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CURRENT AND POTENTIAL INSTRUMENT TRANSFORMER TEST SET

(INDUSTRIAL AND METROLOGY VERSIONS)

1. Automatic Current and Potential Transformer Test Set Series W
Pos. 1.1 1 p. Automatic Current Transformer Testing Instrument (industry version)
Type **WI-ST00**

Pos. 1.2 1 p. Automatic Current Transformer Testing Instrument (metrology version)
Type **WI-SM00**

2. Standard Current Transformer Type CT-N2K0
Pos. 2.1 1 p. Standard Current Transformer up to 2'000 A
Type **CT-N2K0**

3. Current Burden Type BR-I100
Pos. 3.1 1 p. Electronically Compensated Current Burden acc. to IEC/VDE/ANSI/EEE
Type **BR-I100**

Pos. 1.1 Automatic Current Transformer Testing Instrument (industry version) Type WI-ST00
Current transformer test part

Nominal currents of the CT to be tested (X)	5, 2 and 1 A
Nominal Current of the standard CT (N)	5 A
Matching	0.5 ... 1.6
Working range	1 ... 210% of nominal current
Frequency	50 and 60 Hz
Measuring range ratio error	± 20 %
Resolution ratio error	0.001 %
Measuring range phase angle	± 200 crad
Resolution phase angle	0.01 Min or 10 µrad
Uncertainty of ratio measurement	± 100 ppm ± 1% of reading
Uncertainty of phase measurement	± 100 µrad ± 1% of reading
Inherent burden N-Side	< 20mΩ
Inherent burden X-Side	< 35mΩ/5A , 50 mΩ/2A, < 100mΩ/1A
Resolution current measurement	0.1 % / 0.001A
Uncertainty current measurement	± 1% rdg

Reference conditions

Temperature	23° C ± 2° C
Humidity	45 ... 75 %
Air pressure	101.3 kPa
Rated range of use according to IEC 359	
Temperature	5° C ... 40° C
Humidity, not condensing	10 ... 90 %
Air pressure	70 ... 106 kPa
Dimensions (W, D, H)	449 x 446 x 177 mm
Weight	15 kg
Power mains	115/230V 50/60 Hz 50 VA

Pos. 1.2 **Automatic Current Transformer Testing Instrument (metrology version)** **Type WI-SM00**

Current transformer test part

Nominal currents of the CT to be tested (X)	5, 2 and 1 A
Nominal Current of the standard CT (N)	5 A
Matching	0.5 ... 1.6
Working range	1 ... 210% of nominal current
Frequency	50 and 60 Hz
Measuring range ratio error	± 20 %
Resolution ratio error	0.001 %
Measuring range phase angle	± 200 crad
Resolution phase angle	0.001 Min or 10 µrad
Uncertainty of ratio measurement	± 10 ppm ± 1% of reading
Uncertainty of phase measurement	± 10 µrad ± 1% of reading
Inherent burden N-Side	< 20mΩ
Inherent burden X-Side	30mΩ/5A , 80 mΩ/2A, 200mΩ/1A
Resolution current measurement	0.1 % / 0.001A
Uncertainty current measurement	± 1% rdg

Reference conditions

Temperature	23° C ± 2° C
Humidity	45 ... 75 %
Air pressure	101.3 kPa
Rated range of use	
according to IEC 359	
Temperature	5° C ... 40° C
Humidity, not condensing	10 ... 90 %
Air pressure	70 ... 106 kPa
Dimensions (W, D, H)	449 x 446 x 177 mm
Weight	15 kg
Power mains	115/230V 50/60 Hz 50 VA

Pos. 2.1 **Standard Current Transformer** **Type CT-N2K0**

Nominal primary currents (I_N):)	2'000, 1'000, 500, 250, 125, 100, 50, 25, 12.5, 10, 5 A
Nominal Secondary current	5 A
Rated Burden	5 VA
Working range	1 ... 200 % of nominal current
Frequency	50 /60 Hz
Uncertainty of ratio	± 0.001 %
Uncertainty of phase	± 0.05 Min.
Overload protection	with indication
Mains	115 / 230 V 50 / 60 Hz
Dimensions	approx. 600 x 550 x 800 mm
Hole diameter	70 mm
Weight	approx. 60 kg

Reference Conditions

Temperature	23° C ± 2° C
Humidity	45 ... 75 %
Air Pressure	101.3 kPa

Rated range of use

according to Standard IEC 359

Temperature	5° C ... 40° C
Humidity, not condensing	10 ... 90 %
Air Pressure	70 ... 106 kPa

Pos. 3.1 **Current Burden according to IEC/VDE/ANSI/IEEE** **Type BR-I100**

Functions according to IEC 60044-1 / VDE 0414

Nominal Currents (I_N):)	1 A and 5 A
Nominal Powers	5 - 10 - 15 - 20 - 25 - 30 - 45 - 50 - 60 - 75 - 90 - 100 - 120 - 150 - 200 VA
Rated power user defined	continuously adjustable from 1 … 200 VA
Burden ratings	1/1 and ¼
Power factor	0.8 (Burden ≥ 5 VA) 1 (burden < 5 VA)
Power factor user defined	continuously adjustable from 0.5 … 1
Frequency	50 Hz and 60 Hz
Overload	max 2 x I_N
Uncertainty of Rated Power	± 3 %
Uncertainty of Phase Angle	± 3 crad

Functions according to ANSI/IEEE C57.13- 1993

Nominal Currents (I_N): 1 and 5 A

Nominal Powers	Power	Power Factor	Code
	2.5 VA	0.9	B-0.1
	5.0 VA	0.9	B-0.2
	12.5 VA	0.9	B-0.5
	22.5 VA	0.9	B-0.9
	45.0 VA	0.9	B-1.8
	25.0 VA	0.5	B-1
	50 VA	0.5	B-2
	100 VA	0.5	B-4
	200 VA	0.5	B-8

Rated power user defined	continuously adjustable from 1 … 200 VA
Power factor user defined	continuously adjustable from 0.5 … 1
Frequency	60 Hz and 50 Hz
Overload	max 2 x I_N
Uncertainty of Rated Power	± 3 %
Uncertainty of Phase Angle	± 3 crad

Reference Conditions

Temperature	23° C ± 2° C
Humidity	45 ... 75 %
Air Pressure	101.3 kPa

Rated range of use

according to Standard IEC 359	
Temperature	5° C ... 40° C
Humidity, not condensing	10 ... 90 %
Air Pressure	70 ... 106 kPa
Dimensions	B500 x T470 x H192
Weight:	~ 65 kg
Power mains	230V 50 Hz 300VA


Current Burden
BI-200
Burden FREE
Ixn = 5.0 A
SN = 20.000 VA
cosβ = 0.800
Action: WAIT
IB = 0.00 A
Freq.:
Zdev:
Phidev:
MORE
Vernier
Power
Amplifier
Output Fuse