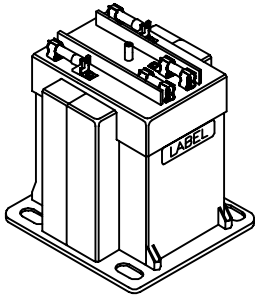
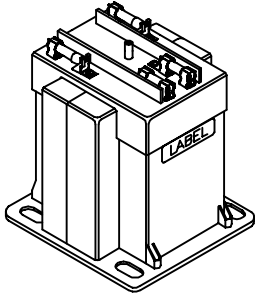
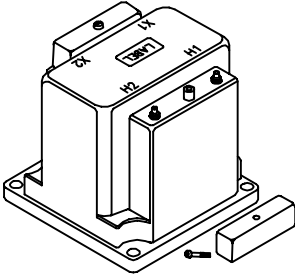
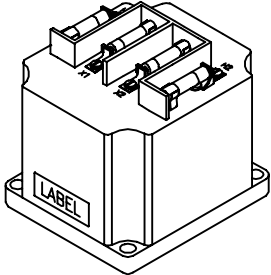
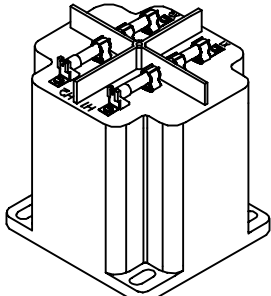


600 VOLT

VOLTAGE TRANSFORMERS CURRENT TRANSFORMERS

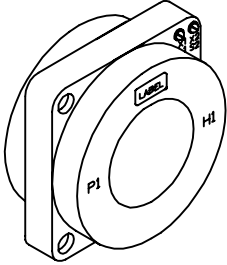
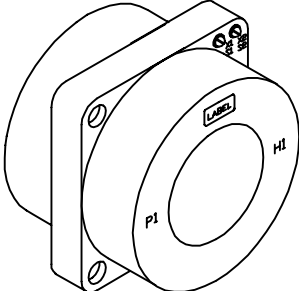
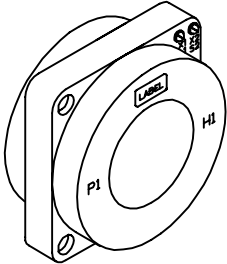
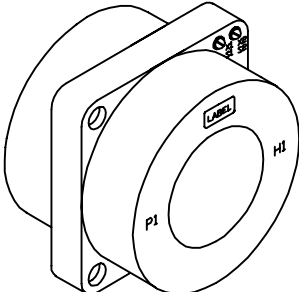
IEC RATED
-50 HZ-

MODEL 450I		ACCURACY CLASS THERMAL RATING 0.2 @ 40 VA 0.5 @ 70 VA 550 VA at 30°C. amb. 350 VA at 55°C. amb.	BODY SIZE W152.4mm H155mm D165mm	PAGE 3
MODEL 456I		ACCURACY CLASS THERMAL RATING 0.2 @ 20 VA 0.5 @ 35 VA 400 VA at 30°C. amb. 250 VA at 55°C. amb.	BODY SIZE W152.4mm H155mm D165mm	PAGE 4
MODEL 460I		ACCURACY CLASS THERMAL RATING 0.5 @ 10 VA 1.0 @ 20 VA 125 VA at 30°C. amb. 75 VA at 55°C. amb.	BODY SIZE W114mm H84.8mm D120mm	PAGE 5
MODEL 460 FI & FFI		ACCURACY CLASS THERMAL RATING 0.5 @ 10 VA 1.0 @ 20 VA 125 VA at 30°C. amb. 75 VA at 55°C. amb.	BODY SIZE W109.7mm H120.7mm D116mm	PAGE 6
MODEL 475I		ACCURACY CLASS THERMAL RATING 0.2 @ 10 VA 0.5 @ 20 VA 225 VA at 30°C. amb. 150 VA at 55°C. amb.	BODY SIZE W120.7mm H160.7mm D111.3mm	PAGE 7

600 VOLT

VOLTAGE TRANSFORMERS CURRENT TRANSFORMERS

IEC RATED
-50 HZ-

<p>MODEL 680I</p>		<p>WINDOW DIA. 178.3mm</p>	<p>BODY SIZE W273mm H273mm D 89mm</p>	<p>PAGE 8</p>
<p>MODEL 685I</p>		<p>WINDOW DIA. 178.3mm</p>	<p>BODY SIZE W273mm H273mm D177.8mm</p>	<p>PAGE 11</p>
<p>MODEL 780I</p>		<p>WINDOW DIA. 165mm</p>	<p>BODY SIZE W251mm H251mm D 86mm</p>	<p>PAGE 14</p>
<p>MODEL 785I</p>		<p>WINDOW DIA. 165mm</p>	<p>BODY SIZE W251mm H251mm D171.5mm</p>	<p>PAGE 17</p>

VOLTAGE TRANSFORMER

Model 450I

FREQUENCY:
50 Hz

STANDARD SECONDARY VOLTAGE:
110 Volts

INSULATION LEVEL:
0.72kV

ACCURACY CLASS:
0.2 @ 40 VA,
0.5 @ 70 VA.

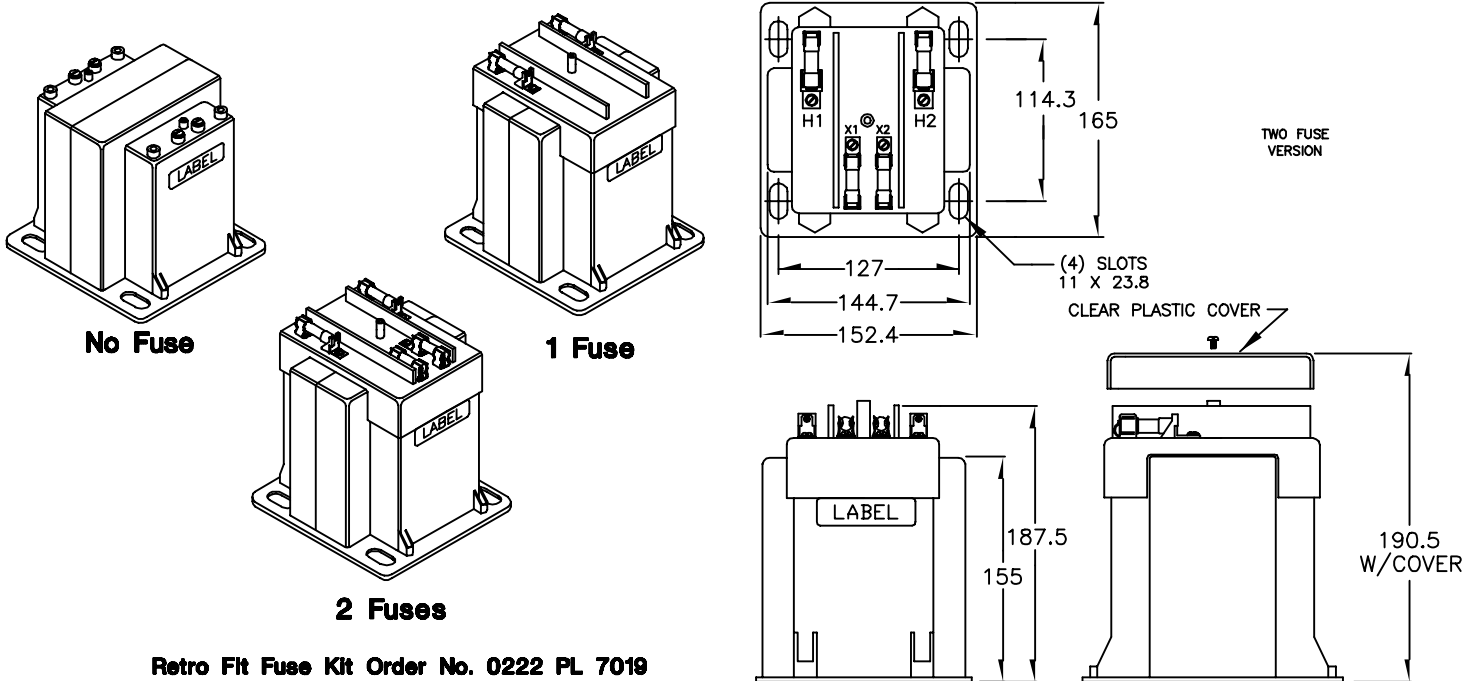
THERMAL RATING:
550 VA at 30°C. amb.,
350 VA at 55°C. amb.

REGULATORY AGENCY APPROVALS



Manufactured to meet the requirements of ANSI C57.13.
Classified by U.L. in accordance with IEC 44-2

- The primary and secondary terminals are ASA No. 10-32 screws into 9.6mm deep brass inserts and fitted with one lockwasher and flatwasher and are contained in a sealable terminal cover.
- 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 an 6.0 amp BBS type or equal fuse in the secondary to protect the transformer.
- When primary fuses are requested, the ratings will be as given in the table below.
- When only one fuse is used, it must be connected into the line side (H1) terminal wiring. This will prevent the presence of voltage at the H1 terminal for a ruptured fuse in the neutral (H2) terminal wiring for line-to-neutral connected transformers.
- Approximate weight: 11.4 kg



CATALOG NUMBERS			VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
NOT FUSED	PRIMARY FUSES ONLY	PRIMARY AND SECONDARY FUSES			
450I-110	450I-110F	450I-110FF	110:110	1:1	10 amp.
450I-220	450I-220F	450I-220FF	220:110	2:1	6 amp.
450I-380	450I-380F	450I-380FF	380:110	3.45:1	3 amp.
450I-400	450I-400F	450I-400FF	400:110	3.64:1	3 amp.
450I-416	450I-416F	450I-416FF	416:110	3.78:1	3 amp.
450I-440	450I-440F	450I-440FF	440:110	4:1	3 amp.
450I-550	450I-550F	450I-550FF	550:110	5:1	2 amp.
450I-660	450I-660F	450I-660FF	660:110	6:1	2 amp.

ABOVE PART NUMBERS ARE AVAILABLE WITH 100 VOLT SECONDARIES.

VOLTAGE TRANSFORMER

Model 456I

FREQUENCY:
50 Hz

STANDARD SECONDARY VOLTAGE:
110 Volts

INSULATION LEVEL:
0.72kV

ACCURACY CLASS:

0.2 @ 20 VA,
0.5 @ 35 VA.

THERMAL RATING:

400 VA at 30°C. amb.,
250 VA at 55°C. amb.

REGULATORY AGENCY APPROVALS

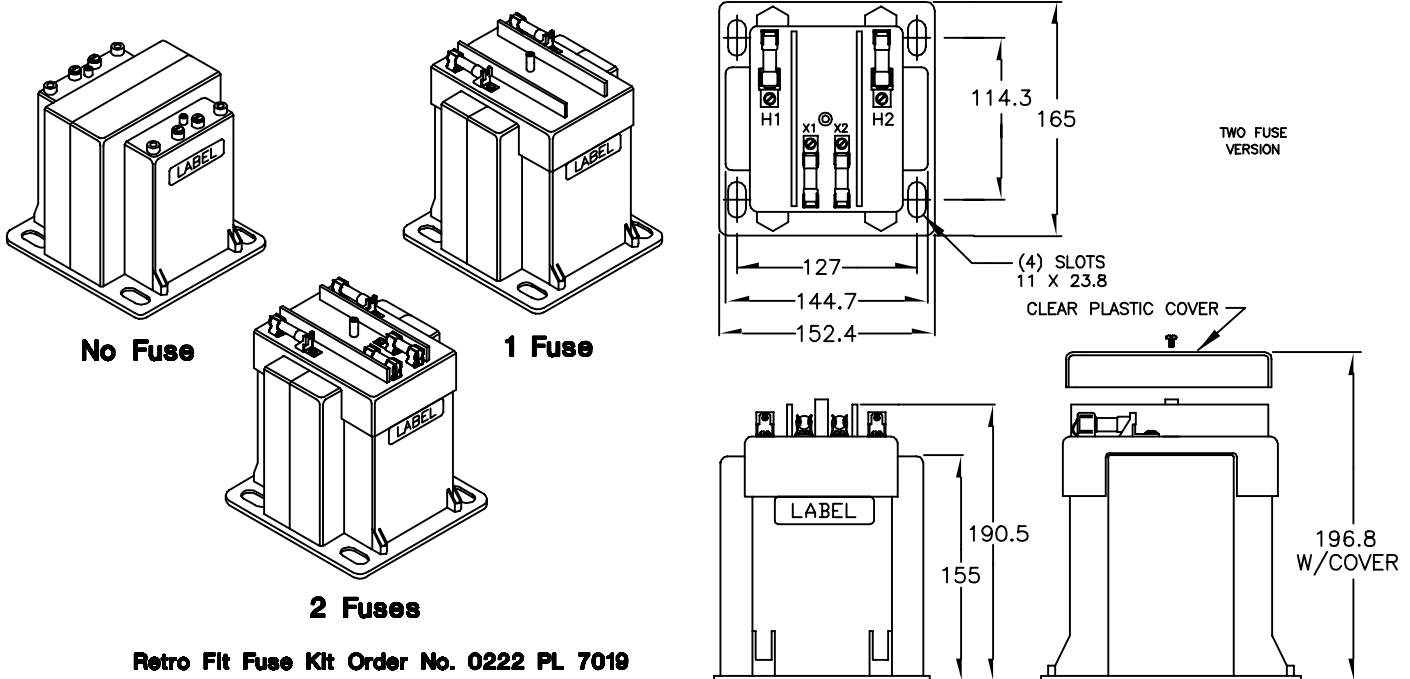


Manufactured to meet the requirements of ANSI C57.13.
Classified by U.L. in accordance with IEC 44-2

- The primary and secondary terminals are ASA No. 10-32 screws into 9.7mm deep brass inserts and fitted with one lockwasher and flatwasher and are contained in a sealable terminal cover.
- 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 4.0 amp BBS type or equal fuse in the secondary to protect the transformer.
- When primary fuses are requested, the ratings will be as given in the table below.

- When only one fuse is used, it must be connected into the line side (H1) terminal wiring. This will prevent the presence of voltage at the H1 terminal for a ruptured fuse in the neutral (H2) terminal wiring for line-to-neutral connected transformers.
- Approximate weight: 8.4 kg.



CATALOG NUMBERS			VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
NOT FUSED	PRIMARY FUSES ONLY	PRIMARY AND SECONDARY FUSES			
456I-110	456I-110F	456I-110FF	110:110	1:1	6 amp.
456I-220	456I-220F	456I-220FF	220:110	2:1	4 amp.
456I-380	456I-380F	456I-380FF	380:110	3.45:1	3 amp.
456I-400	456I-400F	456I-400FF	400:110	3.64:1	3 amp.
456I-416	456I-416F	456I-416FF	416:110	3.78:1	3 amp.
456I-440	456I-440F	456I-440FF	440:110	4:1	2 amp.
456I-550	456I-550F	456I-550FF	550:110	5:1	2 amp.
456I-660	456I-660F	456I-660FF	660:110	6:1	2 amp.

ABOVE PART NUMBERS ARE AVAILABLE WITH 100 VOLT SECONDARIES.

VOLTAGE TRANSFORMER

Model 460I

FREQUENCY:
50 Hz

STANDARD SECONDARY VOLTAGE:
110 Volts

INSULATION LEVEL:
0.72kV

ACCURACY CLASS:
0.5 @ 10 VA,
1.0 @ 20 VA.

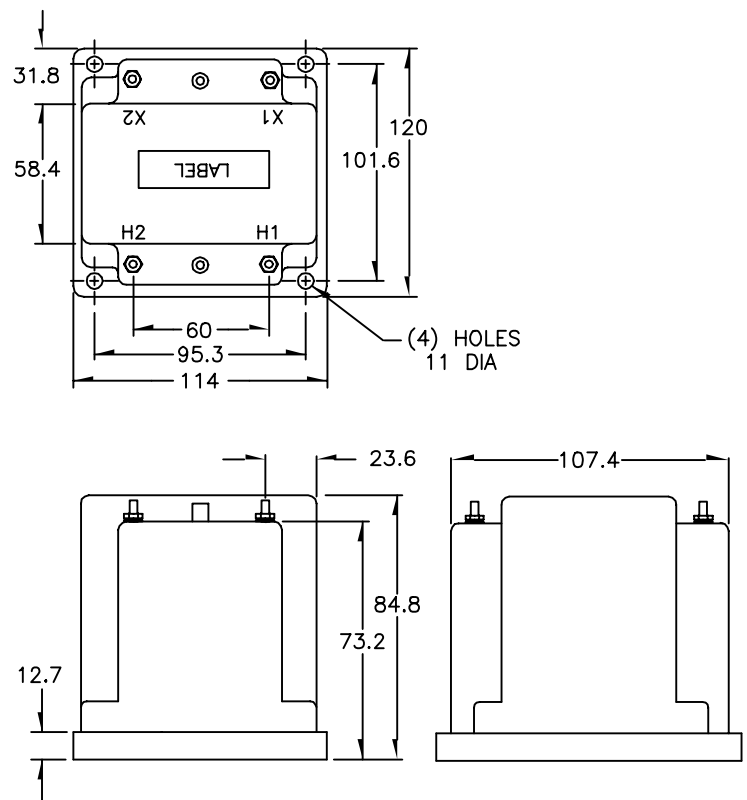
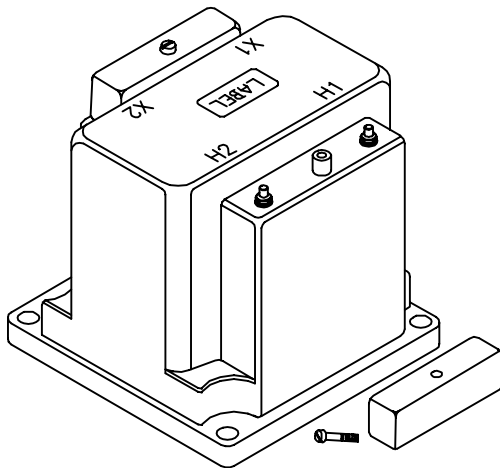
THERMAL RATING:
125 VA at 30°C. amb.,
75 VA at 55°C. amb.

REGULATORY AGENCY APPROVALS



Manufactured to meet the requirements of ANSI C57.13.
Classified by U.L. in accordance with IEC 44-2

- Terminals are brass studs ASA No. 10-32 with one lockwasher, flatwasher and regular nut.
- 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.
- Terminal covers available upon request.
- Approximate weight: 3.5 kg.



CATALOG NUMBER	VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
460I-110	110:110	1:1	3 amp.
460I-220	220:110	2:1	2 amp.
460I-380	380:110	3.45:1	1 amp.
460I-400	400:110	3.64:1	1 amp.
460I-416	416:110	3.78:1	1 amp.
460I-440	440:110	4:1	1 amp.
460I-550	550:110	5:1	0.75 amp.
460I-660	660:110	6:1	0.50 amp.

ABOVE PART NUMBERS ARE AVAILABLE WITH 100 VOLT SECONDARIES.

VOLTAGE TRANSFORMER

Model 460 FI & FFI

FREQUENCY:
50 Hz

STANDARD SECONDARY VOLTAGE:
110 Volts

INSULATION LEVEL:
0.72kV

ACCURACY CLASS:
0.5 @ 10 VA,
1.0 @ 20 VA.

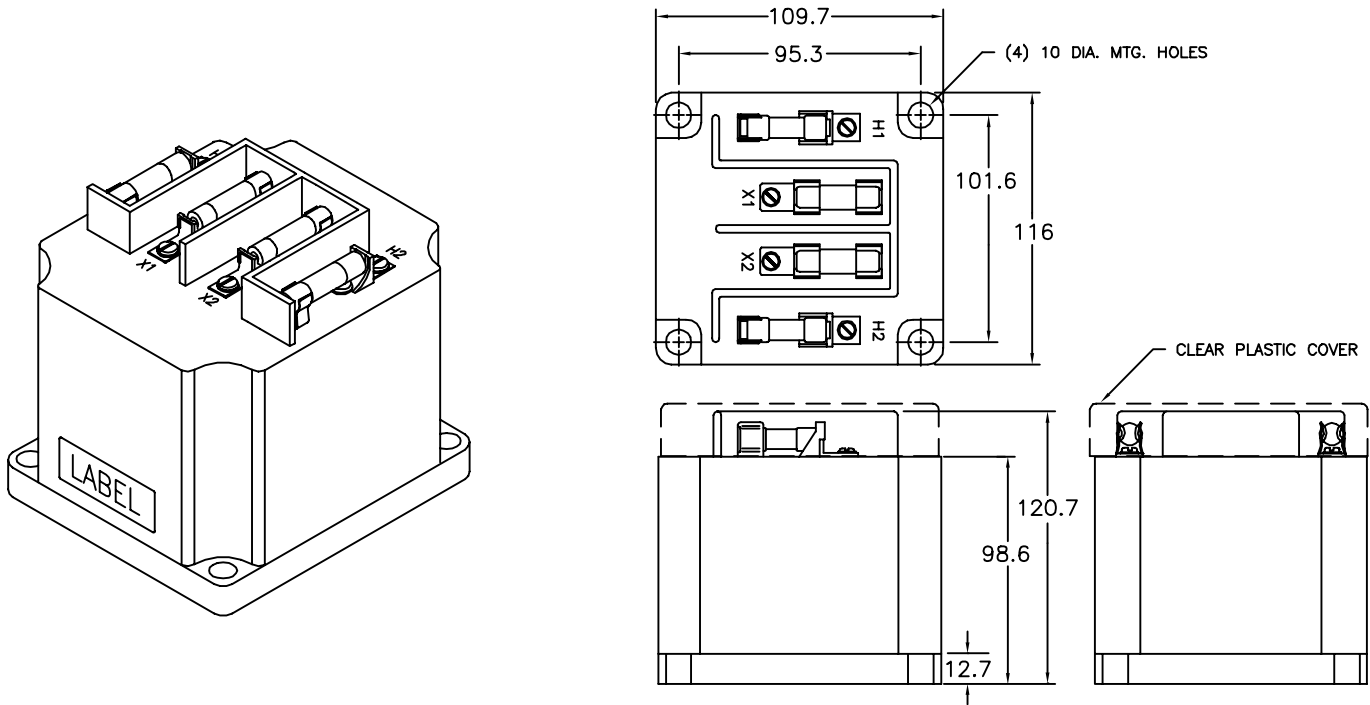
THERMAL RATING:
125 VA at 30°C. amb.,
75 VA at 55°C. amb.

REGULATORY AGENCY APPROVALS



Manufactured to meet the requirements of ANSI C57.13.
Classified by U.L. in accordance with IEC 44-2

- Terminals are brass screws ASA No. 8-32 with one lockwasher, flatwasher.
- 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 BBS type or equal fuse in the secondary to protect the transformer.
- Primary fuses are class CC rejection type.
- Approximate weight: 3.5 kg.



CATALOG NUMBERS		VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
PRIMARY FUSES ONLY	PRIMARY AND SECONDARY FUSES			
460I-110F	460I-110FF	110:110	1:1	3 amp.
460I-220F	460I-220FF	220:110	2:1	2 amp.
460I-380F	460I-380FF	380:110	3.45:1	1 amp.
460I-400F	460I-400FF	400:110	3.64:1	1 amp.
460I-416F	460I-416FF	416:110	3.78:1	1 amp.
460I-440F	460I-440FF	440:110	4:1	1 amp.
460I-550F	460I-550FF	550:110	5:1	0.75 amp.
460I-660F	460I-660FF	660:110	6:1	0.50 amp.

ABOVE PART NUMBERS ARE AVAILABLE WITH 100 VOLT SECONDARIES.

VOLTAGE TRANSFORMER

Model 475I

FREQUENCY:

60 Hz

STANDARD SECONDARY VOLTAGE:

120 Volts

INSULATION LEVEL:

600 Volt, 10 kV BIL full wave.

ACCURACY CLASS:

0.2 @ 10 VA,
0.5 @ 20 VA.

THERMAL RATING:

225 VA at 30°C. amb.,
150 VA at 55°C. amb.

REGULATORY AGENCY APPROVALS



E93779



LR89403

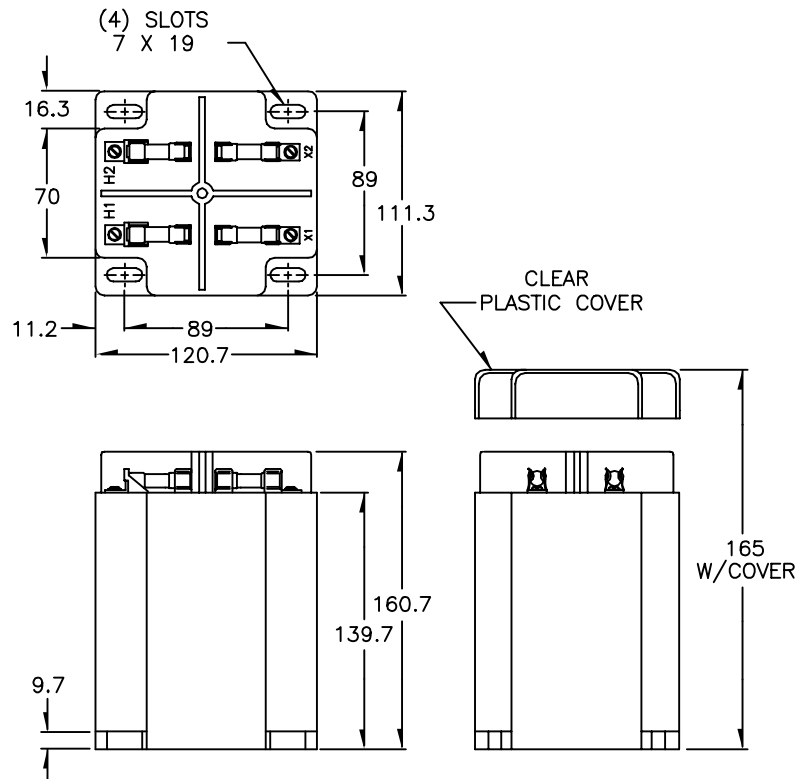
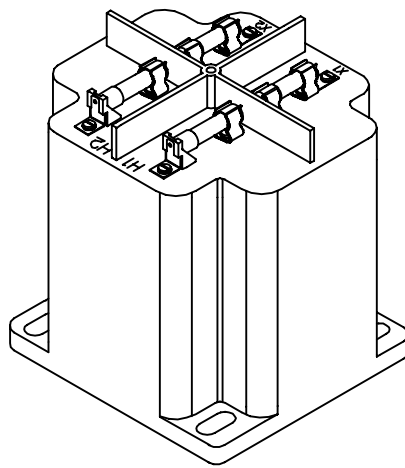
Manufactured to meet the requirements of ANSI C57.13.
Classified by U.L. in accordance with IEC 44-2

- The primary and secondary terminals are ASA No. 8 brass screws with flatwasher and a lockwasher.
- 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 3.0 amp BBS type or equal fuse in the secondary to protect the transformer.

- Transformer has a plastic terminal cover.
- Approximate weight: 5.7 kg.



CATALOG NUMBERS			VOLTAGE RATING	TURNS RATIO	REC. PRIMARY FUSE RATING
NOT FUSED	PRIMARY FUSES ONLY	PRIMARY AND SECONDARY FUSES			
475I-110	475I-110F	475I-110FF	110:110	1:1	4 amp.
475I-220	475I-220F	475I-220FF	220:110	2:1	3 amp.
475I-380	475I-380F	475I-380FF	380:110	3.45:1	2 amp.
475I-400	475I-400F	475I-400FF	400:110	3.64:1	2 amp.
475I-416	475I-416F	475I-416FF	416:110	3.78:1	2 amp.
475I-440	475I-440F	475I-440FF	440:110	4:1	2 amp.
475I-550	475I-550F	475I-550FF	550:110	5:1	1 amp.
475I-660	475I-660F	475I-660FF	660:110	6:1	1 amp.

ABOVE PART NUMBERS ARE AVAILABLE WITH 100 VOLT SECONDARIES.

CURRENT TRANSFORMER

Model 680I

Window Diameter 178.3mm

APPLICATION:
Protective and measuring.

FREQUENCY:
50–400 Hz.

INSULATION LEVEL:
0.72kV

REGULATORY AGENCY APPROVALS

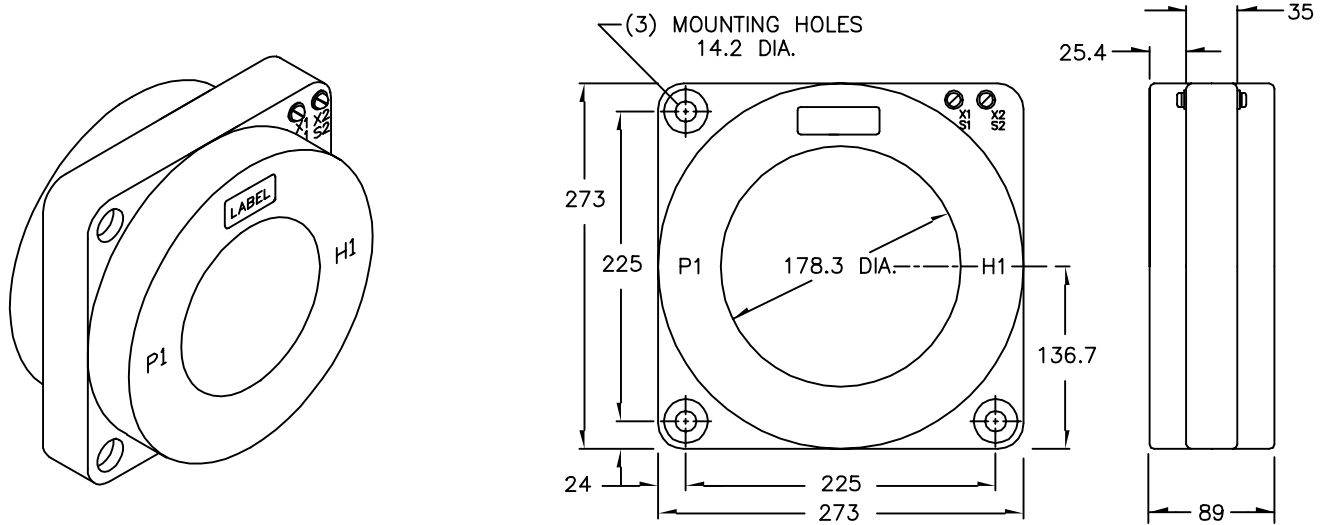


Manufactured to meet the requirements of ANSI/IEEE C57.13.
Classified by U.L. in accordance with IEC 44-1.
Approved for revenue metering by Industry Canada. AE-0657(*)

CONTINUOUS THERMAL CURRENT RATING FACTOR:

50:5 – 2000:5	2.00 at 30°C ambient.	1.50 at 55°C ambient.
2500:5 – 4000:5	1.33 at 30°C ambient.	1.00 at 55°C ambient.
5000:5	1.00 at 30°C ambient.	0.75 at 55°C ambient.

- Secondary terminals are brass screws ASA No. 10–32 with one flatwasher and lockwasher, accessible from either side.
- Approximate weight 15.5 kg



1 AMP SECONDARY

CATALOG NUMBER	CURRENT RATIO	IEC 44-1 PROTECTIVE CLASS AT 50Hz					IEC 44-1 MEASURING CLASS AT 50Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		BURDEN VA					BURDEN VA					
		2.5	5	10	15	30	2.5	5	10	15	30	
680I – 500-1	50:1	10P10	–	–	–	–	3.0	5.0	–	–	–	0.18
680I – 600-1	60:1	10P15	–	–	–	–	3.0	5.0	–	–	–	0.19
680I – 750-1	75:1	10P15	10P10	–	–	–	3.0	3.0	5.0	–	–	0.21
680I – 101-1	100:1	5P20	10P10	10P5	–	–	1.0	3.0	3.0	5.0	–	0.28
680I – 151-1	150:1	5P30	5P15	10P10	10P5	–	1.0	1.0	3.0	3.0	5.0	1.18
680I – 201-1	200:1	5P30	5P20	5P10	10P5	–	0.5	0.5	1.0	3.0	3.0	1.57
680I – 251-1	250:1	5P30	5P30	5P15	5P10	10P5	0.5	0.5	1.0	1.0	3.0	1.96
680I – 301-1	300:1	5P30	5P30	5P20	5P10	10P5	0.5	0.5	0.5	1.0	1.0	2.36
680I – 351-1	350:1	5P30	5P30	5P20	5P15	5P5	0.2	0.5	0.5	0.5	1.0	2.75
680I – 401-1	400:1	5P30	5P30	5P20	5P15	5P5/10P10	0.2	0.2	0.5	0.5	1.0	3.14
680I – 501-1	500:1	5P30	5P30	5P30	5P20	5P10	0.2	0.2	0.2	0.5	0.5	3.92
680I – 601-1	600:1	5P30	5P30	5P20	5P15	5P5/10P10	0.2	0.2	0.5	0.5	1.0	4.06
680I – 751-1	750:1	5P30	5P30	5P20/10P30	5P20	5P10	0.1	0.2	0.2	0.5	0.5	5.25
680I – 801-1	800:1	5P30	5P30	5P30	5P20	5P10	0.1	0.2	0.2	0.2	0.5	5.60
680I – 102-1	1000:1	5P30	5P30	5P30	5P20	5P15	0.1	0.1	0.2	0.2	0.5	7.00
680I – 122-1	1200:1	5P30	5P30	5P30	5P30	5P15	0.1	0.1	0.1	0.1	0.2	8.40
680I – 152-1	1500:1	5P30	5P30	5P20	5P20	5P10	0.1	0.1	0.1	0.1	0.2	9.24
680I – 162-1	1600:1	5P30	5P30	5P20/10P30	5P20	5P10	0.1	0.1	0.1	0.1	0.2	9.85
680I – 202-1	2000:1	5P30	5P30	5P20	5P20	5P10/10P15	0.1	0.1	0.1	0.1	0.2	11.73
680I – 252-1	2500:1	5P20	5P20	5P20	5P20	5P15	0.1	0.1	0.1	0.1	0.1	13.87
680I – 302-1	3000:1	5P30	5P20	5P20	5P20	5P15	0.1	0.1	0.1	0.1	0.1	16.97
680I – 322-1	3200:1	5P30	5P20	5P20	5P20	5P15	0.1	0.1	0.1	0.1	0.1	18.10
680I – 402-1	4000:1	5P30	5P20/10P30	5P20	5P20	5P15/10P20	0.1	0.1	0.1	0.1	0.1	23.06

TYPICAL EXCITATION CURVES - MODEL 680I

1 AMP SECONDARY

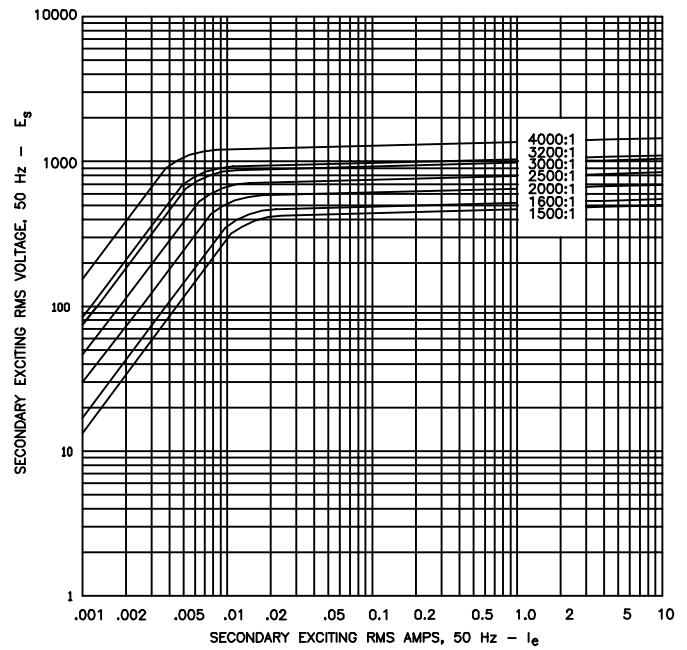
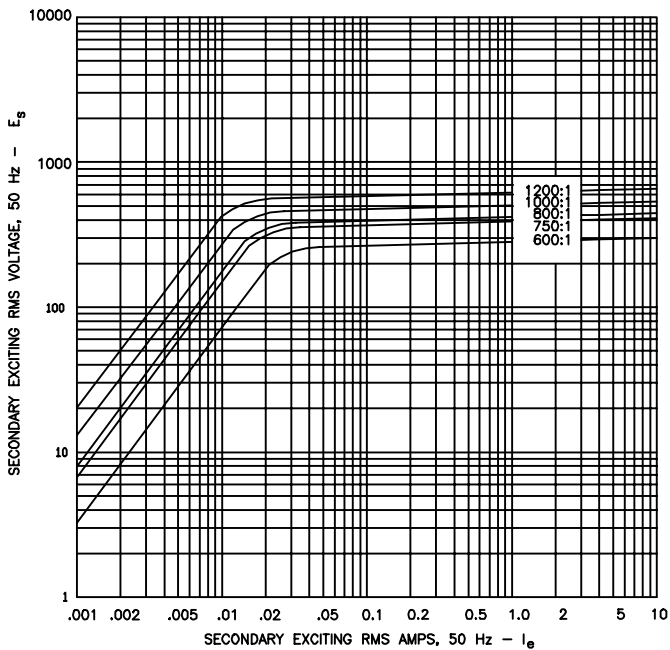
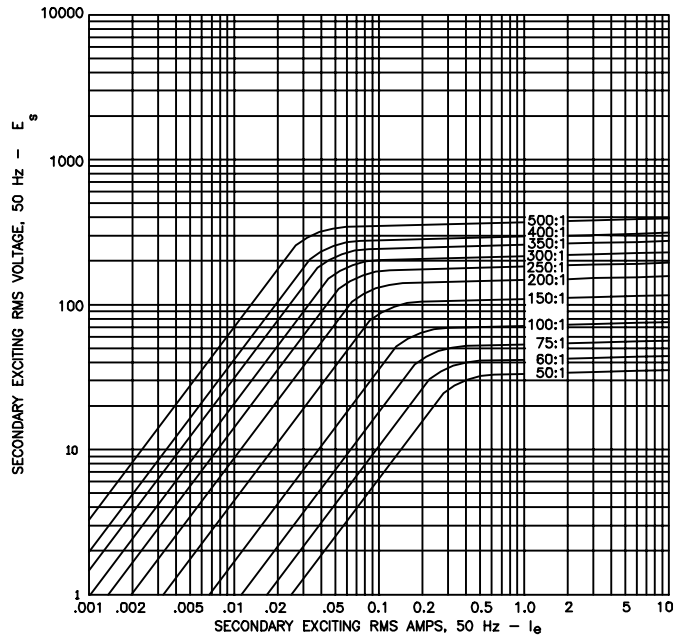
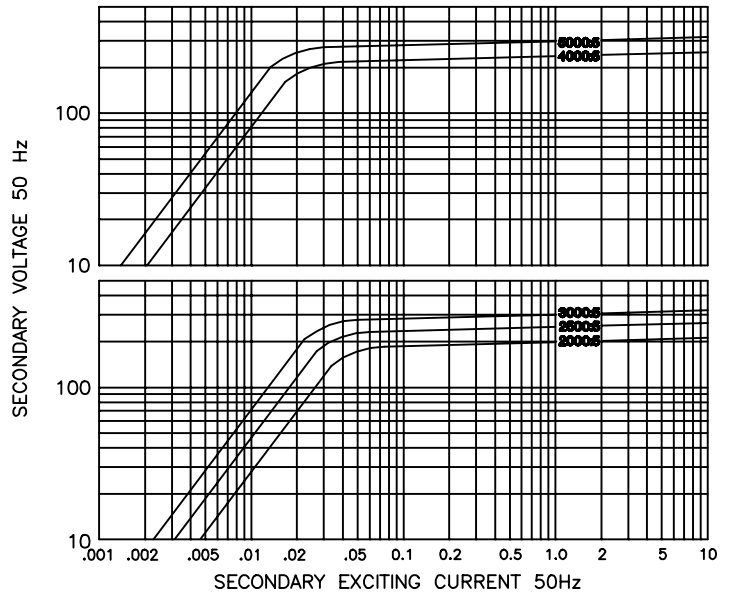
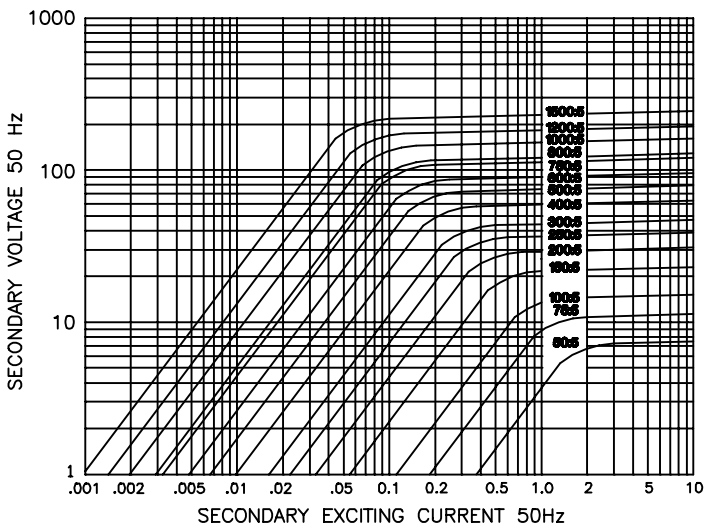


TABLE & TYPICAL EXCITATION CURVES - MODEL 680I

5 AMP SECONDARY

CATALOG NUMBER	CURRENT RATIO	IEC 44-1 PROTECTIVE CLASS AT 50Hz					IEC 44-1 MEASURING CLASS AT 50Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		BURDEN VA					BURDEN VA					
		2.5	5	10	15	30	2.5	5	10	15	30	
680I - 500-5	50:5	10P10	-	-	-	-	3.0	-	-	-	-	0.016
680I - 750-5	75:5	10P15	10P10	-	-	-	3.0	3.0	-	-	-	0.023
680I - 101-5	100:5	5P20	10P10	10P5	-	-	1.0	3.0	3.0	-	-	0.031
680I - 151-5	150:5	5P20	5P15	10P10	10P5	-	1.0	1.0	3.0	3.0	-	0.047
680I - 201-5	200:5	5P30	5P20	5P10	10P5	-	0.5	0.5	1.0	3.0	3.0	0.065
680I - 251-5	250:5	5P30	5P20/10P30	5P10	5P10	10P5	0.5	0.5	1.0	1.0	3.0	0.082
680I - 301-5	300:5	5P30	5P30	5P15/10P20	5P10	5P5	0.5	0.5	0.5	1.0	1.0	0.098
680I - 401-5	400:5	5P30	5P30	5P20	5P15	5P5/10P10	0.2	0.5	0.5	0.5	1.0	0.131
680I - 501-5	500:5	5P30	5P30	5P30	5P20	5P10	0.2	0.2	0.5	0.5	0.5	0.164
680I - 601-5	600:5	5P30	5P30	5P30	5P20	5P10/10P15	0.2	0.2	0.2	0.5	0.5	0.196
680I - 751-5	750:5	5P30	5P30	5P30	5P30	5P15	0.2	0.2	0.2	0.2	0.5	0.245
680I - 801-5	800:5	5P30	5P30	5P30	5P30	5P15	0.2	0.2	0.2	0.2	0.2	0.262
680I - 102-5	1000:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	0.327
680I - 122-5	1200:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	0.393
680I - 152-5	1500:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.491
680I - 202-5	2000:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	0.598
680I - 252-5	2500:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.748
680I - 302-5	3000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.898
680I - 402-5	4000:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	1.076
680I - 502-5	5000:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	1.678



CURRENT TRANSFORMER

Model 685I

Window Diameter 178.3mm

APPLICATION:
Protective and measuring.

FREQUENCY:
50-400 Hz.

INSULATION LEVEL:
0.72kV

CONTINUOUS THERMAL CURRENT RATING FACTOR:

50:5 - 1500:5 2.00 at 30°C ambient.
1.50 at 55°C ambient.
2000:5 - 4000:5 1.33 at 30°C ambient.
1.00 at 55°C ambient.

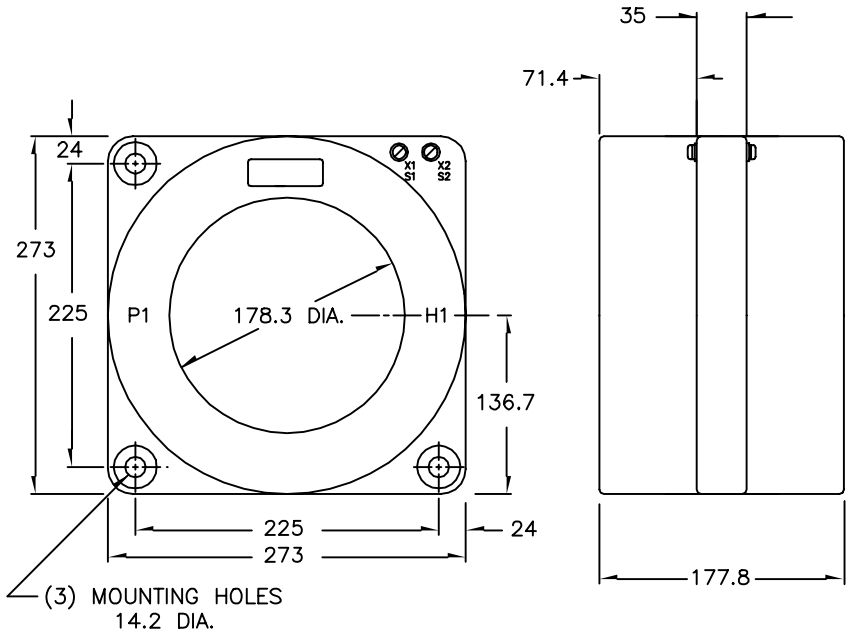
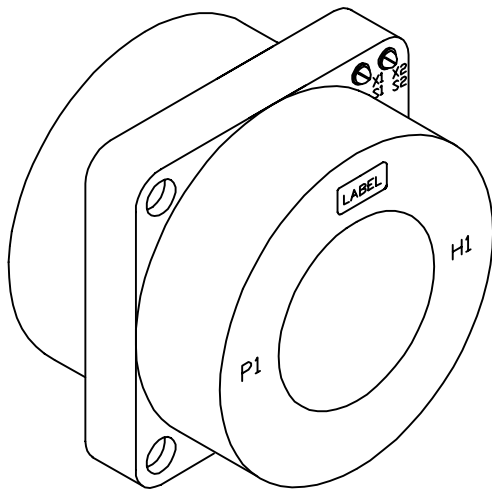
REGULATORY AGENCY APPROVALS



Manufactured to meet the requirements of ANSI/IEEE C57.13.
Classified by U.L. in accordance with IEC 44-1.
Approved for revenue metering by Industry Canada. AE-0657(*)

- Secondary terminals are brass screws ASA No. 10-32 with one flatwasher and lockwasher, accessible from either side.

- Approximate weight 29.1 kg



1 AMP SECONDARY

CATALOG NUMBER	CURRENT RATIO	IEC 44-1 PROTECTIVE CLASS AT 50Hz					IEC 44-1 MEASURING CLASS AT 50Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		BURDEN VA					BURDEN VA					
		2.5	5	10	15	30	2.5	5	10	15	30	
685I-400-1	40:1	10P20	-	-	-	-	3.0	-	-	-	-	0.221
685I-500-1	50:1	10P20	10P10	-	-	-	3.0	5.0	-	-	-	0.278
685I-750-1	75:1	10P30	10P20	10P10	-	-	3.0	3.0	3.0	5.0	-	0.418
685I-101-1	100:1	5P30	5P30	10P15	10P10	-	1.0	1.0	3.0	3.0	5.0	0.558
685I-151-1	150:1	5P30	5P30	5P20	10P10	10P5	0.5	1.0	1.0	3.0	3.0	2.117
685I-201-1	200:1	5P30	5P30	5P20	5P15/10P20	10P10	0.5	0.5	0.5	1.0	1.0	2.823
685I-251-1	250:1	5P30	5P30	5P30	5P20	5P10	0.5	0.5	0.5	1.0	1.0	3.529
685I-301-1	300:1	5P30	5P30	5P30	5P30	5P15	0.2	0.5	0.5	0.5	1.0	4.234
685I-351-1	350:1	5P30	5P30	5P30	5P30	5P15/10P20	0.2	0.2	0.5	0.5	0.5	4.940
685I-401-1	400:1	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.5	0.5	0.5	5.646
685I-501-1	500:1	5P30	5P30	5P30	5P30	5P20	0.1	0.2	0.2	0.2	0.5	7.057
685I-601-1	600:1	5P30	5P30	5P30	5P30	5P15/10P20	0.2	0.2	0.2	0.2	0.5	7.384
685I-701-1	700:1	5P30	5P30	5P30	5P30	5P20	0.1	0.1	0.2	0.2	0.5	8.615
685I-801-1	800:1	5P30	5P30	5P30	5P30	5P20	0.1	0.1	0.1	0.2	0.2	9.846
685I-102-1	1000:1	5P30	5P30	5P30	5P30	5P30	0.1	0.1	0.1	0.1	0.2	12.31
685I-122-1	1200:1	5P30	5P30	5P30	5P30	5P30	0.1	0.1	0.1	0.1	0.1	14.77
685I-152-1	1500:1	5P30	5P30	5P30	5P30	5P30	0.1	0.1	0.1	0.1	0.1	16.95
685I-162-1	1600:1	5P30	5P30	5P30	5P30	5P20	0.1	0.1	0.1	0.1	0.1	18.35
685I-202-1	2000:1	5P30	5P30	5P30	5P30	5P20	0.1	0.1	0.1	0.1	0.1	20.61
685I-252-1	2500:1	5P30	5P30	5P30	5P20/10P30	5P20	0.1	0.1	0.1	0.1	0.1	26.04
685I-302-1	3000:1	5P30	5P30	5P30	5P30	5P30	0.1	0.1	0.1	0.1	0.1	31.57
685I-402-1	4000:1	5P30	5P30	5P30	5P30	5P30	0.1	0.1	0.1	0.1	0.1	42.53

TYPICAL EXCITATION CURVES - MODEL 685I

1 AMP SECONDARY

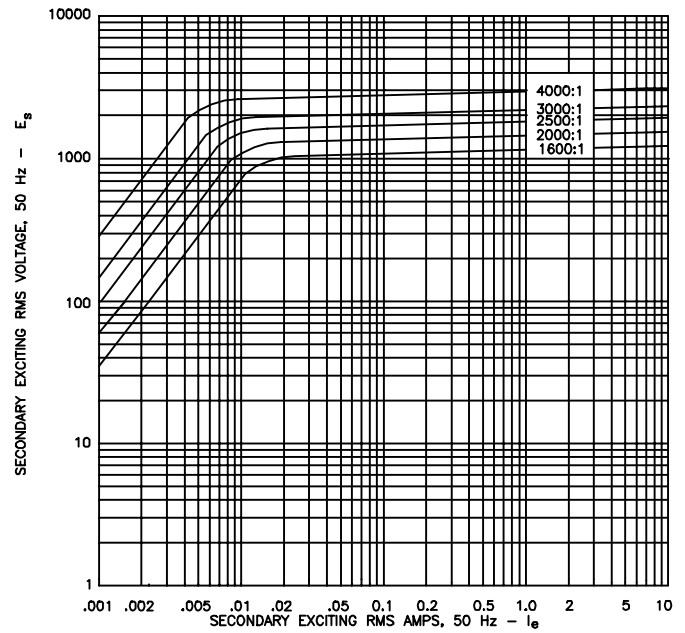
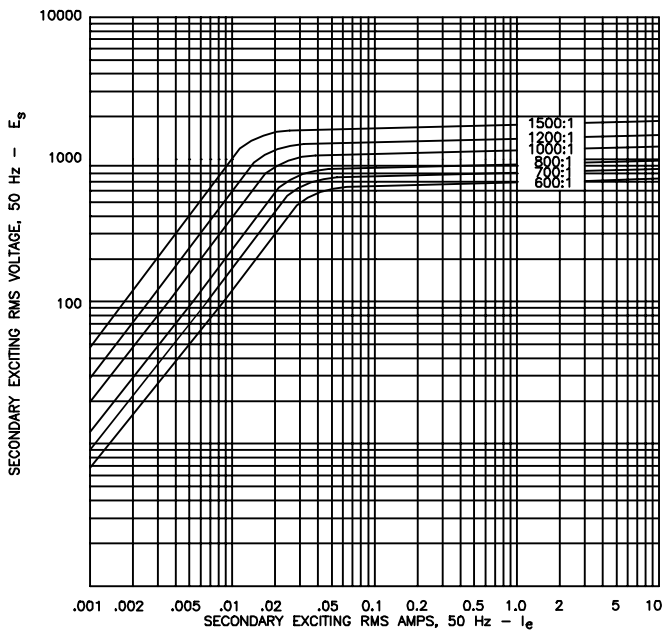
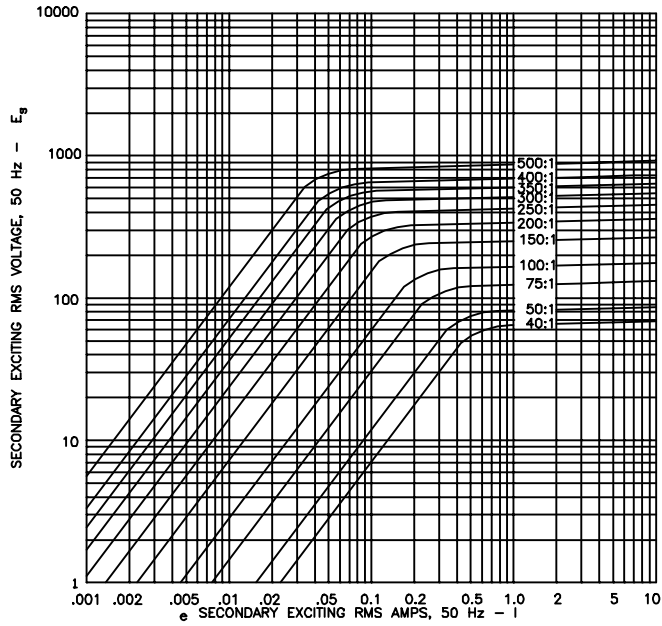
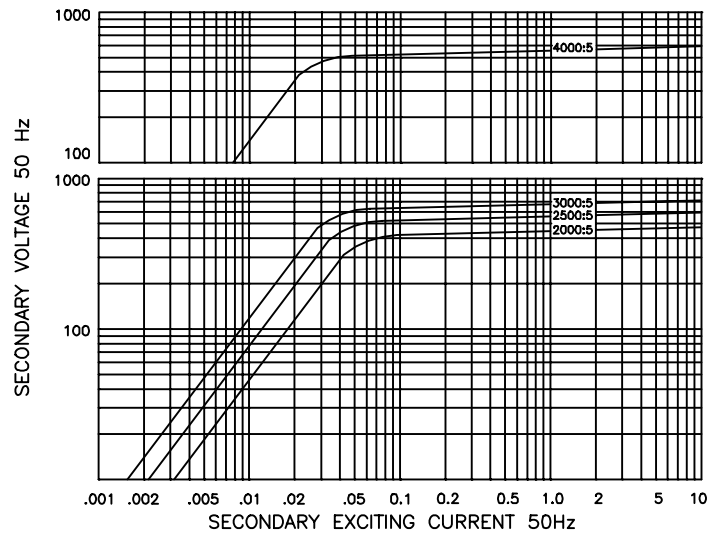
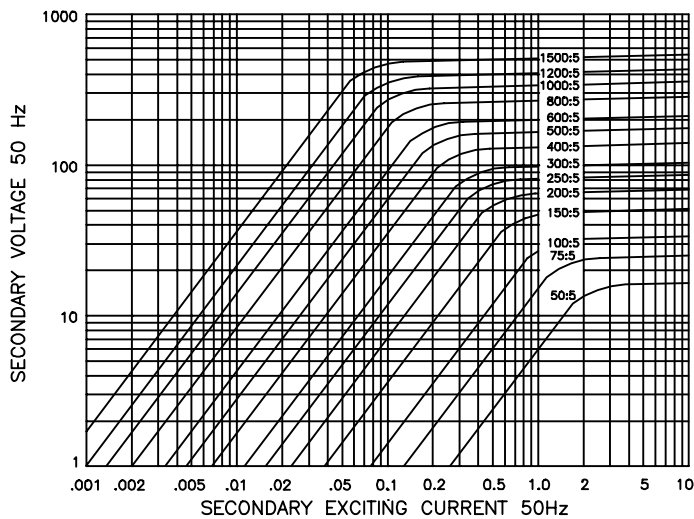


TABLE & TYPICAL EXCITATION CURVES - MODEL 685I

5 AMP SECONDARY

CATALOG NUMBER	CURRENT RATIO	IEC 44-1 PROTECTIVE CLASS AT 50Hz					IEC 44-1 MEASURING CLASS AT 50Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		BURDEN VA					BURDEN VA					
		2.5	5	10	15	30	2.5	5	10	15	30	
685I-500-5	50:5	10P20	-	-	-	-	3.0	5.0	-	-	-	0.029
685I-750-5	75:5	10P30	10P20	-	-	-	3.0	3.0	5.0	5.0	-	0.043
685I-101-5	100:5	5P30	10P30	10P15	10P10	-	1.0	3.0	3.0	3.0	-	0.058
685I-151-5	150:5	5P30	5P30	5P20	10P15	10P5	0.5	1.0	1.0	3.0	3.0	0.086
685I-201-5	200:5	5P30	5P30	5P20	5P15/10P20	10P10	0.5	0.5	1.0	1.0	3.0	0.118
685I-251-5	250:5	5P30	5P30	5P30	5P20	5P10	0.5	0.5	0.5	1.0	1.0	0.147
685I-301-5	300:5	5P30	5P30	5P30	5P20	5P15	0.5	0.5	0.5	0.5	1.0	0.177
685I-401-5	400:5	5P30	5P30	5P30	5P30	5P20	0.2	0.5	0.5	0.5	0.5	0.236
685I-501-5	500:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.5	0.5	0.295
685I-601-5	600:5	5P30	5P30	5P30	5P30	5P20/10P30	0.2	0.2	0.2	0.2	0.5	0.354
685I-801-5	800:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.472
685I-102-5	1000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.590
685I-122-5	1200:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.708
685I-152-5	1500:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.884
685I-202-5	2000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	1.039
685I-252-5	2500:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	1.298
685I-302-5	3000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	1.558
685I-402-5	4000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	1.956



CURRENT TRANSFORMER

Model 780I

Window Diameter 165mm

APPLICATION:
Protective and measuring.

FREQUENCY:
50–400 Hz.

INSULATION LEVEL:
0.72kV

CONTINUOUS THERMAL CURRENT RATING FACTOR:

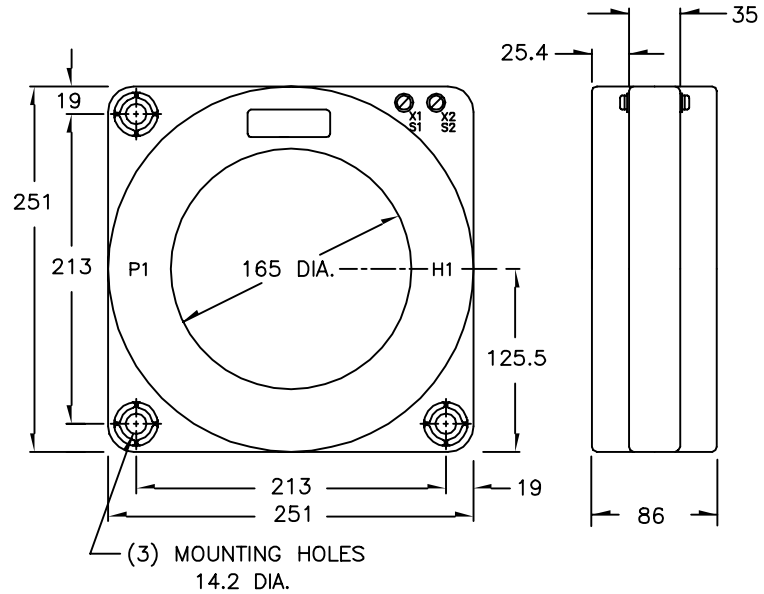
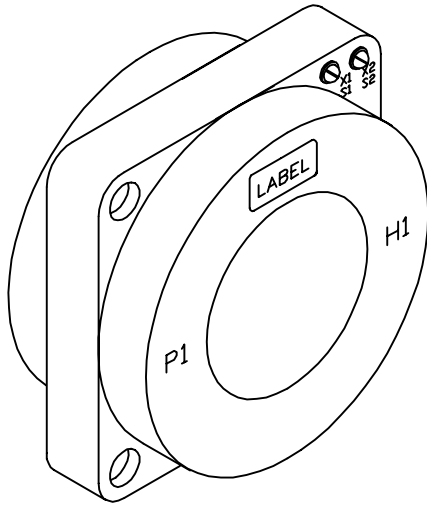
50:5 – 1200:5 2.0 at 30°C ambient.
1.5 at 55°C ambient.
1500:5 – 4000:5 1.5 at 30°C ambient.
1.33 at 55°C ambient.

REGULATORY AGENCY APPROVALS



Manufactured to meet the requirements of ANSI/IEEE C57.13.
Classified by U.L. in accordance with IEC 44-1.
Approved for revenue metering by Industry Canada. AE-0657(*)

- Secondary terminals are brass screws ASA No. 10–32 with one flatwasher and lockwasher, accessible from either side.
- Approximate weight 13.6 kg



1 AMP SECONDARY

CATALOG NUMBER	CURRENT RATIO	IEC 44-1 PROTECTIVE CLASS AT 50Hz					IEC 44-1 MEASURING CLASS AT 50Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		BURDEN VA					BURDEN VA					
		2.5	5	10	15	30	2.5	5	10	15	30	
780I-500-1	50:1	10P10	-	-	-	-	3.0	3.0	-	-	-	0.134
780I-750-1	75:1	5P15	5P5	-	-	-	3.0	3.0	3.0	5.0	-	0.205
780I-101-1	100:1	5P20	5P10	5P5	-	-	3.0	3.0	3.0	3.0	-	0.28
780I-151-1	150:1	5P30	5P15	5P5	5P5	-	0.5	1.0	3.0	3.0	3.0	0.42
780I-201-1	200:1	5P30	5P20	5P10	5P5	-	0.5	0.5	1.0	1.0	3.0	0.56
780I-251-1	250:1	5P30	10P30	10P15	10P10	10P5	0.5	0.5	0.5	1.0	1.0	0.70
780I-301-1	300:1	5P30	10P30	5P15	5P10	5P5	0.5	0.5	0.5	0.5	1.0	1.33
780I-401-1	400:1	5P30	5P30	10P25	10P15	5P5	0.2	0.2	0.5	0.5	0.5	1.78
780I-501-1	500:1	5P30	5P30	10P25	10P20	10P10	0.2	0.2	0.2	0.5	0.5	3.52
780I-601-1	600:1	5P30	5P30	10P25	10P15	5P5	0.2	0.2	0.2	0.5	0.5	1.46
780I-751-1	750:1	5P30	5P30	10P30	10P20	10P10	0.2	0.2	0.2	0.2	0.5	2.30
780I-801-1	800:1	5P30	5P30	10P30	10P20	10P10	0.2	0.2	0.2	0.2	0.5	3.07
780I-102-1	1000:1	5P30	5P30	10P30	10P20	5P10	0.2	0.2	0.2	0.2	0.2	6.08
780I-122-1	1200:1	5P30	5P30	10P30	10P25	10P15	0.2	0.2	0.2	0.2	0.2	7.82
780I-152-1	1500:1	5P30	5P30	5P30	10P30	5P15	0.2	0.2	0.2	0.2	0.2	9.78
780I-162-1	1600:1	5P30	5P30	5P30	10P30	10P20	0.2	0.2	0.2	0.2	0.2	10.43
780I-202-1	2000:1	5P30	5P30	5P30	10P30	10P20	0.2	0.2	0.2	0.2	0.2	13.48
780I-252-1	2500:1	5P30	5P30	10P30	10P25	5P15	0.2	0.2	0.2	0.2	0.2	13.85
780I-302-1	3000:1	5P30	5P30	5P30	10P30	10P20	0.2	0.2	0.2	0.2	0.2	16.94
780I-322-1	3200:1	5P30	5P30	5P30	10P30	10P20	0.2	0.2	0.2	0.2	0.2	18.42
780I-352-1	3500:1	5P30	5P30	5P30	10P30	10P20	0.2	0.2	0.2	0.2	0.2	20.14
780I-402-1	4000:1	5P30	5P30	5P30	10P30	5P20	0.2	0.2	0.2	0.2	0.2	23.46

TYPICAL EXCITATION CURVES - MODEL 780I

1 AMP SECONDARY

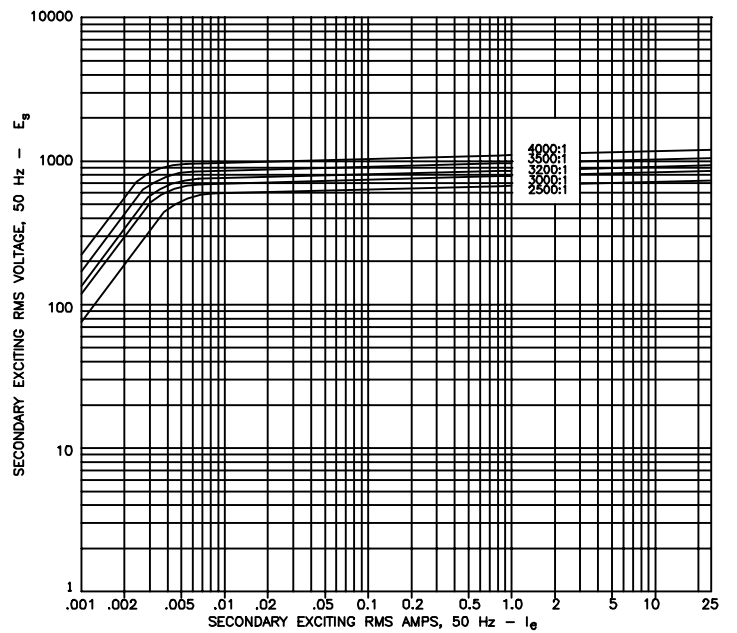
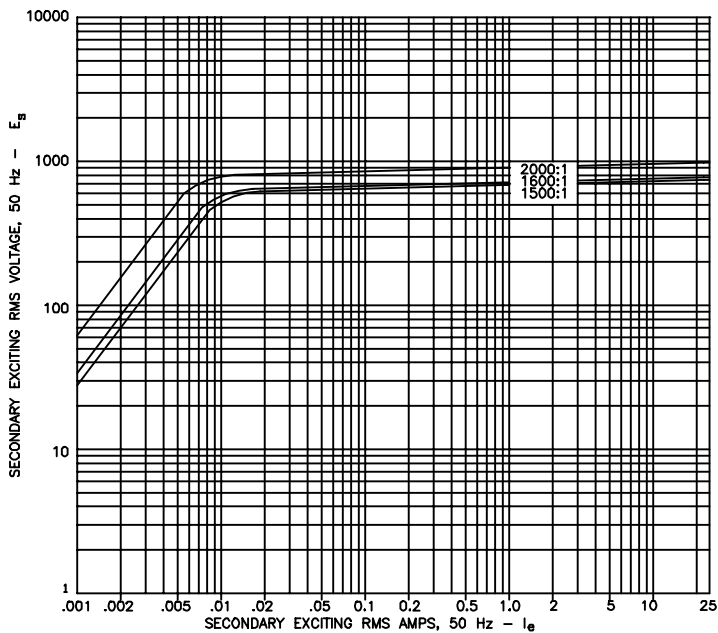
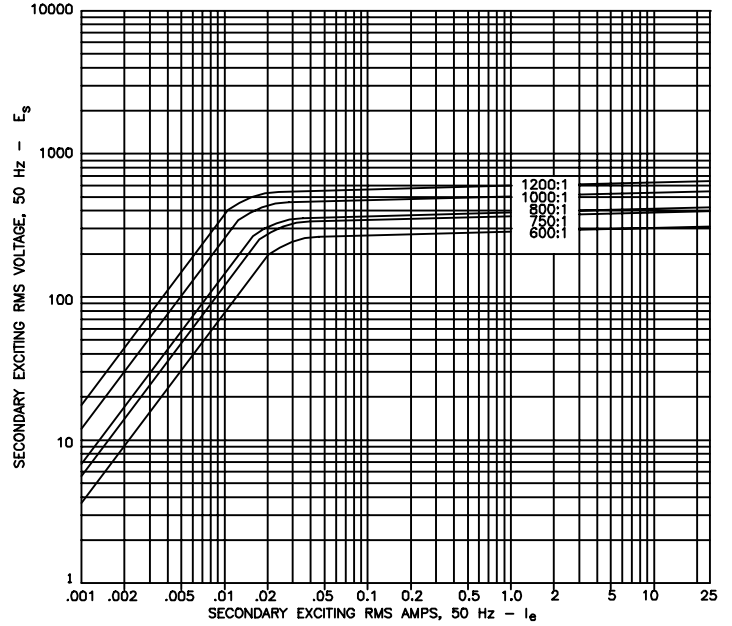
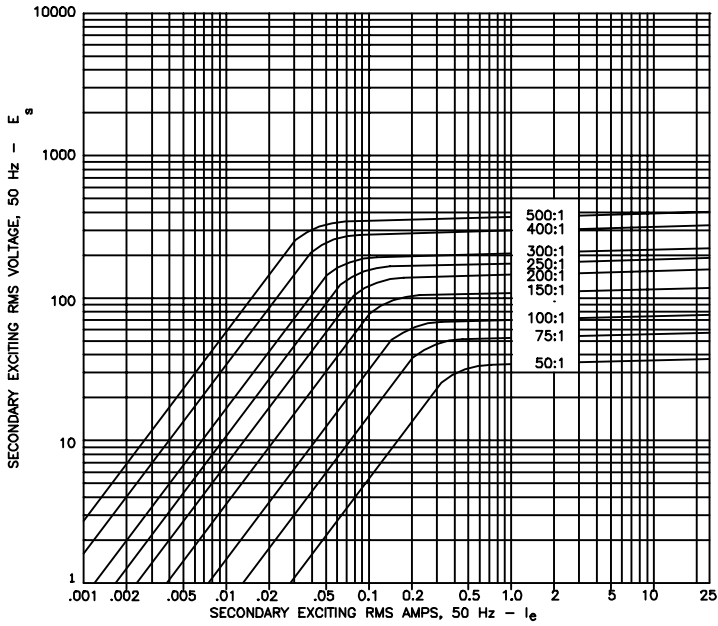
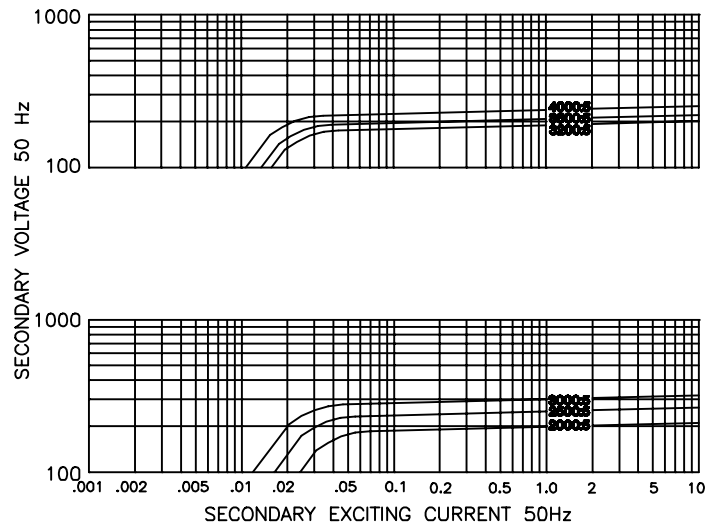
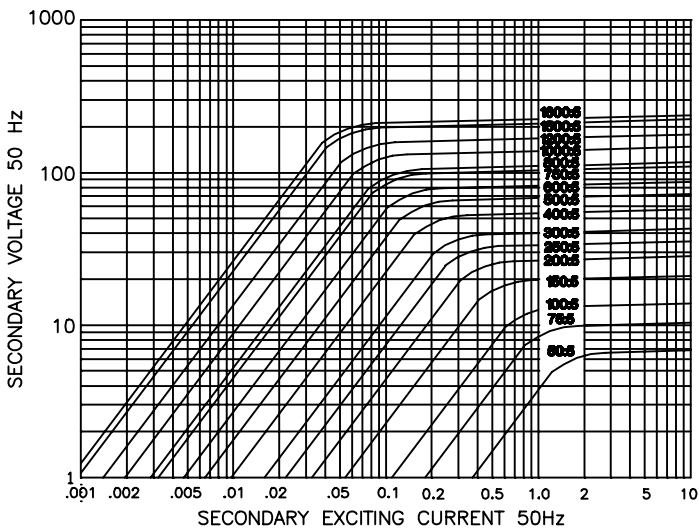


TABLE & TYPICAL EXCITATION CURVES - MODEL 780I

5 AMP SECONDARY

CATALOG NUMBER	CURRENT RATIO	IEC 44-1 PROTECTIVE CLASS AT 50Hz					IEC 44-1 MEASURING CLASS AT 50Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		BURDEN VA					BURDEN VA					
		2.5	5	10	15	30	2.5	5	10	15	30	
780I-500-5	50:5	-	-	-	-	-	5.0	-	-	-	-	0.008
780I-750-5	75:5	10P15	10P5	-	-	-	3.0	3.0	-	-	-	0.016
780I-101-5	100:5	5P20	10P10	10P5	-	-	1.0	3.0	3.0	5.0	-	0.027
780I-151-5	150:5	5P30	5P15	10P10	10P5	-	1.0	1.0	3.0	3.0	5.0	0.042
780I-201-5	200:5	5P30	5P20	5P10	5P5	-	0.5	1.0	1.0	1.0	3.0	0.054
780I-251-5	250:5	5P30	5P20	5P15	5P10	10P5	0.5	0.5	1.0	1.0	3.0	0.067
780I-301-5	300:5	5P30	5P30	5P15	5P10	5P5	0.5	0.5	0.5	1.0	1.0	0.097
780I-401-5	400:5	5P30	5P30	5P20	5P15	5P5	0.2	0.5	0.5	1.0	1.0	0.129
780I-501-5	500:5	5P30	5P30	5P20	5P20	5P10	0.2	0.2	0.5	0.5	1.0	0.161
780I-601-5	600:5	5P30	5P30	5P30	5P20	5P10	0.2	0.2	0.2	0.5	0.5	0.193
780I-751-5	750:5	5P30	5P30	5P30	5P20/10P30	5P15	0.2	0.2	0.2	0.2	0.5	0.242
780I-801-5	800:5	5P30	5P30	5P30	5P30	5P15	0.2	0.2	0.2	0.2	0.2	0.258
780I-102-5	1000:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	0.322
780I-122-5	1200:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	0.387
780I-152-5	1500:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	0.608
780I-162-5	1600:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.649
780I-202-5	2000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.588
780I-252-5	2500:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.735
780I-302-5	3000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	1.105
780I-322-5	3200:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	0.859
780I-352-5	3500:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	0.940
780I-402-5	4000:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	1.074



CURRENT TRANSFORMER

Model 785I

Window Diameter 165mm

APPLICATION:
Protective and measuring.

FREQUENCY:
50–400 Hz.

INSULATION LEVEL:
0.72kV

REGULATORY AGENCY APPROVALS

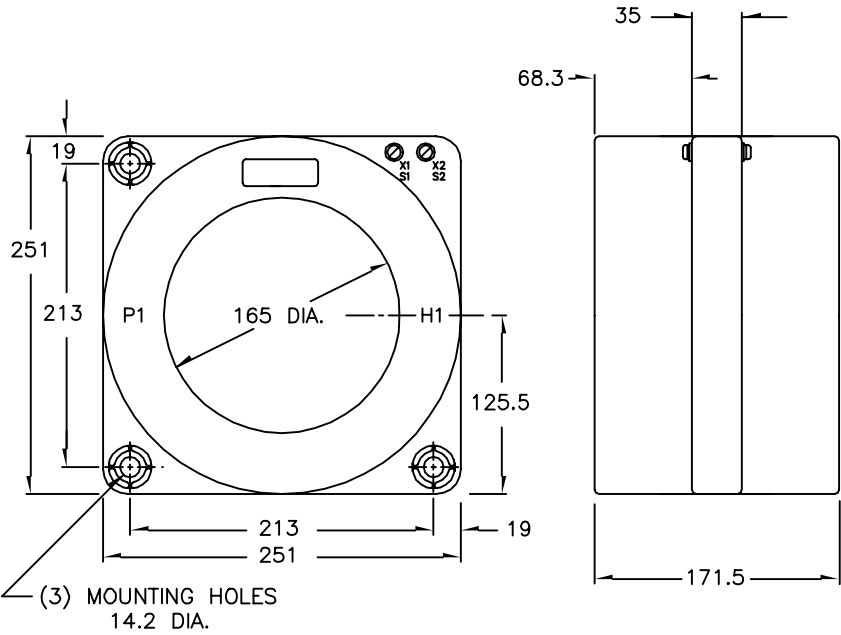
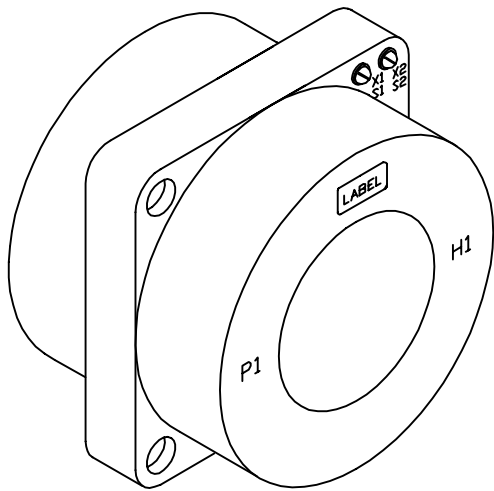


Manufactured to meet the requirements of ANSI/IEEE C57.13.
Classified by U.L. in accordance with IEC 44-1.
Approved for revenue metering by Industry Canada. AE-0657(*)

CONTINUOUS THERMAL CURRENT RATING FACTOR:

50:5 – 1200:5	2.0 at 30°C ambient.
	1.5 at 55°C ambient.
1500:5 – 2500:5	1.5 at 30°C ambient.
	1.33 at 55°C ambient.
3000:5 – 4000:5	1.33 at 30°C ambient.
	1.0 at 55°C ambient.

- Secondary terminals are brass screws ASA No. 10–32 with one flatwasher and lockwasher, accessible from either side.
- Approximate weight 26.4 kg



1 AMP SECONDARY

CATALOG NUMBER	CURRENT RATIO	IEC 44-1 PROTECTIVE CLASS AT 50Hz					IEC 44-1 MEASURING CLASS AT 50Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		BURDEN VA					BURDEN VA					
		2.5	5	10	15	30	2.5	5	10	15	30	
785I-500-1	50:1	10P25	5P10	-	-	-	3.0	3.0	-	-	-	0.249
785I-750-1	75:1	5P30	10P20	10P10	-	-	1.0	3.0	3.0	5.0	-	0.376
785I-101-1	100:1	5P30	10P25	5P10	5P5	-	1.0	1.0	3.0	3.0	5.0	0.51
785I-151-1	150:1	5P30	5P30	10P20	5P10	-	0.5	0.5	1.0	1.0	3.0	0.76
785I-201-1	200:1	5P30	5P30	10P25	5P15	5P5	0.5	0.5	0.5	1.0	1.0	1.02
785I-251-1	250:1	5P30	5P30	5P30	10P25	5P10	0.5	0.5	0.5	0.5	1.0	2.02
785I-301-1	300:1	5P30	5P30	5P30	10P25	10P15	0.2	0.5	0.5	0.5	1.0	2.42
785I-401-1	400:1	5P30	5P30	5P30	5P30	5P15	0.2	0.2	0.2	0.5	0.5	3.22
785I-501-1	500:1	5P30	5P30	5P30	5P30	10P20	0.2	0.2	0.2	0.2	0.5	6.39
785I-601-1	600:1	5P30	5P30	5P30	5P30	10P20	0.2	0.2	0.2	0.2	0.5	2.72
785I-751-1	750:1	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.2	4.28
785I-801-1	800:1	5P30	5P30	5P30	5P30	10P20	0.2	0.2	0.2	0.2	0.2	5.74
785I-102-1	1000:1	5P30	5P30	5P30	5P30	10P25	0.2	0.2	0.2	0.2	0.2	11.39
785I-122-1	1200:1	5P30	5P30	5P30	5P30	10P30	0.2	0.2	0.2	0.2	0.2	14.20
785I-152-1	1500:1	5P30	5P30	5P30	5P30	10P30	0.2	0.2	0.2	0.2	0.2	17.75
785I-162-1	1600:1	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	18.93
785I-202-1	2000:1	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	23.47
785I-252-1	2500:1	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	26.01
785I-302-1	3000:1	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	31.54
785I-322-1	3200:1	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	33.99
785I-352-1	3500:1	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	37.18
785I-402-1	4000:1	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	42.93

TYPICAL EXCITATION CURVES - MODEL 785I

1 AMP SECONDARY

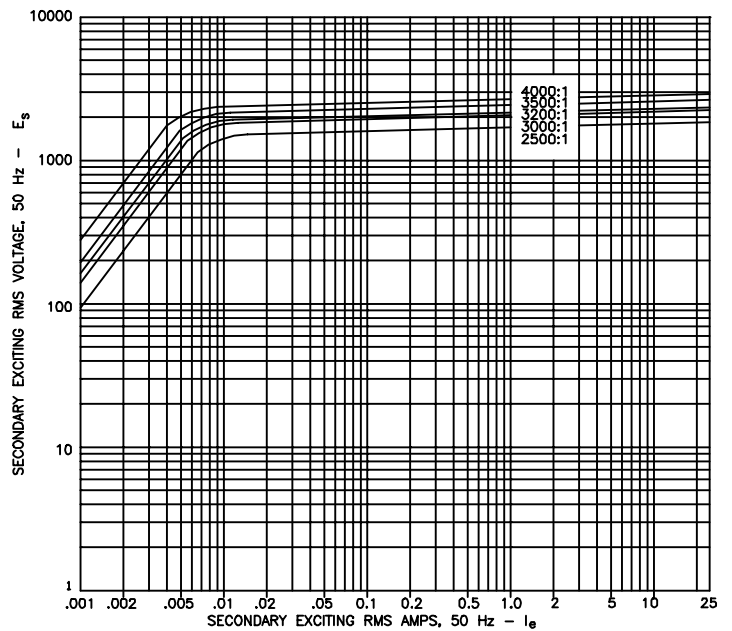
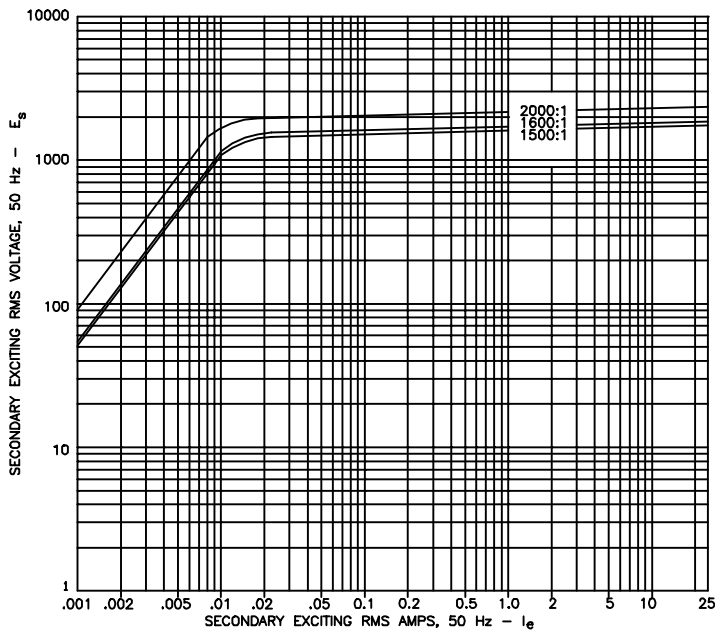
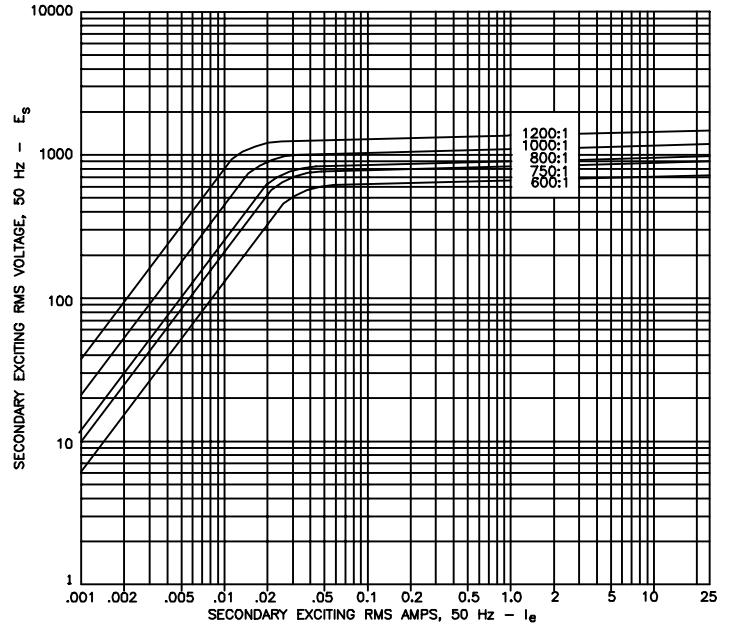
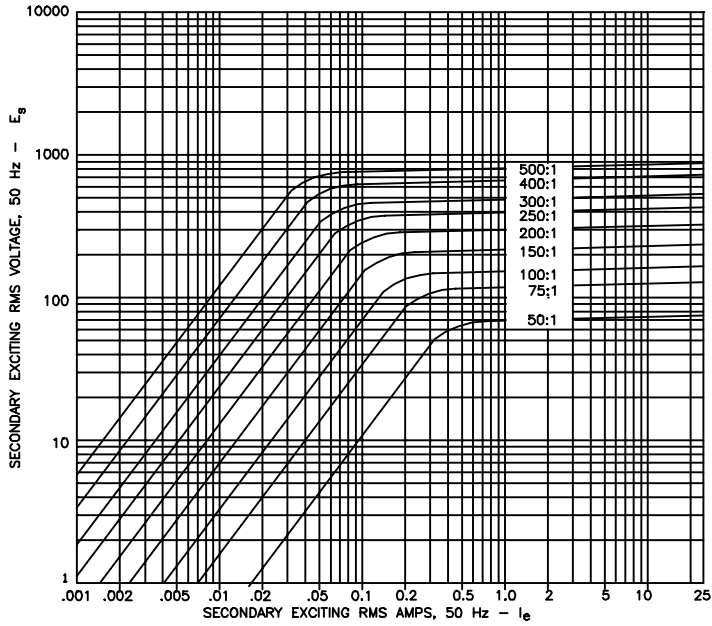


TABLE & TYPICAL EXCITATION CURVES - MODEL 785I

5 AMP SECONDARY

CATALOG NUMBER	CURRENT RATIO	IEC 44-1 PROTECTIVE CLASS AT 50Hz					IEC 44-1 MEASURING CLASS AT 50Hz					SECONDARY WINDING RESISTANCE (OHMS @ 75°C)
		BURDEN VA					BURDEN VA					
		2.5	5	10	15	30	2.5	5	10	15	30	
785I-500-5	50:5	10P20	-	-	-	-	3.0	5.0	-	-	-	0.028
785I-750-5	75:5	10P30	10P20	10P10	-	-	3.0	2.0	5.0	5.0	-	0.043
785I-101-5	100:5	5P30	5P20	10P10	10P5	-	1.0	1.0	3.0	3.0	-	0.057
785I-151-5	150:5	5P30	5P30	5P15/5P20	10P10	10P5	0.5	1.0	1.0	3.0	3.0	0.087
785I-201-5	200:5	5P30	5P30	5P20	5P15	10P5	0.5	0.5	0.5	1.0	3.0	0.116
785I-251-5	250:5	5P30	5P30	5P30	5P20	5P10	0.5	0.5	0.5	0.5	1.0	0.146
785I-301-5	300:5	5P30	5P30	5P30	5P20	5P10/10P15	0.2	0.5	0.5	0.5	1.0	0.175
785I-401-5	400:5	5P30	5P30	5P30	5P30	5P15	0.2	0.5	0.5	0.5	0.5	0.233
785I-501-5	500:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.5	0.5	0.291
785I-601-5	600:5	5P30	5P30	5P30	5P30	5P20	0.2	0.2	0.2	0.2	0.5	0.349
785I-751-5	750:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.437
785I-801-5	800:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.466
785I-102-5	1000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.582
785I-122-5	1200:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	0.699
785I-152-5	1500:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	1.100
785I-162-5	1600:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	1.174
785I-202-5	2000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	1.068
785I-252-5	2500:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	1.335
785I-302-5	3000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	2.014
785I-402-5	4000:5	5P30	5P30	5P30	5P30	5P30	0.2	0.2	0.2	0.2	0.2	1.955

