

>183.85546 67610.12287 577  
>198.65546 65612.232829 955  
>198.65546 65612.232829 95556  
>152.698016 68818.282399 92356  
>198.643636 78617.732289 783 56  
>124.634546 78672.237779 683 56  
>458.11142 83417.782397 876 56  
>145.523286 64486.222689 986 56  
>140.77060 32814.077060 328 56

## MODEL 7023/4000



### Compensated Current Transformer

- Single & Multiple Ranges
- Highest Permeability
- Wide Measurement Range
- Negligible Current Errors
- Low Burden
- Low Uncertainties

## MODEL INFORMATION

The Model 7023/4000 series of High Voltage Current Transformers was designed for the current input to MI's ALMS 4300 Loss Measurement Systems. This design meets the requirements of both CEI/IEC 44-1 and IEEE STD C57.12.00-2000. The bushing is filled to approximately 72 PSI absolute of SF6 and is fitted with a pressure indicator or with an optional pressure transducer with a 4-20 mA output for continuous monitoring. Connections to the primary winding of the current transformer are made via a copper bar, machined at both ends. Utilizing passive two stage compensated technology, errors of less than 10 ppm can be achieved at high voltages.

The main advantage of a two stage compensated CT is that the effective burden is 0 when feeding into another compensated CT such as the current input on the Model 2010A Wattmeter. As a result, the errors of the CT are effectively reduced to zero in both magnitude and phase. Lead length becomes unimportant and there is no further concern for any additional active

components. If the 7023/4000 is connected to a wattmeter that has only a two wire input, the secondary and auxiliary leads must be connected together as close as possible to the input of the wattmeter. Typical errors for burdens at 1Ω are less than 100 ppm. For more accurate data on errors related to burdens above 100 mΩ contact the factory.

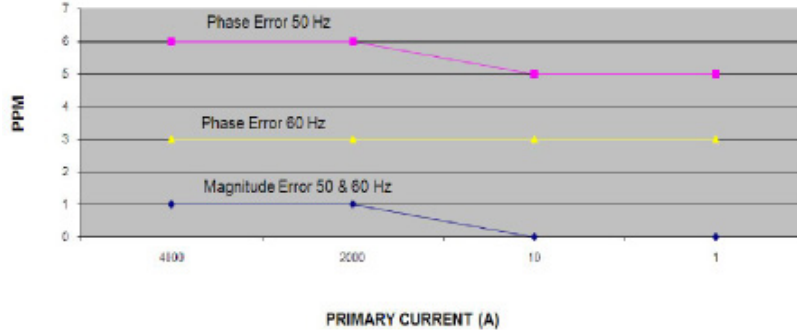
The Model 7023/4000 is a four-wire single range passive-two-stage current transformer, which can be supplied to operate at primary currents of either 2000 or 4000 amperes and secondary currents of 1 and 2 amps respectively. The secondary and compensation windings are brought out through a tube and connector in the base of the structure for easy connection. All current transformers have 10% over range capabilities.

The Model 7023/4000 can also be used as a Range Extender for the Model 7010 series of Capacitance/Inductance Bridges for measuring losses in reactors.

>163,65546 67810,7 2337 971  
 >198,65546 65612,23 2829 955  
 >198,65546 65612,23 2829 95556  
 >152,698016 68818,28 2399 92356  
 >198,643636 78617,73 2289 783 56  
 >124,634546 78672,23 7779 683 56  
 >458,11142 83417,73 2397 876 56  
 >145,523286 64486,22 2889 986 56  
 >140,77060 32814,07 7060 328 56



**Typical Error Chart for 0 to 100 milli-ohm Burden**  
**(Report # E01-003)**



**Specifications:**

**Nominal Ratio: 2000:1**

**Ratio Error < 10 ppm in magnitude and phase**

**Operating Voltage:** 300 kV rms @ 50/60 Hz

**Withstand Voltage:** 360 kV rms @ 50/60 Hz

**Impulse Peak:** 650 kV

**Partial Discharge:** < 10 pC @ 300 kV

**Operating Temperature:** -5°C to 40°C

**Humidity:** Up to 95%, non-condensing

**Environmental Conditions:** Indoor Use Only

**Dimensions:** **Weight:**

Diameter 1.25m x 3.38m ht. 386 kg

**How to Order:**

Model: 7023/4000

Compensated Current Transformer

**Distributed By:**

**Corporate Headquarters**

**Measurements International**  
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