



**Instrument Transformers, Inc.**

a division of GE Multilin 

# Current Transformer IEC Rated 50Hz Model 680I

Window Diameter 178.3mm



REGULATORY AGENCY APPROVALS



E93779



LR89403

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

**APPLICATION:**

Protective and measuring.

**FREQUENCY:**

50-400 Hz.

**INSULATION LEVEL:**

0.72kV

**CONTINUOUS THERMAL  
CURRENT RATING FACTOR:**

50:5 thru 2000:5 2.00 at 30°C. amb.,  
1.50 at 55°C. amb.  
2500:5 thru 4000:5 1.33 at 30°C. amb.,  
1.00 at 55°C. amb.  
5000:5 1.00 at 30°C. amb.,  
0.75 at 55°C. amb.

Secondary terminals are brass screws ASA 10-32  
with one flatwasher and lockwasher, accessible  
from either side.

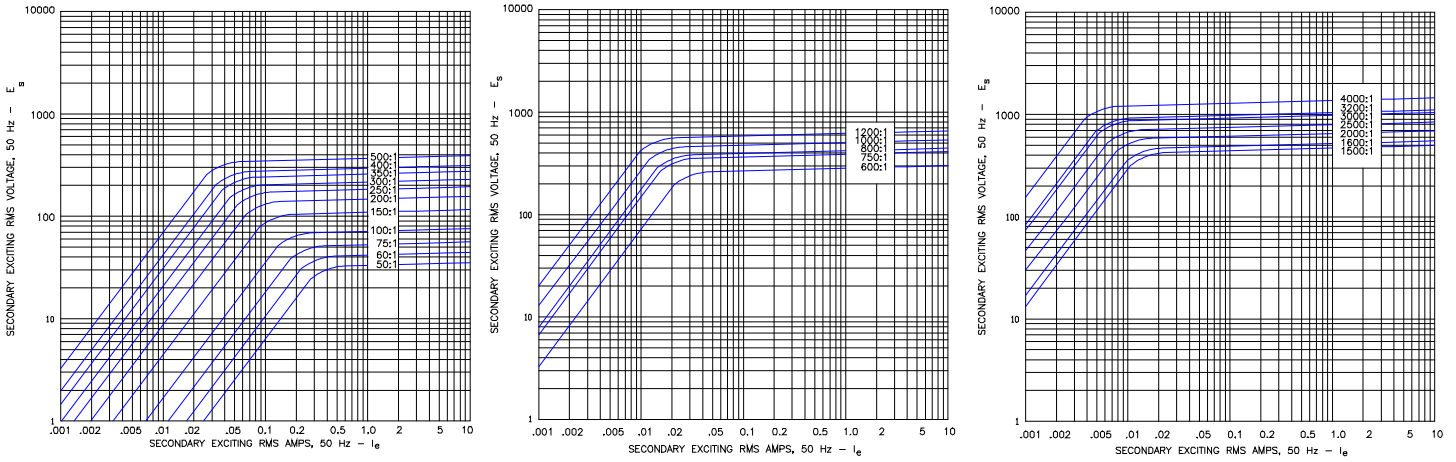
Approximate weight 15.5 kg

### 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

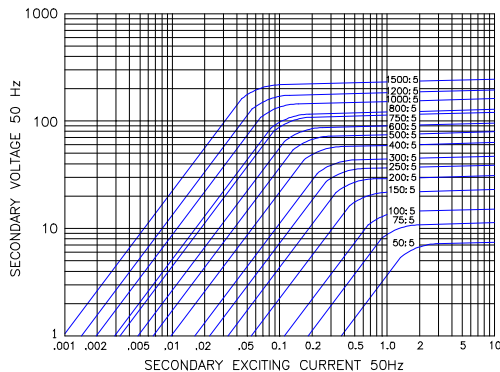
# Model 680I

## Excitation Curves - 1 Amp Secondary

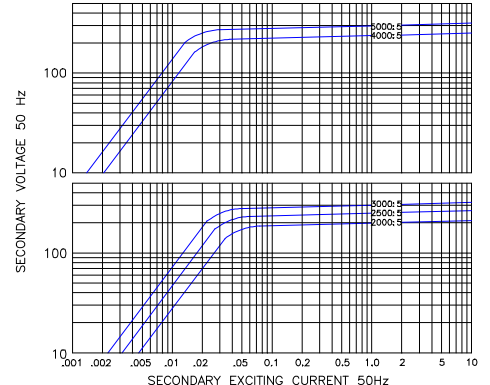
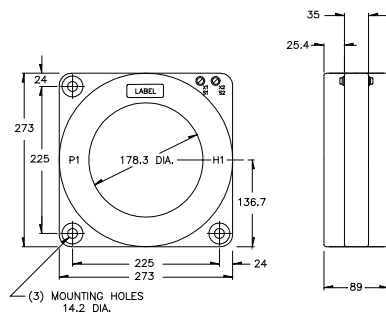


## 5 AMP SECONDARY

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



Dimensions in millimeters.



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