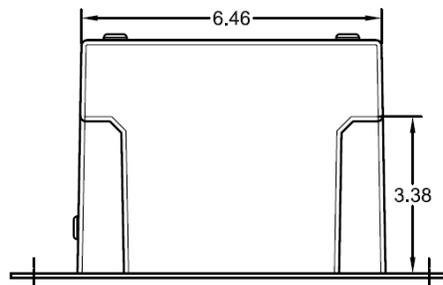
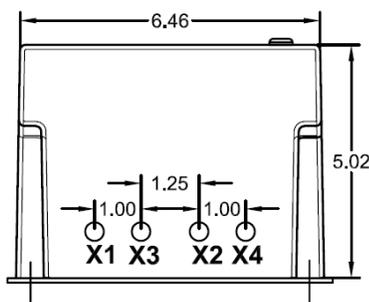
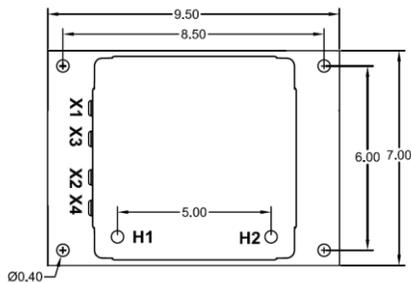
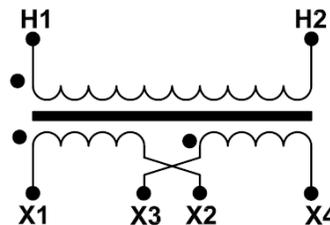
25 lbs.



CATALOG NUMBER	PRIMARY VOLTAGE	RATIO AT 120 V	SECONDARY VOLTAGE	FREQUENCY Hz	THERMAL RATING
CPT3 60 05 2400 – 6	2400	20.00	120/240	50/60	0.5 kVA
CPT3 60 05 3300 – 6	3300	27.50	120/240	50/60	0.5 kVA
CPT3 60 05 4160 – 6	4160	34.66	120/240	50/60	0.5 kVA
CPT3 60 05 4800 – 6	4800	40.00	120/240	50/60	0.5 kVA
CPT3 60 05 5000 – 6	5000	41.66	120/240	50/60	0.5 kVA
CPT3 60 05 5500 – 6	5500	45.83	120/240	50/60	0.5 kVA
CPT3 60 05 6000 – 6	6000	50.00	120/240	50/60	0.5 kVA
CPT3 60 05 6600 – 6	6600	55.00	120/240	50/60	0.5 kVA
CPT3 60 05 6900 - 6	6900	57.50	120/240	50/60	0.5 kVA

- Primary and secondary terminal are brass screws No. 10-32 with one flat washer and lockwasher.
- Transformer winding is vacuum encapsulated in polyurethane resin with temperature insulation class of 105°C
- Plated steel mounting base
- For indoor use

CONNECTION DIAGRAM



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

APPLICATION:

To provide power in Motor Control centers and Distribution Switchgear

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

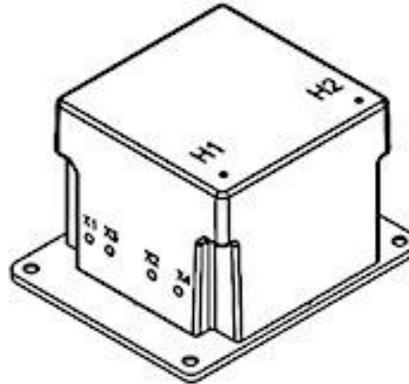
6.9 kV, 60 kV BIL. full wave

THERMAL RATING:

At 30°C. amb.

APPROXIMATE WEIGHT:

25 lbs.

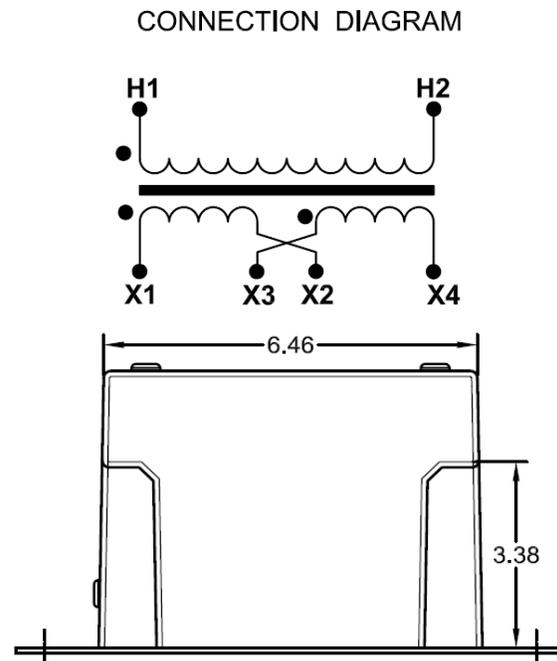
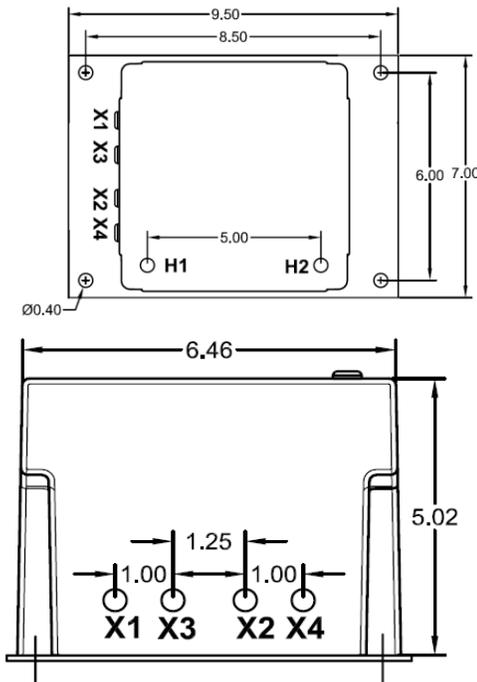


CERTIFICATIONS:



CATALOG NUMBER	PRIMARY VOLTAGE	RATIO AT 110 V	SECONDARY VOLTAGE	FREQUENCY Hz	THERMAL RATING
CPT3 60 05 2400 - 5	2400	21.81	110/220	50/60	0.5 kVA
CPT3 60 05 3300 - 5	3300	30.00	110/220	50/60	0.5 kVA
CPT3 60 05 4160 - 5	4160	37.81	110/220	50/60	0.5 kVA
CPT3 60 05 4800 - 5	4800	43.63	110/220	50/60	0.5 kVA
CPT3 60 05 5000 - 5	5000	45.45	110/220	50/60	0.5 kVA
CPT3 60 05 5500 - 5	5500	50.00	110/220	50/60	0.5 kVA
CPT3 60 05 6000 - 5	6000	54.54	110/220	50/60	0.5 kVA
CPT3 60 05 6600 - 5	6600	60.00	110/220	50/60	0.5 kVA
CPT3 60 05 6900 - 5	6900	62.72	110/220	50/60	0.5 kVA

- Primary and secondary terminal are brass screws No. 10-32 with one flat washer and lockwasher.
- Transformer winding is vacuum encapsulated in polyurethane resin with temperature insulation class of 105°C
- Plated steel mounting base
- For indoor use





TTL Transformer Technologies Ltd.

Control Power Transformer

Model CPT3-60-075-6

CERTIFICATIONS:



APPLICATION:

To provide power in Motor Control centers and Distribution Switchgear

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

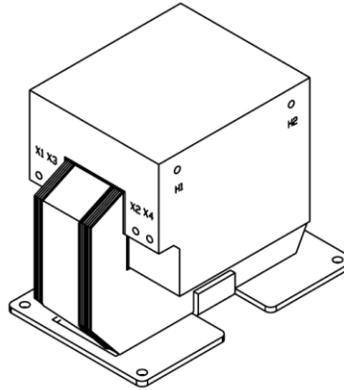
6.9 kV, 60 kV BIL. full wave

THERMAL RATING:

At 30°C. amb.

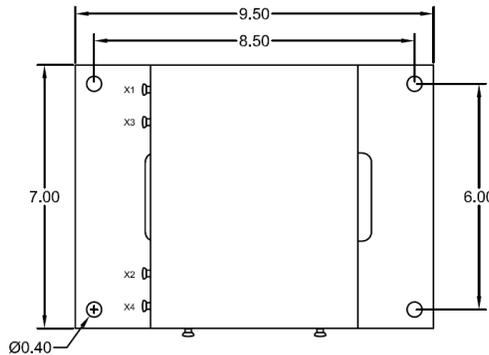
APPROXIMATE WEIGHT:

25 lbs.

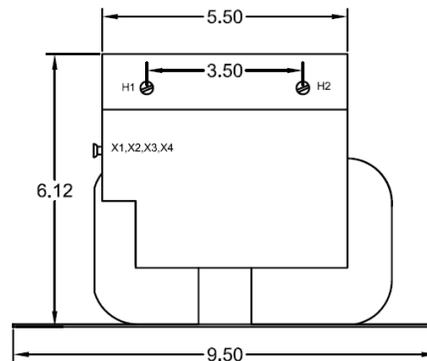
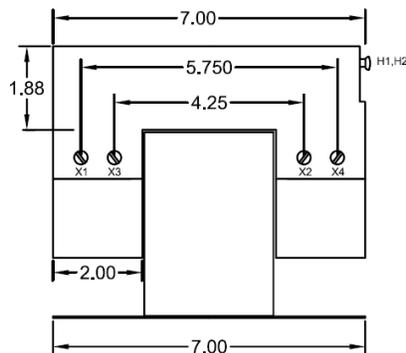
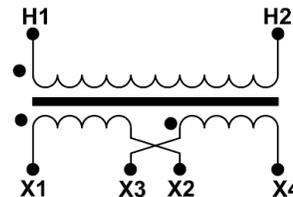


CATALOG NUMBER	PRIMARY VOLTAGE	RATIO AT 120 V	SECONDARY VOLTAGE	FREQUENCY Hz	THERMAL RATING
CPT3 60 075 2400 - 6	2400	20.00	120/240	50/60	0.75 kVA
CPT3 60 075 3300 - 6	3300	27.50	120/240	50/60	0.75 kVA
CPT3 60 075 4160 - 6	4160	34.66	120/240	50/60	0.75 kVA
CPT3 60 075 4800 - 6	4800	40.00	120/240	50/60	0.75 kVA
CPT3 60 075 5000 - 6	5000	41.66	120/240	50/60	0.75 kVA
CPT3 60 075 5500 - 6	5500	45.83	120/240	50/60	0.75 kVA
CPT3 60 075 6000 - 6	6000	50.00	120/240	50/60	0.75 kVA
CPT3 60 075 6600 - 6	6600	55.00	120/240	50/60	0.75 kVA
CPT3 60 075 6900 - 6	6900	57.50	120/240	50/60	0.75 kVA

- Primary and secondary terminal are brass screws No. 10-32 with one flat washer and lockwasher.
- Transformer winding is vacuum encapsulated in polyurethane resin with temperature insulation class of 105°C
- Plated steel mounting base
- For indoor use



CONNECTION DIAGRAM



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

CERTIFICATIONS:



APPLICATION:

To provide power in Motor Control centers and Distribution Switchgear

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

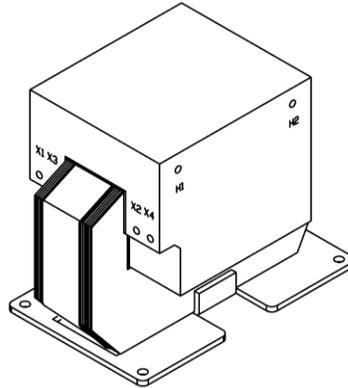
6.9 kV, 60 kV BIL. full wave

THERMAL RATING:

At 30°C. amb.

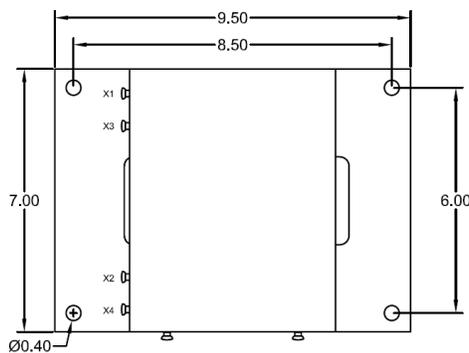
APPROXIMATE WEIGHT:

27 lbs.

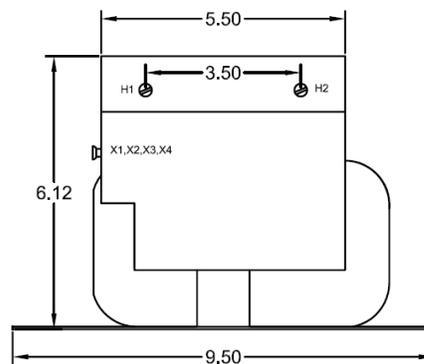
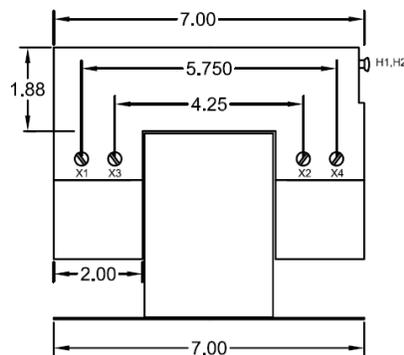
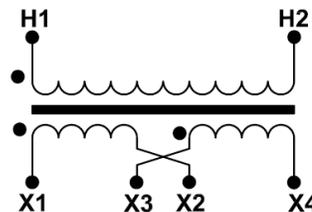


CATALOG NUMBER	PRIMARY VOLTAGE	RATIO AT 110 V	SECONDARY VOLTAGE	FREQUENCY Hz	THERMAL RATING
CPT3 60 075 2400 – 5	2400	21.81	110/220	50/60	0.75 kVA
CPT3 60 075 3300 – 5	3300	30.00	110/220	50/60	0.75 kVA
CPT3 60 075 4160 – 5	4160	37.81	110/220	50/60	0.75 kVA
CPT3 60 075 4800 – 5	4800	43.63	110/220	50/60	0.75 kVA
CPT3 60 075 5000 – 5	5000	45.45	110/220	50/60	0.75 kVA
CPT3 60 075 5500 – 5	5500	50.00	110/220	50/60	0.75 kVA
CPT3 60 075 6000 – 5	6000	54.54	110/220	50/60	0.75 kVA
CPT3 60 075 6600 – 5	6600	60.00	110/220	50/60	0.75 kVA
CPT3 60 075 6900 – 5	6900	62.72	110/220	50/60	0.75 kVA

- Primary and secondary terminal are brass screws No. 10-32 with one flat washer and lockwasher.
- Transformer winding is vacuum encapsulated in polyurethane resin with temperature insulation class of 105°C
- Plated steel mounting base
- For indoor use



CONNECTION DIAGRAM



CERTIFICATIONS:



APPLICATION:

To provide power in Motor Control centers and Distribution Switchgear

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

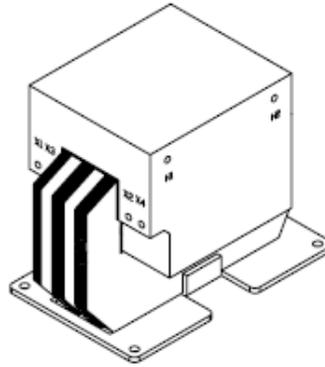
6.9 kV, 60 kV BIL, full wave

THERMAL RATING:

At 30°C. amb.

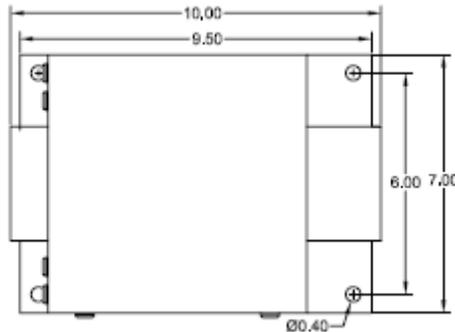
APPROXIMATE WEIGHT:

57 lbs.

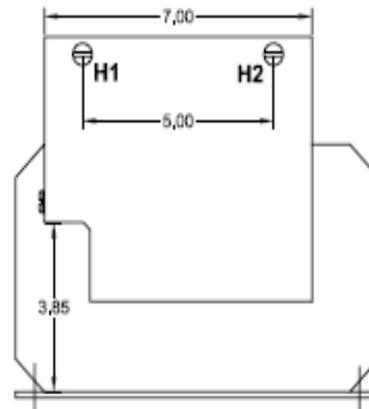
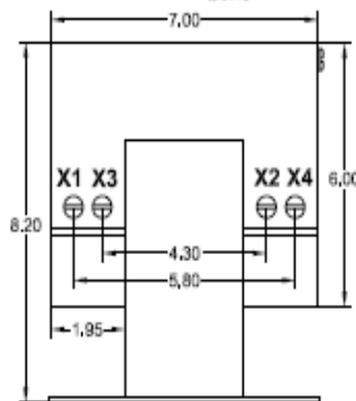
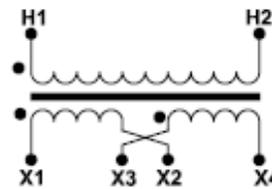


CATALOG NUMBER	PRIMARY VOLTAGE	RATIO AT 120 V	SECONDARY VOLTAGE	FREQUENCY Hz	THERMAL RATING
CPT3 60 2 2400 - 6	2400	20.00	120/240	50/60	2.0 kVA
CPT3 60 2 3300 - 6	3300	27.50	120/240	50/60	2.0 kVA
CPT3 60 2 4160 - 6	4160	34.66	120/240	50/60	2.0 kVA
CPT3 60 2 4800 - 6	4800	40.00	120/240	50/60	2.0 kVA
CPT3 60 2 5000 - 6	5000	41.66	120/240	50/60	2.0 kVA
CPT3 60 2 5500 - 6	5500	45.83	120/240	50/60	2.0 kVA
CPT3 60 2 6000 - 6	6000	50.00	120/240	50/60	2.0 kVA
CPT3 60 2 6600 - 6	6600	55.00	120/240	50/60	2.0 kVA
CPT3 60 2 6900 - 6	6900	57.50	120/240	50/60	2.0 kVA

- Primary and secondary terminal are brass screws No. 10-32 with one flat washer and lockwasher.
- Transformer winding is vacuum encapsulated in polyurethane resin with temperature insulation class of 105°C
- Plated steel mounting base
- For indoor use



CONNECTION DIAGRAM



CERTIFICATIONS:



APPLICATION:

To provide power in Motor Control centers and Distribution Switchgear

FREQUENCY:

50/60 Hz.

INSULATION LEVEL:

6.9 kV, 60 kV BIL. full wave

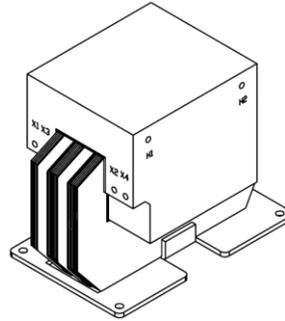
THERMAL RATING:

At 30°C. amb.

CONNECTIONS:

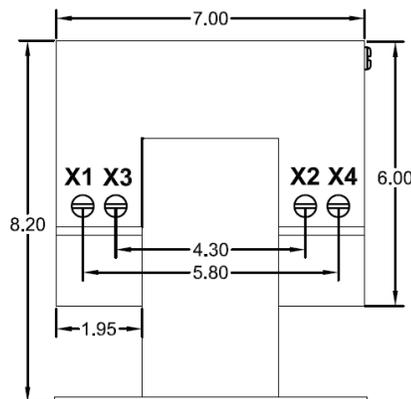
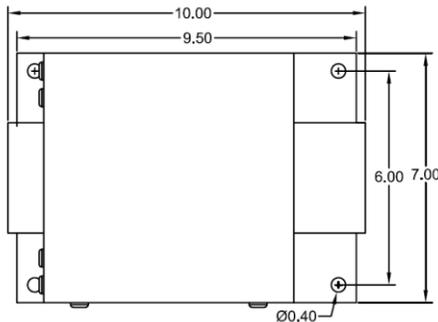
APPROXIMATE WEIGHT:

57 lbs.

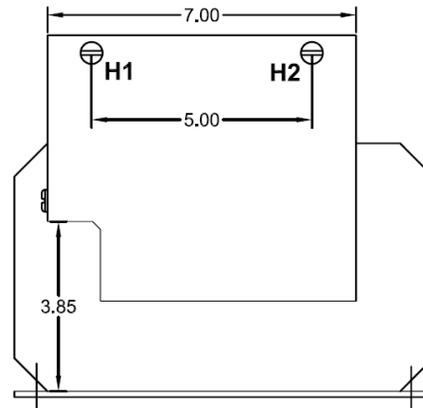
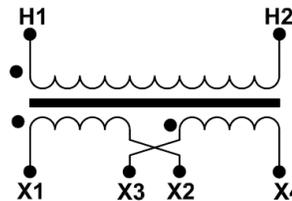


CATALOG NUMBER	PRIMARY VOLTAGE	RATIO AT 110 V	SECONDARY VOLTAGE	FREQUENCY Hz	THERMAL RATING
CPT3 60 2 2400 – 5	2400	21.81	110/220	50/60	2.0 kVA
CPT3 60 2 3300 – 5	3300	30.00	110/220	50/60	2.0 kVA
CPT3 60 2 4160 – 5	4160	37.81	110/220	50/60	2.0 kVA
CPT3 60 2 4800 – 5	4800	43.63	110/220	50/60	2.0 kVA
CPT3 60 2 5000 – 5	5000	45.45	110/220	50/60	2.0 kVA
CPT3 60 2 5500 – 5	5500	50.00	110/220	50/60	2.0 kVA
CPT3 60 2 6000 – 5	6000	54.54	110/220	50/60	2.0 kVA
CPT3 60 2 6600 – 5	6600	60.00	110/220	50/60	2.0 kVA
CPT3 60 2 6900 - 5	6900	62.72	110/220	50/60	2.0 kVA

- Primary and secondary terminal are brass screws No. 10-32 with one flat washer and lockwasher.
- Transformer winding is vacuum encapsulated in polyurethane resin with temperature insulation class of 105°C
- Plated steel mounting base
- For indoor use



CONNECTION DIAGRAM



Control Power Transformer

Model CPT3-60-5

CPT5-95-5 rev 050919

CERTIFICATIONS:



FREQUENCY:

60 Hz.

THERMAL RATING:

5 kVA at 30°C. ambient

4.3 kVA at 55°C. ambient

STANDARD SECONDARY VOLTAGE:

120 volts

INSULATION LEVEL:

CPT3:

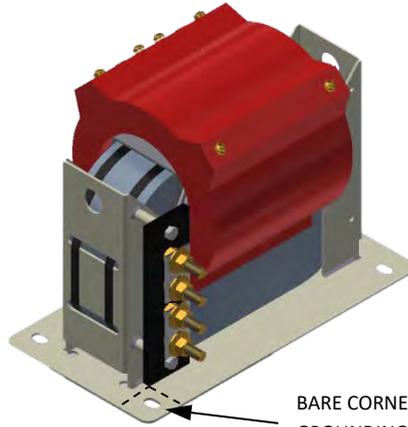
5 kV, 60 kV BIL full wave.

CPT5:

15 kV, 95 kV BIL full wave.

APPROXIMATE WEIGHT:

165 lbs.



BARE CORNER FOR GROUNDING

- Primary terminals are ¼ - 20 brass screws with one flat washer and star washer.
- Secondary terminals are brass studs 3/8-16 with one flat washer, lock washer and two nuts, plus series/parallel links.
- The transformer High Voltage winding is vacuum encapsulated in epoxy resin.

- Supplied with 1±7-1/2% or 2±2-1/2% taps above & below nominal voltage on the primary winding.
- Available as unfused only.
- Self cooled.
- Steel mounting base.
- For indoor use.

***CATALOG NO.	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	**FUSE RATING
CPT3-60-5-242	2400	20:1	120/240	7E
CPT3-60-5-4161	4160	34.7:1	120/240	5E
CPT3-60-5-482	4800	40:1	120/240	5E
CPT5-95-5-722	7200	60:1	120/240	3E
CPT5-95-5-842	8400	70:1	120/240	3E
CPT5-95-5-123	12000	100:1	120/240	2E
CPT5-95-5-1242	12470	104:1	120/240	2E
CPT5-95-5-1322	13200	110:1	120/240	2E
CPT5-95-5-1382	13800	115:1	120/240	2E
CPT5-95-5-1442*	14400	120:1	120/240	2E

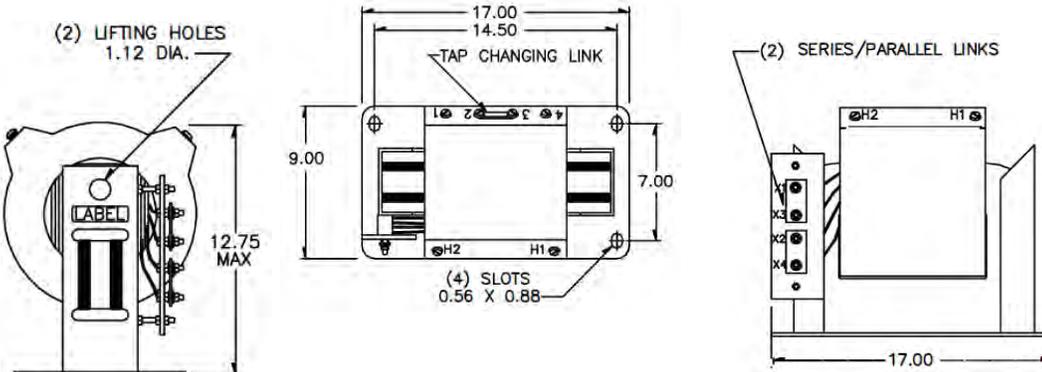
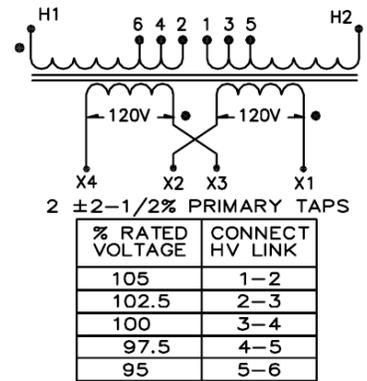
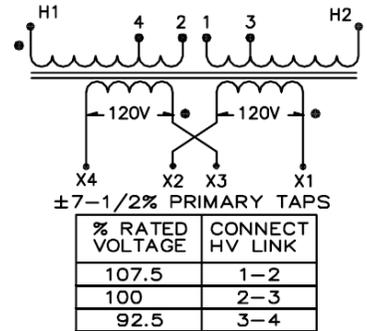
*Not available with primary taps.

**Note all fuse ratings are based upon NEC transformer overcurrent protection recommendations. Specific applications may require other ratings.

***For 1±7-1/2% taps use suffix "A" after Catalog No.

***For 2±2-1/2% taps use suffix "B" after Catalog No.

CONNECTION DIAGRAMS



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Control Power Transformer

Model CPT3-60-10
CPT5-95-10 rev 050919

CERTIFICATIONS:



FREQUENCY:

60 Hz.

THERMAL RATING:

10 kVA at 30°C. ambient

8.6 kVA at 55°C. ambient

STANDARD SECONDARY VOLTAGE:

120 volts

INSULATION LEVEL:

CPT3:

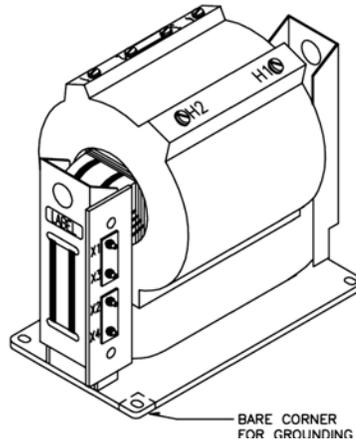
5 kV, 60 kV BIL full wave.

CPT5:

15 kV, 95 kV BIL full wave.

APPROXIMATE WEIGHT:

250 lbs.



- Primary terminals are ¼-20 brass screws with one flat washer and star washer.
- Secondary terminals are brass studs ½-13 with one flat washer, lock washer and two nuts, plus series/parallel links.
- The transformer High Voltage winding is vacuum encapsulated in epoxy resin.

- Supplied with 1±7-1/2% or 2±2-1/2% taps above & below nominal voltage on the primary winding.
- Available as unfused only.
- Self cooled.
- Steel mounting base.
- For indoor use.

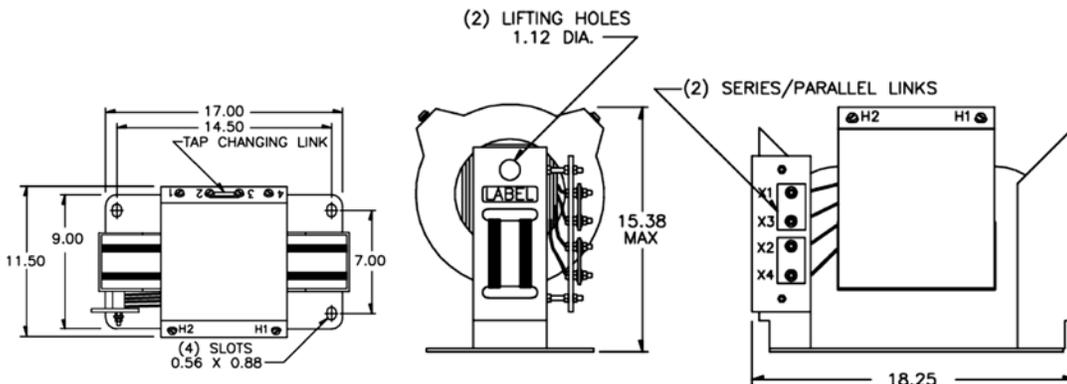
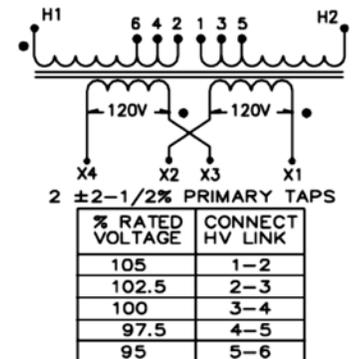
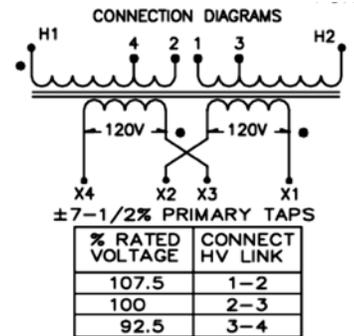
***CATALOG NO.	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	**FUSE RATING
CPT3-60-10-242	2400	20:1	120/240	15E
CPT3-60-10-4161	4160	34.7:1	120/240	7E
CPT3-60-10-482	4800	40:1	120/240	7E
CPT5-95-10-722	7200	60:1	120/240	5E
CPT5-95-10-842	8400	70:1	120/240	5E
CPT5-95-10-123	12000	100:1	120/240	3E
CPT5-95-10-1242	12470	104:1	120/240	3E
CPT5-95-10-1322	13200	110:1	120/240	3E
CPT5-95-10-1382	13800	115:1	120/240	3E
CPT5-95-10-1442*	14400	120:1	120/240	3E

*Not available with primary taps.

**Note all fuse ratings are based upon NEC transformer overcurrent protection recommendations. Specific applications may require other ratings.

***For 1±7-1/2% taps use suffix "A" after Catalog No.

***For 2±2-1/2% taps use suffix "B" after Catalog No.



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Control Power Transformer

Model CPT3-60-15
CPT5-95-15 rev 050919

CERTIFICATIONS:



FREQUENCY:

60 Hz.

THERMAL RATING:

15 kVA at 30°C. ambient
 12.9 kVA at 55°C. ambient

STANDARD SECONDARY VOLTAGE:

120 volts

INSULATION LEVEL:

CPT3:

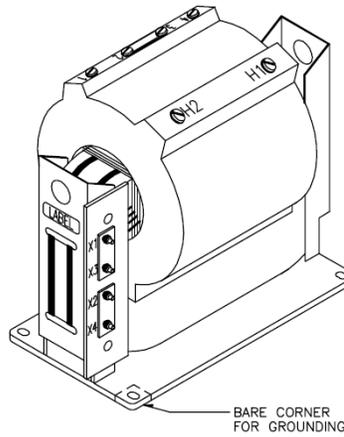
5 kV, 60 kV BIL full wave.

CPT5:

15 kV, 95 kV BIL full wave.

APPROXIMATE WEIGHT:

290 lbs.



- Primary terminals are ¼-20 brass screws with one flat washer and star washer.
- Secondary terminals are brass studs ½-13 with one flat washer, lock washer and two nuts, plus series/parallel links.
- The transformer High Voltage winding is vacuum encapsulated in epoxy resin.

- Supplied with 1±7-1/2% or 2±2-1/2% taps above & below nominal voltage on the primary winding.
- Available as unfused only.
- Self cooled.
- Steel mounting base.
- For indoor use.

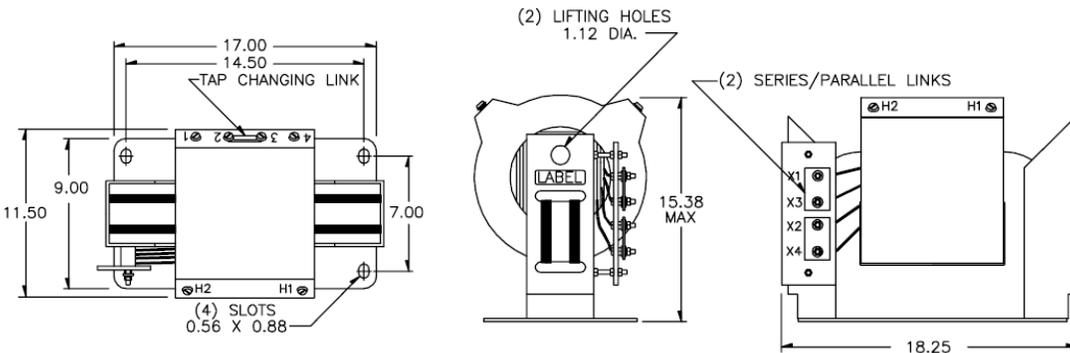
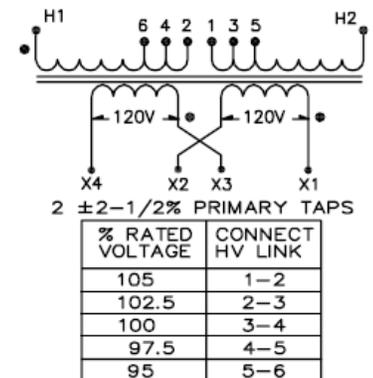
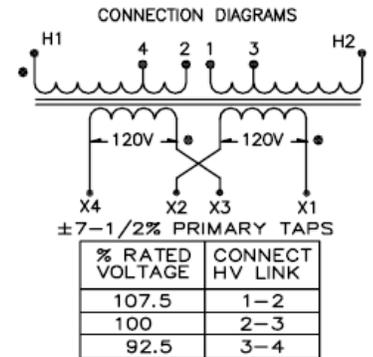
***CATALOG NO.	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	**FUSE RATING
CPT3-60-15-242	2400	20:1	120/240	15E
CPT3-60-15-4161	4160	34.7:1	120/240	10E
CPT3-60-15-482	4800	40:1	120/240	10E
CPT5-95-15-722	7200	60:1	120/240	7E
CPT5-95-15-842	8400	70:1	120/240	7E
CPT5-95-15-123	12000	100:1	120/240	5E
CPT5-95-15-1242	12470	104:1	120/240	5E
CPT5-95-15-1322	13200	110:1	120/240	5E
CPT5-95-15-1382	13800	115:1	120/240	5E
CPT5-95-15-1442*	14400	120:1	120/240	5E

*Not available with primary taps.

**Note all fuse ratings are based upon NEC transformer overcurrent protection recommendations. Specific applications may require other ratings.

***For 1±7-1/2% taps use suffix "A" after Catalog No.

***For 2±2-1/2% taps use suffix "B" after Catalog No.



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Control Power Transformer

Model CPTS3-60-5

CPTS5-95-5 rev 050919

CERTIFICATIONS:



FREQUENCY:

60 Hz.

THERMAL RATING:

5 kVA at 30°C. ambient

4.3 kVA at 55°C. ambient

STANDARD SECONDARY VOLTAGE:

120 volts

INSULATION LEVEL:

CPT3:

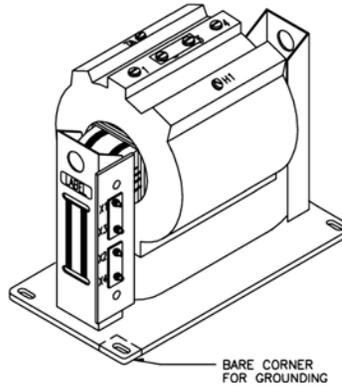
5 kV, 60 kV BIL full wave.

CPT5:

15 kV, 95 kV BIL full wave.

APPROXIMATE WEIGHT:

165 lbs.



- Primary terminals are ¼-20 brass screws with one flat washer and star washer.
- Secondary terminals are brass studs ½-13 with one flat washer, lock washer and two nuts, plus series/parallel links.
- The transformer High Voltage winding is vacuum encapsulated in epoxy resin.

- Supplied with 1±7-1/2% or 2±2-1/2% taps above & below nominal voltage on the primary winding.
- Available as unfused only.
- Self cooled.
- Steel mounting base.
- For indoor use.

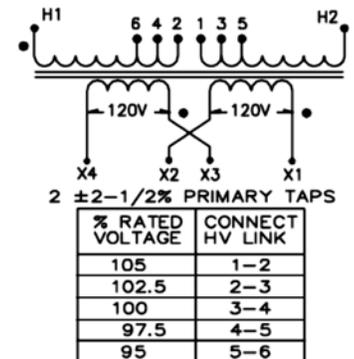
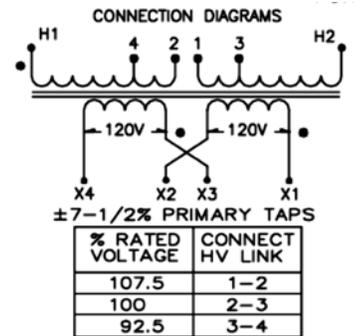
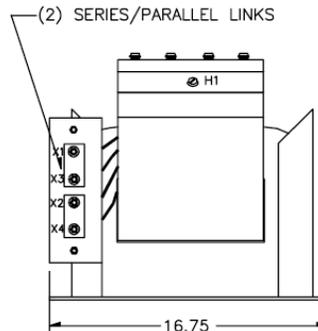
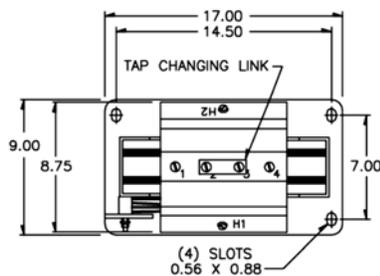
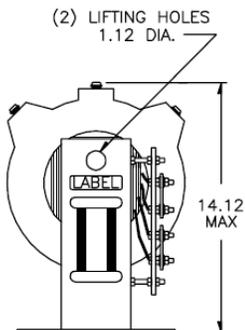
***CATALOG NO.	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	**FUSE RATING
CPTS3-60-5-242	2400	20:1	120/240	7E
CPTS3-60-5-4161	4160	34.7:1	120/240	5E
CPTS3-60-5-482	4800	40:1	120/240	5E
CPTS5-95-5-722	7200	60:1	120/240	3E
CPTS5-95-5-842	8400	70:1	120/240	3E
CPTS5-95-5-123	12000	100:1	120/240	2E
CPTS5-95-5-1242	12470	104:1	120/240	2E
CPTS5-95-5-1322	13200	110:1	120/240	2E
CPTS5-95-5-1382	13800	115:1	120/240	2E
CPTS5-95-5-1442*	14400	120:1	120/240	2E

*Not available with primary taps.

**Note all fuse ratings are based upon NEC transformer overcurrent protection recommendations. Specific applications may require other ratings.

***For 1±7-1/2% taps use suffix "A" after Catalog No.

***For 2±2-1/2% taps use suffix "B" after Catalog No.



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Control Power Transformer

Model CPTS3-60-10

CPTS5-95-10 rev 050919

CERTIFICATIONS:



FREQUENCY:

60 Hz.

THERMAL RATING:

10 kVA at 30°C. ambient

8.6 kVA at 55°C. ambient

STANDARD SECONDARY VOLTAGE:

120 volts

INSULATION LEVEL:

CPT3:

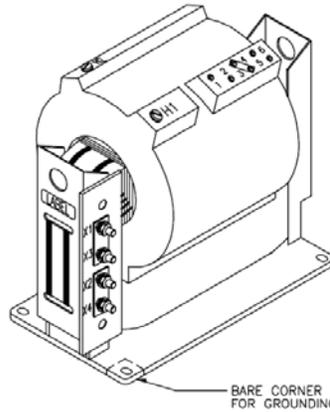
5 kV, 60 kV BIL full wave.

CPT5:

15 kV, 95 kV BIL full wave.

APPROXIMATE WEIGHT:

250 lbs.



- Primary terminals are ¼-20 brass screws with one flat washer and star washer.
- Secondary terminals are brass studs ½-13 with one flat washer, lock washer and two nuts, plus series/parallel links.
- The transformer High Voltage winding is vacuum encapsulated in epoxy resin.

- Supplied with 1±7-1/2% or 2±2-1/2% taps above & below nominal voltage on the primary winding.
- Available as unfused only.
- Self cooled.
- Steel mounting base.
- For indoor use.

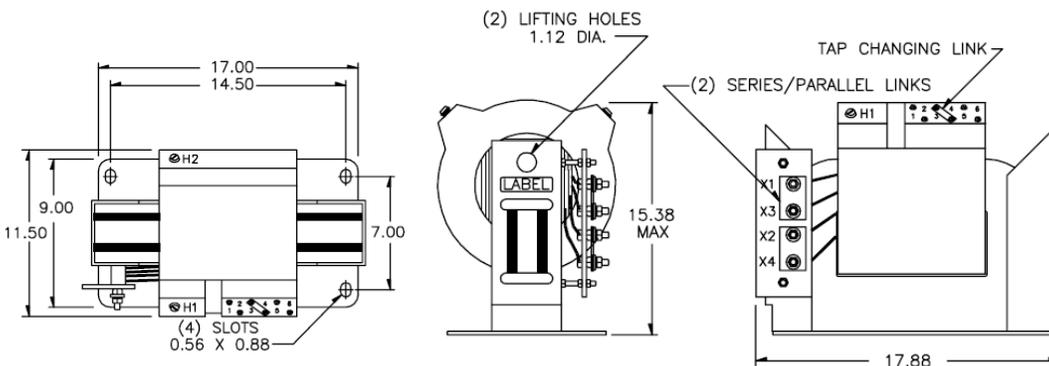
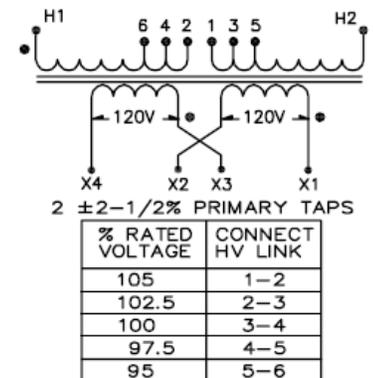
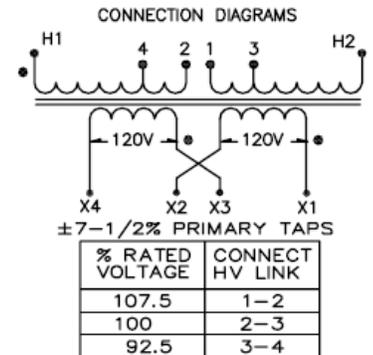
***CATALOG NO.	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	**FUSE RATING
CPTS3-60-10-242	2400	20:1	120/240	15E
CPTS3-60-10-4161	4160	34.7:1	120/240	7E
CPTS3-60-10-482	4800	40:1	120/240	7E
CPTS5-95-10-722	7200	60:1	120/240	5E
CPTS5-95-10-842	8400	70:1	120/240	5E
CPTS5-95-10-123	12000	100:1	120/240	3E
CPTS5-95-10-1242	12470	104:1	120/240	3E
CPTS5-95-10-1322	13200	110:1	120/240	3E
CPTS5-95-10-1382	13800	115:1	120/240	3E
CPTS5-95-10-1442*	14400	120:1	120/240	3E

*Not available with primary taps.

**Note all fuse ratings are based upon NEC transformer overcurrent protection recommendations. Specific applications may require other ratings.

***For 1±7-1/2% taps use suffix "A" after Catalog No.

***For 2±2-1/2% taps use suffix "B" after Catalog No.



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Control Power Transformer

Model CPTS3-60-15

CPTS5-95-15 rev 050919

CERTIFICATIONS:



FREQUENCY:

60 Hz.

THERMAL RATING:

15 kVA at 30°C. ambient
12.9 kVA at 55°C. ambient

STANDARD SECONDARY VOLTAGE:

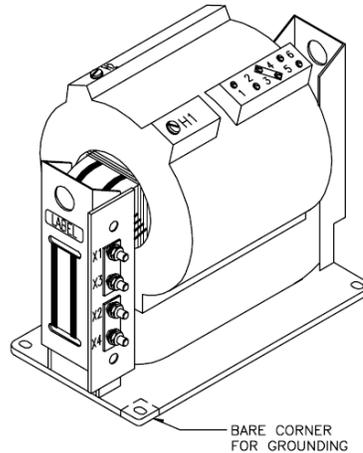
120 volts

INSULATION LEVEL:

CPT3:
5 kV, 60 kV BIL full wave.
CPT5:
15 kV, 95 kV BIL full wave.

APPROXIMATE WEIGHT:

290 lbs.



- Primary terminals are ¼-20 brass screws with one flat washer and star washer.
- Secondary terminals are brass studs ½-13 with one flat washer, lock washer and two nuts, plus series/parallel links.
- The transformer High Voltage winding is vacuum encapsulated in epoxy resin.

- Supplied with 1±7-1/2% or 2±2-1/2% taps above & below nominal voltage on the primary winding.
- Available as unfused only.
- Self cooled.
- Steel mounting base.
- For indoor use.

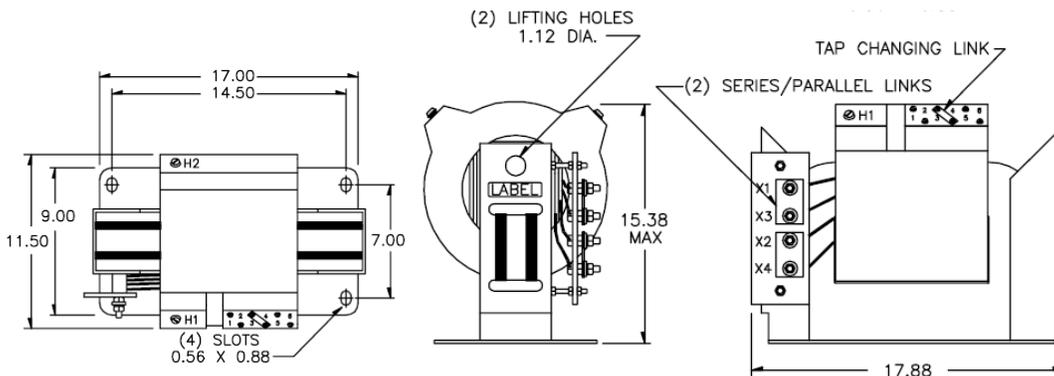
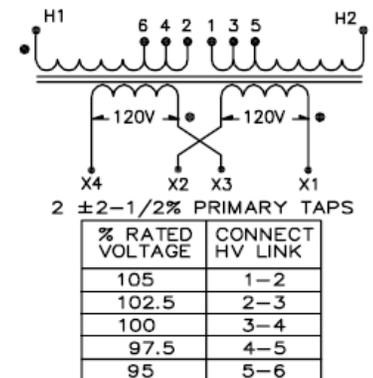
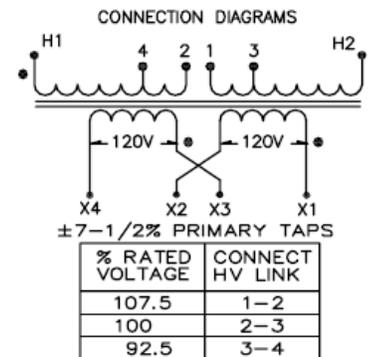
***CATALOG NO.	PRIMARY VOLTAGE	RATIO	SECONDARY VOLTAGE	**FUSE RATING
CPTS3-60-15-242	2400	20:1	120/240	15E
CPTS3-60-15-4161	4160	34.7:1	120/240	10E
CPTS3-60-15-482	4800	40:1	120/240	10E
CPTS5-95-15-722	7200	60:1	120/240	7E
CPTS5-95-15-842	8400	70:1	120/240	7E
CPTS5-95-15-123	12000	100:1	120/240	5E
CPTS5-95-15-1242	12470	104:1	120/240	5E
CPTS5-95-15-1322	13200	110:1	120/240	5E
CPTS5-95-15-1382	13800	115:1	120/240	5E
CPTS5-95-15-1442*	14400	120:1	120/240	5E

*Not available with primary taps.

**Note all fuse ratings are based upon NEC transformer overcurrent protection recommendations. Specific applications may require other ratings.

***For 1±7-1/2% taps use suffix "A" after Catalog No.

***For 2±2-1/2% taps use suffix "B" after Catalog No.



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Control Power Transformer

Model 3CPT3-60-15

3CPT5-95-15 rev 050919

CERTIFICATIONS:



FREQUENCY:

60 Hz.

THERMAL RATING:

15 kVA at 30°C. ambient

13 kVA at 55°C. ambient

80°C rise.

STANDARD SECONDARY VOLTAGE:

120 volts

INSULATION LEVEL:

CPT3: 5kV

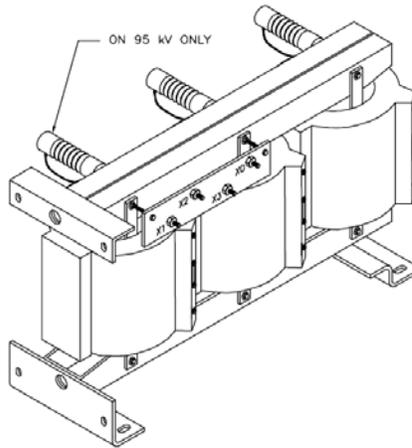
60 kV, 60 kV BIL full wave. 130°C

CPT5: 15kV,

95 kV, 95 kV BIL full wave. 130°C

APPROXIMATE WEIGHT:

650 lbs.



- Primary terminals are copper compression type lugs.
- Secondary terminals are brass studs ½-13 with one flat washer, star washer and two regular nuts.
- The high voltage coils are vacuum encapsulated in epoxy resin. Complete unit is varnish dipped.
- Supplied with taps on the primary side:
Cat. Suffix A –(1) ± 7-1/2% taps or
Cat. Suffix B –(2) ± 2-1/2% taps.

- Secondary typically 120/240 V operation.
- Available as unfused only.
- Vertical or horizontal mounting.
- Mounting base and frame is 7 ga. (0.188" thk) steel, with (8) 0.56 x 0.875 slots.
- For indoor use.

***CATALOG NO.	PRIMARY VOLTAGE	SECONDARY VOLTAGE	**FUSE RATING
3CPT3-60-15-242	2400	208Y/120	10E
3CPT3-60-15-4161	4160	208Y/120	7E
3CPT3-60-15-482	4800	208Y/120	5E
3CPT5-95-15-722	7200	208Y/120	5E
3CPT5-95-15-842	8400	208Y/120	5E
3CPT5-95-15-123	12000	208Y/120	3E
3CPT5-95-15-1242	12470	208Y/120	3E
3CPT5-95-15-1322	13200	208Y/120	3E
3CPT5-95-15-1382	13800	208Y/120	3E

*Note all fuse ratings are based upon NEC transformer overcurrent protection recommendations. Specific applications may require other ratings.

PRIMARY VOLTS	CONNECT
107.5%	1 – 2
100%	2 – 3
92.5%	3 – 4

1 ± 7-1/2% PRIMARY TAPS – SUFFIX "A"

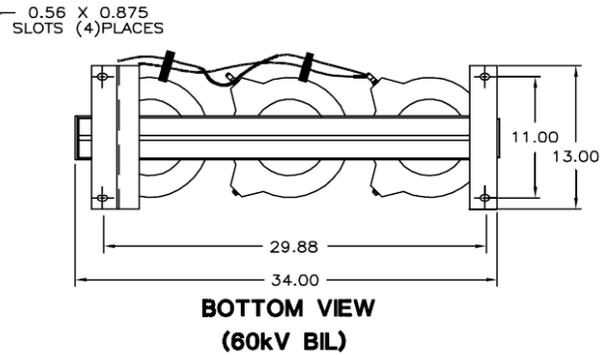
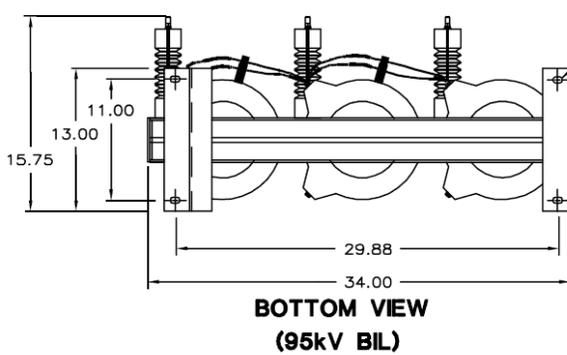
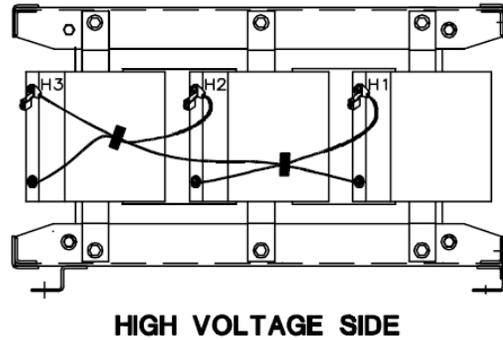
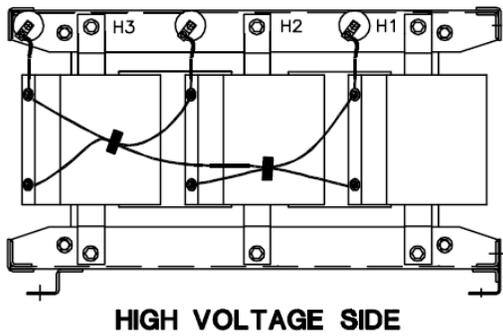
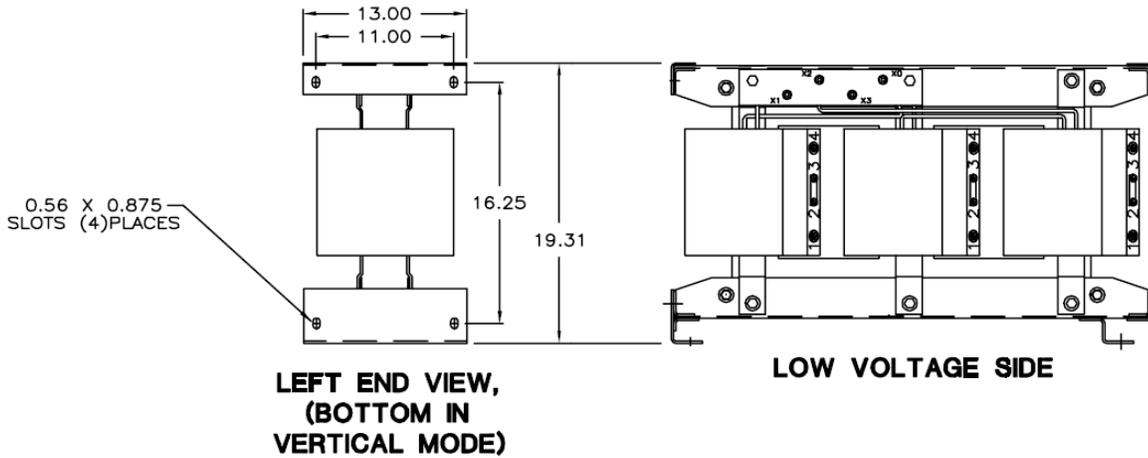
PRIMARY VOLTS	CONNECT
105%	1 – 2
102.5%	2 – 3
100%	3 – 4
97.5%	4 – 5
92.5%	5 – 6

2 ± 2-1/2% PRIMARY TAPS – SUFFIX "B"

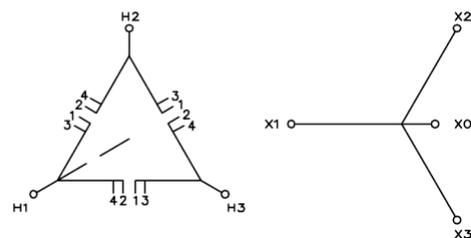
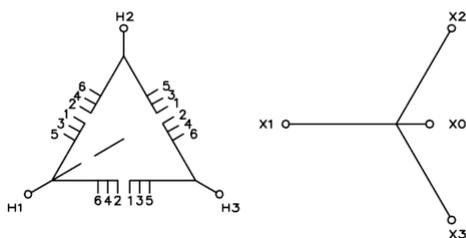
Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Control Power Transformer

Model 3CPT3-60-15
3CPT5-95-15 rev 050919



FOR HORIZONTAL OR VERTICAL MOUNTING



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Control Power Transformer

**Model 3CPT3-60-30,
3CPT5-95-30, 3CPT3-60-45,
3CPT5-95-45 rev 050919**

FREQUENCY:

60 Hz.

THERMAL RATING:

30 kVA at 30°C. ambient
25.7 kVA at 55°C. ambient
80°C rise.
45 kVA at 30°C ambient
38.6 kVA at 55° ambient.
80°C rise.

STANDARD SECONDARY VOLTAGE:

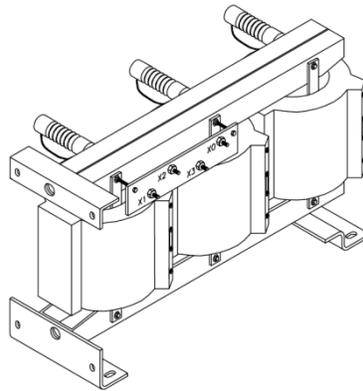
120 volts

INSULATION LEVEL:

3CPT3: 5kV
60 kV, 60 kV BIL full wave. 130°C
3CPT5: 15kV,
95 kV, 95 kV BIL full wave. 130°C

APPROXIMATE WEIGHT:

730 lbs.



CERTIFICATIONS:



- Primary terminals are copper compression type lugs.
- Secondary terminals are brass studs 1/2-13 with one flat washer, star washer and two regular nuts.
- The high voltage coils are vacuum encapsulated in epoxy resin. Complete unit is varnish dipped.
- Supplied with taps on the primary side:
Cat. Suffix A -(1) ± 7-1/2% taps or
Cat. Suffix B -(2) ± 2-1/2% taps.
- Secondary typically 120/240 V operation.
- Available as unfused only.
- Vertical or horizontal mounting.
- Mounting base and frame is 7 ga. (0.188" thk) steel, with (8) 0.56 x 0.875 slots.
- For indoor use.

***CATALOG NO.	PRIMARY VOLTAGE	SECONDARY VOLTAGE	**FUSE RATING	***CATALOG NO.	PRIMARY VOLTAGE	SECONDARY VOLTAGE	**FUSE RATING
3CPT3-60-15-242	2400	208Y/120	10E	3CPT3-60-45-242	2400	208Y/120	25E
3CPT3-60-15-4161	4160	208Y/120	7E	3CPT3-60-45-4161	4160	208Y/120	15E
3CPT3-60-15-482	4800	208Y/120	5E	3CPT3-60-45-482	4800	208Y/120	15E
3CPT5-95-15-722	7200	208Y/120	5E	3CPT5-95-45-722	7200	208Y/120	15E
3CPT5-95-15-842	8400	208Y/120	5E	3CPT5-95-45-842	8400	208Y/120	15E
3CPT5-95-15-123	12000	208Y/120	3E	3CPT5-95-45-123	12000	208Y/120	7E
3CPT5-95-15-1242	12470	208Y/120	3E	3CPT5-95-45-1242	12470	208Y/120	7E
3CPT5-95-15-1322	13200	208Y/120	3E	3CPT5-95-45-1322	13200	208Y/120	7E
3CPT5-95-15-1382	13800	208Y/120	3E	3CPT5-95-45-1382	13800	208Y/120	7E

*Note all fuse ratings are based upon NEC transformer overcurrent protection recommendations. Specific applications may require other ratings.

PRIMARY VOLTS	CONNECT
107.5%	1 – 2
100%	2 – 3
92.5%	3 – 4

1 ± 7-1/2% PRIMARY TAPS – SUFFIX "A"

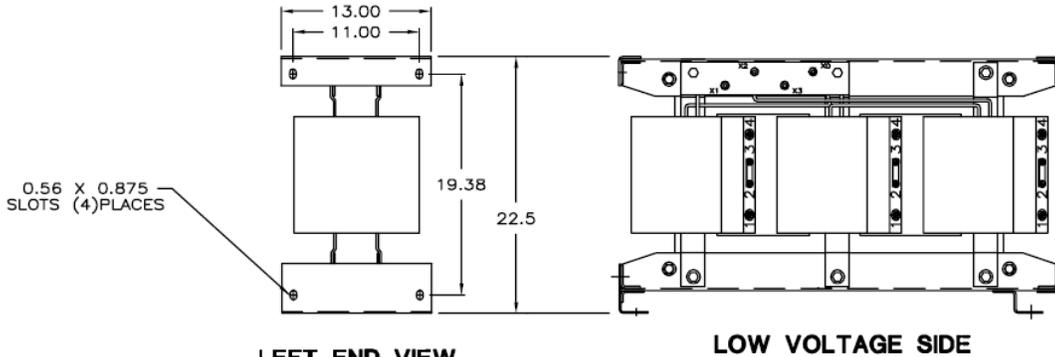
PRIMARY VOLTS	CONNECT
105%	1 – 2
102.5%	2 – 3
100%	3 – 4
97.5%	4 – 5
92.5%	5 – 6

2 ± 2-1/2% PRIMARY TAPS – SUFFIX "B"

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

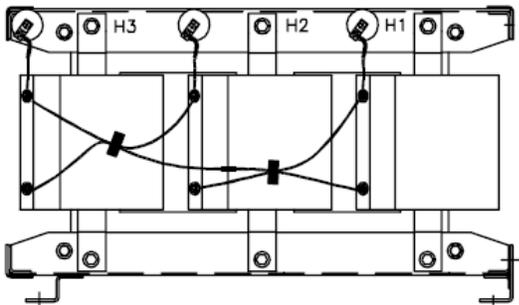
Control Power Transformer

**Model 3CPT3-60-30,
3CPT5-95-30, 3CPT3-60-45,
3CPT5-95-45 rev 050919**

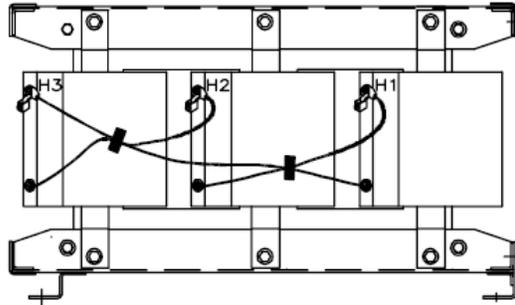


**LEFT END VIEW,
(BOTTOM IN
VERTICAL MODE)**

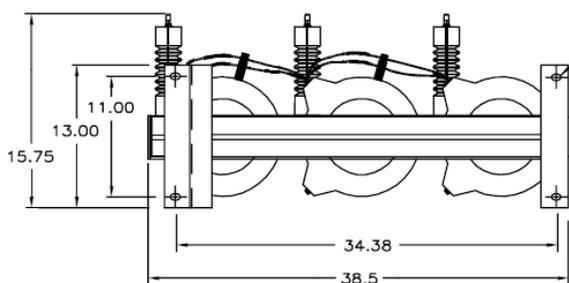
LOW VOLTAGE SIDE



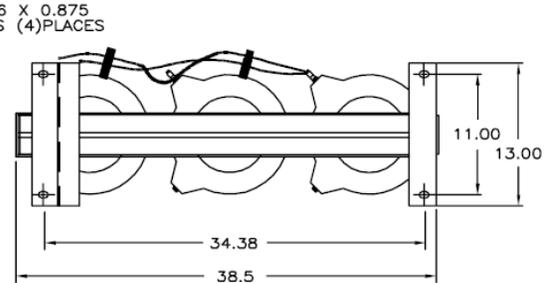
HIGH VOLTAGE SIDE



HIGH VOLTAGE SIDE

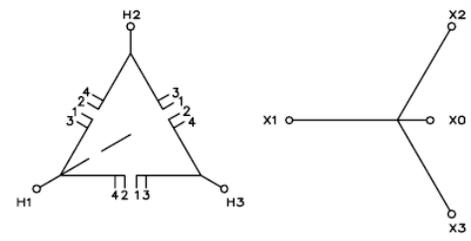
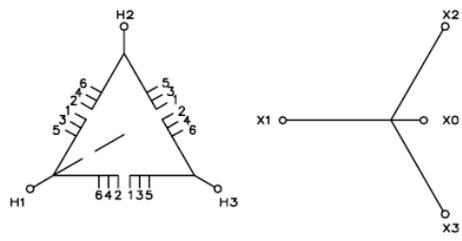


**BOTTOM VIEW
(95kV BIL)**



**BOTTOM VIEW
(60kV BIL)**

FOR HORIZONTAL OR VERTICAL MOUNTING

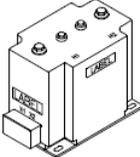
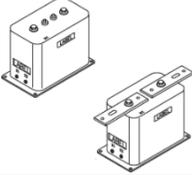
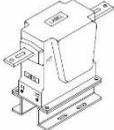


Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

CURRENT TRANSFORMERS

For Metering and Instrumentation

MV Current Transformers

MODEL CTW3-60-T50 MODEL CTWH3-60-T50		Page 9-2
MODEL CTW5-L110 MODEL CTWH5-L-110		Page 9-4
MODEL CTWH3-60-T100		Page 9-6
MODEL CTWH4-75-T100		Page 9-8
MODEL CTWH5-B-110-T200**		Page 9-10
MODEL JKM-3C		Page 9-12
MODEL JKM-5C		Page 9-14

Wound Primary Indoor Current Transformer

**Model CTW3-60-T50
CTWH3-60-T50 rev 051223**

CERTIFICATIONS:

APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

MAXIMUM SYSTEM VOLTAGE:

5.6Kv, BIL 60kV

APPROXIMATE WEIGHT:

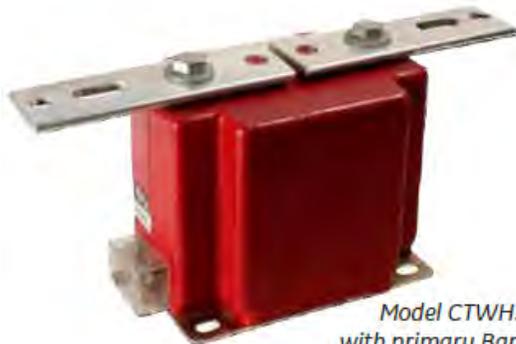
20 lbs.

CONTINUOUS THERMAL RATING FACTOR:

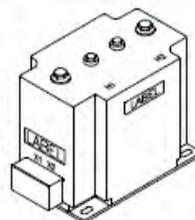
1.5 at 30°C., 1.33 at 55°C.

150:5 and 600:5- 1.33 at 30°C., 1.00 at 55°C.

250:5- 1.00 at 30°C., 0.85 at 55°C.



Model CTWH3
with primary Bars



Model CTW3
without primary Bars



Primary terminals are ½ - 13 bolts with one Belleville washer.

Secondary terminals are brass studs No. 10-32 with one flatwasher, lockwasher and regular nut.

Supplied with short circuit secondary terminal cover. Vacuum cast polyurethane resin. Other ratios, secondary currents and dual ratios are available. Refer to factory.

MODEL CTW3-60-T50 & CTWH3-60-T50

Approximate weight: 20 lbs.

CAUTION: Use only the Belleville washers supplied. Tighten to between 25 to 30 foot-pounds. DO NOT OVERTIGHTEN

Catalog Number	Current Ratio	Relay Class	ANSI Metering Class at 60 Hz					**Thermal current Rating 1 Second RMS Amps
			BO.1	BO.2	BO.5	BO.9	B1.8	
CTW3-60-T50-050	5:5	T50	0.3	0.3	0.3	0.6	1.2	375
CTW3-60-T50-100	10:5	T50	0.3	0.3	0.3	0.6	1.2	1,000
CTW3-60-T50-150	15:5	T50	0.3	0.3	0.3	0.6	1.2	1,690
CTW3-60-T50-200	20:5	T50	0.3	0.3	0.3	0.6	1.2	1,900
CTW3-60-T50-250	25:5	T50	0.3	0.3	0.3	0.6	1.2	2,700
CTW3-60-T50-300	30:5	T50	0.3	0.3	0.3	0.6	1.2	2,700
CTW3-60-T50-400	40:5	T50	0.3	0.3	0.3	0.6	1.2	4,720
CTW3-60-T50-500	50:5	T50	0.3	0.3	0.3	0.6	1.2	4,720
CTW3-60-T50-750	75:5	T50	0.3	0.3	0.3	0.6	1.2	8,630
CTW3-60-T50-101	100:5	T50	0.3	0.3	0.3	0.6	1.2	8,630
CTW3-60-T50-151	150:5	T50	0.3	0.3	0.3	0.6	1.2	14,380
CTW3-60-T50-201	200:5	T50	0.3	0.3	0.3	0.6	1.2	17,250
CTW3-60-T50-251	250:5	T50	0.3	0.3	0.3	0.6	1.2	17,250
CTW3-60-T50-301	300:5	T50	0.3	0.3	0.3	0.6	1.2	37,800
CTW3-60-T50-401	400:5	T50	0.3	0.3	0.3	0.6	1.2	37,800
CTW3-60-T50-501	500:5	T50	0.3	0.3	0.3	0.6	1.2	37,800
CTW3-60-T50-601	600:5	T50	0.3	0.3	0.3	0.6	1.2	37,800

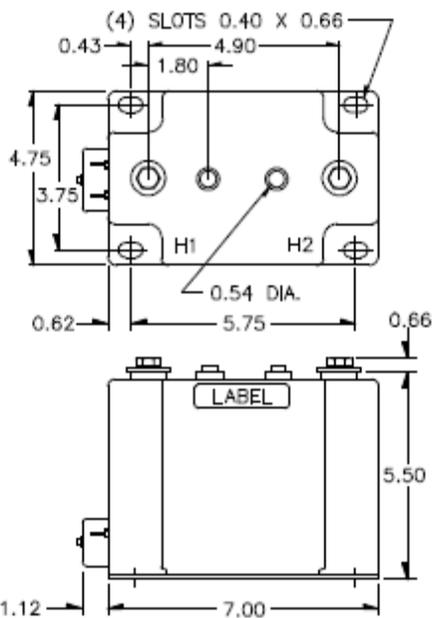
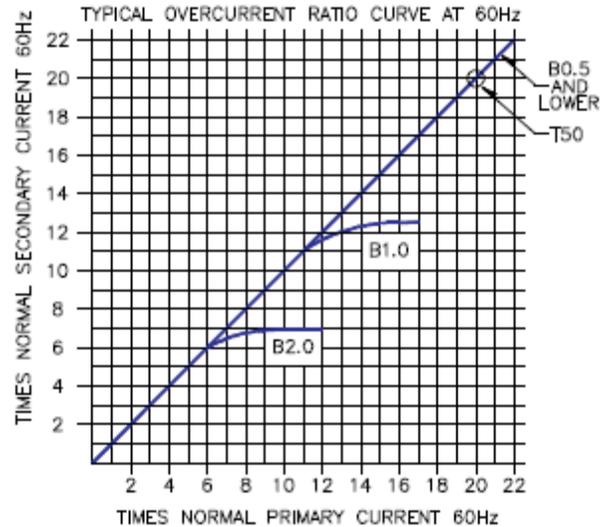
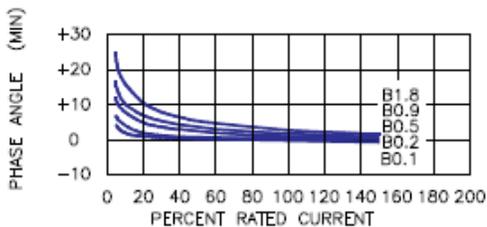
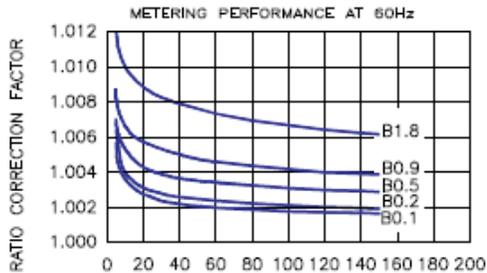
*For ordering with primary bars, change model number to CTWH3.

**With a burden of B0.1 or greater connected to the secondary.

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

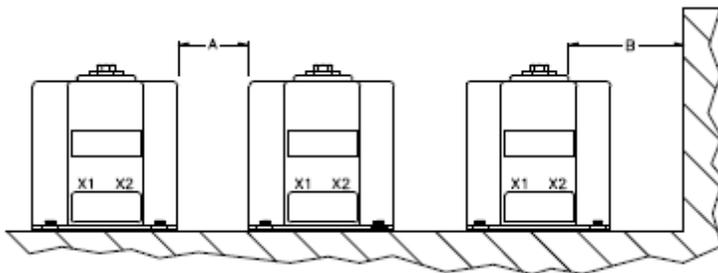
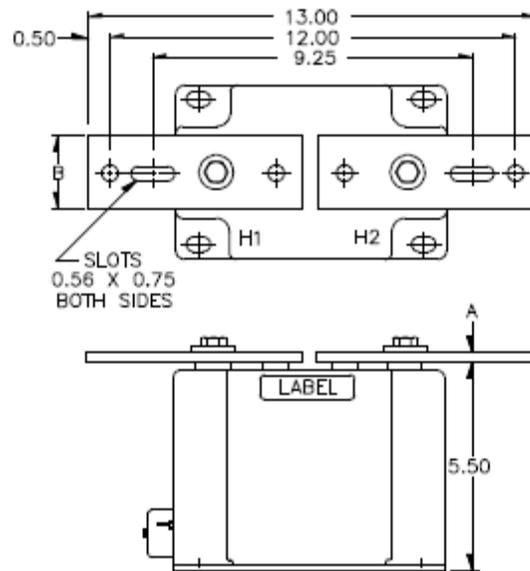
Wound Primary Indoor Current Transformer

**Model CTW3-60-T50
CTWH3-60-T50**



PRIMARY CURRENT	BAR SIZES	
	A	B
5 TO 150A	0.19	1.50
200 TO 600A	0.25	2.00

WITH PRIMARY BARS



RECOMMENDED MINIMUM SPACINGS

A = Unit to Unit = 0.75" minimum.
B = HV to Ground in Air = 3.00" minimum.

Recommended spacing are for guidance only. User needs to set appropriate values to assure performance for high potential test, impulse test, high humidity, partial discharge, high altitude, and other considerations like configuration.

Wound Primary Indoor Current Transformer

Model CTW5-L-110
CTWH5-L-110 rev 051223

CERTIFICATIONS:



APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

CONTINUOUS THERMAL RATING

FACTOR:

1.00 at 30°C., 0.85 at 55°C

APPROXIMATE WEIGHT:

34 lbs.

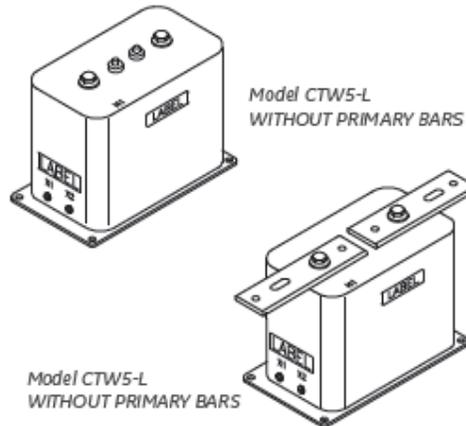
CONNECTIONS:

Primary terminals are ½ - 13 bolts with one Belleville washer.

Secondary terminals are brass screws No. 10-32 with one flatwasher, lockwasher.

Vacuum cast in polyurethane resin.

Other ratios, secondary currents and dual ratios are available. Refer to factory.



MODEL 1CTW5-L-110 & CTWH5-6-110

Window Diameter 6.00"

Approximate weight: 34 lbs.

Catalog Number	Current Ratio	Relay Class	ANSI Metering Class at 60 Hz					**Thermal current Rating 1 Second RMS Amps
			BO.1	BO.2	BO.5	BO.9	B1.8	
CTW5-L-110-T20-050	5:5	T20	0.3	0.3	0.6	1.2	2.4	375
CTW5-L-110-T20-100	10:5	T20	0.3	0.3	0.6	1.2	2.4	590
CTW5-L-110-T20-150	15:5	T20	0.3	0.3	0.6	1.2	2.4	1,200
CTW5-L-110-T20-250	25:5	T20	0.3	0.3	0.6	1.2	2.4	1,700
CTW5-L-110-T20-300	30:5	T20	0.3	0.3	0.6	1.2	2.4	1,700
CTW5-L-110-T20-400	40:5	T20	0.3	0.3	0.6	1.2	2.4	2,400
CTW5-L-100-T20-500	50:5	T20	0.3	0.3	0.6	1.2	2.4	4,715
CTW5-L-110-T20-750	75:5	T25	0.3	0.3	0.6	1.2	2.4	4,715
CTW5-L-110-T20-101	100:5	T25	0.3	0.3	0.6	1.2	2.4	8,625
CTW5-L-110-T20-151	150:5	T25	0.3	0.3	0.6	1.2	2.4	11,500
CTW5-L-110-T20-201	200:5	T30	0.3	0.3	0.6	1.2	2.4	11,500
CTW5-L-110-T20-251	250:5	T20	0.3	0.3	0.6	1.2	2.4	21,700
CTW5-L-110-T20-301	300:5	T25	0.3	0.3	0.6	1.2	2.4	21,700
CTW5-L-110-T20-401	400:5	T30	0.3	0.3	0.6	1.2	2.4	44,700
CTW5-L-110-T20-501	500:5	T35	0.3	0.3	0.3	0.6	1.2	44,700
CTW5-L-110-T20-601	600:5	T40	0.3	0.3	0.3	0.6	1.2	44,700

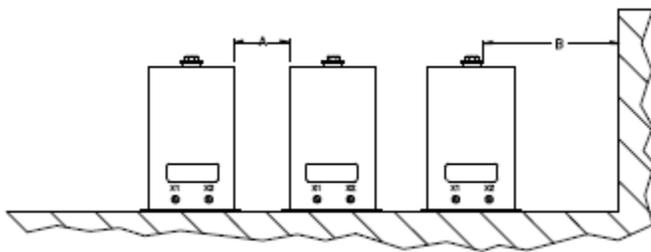
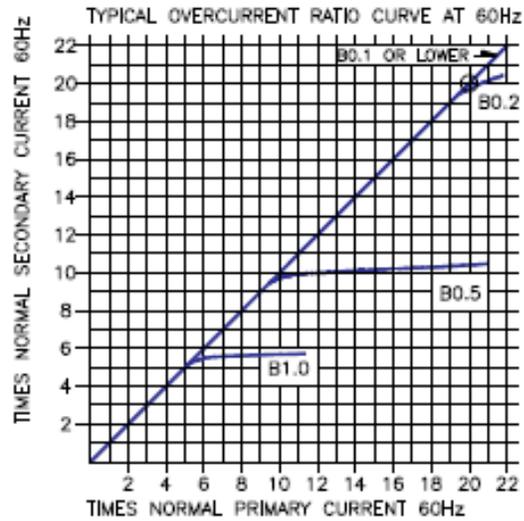
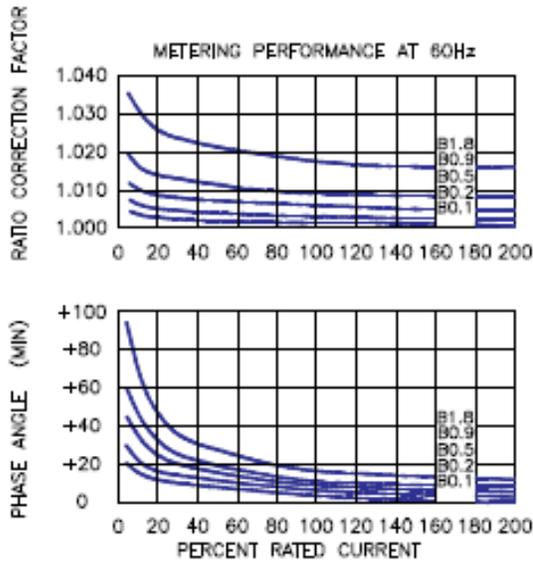
*For ordering with primary bars, change model number to CTWH5-L

A test card is provided with each unit.

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Wound Primary Indoor Current Transformer

**Model CTW5-L-110
CTWH5-L-110**

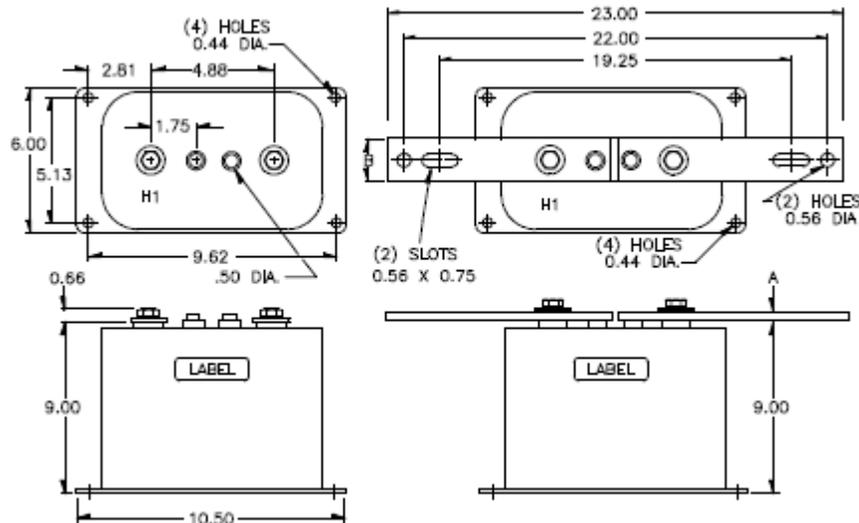


RECOMMENDED MINIMUM SPACINGS

A = Unit to Unit = 2.00" minimum.

B = HV to Ground in Air = 6.50" minimum.

Recommended spacing are for guidance only. User needs to set appropriate values to assure performance for high potential test, impulse test, high humidity, partial discharge, high altitude, and other considerations like configuration.



Wound Primary Indoor Current Transformer

Model CTWH3-60-T100

rev 051223

APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

MAXIMUM SYSTEM VOLTAGE:

5.6Kv, BIL 60kV

APPROXIMATE WEIGHT:

41 lbs.

CONTINUOUS THERMAL RATING FACTOR:

1.5 at 30°C., 1.33 at 55°C.
250:5, 1000:5 AND 1,200:5-
1.10 at 30°C., 0.85 at 55°C.



CERTIFICATIONS:



Primary terminals are copper bars. See chart next pages for sizes.

Secondary terminals are brass screws No. 10-32 with one flatwasher, lockwasher.

Vacuum cast polyurethane resin. Other ratios, secondary currents and dual ratios are available. Refer to factory.

MODEL CTWH3-60-T100

Approximate weight: 41 lbs.

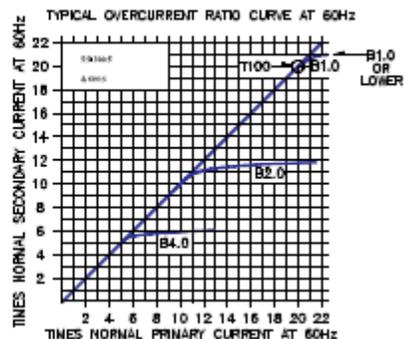
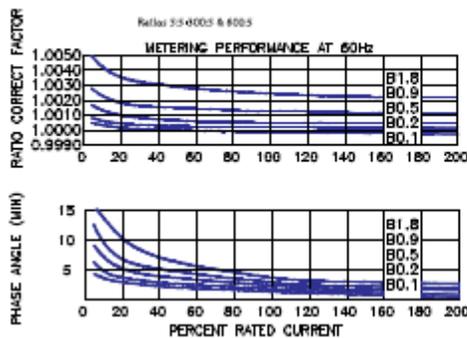
Catalog Number	Current Ratio	Relay Class	ANSI Metering Class at 60 Hz					**Thermal current Rating 1 Second RMS Amps
			BO.1	BO.2	BO.5	BO.9	B1.8	
CTWH3-60-T100-050	5:5	T100	0.3	0.3	0.3	0.3	0.3	470
CTWH3-60-T100-100	10:5	T100	0.3	0.3	0.3	0.3	0.3	900
CTWH3-60-T100-150	15:5	T100	0.3	0.3	0.3	0.3	0.3	1,600
CTWH3-60-T100-200	20:5	T100	0.3	0.3	0.3	0.3	0.3	1,900
CTWH3-60-T100-250	25:5	T100	0.3	0.3	0.3	0.3	0.3	2,600
CTWH3-60-T100-300	30:5	T100	0.3	0.3	0.3	0.3	0.3	2,900
CTWH3-60-T100-400	40:5	T100	0.3	0.3	0.3	0.3	0.3	3,800
CTWH3-60-T600-500	50:5	T100	0.3	0.3	0.3	0.3	0.3	4,700
CTWH3-60-T100-750	75:5	T100	0.3	0.3	0.3	0.3	0.3	5,900
CTWH3-60-T100-101	100:5	T100	0.3	0.3	0.3	0.3	0.3	8,600
CTWH3-60-T100-151	150:5	T100	0.3	0.3	0.3	0.3	0.3	12,900
CTWH3-60-T100-201	200:5	T100	0.3	0.3	0.3	0.3	0.3	17,200
CTWH3-60-T100-251	250:5	T100	0.3	0.3	0.3	0.3	0.3	17,200
CTWH3-60-T100-301	300:5	T100	0.3	0.3	0.3	0.3	0.3	34,500
CTWH3-60-T100-401	400:5	T100	0.3	0.3	0.3	0.3	0.3	34,500
CTWH3-60-T100-601	600:5	T100	0.3	0.3	0.3	0.3	0.3	66,200
CTWH3-60-T100-801	800:5	T100	0.3	0.3	0.3	0.3	0.3	66,200
CTWH3-60-T100-102	1,000:5	T100	0.3	0.3	0.3	0.3	0.3	66,200
CTWH3-600-T100-122	1,200:5	T100	0.3	0.3	0.3	0.3	0.3	66,200

**With a burden of B0.1 or greater connected to the secondary.

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

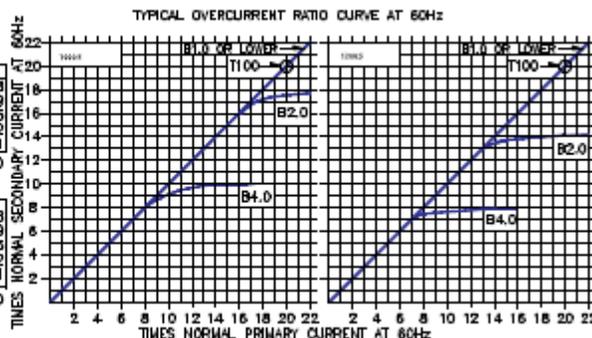
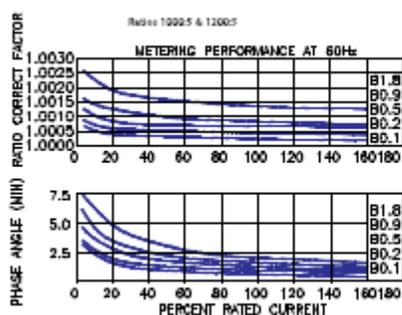
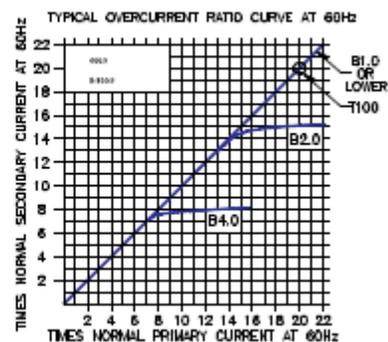
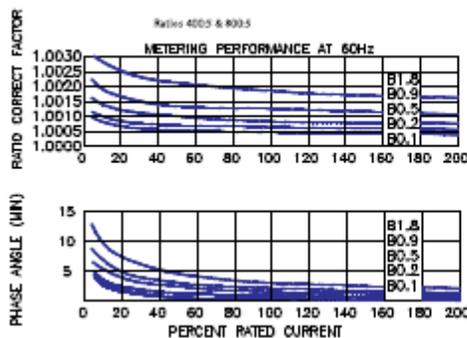
Wound Primary Indoor Current Transformer

Model CTWH3-60-T100



Bar Sizes

Primary Current	Dimensions	
	A	B
5 to 250 A	0.25	1.50
300 to 1,200 A	0.38	2.00

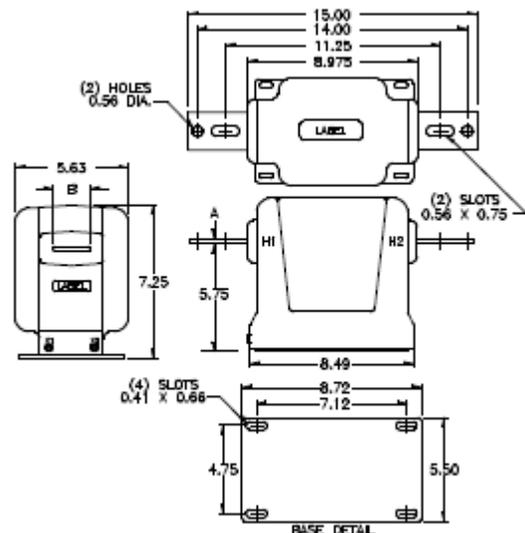
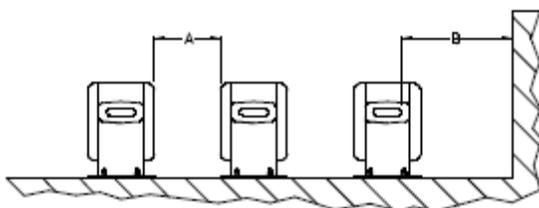


RECOMMENDED MINIMUM SPACINGS

A = Unit to Unit = 0.75" minimum.

B = HV to Ground in Air = 3.00" minimum.

Recommended spacing are for guidance only. User needs to set appropriate values to assure performance for high potential test, impulse test, high humidity, partial discharge, high altitude, and other considerations like configuration.



Wound Primary Indoor Current Transformer

Model CTWH4-75-T100

rev 051223

APPLICATION:

Relaying and metering

FREQUENCY:

50-400 Hz.

MAXIMUM SYSTEM VOLTAGE:

9.52 kV, BIL 75 kV

APPROXIMATE WEIGHT:

42 lbs.

CONTINUOUS THERMAL RATING FACTOR:

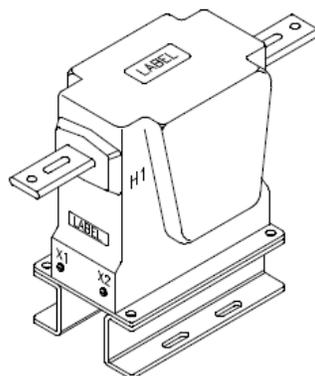
1.50 at 30°C., 1.33 at 55°C.

250:5 and 1000:5

1.10 at 30°C., 0.85 at 55°C.

1,000:5-

1.0 at 30°C., 0.75 at 55°C.



CERTIFICATIONS:



Primary terminals are plated copper bars. See chart next pages for sizes.

Secondary terminals are brass screws No. 10-32 with one flatwasher, lockwasher.

Vacuum cast polyurethane resin. Other ratios, secondary currents and dual ratios are available. Refer to factory.

MODEL CTWH4-75-T100

Approximate weight: 42 lbs.

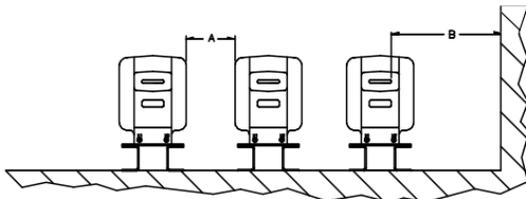
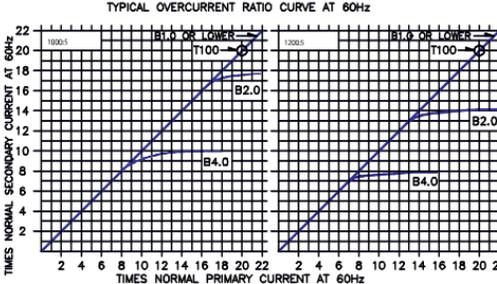
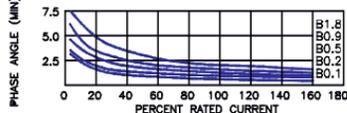
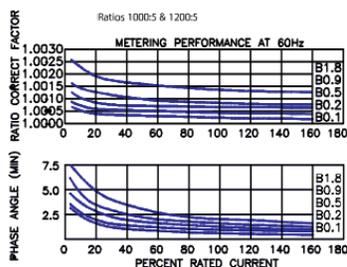
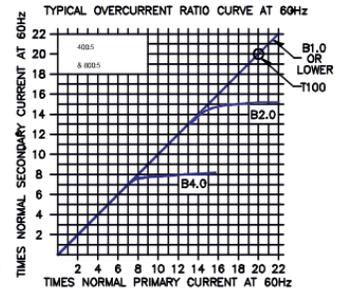
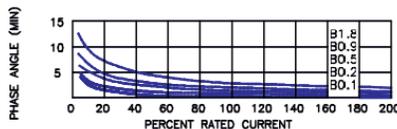
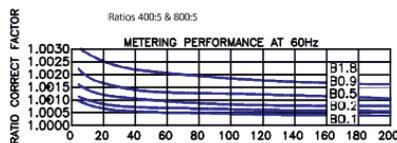
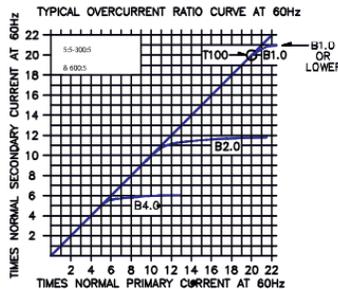
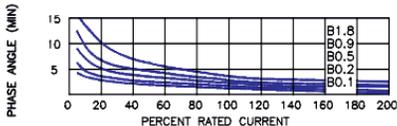
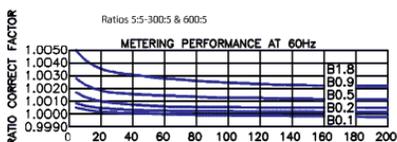
Catalog Number	Current Ratio	Relay Class	ANSI Metering Class at 60 Hz					**Thermal current Rating 1 Second RMS Amps
			BO.1	BO.2	BO.5	BO.9	B1.8	
CTWH4-75-T100-050	5:5	T100	0.3	0.3	0.3	0.3	0.3	470
CTWH4-75-T100-100	10:5	T100	0.3	0.3	0.3	0.3	0.3	900
CTWH4-75-T100-150	15:5	T100	0.3	0.3	0.3	0.3	0.3	1,600
CTWH4-75-T100-200	20:5	T100	0.3	0.3	0.3	0.3	0.3	1,900
CTWH4-75-T100-250	25:5	T100	0.3	0.3	0.3	0.3	0.3	2,600
CTWH4-75-T100-300	30:5	T100	0.3	0.3	0.3	0.3	0.3	2,900
CTWH4-75-T100-400	40:5	T100	0.3	0.3	0.3	0.3	0.3	3,800
CTWH4-75-T100-500	50:5	T100	0.3	0.3	0.3	0.3	0.3	4,700
CTWH4-75-T100-750	75:5	T100	0.3	0.3	0.3	0.3	0.3	5,900
CTWH4-75-T100-101	100:5	T100	0.3	0.3	0.3	0.3	0.3	8,600
CTWH4-75-T100-151	150:5	T100	0.3	0.3	0.3	0.3	0.3	12,900
CTWH4-75-T100-201	200:5	T100	0.3	0.3	0.3	0.3	0.3	17,200
CTWH4-75-T100-251	250:5	T100	0.3	0.3	0.3	0.3	0.3	17,200
CTWH4-75-T100-301	300:5	T100	0.3	0.3	0.3	0.3	0.3	34,500
CTWH4-75-T100-401	400:5	T100	0.3	0.3	0.3	0.3	0.3	34,500
CTWH4-75-T100-601	600:5	T100	0.3	0.3	0.3	0.3	0.3	66,200
CTWH4-75-T100-801	800:5	T100	0.3	0.3	0.3	0.3	0.3	66,200
CTWH4-75-T100-102	1,000:5	T100	0.3	0.3	0.3	0.3	0.3	66,200
CTWH4-75-T100-122	1,200:5	T100	0.3	0.3	0.3	0.3	0.3	66,200

**With a burden of B0.1 or greater connected to the secondary.

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Wound Primary Indoor Current Transformer

Model CTWH4-75-T100



RECOMMENDED MINIMUM SPACINGS

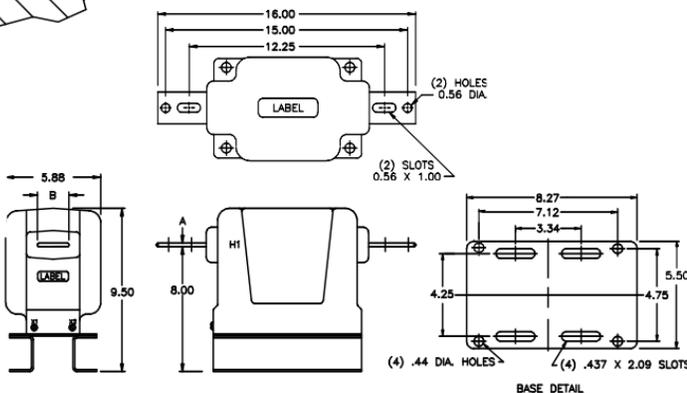
A = Unit to Unit = 1.00" minimum.

B = HV to Ground in Air = 4.50" minimum.

Recommended spacing are for guidance only. User needs to set appropriate values to assure performance for high potential test, impulse test, high humidity, partial discharge, high altitude, and other considerations like configuration.

Bar Sizes

Primary Current	Dimensions	
	A	B
5 to 200 A	0.25	1.50
250 to 1,200 A	0.38	2.00



Wound Primary Indoor Current Transformer

Model CTWH5-B-110-T200**

rev 051223

CERTIFICATIONS:



APPLICATION:

Metering and relaying.

FREQUENCY:

50-400 Hz.

MAXIMUM SYSTEM VOLTAGE:

15.5 kV, BIL 110 kV

APPROXIMATE WEIGHT:

76 lbs.

CONTINUOUS THERMAL RATING FACTOR:

5:5 thru 600:5-

1.50 at 30°C., 1.33 at 55°C.

800:5 and over-

1.0 at 30°C., 0.8 at 55°C.

Primary terminals are plated copper bars. See chart next pages for sizes.

Secondary terminals are brass screws No. 10-32 with one flatwasher, lockwasher.

Vacuum cast polyurethane resin. Other ratios, secondary currents and dual ratios are available. Refer to factory.

MODEL CTWH5-B-110-T200**

Approximate weight: 76 lbs.

Catalog Number	Current Ratio	Relay Class	ANSI Metering Class at 60 Hz					**Thermal current Rating 1 Second RMS Amps
			BO.1	BO.2	BO.5	BO.9	B1.8	
CTWH5-B-110-T200-050	5:5	T200	0.3	0.3	0.3	0.3	0.3	470
CTWH5-B-110-T200-100	*10:5	T200	0.3	0.3	0.3	0.3	0.3	950
CTWH5-B-110-T200-150	*15:5	T200	0.3	0.3	0.3	0.3	0.3	1440
CTWH5-B-110-T200-200	*20:5	T200	0.3	0.3	0.3	0.3	0.3	1840
CTWH5-B-110-T200-250	*25:5	T200	0.3	0.3	0.3	0.3	0.3	2670
CTWH5-B-110-T200-300	*30:5	T200	0.3	0.3	0.3	0.3	0.3	2920
CTWH5-B-110-T200-400	*40:5	T200	0.3	0.3	0.3	0.3	0.3	3700
CTWH5-B-110-T200-500	*50:5	T200	0.3	0.3	0.3	0.3	0.3	4700
CTWH5-B-110-T200-750	*75:5	T200	0.3	0.3	0.3	0.3	0.3	7575
CTWH5-B-110-T200-101	*100:5	T200	0.3	0.3	0.3	0.3	0.3	12,940
CTWH5-B-110-T200-151	*150:5	T200	0.3	0.3	0.3	0.3	0.3	14,375
CTWH5-B-110-T200-201	*200:5	T200	0.3	0.3	0.3	0.3	0.3	25,875
CTWH5-B-110-T200-301	*300:5	T200	0.3	0.3	0.3	0.3	0.3	27,520
CTWH5-B-110-T200-401	*400:5	T200	0.3	0.3	0.3	0.3	0.3	40,350
CTWH5-B-110-T200-601	*600:5	T200	0.3	0.3	0.3	0.3	0.3	66,225
CTWH5-B-110-T200-801	*800:5	T200	0.3	0.3	0.3	0.3	0.3	66,225
CTWH5-B-110-T200-102	*1,000:5	T200	0.3	0.3	0.3	0.3	0.3	66,225
CTWH5-B-110-T200-122	*1,200:5	T200	0.3	0.3	0.3	0.3	0.3	66,225

All primary voltages marked with an () are approved for revenue metering in Canada by Industry Canada, Approval No. AE-0640 Rev.1.

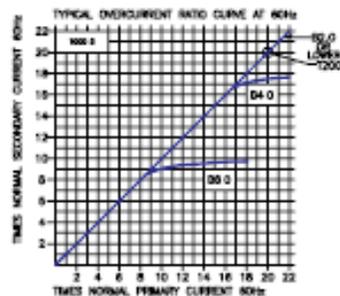
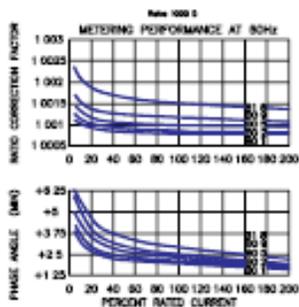
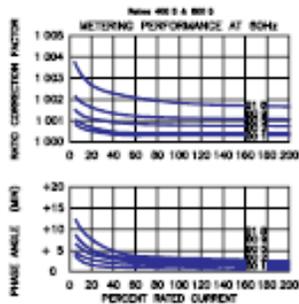
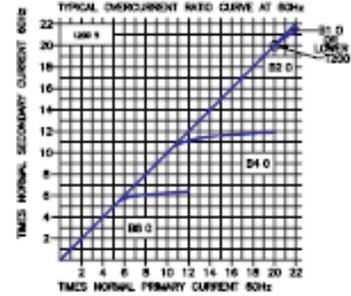
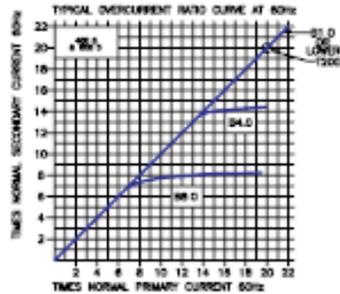
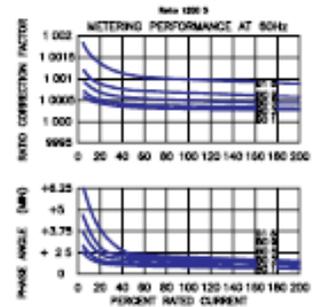
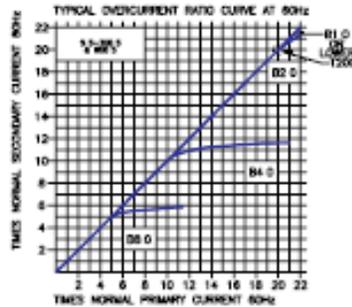
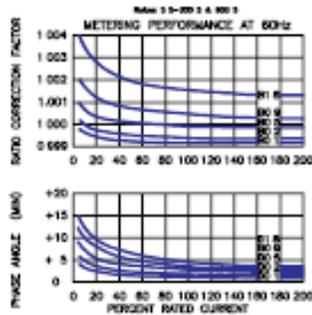
**Replaces Model CTWH5-110-T200. A test card is provided with each unit.

***With a burden of B0.1 or greater connected to the secondary.

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

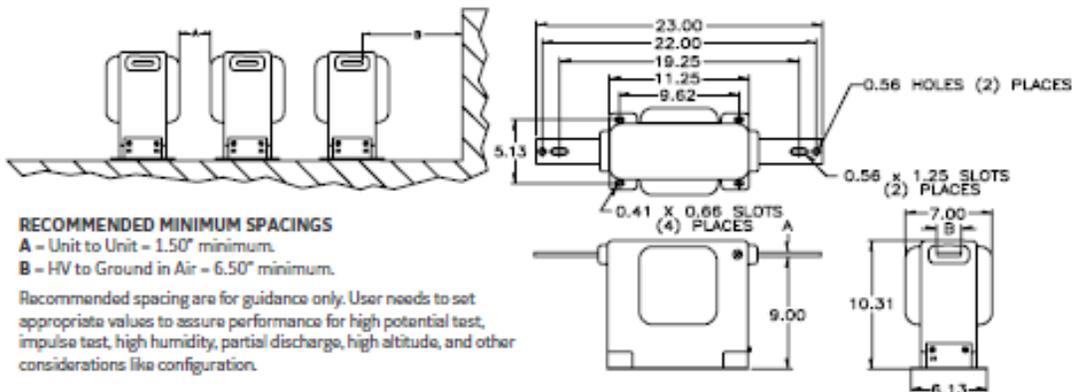
Wound Primary Indoor Current Transformer

Model CTWH5-B-110-T200**



Bar Sizes

Primary Current	Dimensions	
	A	B
5 to 200A	0.25	1.50
300 to 600A	0.38	2.00



Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Wound Primary Indoor Current Transformer

Model JKM-3C

rev 051223

CERTIFICATIONS:



ISO 9001

QUALITY
MANAGEMENT

APPLICATION:

Designed for indoor service; Suitable for operating meters, instruments and control devices.

FREQUENCY:

50-60 Hz.

INSULATION LEVEL:

5 kV; BIL 60 kV full wave

APPROXIMATE WEIGHT:

30 lbs.

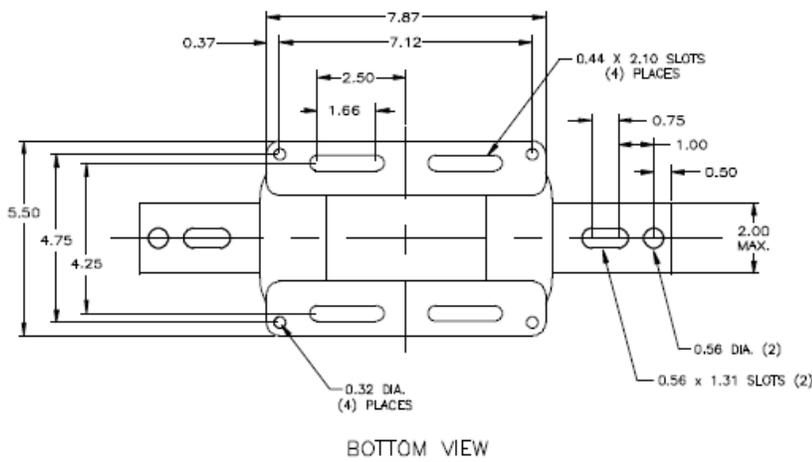
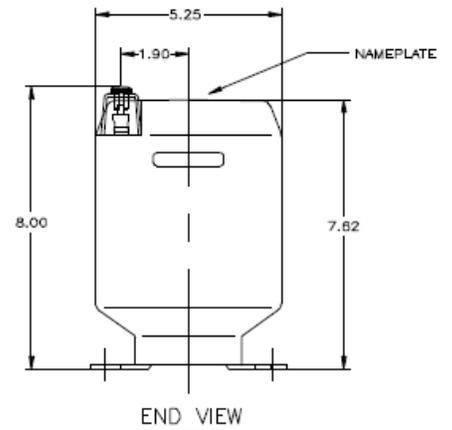
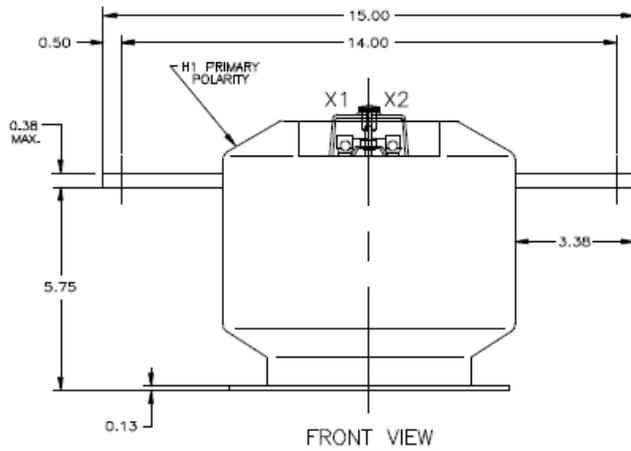


Current Ratio (Amps) Pri:Sec	ANSI Accuracy Class, 60 Hz			Continuous Thermal Current Rating Factor		Primary Bar Size		One Second Thermal Limit Amps	Mech. Limit Amps
	ANSI Meter Class Burden		Relay Class	@30°C Amb.	@55°C Amb.	Width ins.	Thick ins.		
	B0.1 to B0.5	B0.9 to 1.8							
Single Ratio									
5:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	465	550
10:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	930	1,100
15:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	1,470	1,620
20:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	1,850	2,200
25:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	2,300	2,750
30:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	2,450	3,300
40:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	3,700	4,400
50:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	4,600	5,500
75:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	6,400	8,250
100:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	8,600	11,000
150:5	0.3	0.3	T100	1.5	1.0	1.50	0.188	12,800	16,500
200:5	0.3	0.3	T100	1.5	1.0	2.00	0.25	17,300	22,000
300:5	0.3	0.3	T100	1.5	1.0	2.00	0.25	25,700	33,000
400:5	0.3	0.3	T100	1.5	1.0	2.00	0.25	36,000	44,000
500:5	0.3	0.3	T100	1.33	1.0	2.00	0.38	43,100	47,000
600:5	0.3	0.3	T100	1.5	1.0	2.00	0.38	51,500	66,000
800:5	0.3	0.3	T100	1.33	1.0	2.00	0.38	63,300	70,500
Tapped Secondary									
50/100:5	0.3	---	T50	2.0	1.5	1.50	0.188	4,300	11,000
	0.3	0.3	T100	1.5	1.0			8,600	
75/150:5	0.3	---	T50	2.0	1.5	1.50	0.188	6,400	16,500
	0.3	0.3	T100	1.5	1.0			12,800	
100/200:5	0.3	---	T50	2.0	1.5	2.00	0.25	8,650	22,000
	0.3	0.3	T100	1.5	1.0			17,300	
150/300:5	0.3	---	T50	2.0	1.5	2.00	.025	13,750	33,000
	0.3	0.3	T100	1.5	1.0			27,500	
200/400:5	0.3	---	T50	2.0	1.5	2.00	0.25	18,000	44,000
	0.3	0.3	T100	1.5	1.0			36,000	
300/600:5	0.3	---	T50	2.0	1.5	2.00	.038	25,750	66,000
	0.3	0.3	T100	1.5	1.0			51,500	
400/800:5	0.3	---	T50	2.0	1.5	2.00	0.38	31,650	70,500
	0.3	0.3	T100	1.33	1.0			63,300	

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Wound Primary Indoor Current Transformer

Model JKM-3C



Construction and Insulation

The core and coil assembly is encapsulated in vacuum cast polyurethane resin. This tough material has excellent electrical and mechanical properties over a wide temperature range, has low water absorption and is resistant to oil and a variety of chemicals.

Core and Coils

The core is made from high quality grain oriented silicon steel, annealed under rigidly controlled factory conditions. The primary winding consists of two coils in series, one around each leg of the core. This construction minimizes flux leakage thus improving the accuracy of the transformer. The secondary winding consists of two coils in parallel. Each coil is located inside the corresponding primary coil and surrounds one leg of the core.

Terminals

Secondary terminals are tin plated brass, compression type with a 0.275" diameter cross-hole for wiring and a ¼ - 28 clamp screw. A shorting device is provided and interlocked to the terminal cover. The terminal cover is made of a clear plastic. Provision is made for sealing the cover.

Primary Bars

The primary terminals are tin plated copper bars molded into the cast resin insulation. They have one hole and one slot at each end, suitable for ½" bolts.

Polarity

The primary and secondary polarity markers H1, X1, are molded in the insulation. They are thus permanent and integral parts of the transformer and cannot be readily obliterated. They are also marked white.

Base plate and mounting

The base plate is made of stainless steel; it is provided with four slots for mounting. The transformer may be mounted in any orientation.

Maintenance

These transformers require no maintenance, other than occasional cleaning, if installed where air contamination is severe.

Wound Primary Indoor Current Transformer

Model JKM-5C

CERTIFICATIONS:

APPLICATION:

Designed for indoor service; Suitable for operating meters, instruments and control devices.

FREQUENCY:

50-60 Hz.

INSULATION LEVEL:

15.5 kV; BIL 110 kV full wave

APPROXIMATE WEIGHT:

53 lbs.

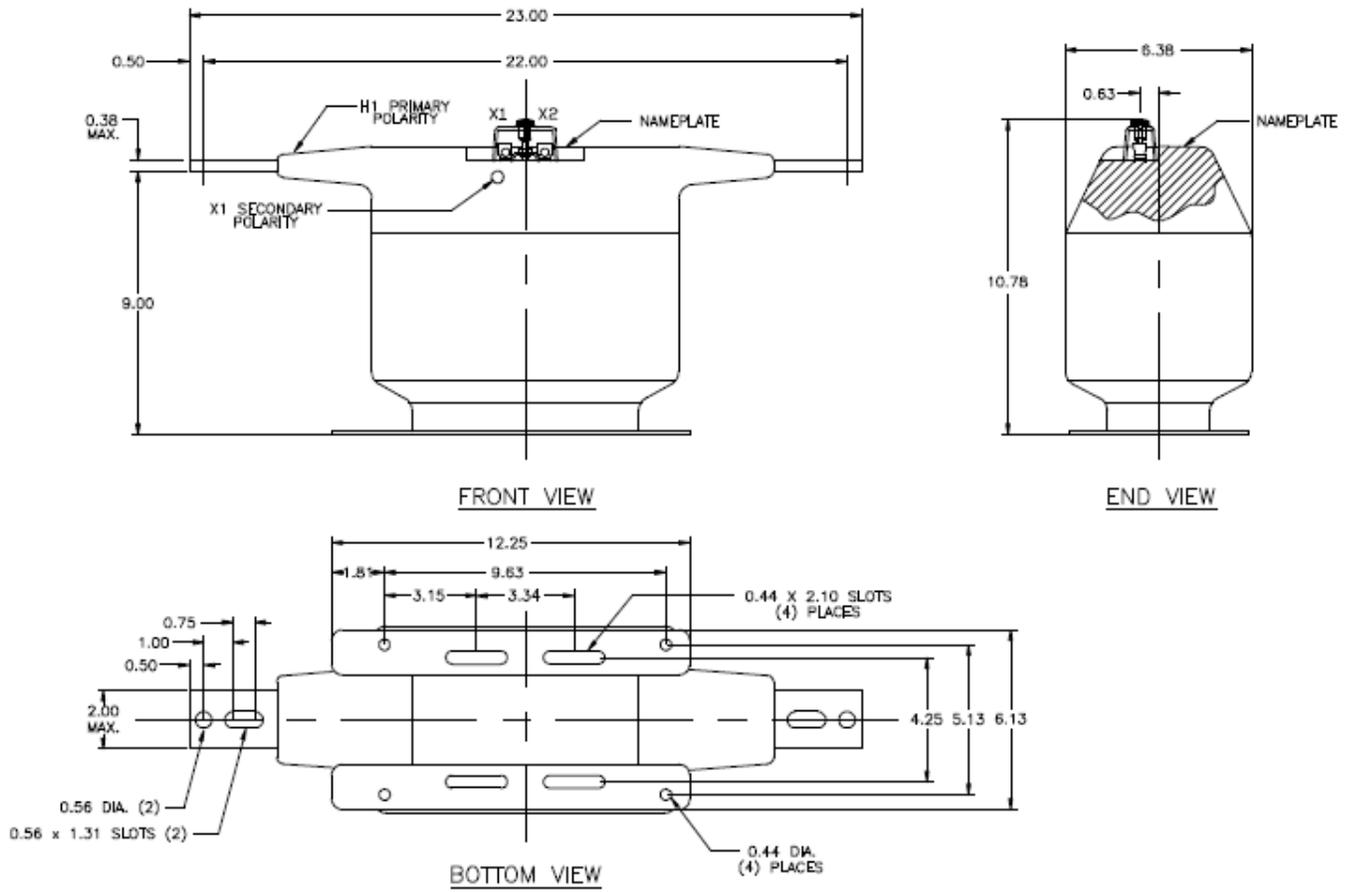


Current Ratio (Amps) Pri:Sec	ANSI Accuracy Class, 60 Hz		Relay Class	Continuous Thermal Current Rating Factor		Primary Bar Size		One Second Thermal Limit Amps	Mech. Limit Amps
	ANSI Meter Class Burden			@30°C Amb.	@55°C Amb.	Width ins.	Thick ins.		
	B0.1 to B0.5	B0.9 to 1.8		Single Ratio					
5:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	465	625
10:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	930	1,250
15:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	1,470	1,875
20:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	1,850	2,500
25:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	2,300	3,125
30:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	2,460	3,750
40:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	3,720	5,000
50:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	4,600	6,250
75:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	6,375	9,375
100:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	8,600	12,500
150:5	0.3	0.3	T200	1.5	1.33	1.50	0.188	12,750	18,750
200:5	0.3	0.3	T200	1.5	1.33	2.00	0.25	17,200	25,000
300:5	0.3	0.3	T200	1.5	1.33	2.00	0.25	25,800	37,500
400:5	0.3	0.3	T200	1.5	1.33	2.00	0.25	36,000	50,000
500:5	0.3	0.3	T200	1.5	1.33	2.00	0.38	42,000	53,500
600:5	0.3	0.3	T200	1.5	1.33	2.00	0.38	51,600	75,000
800:5	0.3	0.3	T200	1.2	0.85	2.00	0.38	63,200	80,000
Tapped Secondary									
50/100:5	0.3	---	T100	2.0	1.5	1.50	0.188	4,300	12,500
	0.3	0.3	T200	1.5	1.0			8,600	
75/150:5	0.3	---	T100	2.0	1.5	1.50	0.188	6,375	18,750
	0.3	0.3	T200	1.5	1.0			12,750	
100/200:5	0.3	---	T100	2.0	1.5	2.00	0.25	8,600	25,000
	0.3	0.3	T200	1.5	1.0			17,200	
150/300:5	0.3	---	T100	2.0	1.5	2.00	0.25	12,900	37,500
	0.3	0.3	T200	1.5	1.0			25,800	
200/400:5	0.3	---	T100	2.0	1.5	2.00	.25	18,000	50,000
	0.3	0.3	T200	1.5	1.0			36,000	
300/600:5	0.3	---	T100	2.0	1.5	2.00	0.38	25,800	75,000
	0.3	0.3	T200	1.5	1.0			51,600	
400/800:5	0.3	---	T100	2.0	1.5	2.00	0.38	31,600	80,000
	0.3	0.3	T200	1.2	0.85			63,200	

Products are manufactured in a plant whose quality management system has been certified to be in compliance with ISO 9001:2015 by NQA

Wound Primary Indoor Current Transformer

Model JKM-5C



Construction and Insulation

The core and coil assembly is encapsulated in vacuum cast polyurethane resin. This tough material has excellent electrical and mechanical properties over a wide temperature range, has low water absorption and is resistant to oil and a variety of chemicals.

Core and Coils

The core is made from high quality grain oriented silicon steel, annealed under rigidly controlled factory conditions. The primary winding consists of two coils in series, one around each leg of the core. This construction minimizes flux leakage thus improving the accuracy of the transformer. The secondary winding consists of two coils in parallel. Each coil is located inside the corresponding primary coil and surrounds one leg of the core.

Terminals

Secondary terminals are tin plated brass, compression type with a 0.275" diameter cross-hole for wiring and a ¼ - 28 clamp screw. A shorting device is provided and interlocked to the terminal cover. The terminal cover is made of a clear plastic. Provision is made for sealing the cover.

Primary Bars

The primary terminals are tin plated copper bars molded into the cast resin insulation. They have one hole and one slot at each end, suitable for ½" bolts.

Polarity

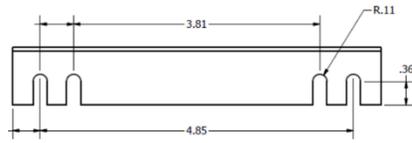
The primary and secondary polarity markers H1, X1, are molded in the insulation. They are thus permanent and integral parts of the transformer and cannot be readily obliterated. They are also marked white.

Base plate and mounting

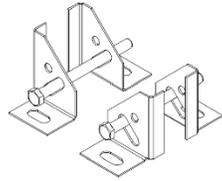
The base plate is made of stainless steel; it is provided with four slots for mounting. The transformer may be mounted in any orientation.

Maintenance

These transformers require no maintenance, other than occasional cleaning, if installed where air contamination is severe.



MODEL 8SHT-KIT

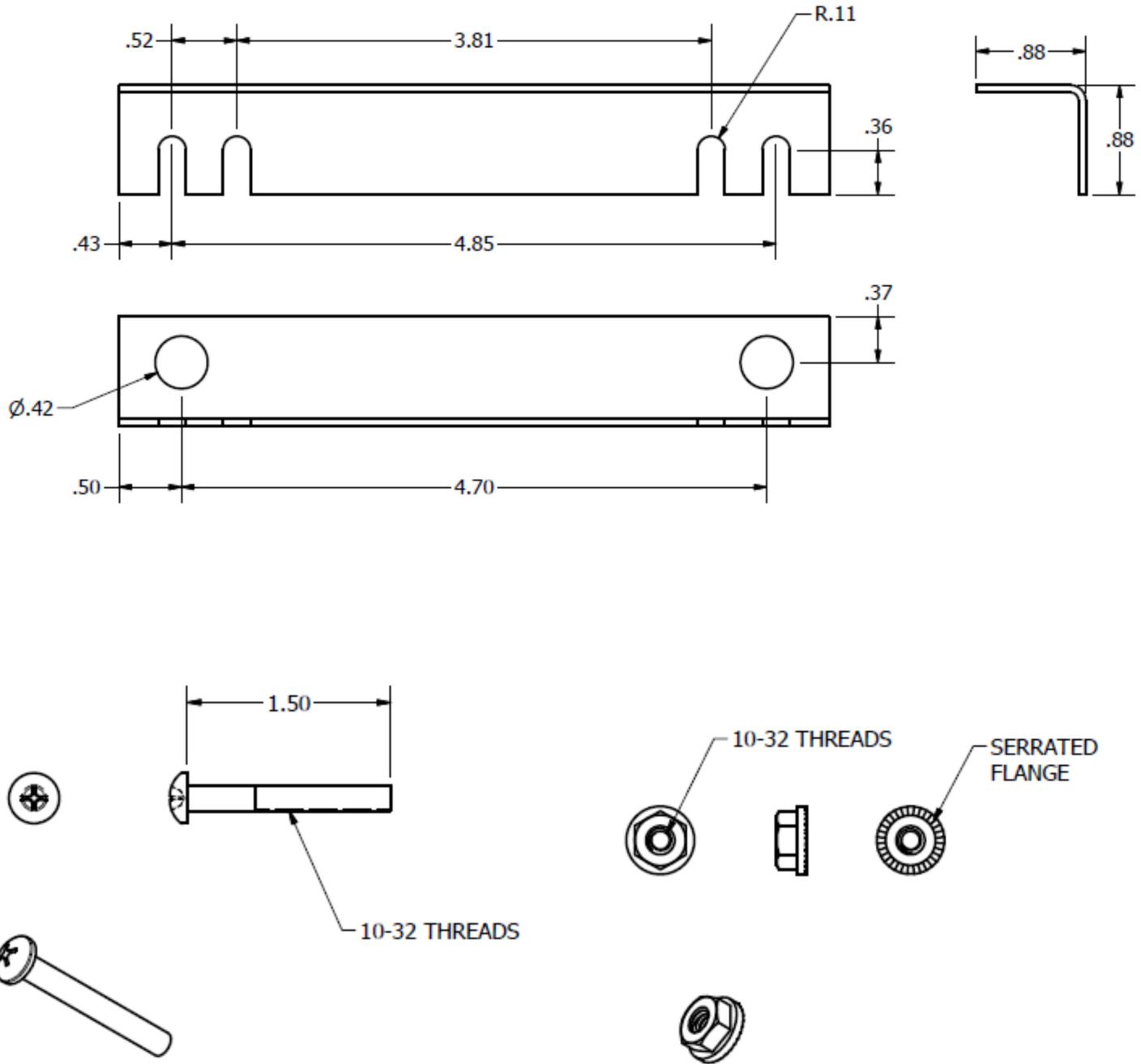


MODEL 115-KIT

APPLICATION:

Mounting kit for use with model 8SHT.

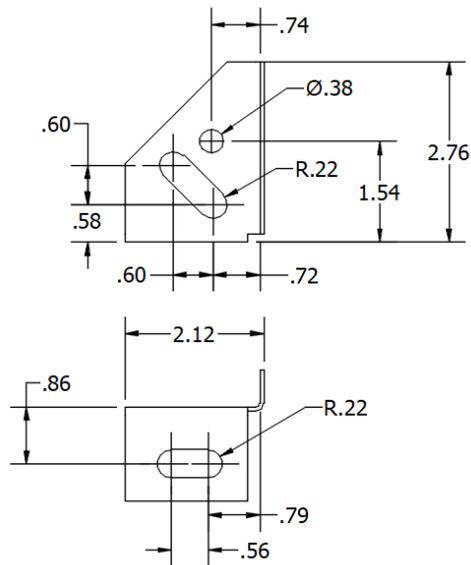
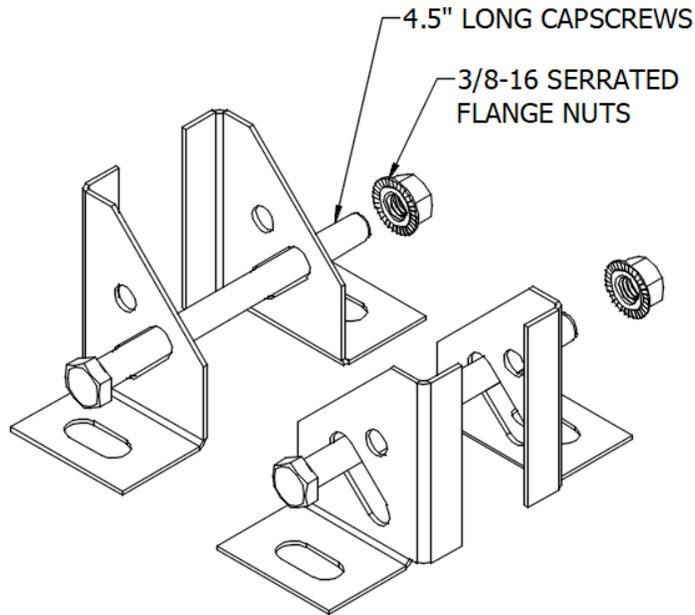
Each kit contains 2 brackets, 2 bolts and 2 nuts.



APPLICATION:

Mounting kit for use with model 115

Each kit contains 4 brackets, 2 bolts and 2 nuts.



TECHNICAL DATA

STANDARDS

- I. Current Transformers
 - a. I.E.E.E. / A.N.S.I. Publication I.E.E.E. Std. C57.13-2008
 - b. I.E.C. Publication No. I.E.C. 61869-2
- II. Voltage Transformers
 - a. I.E.E.E. / A.N.S.I. Publication I.E.E.E. Std. C57-13-2008
 - b. I.E.C. Publication No. 61869-3

Standards listed are ones we most commonly use in the field. It should be understood that standards are not laws, but are suggested guidelines for users and manufacturers alike. The standards usually suggest test and testing procedures as well.

The following is based on U.S.A. standards (C57.13-2008) which is the standard of choice in the U.S.A.

I.E.C. (International Electro technical Commission) is the standard of choice of the international community.

CURRENT TRANSFORMERS

Accuracy & Burden – Accuracy is defined for two different types of applications (metering and relaying).

The following table defines metering accuracy classes.

The limits of transformer correction factor in standard shall be as shown in Table 1.

**STANDARD ACCURACY CLASSES
TABLE 1**

METERING ACCURACY CLASS	VOLTAGE TRANSFORMERS (at 100% rated voltage)		CURRENT TRANSFORMERS			
	RATIO CORRECTION FACTORS					
			*At 100% rated current		*At 100% rated current	
	Minimum	Maximum	Minimum	Maximum	Minimum	Maximum
0.3	0.997	1.003	0.997	1.003	0.994	1.006
0.6	0.994	1.006	0.994	1.006	0.988	1.012
1.2	0.998	1.012	0.988	1.012	0.976	1.024

*For current transformers the 100% rated current limit also applies to the current corresponding to the continuous thermal current rating factor.

Accuracy statement (0.3, 0.6, 1.2) is not complete unless it is stated at a given burden. Table 2 defines the standard burdens for metering and relaying as well.

TECHNICAL DATA

**STANDARD BURDENS FOR CURRENT TRANSFORMERS WITH 5 SECONDARY WINDINGS
TABLE 2**

BURDENS	BURDEN DESIGNATION**	RESISTANCE (Ω)	INDUCTANCE (mH)	IMPEDANCE (Ω)	VOLTAMPERES (at 5 A)	POWER FACTOR
Metering Burdens	B-0.1	0.09	0.116	0.1	2.5	0.9
	B-0.2	0.18	0.232	0.2	5.0	0.9
	B-.05	0.45	0.580	0.5	12.5	0.9
	B-0.9	0.81	1.040	0.9	22.5	0.9
	B-1.8	1.62	2.080	1.8	45.0	0.9
Relaying Burdens	B-1	0.50	2.300	1.0	25.0	0.5
	B-2	1.00	4.600	2.0	50.0	0.5
	B-4	2.00	9.200	4.0	100.0	0.5
	B-8	4.00	18.400	8.0	200.0	0.5

*If a current transformer secondary winding is rated at other than 5 A, ohmic burdens for specification and rating shall be derived by multiplying the resistance and inductance of the table $[5 / (\text{ampere rating})]^2$, the VA at rated current, the power factor, and the burden designation remaining the same.

**These standard burden designations have no significance at frequencies other than 60 Hz.

There is another factor which must be considered, that is, phase error. Table 3 gives the maximum acceptable phase error associated with the standard accuracy classes.

TABLE 3

ACCURACY CLASSES	± PHASE ERROR AT 100% PRIMARY CURRENT	± PHASE ERROR AT 10% PRIMARY CURRENT
0.3	15.6 MINUTES	31.2 MINUTES
0.6	31.2 MINUTES	62.4 MINUTES
1.2	62.4 MINUTES	24.8 MINUTES

If you have a metering accuracy statement of "0.3 BO.5", it indicates the following:

(0.3) maximum ratio error of 0.3% at 100% of rated primary current or $\pm 0.6\%$ ratio error at 10% of rated primary current. With a maximum phase error of ± 15.6 minutes at 100% rated primary current or ± 31.2 minutes maximum phase error at 10% of rated primary current. All of the above is based on a burden of (BO.5) 0.5 OHMS at power factor of 0.9.

TECHNICAL DATA

CURRENT TRANSFORMERS RELAYING ACCURACY

All relaying accuracies are $\pm 10\%$ maximum ratio error when there is 20 times current flowing in the CT secondary ($20 \times 5A=100A$). There are two designations which are “C” and “T”. Designation “C” stands for “Calculate”. This type of CT’s performance can be very accurately calculated. The “T” designation stands for “Test”. This type of CT’s performance must be verified by testing. Table 4 gives the relaying accuracy designations:

TABLE 4

DESIGNATION	BURDEN	POWER FACTOR	SECONDARY VOLTAGE
C 10 or T10	0.1 Ω	0.5	10V
C 20 or T20	0.2 Ω	0.5	20V
C 50 or T50	0.5 Ω	0.5	50V
C 100 or T100	1.0 Ω	0.5	100V
C 200 or T200	2.0 Ω	0.5	200V
C 400 or T400	4.0 Ω	0.5	400V
C 800 or T800	8.0 Ω	0.5	800V

VOLTAGE TRANSFORMERS

Voltage transformers have the same accuracy classes as indicated in Table 1 (i.e. 0.3, 0.6 & 1.2). These accuracy classes must be given at a stated burden in order to be meaningful. Table 5 gives the standard burden data:

**VOLTAGE TRANSFORMER BURDEN DATA
TABLE 5**

BURDEN	VOLT AMPERES	POWER FACTOR	P.F. ANGLE
W	12.5	0.10	84.3°
X	25	0.70	45.6°
M	35	0.20	78.5°
Y	75	0.85	31.8°
Z	200	0.85	31.8°
ZZ	400	0.85	31.8°

If you have a “0.6Y” accuracy and burden statement, it indicates the following:

This means: (0.6) maximum ratio error of + 0.6% at a burden of 75VA with a power factor of 0.85.

TECHNICAL DATA

CURRENT TRANSFORMERS RATIO MODIFICATION

Relatively large changes in ratio may be achieved through the use of primary turns. For example:

TABLE 6

CT RATIO	NUMBER OF PRIMARY TURNS	MODIFIED RATIO
100:5A	2	50:5A
200:5A	2	100:5A
300:5A	2	150:5A
100:5A	3	33.3:5A
200:5A	3	66.6:5A
300:5A	3	100:5A
100:5A	4	25:5A
200:5A	4	50:5A
300:5A	4	75:5A

A primary turn is the number of times the primary conductor passes through the CT's window. The main advantage of this ratio modification is maintaining the accuracy and burden capabilities of the higher ratio. The higher the primary rating the better the accuracy and burden rating.

Smaller ratio modification adjustments can be made by using additive or subtractive secondary turns. For example, if a CT with a ratio of 100:5A: By adding one additive secondary turn, the ratio modification is 105:5A; by adding on subtractive secondary turn, the ratio modification is 95:5A. Subtractive secondary turns are achieved by placing the "X1" lead through the window from the H1 side and out the H2 side. Additive secondary turns are achieved by placing the "X1" lead through the window from the H2 and out of the H1 side. So, when there is only one primary turn, each secondary turn modifies the primary rating by 5 amperes. If there is more than one primary turn, each secondary turn value is changes (i.e. 5A divided by 2 primary turns = 2.5A). Table 7 illustrates the effects of different combinations of primary and secondary turns:

TABLE 7

PRIMARY TURNS	SECONDARY TURNS	RATIO ADJUSTMENT
1	-0-	100:5A
1	1+	105:5A
1	1-	95:5A
2	-0-	50:5
2	1+	52.5:5A
2	2-	45.0:5A
3	-0-	33.3:5A
3	1+	34.97:5A
3	1-	31.63:5A

The use of primary/secondary turns makes it is possible to modify any CT ratio, since low ratio CT's generally have poorer performances characteristics and high ratio CT's have

TECHNICAL DATA

better performance. By using added primary/secondary turns, you can modify a higher ratio CT to have a lower ratio and enjoy the better performance of the higher ratio.

***Use Table 8 to determine size window needed for number and primary conductor(s)**

TABLE 8

WINDOW DIAMETER		1/2"	3/4"	1"	1 1/2"	2"	1 1/2"	3"	3 1/2"	4"	5"	6"
INSULATION TYPE RHW	AWG MCM											
	14	3	6	10	25	41	58	90	121	155	-	-
	12	3	5	9	21	35	50	77	103	132	-	-
	10	2	4	7	18	29	41	64	86	110	-	-
	8	1	2	4	9	16	22	35	47	60	94	137
	6	1	1	2	6	11	15	24	32	41	64	93
	4	1	1	1	5	8	12	18	24	31	50	72
	3	1	1	1	4	7	10	16	22	38	44	63
	2	-	1	1	4	6	9	14	19	24	38	56
	1	-	1	1	3	5	7	11	14	18	29	42
	0	-	1	1	2	4	6	9	12	16	25	47
	00	-	-	1	1	3	5	8	11	14	22	32
	000	-	-	1	1	3	4	7	9	12	19	28
	0000	-	-	1	1	2	4	6	8	10	16	24
	250	-	-	-	1	1	3	5	6	8	13	19
	300	-	-	-	1	1	3	4	5	7	11	17
	350	-	-	-	1	1	2	4	5	6	10	15
	400	-	-	-	1	1	1	3	4	6	9	14
	500	-	-	-	1	1	1	3	4	5	8	11
	600	-	-	-	1	1	1	2	3	4	6	9
	700	-	-	-	1	1	1	1	3	3	6	8
	750	-	-	-	1	1	1	1	3	3	5	8

Burden is the opposition to the flow of current from the transformers secondary. Burden may be expressed in terms of resistance of volt-amperes. The following table may be used to convert volt-ampere values to resistance values for 5 amp secondary CT's:

TECHNICAL DATA

BURDEN

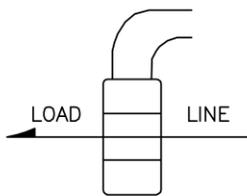
TABLE 9

VOLTAMPERE (VA)	RESISTANCE (OHMS) Ω
0.5	0.02
1.0	0.04
1.5	0.06
2.0	0.08
2.5	0.10
3.0	0.12
3.5	0.14
4.0	0.16
4.5	0.18
5.0	0.20
5.5	0.22
6.0	0.24
6.5	0.26
7.0	0.28
7.5	0.30
8.0	0.32
8.5	0.34
9.0	0.36
9.5	0.38
10.0	0.40
12.5	0.50
15.0	0.60
20.0	0.80
25.0	1.00
45.0	1.80
50.0	2.00
75.0	3.00
100.0	4.00

APPLICATION GUIDE

Primary Turn Ratio Modification

The nameplate of the current transformer is based on the condition that the primary conductor will be passed once through the transformer opening. The rating can be reduced in even multiples by looping this conductor two or more times through the opening. A transformer having a rating of 200 to 5 amperes will be changed to 50 to 5 amperes if four loops or turns are made with the primary cable as illustrated.

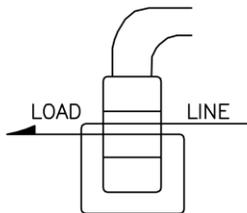


1 Primary Turn

NAMEPLATE RATIO	ACTUAL RATIO
100:5	100:5
150:5	150:5
200:5	200:5
300:5	300:5
400:5	400:5
500:5	500:5
600:5	600:5
800:5	800:5

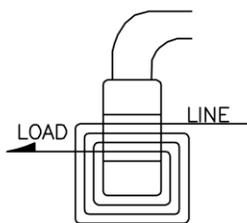
2 Primary Turns

NAMEPLATE RATIO	ACTUAL RATIO
100:5	50:5
150:5	75:5
200:5	100:5
300:5	150:5
400:5	200:5
500:5	250:5
600:5	300:5
800:5	400:5



4 Primary Turns

NAMEPLATE RATIO	ACTUAL RATIO
100:5	25:5
150:5	37.5:5
200:5	50:5
300:5	75:5
400:5	100:5
500:5	125:5
600:5	150:5
800:5	200:5



Secondary Turn Ratio Modification

$$\text{Formula: } \frac{I_p}{I_s} = \frac{N_s}{N_p}$$

Where: I_p – Primary Amperage
 I_s – Secondary Amperage
 N_p – Number of Primary Turns
 N_s – Number of Secondary Turns

Example: A 300:5 Current Transformer –

$$\frac{300 p}{5 s} = \frac{60 s}{1 p}$$

(In practicality one turn is dropped from the secondary as a ratio correction factor).

The ratio of the current transformer can be modified by altering the number of secondary turns by forward or backwinding the secondary lead through the window of the current transformer.

By adding secondary turns the same primary amperage will result in a decrease in secondary output. By subtracting secondary turns the same primary amperage will result in greater secondary output.

Again, using the 300:5 example adding five secondary turns will require 325 amps on the primary to maintain the 5 amp secondary output or:

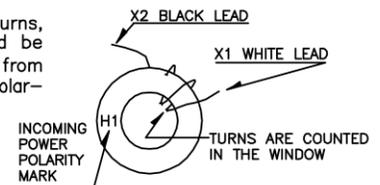
$$\frac{325 p}{5 s} = \frac{65 s}{1 p}$$

Deducting 5 secondary turns will only require 275 amps on the primary to maintain the 5 amp secondary output or:

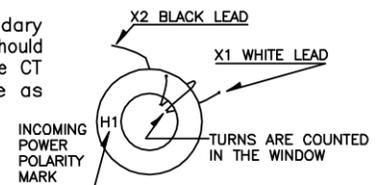
$$\frac{275 p}{5 s} = \frac{55 s}{1 p}$$

The above ratio modifications are achieved in the following manner:

To add secondary turns, the white lead should be wound through the CT from the side opposite the polarity mark.



To subtract secondary turns the white lead should be wound through the CT from the same side as the polarity mark.



Medium Voltage PT Part Number

PT G 3 - 1 - 60 - 42 2 F

Potential Transformer

Style (Base Plate)
G - GE Style
W - Westinghouse Style

Voltage Level
3 = 5.6kV
4 = 9.52 kV
5 = 15.5 kV

Poles (Outputs)
1 or 2

BIL (Basic Impulse Lvl)
60, 75 or 110

First two digits of primary voltage.

Number of zeros following first two numbers.

Number of fuses (F), switchgear style (S) or clips (C).

Control Power Transformer Part Number

CPT 3 - 60 - 0.5 - 24 2 FF

Control Power Transformer

Voltage Level
3 = 5kV

BIL (Basic Impulse Lvl)
60

Thermal Rating (VA)
0.5, 1, 1.5, 2, 3

First two digits of primary voltage.

Number of zeros following first two numbers.

Number of fuses (F), switchgear style (S) or clips (C).

Current Transformer Part Number

2 RL - 10 2 - 1 - LL 48

Model

Frame Type

RL = Round with Leads
SHT = Square with Holes and Terminals
SFT = Square with Feet and Terminals
DRL = Double Core Round with Leads
RT = Round with Terminals

First two
digits of
primary
current.

Number
of zeros
following
first two
numbers.

Secondary
if other
than 5A

Lead length if
longer than 24".
Also for twisted
leads (TL).

Customized
lead length.

Low Voltage VT Part Number

450 I - 480 FF

Model

Use 'I' if IEC class (50 Hz,
110V Secondary)

Primary Voltage Rating

Number of fuses
(if appropriate)



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SCR Power Control Specialists

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