

CT

High Precision Current Transducers

Specifications



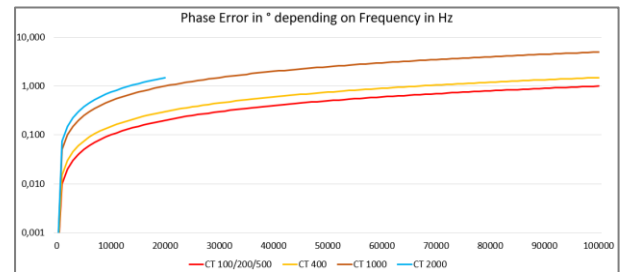
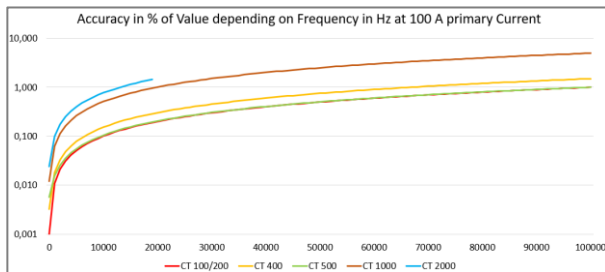
Sensor Specifications

Type	CT 100	CT 200	CT 400	CT 500	CT 1000	CT 2000
Current Range DC / AC_{rms} (Crestfactor 2)	100 A	200 A	400 A	500 A	1000 A	2000 A
100 ms Overload	20 kA _{pk}	20 kA _{pk}	20 kA _{pk}	3 kA _{pk}	5 kA _{pk}	10 kA _{pk}
Ratio	500 : 1	1000 : 1	1500 : 1	750 : 1	1500 : 1	2000 : 1
Output Range	0 ... 200 mA _{rms}	0 ... 200 mA _{rms}	0 ... 266.667 mA _{rms}	0 ... 666.667 mA _{rms}	0 ... 666.667 mA _{rms}	0 ... 1 A _{rms}
Max. Measuring Resistance¹	25 Ω	20 Ω	10 Ω	5 Ω	4 Ω	3.5 Ω
Bandwidth (-3 dB)	DC ... 2 MHz	DC ... 1.1 MHz	DC ... 800 kHz	DC ... 520 kHz	DC ... 440 kHz	DC ... 140 kHz
Step Response (0 ... 90 %)	0.2 μs	0.2 μs	1 μs	1 μs	1 μs	1 μs
Error (of MR)²	0.002 %	0.001 %	0.0008 %	0.00115 %	0.0012 %	0.0012 %
Temp.-Coefficient (of MR)	0.2 ppm/K	0.2 ppm/K	0.1 ppm/K	1 ppm/K	0.3 ppm/K	0.1 ppm/K
Frequency Influence³ (of MV)	0.01 %/kHz	0.01 %/kHz	0.015 %/kHz	0.01 %/kHz	0.05 %/kHz	0.075 %/kHz
Angular Accuracy	0.015 °/kHz	0.015 °/kHz	0.015 °/kHz	0.015 °/kHz	0.05 °/kHz	0.075 °/kHz
Temperature Range	-40 ... 85 °C	-40 ... 85 °C	-40 ... 85 °C	-40 ... 85 °C	-40 ... 85 °C	-40 ... 85 °C
Test Voltage 50 Hz	4.95 kV	4.95 kV	4.95 kV	4.2 kV	4.2 kV	6 kV
Inner Diameter	28 mm	28 mm	28 mm	38 mm	38 mm	70 mm
Mass	0.275 kg	0.295 kg	0.305 kg	1.3 kg	1.3 kg	4.2 kg

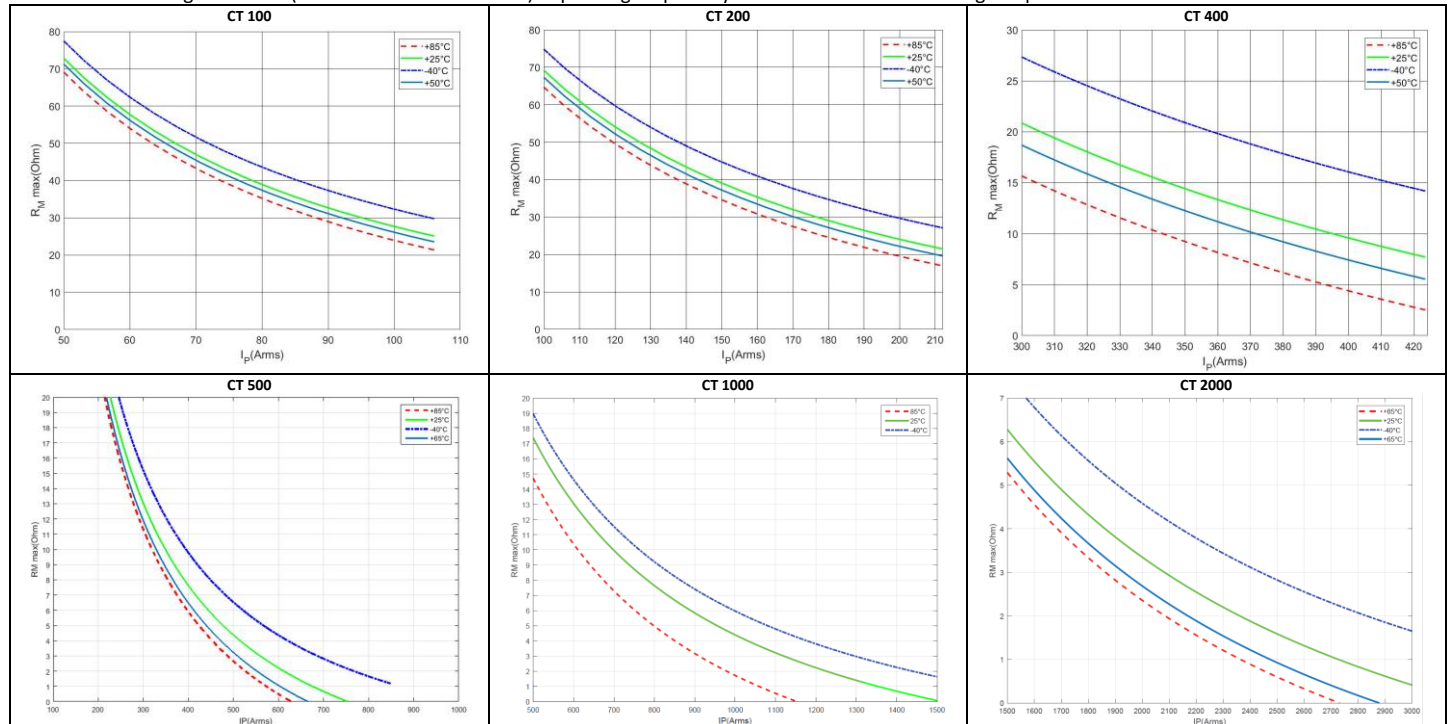
¹ At full scale and 25 °C. For other current values and temperatures see graphs below. Max measuring resistance = cable loop resistance + burden resistance (see page 5).

² Transducer uncertainty of transducer range at 25 °C.

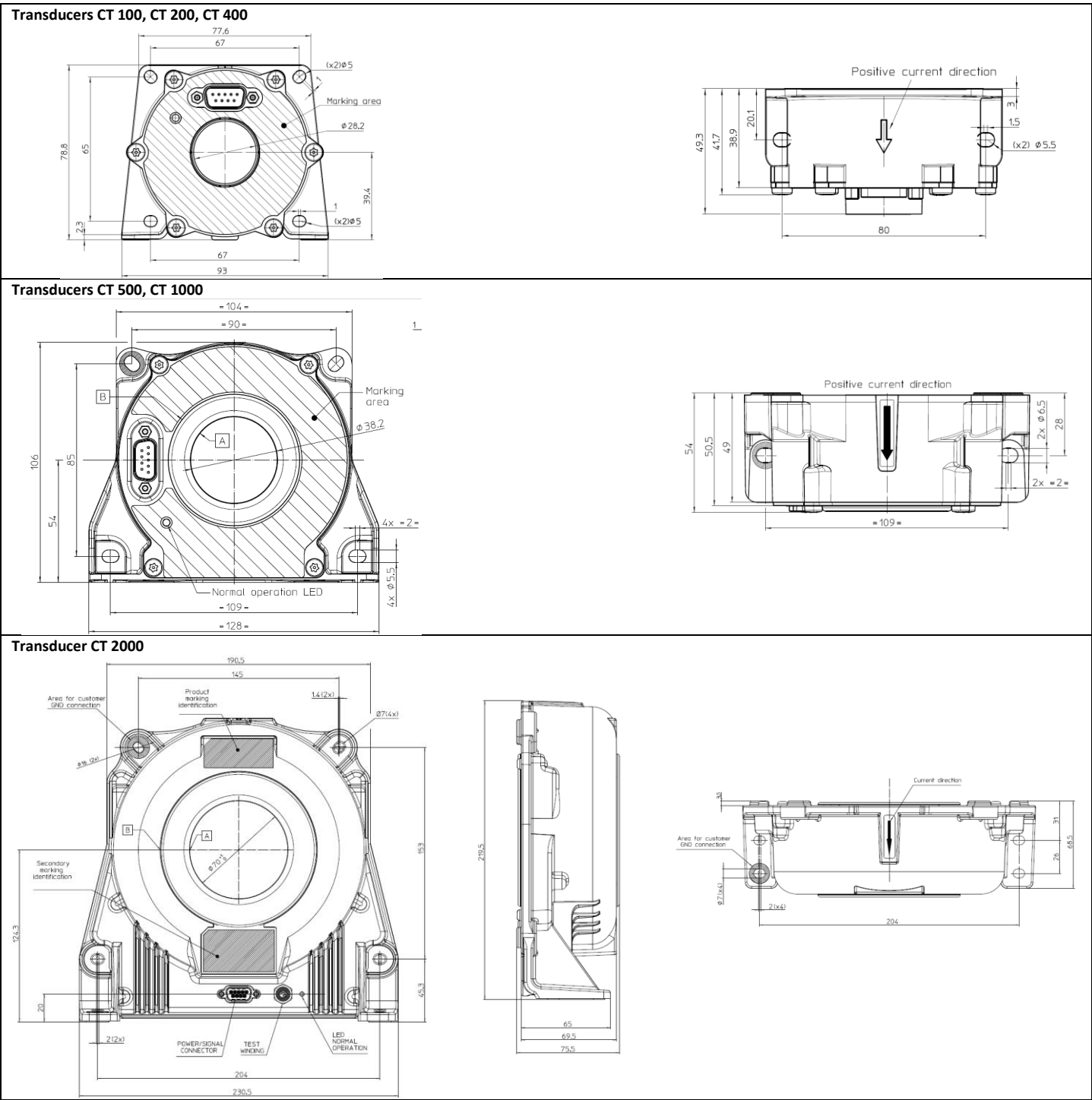
³ Error of measured value. Verified with 100 Arms, DC ... 100 kHz (CT 2000, DC ... 20 kHz)



Maximum measuring resistance (cable- + burden-resistance) depending on primary rms current and surrounding temperature



Dimensions



Order Numbers

CT 100	AC/DC current transducer 100 A _{rms}
CT 200	AC/DC current transducer 200 A _{rms}
CT 400	AC/DC current transducer 400 A _{rms}
CT 500	AC/DC current transducer 500 A _{rms}
CT 1000	AC/DC current transducer 1000 A _{rms}
CT 2000	AC/DC current transducer 2000 A _{rms}