

MS100

Current Transformer Test System



Current Transformer Test System MS100 is a computer-controlled set of equipment that performs fully automatic calibration of Current Transformers with primary current from 0,5 to 5000 A

FEATURES AND BENEFITS

- Complete set of equipment for Current Transformer testing
- High accuracy (current error $\pm 0,005\%$; phase displacement $\Delta\varphi \pm 0,5 \text{ min}$)
- Wide range of primary current: 0,5...5000 A
- Rated secondary currents: 1 and 5 A
- Rated power range:
0,5 to 50 VA at $\cos \varphi = 0,8$
0; 0,5 to 50 VA at $\cos \varphi = 1$
- FS measurement function
- Cable, contact and internal test set (Comparator) resistances are compensated by four-conductor connection

- Measurement process controlled by PC
- Automatic test reports generation using basic or user-created templates
- High productivity

APPLICATIONS

Current Transformer Test System **MS100** is used by:

- Manufacturer of Current Transformers
- On-site testing of Current Transformers
- Calibration laboratories
- Metrology institutes

EQUIPMENT SET

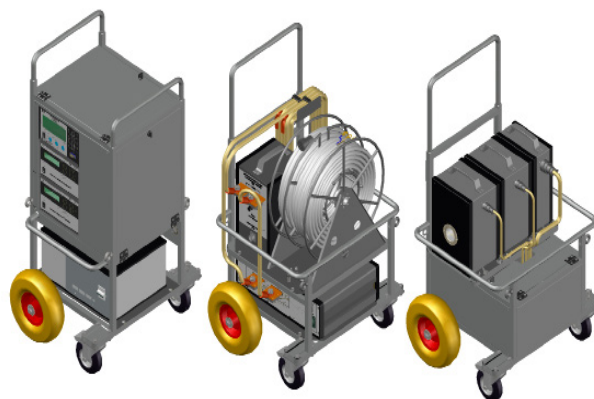
M100 Comparator 	M400 Electronic Current Burden (rated current – 1 A) 
S100A1 FS Switching Unit 	M401 Electronic Current Burden (rated current – 5 A) 
S100 Automatic Current Source 	M500 Programmable Standard Current Transformer + M500E1 Range Extender 

OTHER OPTIONAL SUPPLIES

Racks for stationary indoor using



Trolleys for mobile on-site using



TEST ARRANGEMENT

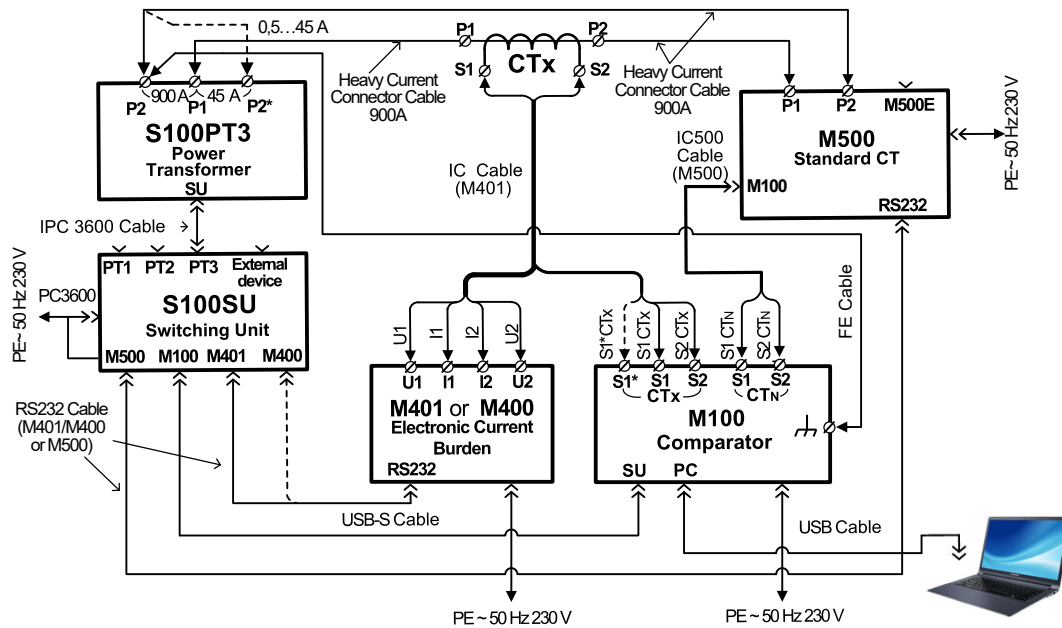


Fig. 1. Measuring circuit for primary rated current 0,5...600 A

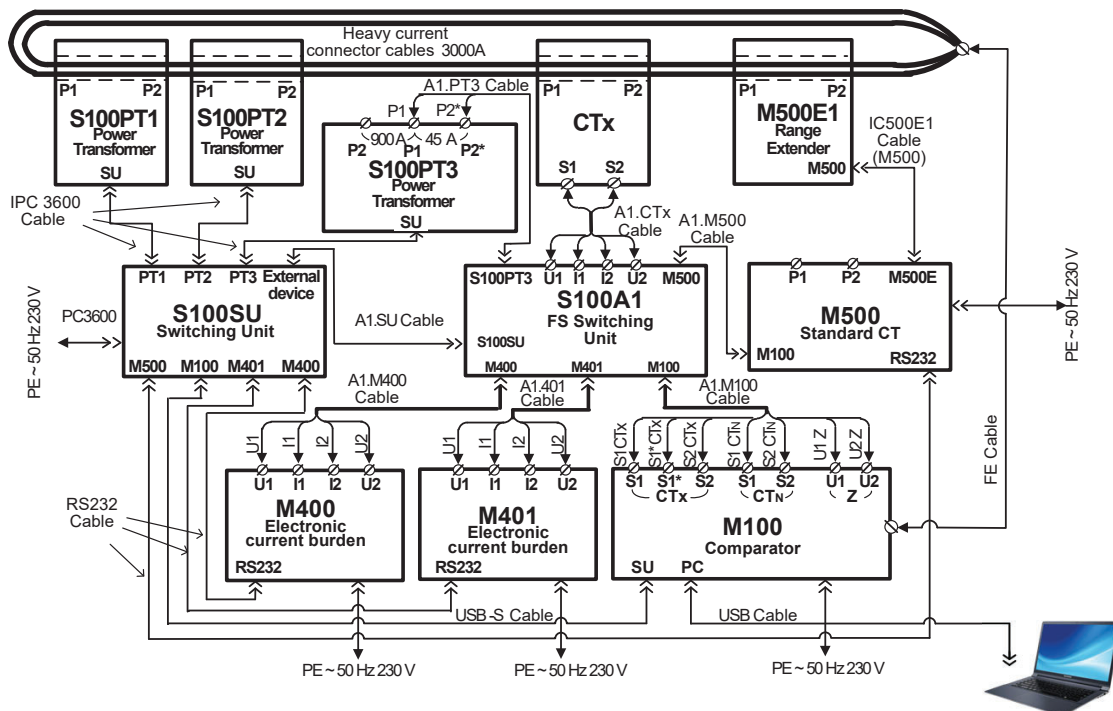


Fig. 2. Measuring circuit for primary rated current 650...5000 A

TECHNICAL SPECIFICATIONS

Specification	Value
Current error	$\pm 0,005 \%$
Phase displacement $\Delta\varphi$	$\pm 0,5 \text{ min}$
Current range	1...150 %
Rated primary current	0,5; 0,6; 0,7; 0,75; 0,8; 0,9; 1; 1,25; 1,5; 2; 2,5; 3; 3,5; 4; 4,5; 5; 5,5; 6; 6,5; 7; 7,5; 8; 8,5; 9; 9,5; 10; 12,5; 15; 20; 25; 30; 35; 40; 45; 50; 55; 60; 65; 70; 75; 80; 85; 90; 95; 100; 105; 110; 115; 120; 125; 130; 135; 140; 145; 150; 155; 160; 165; 170; 175; 180; 185; 190; 195; 200; 225; 250; 275; 300; 325; 350; 375; 400; 425; 450; 475; 500; 525; 550; 575; 600; 650; 700; 750; 800; 850; 900; 950; 1000; 1050; 1100; 1150; 1200; 1250; 1300; 1350; 1400; 1450; 1500; 1550; 1600; 1650; 1700; 1750; 1800; 1850; 1900; 1950; 2000; 2100; 2200; 2250; 2300; 2400; 2500; 2600; 2700; 2750; 2800; 2900; 3000; 3100; 3200; 3300; 3400; 3500; 3600; 3700; 3800; 3900; 4000; 4100*; 4200*; 4300*; 4400*; 4500*; 4600*; 4700*; 4800*; 4900*; 5000* A
Rated secondary current	1; 5 A
Rated power for $\cos \varphi = 0,8$	0,5; 0,75; 1; 1,25; 1,5; 1,75; 1,875; 2; 2,5; 3; 3,75; 4; 5; 6,25; 7,5; 10; 11,25; 12,5; 15; 20; 25; 30; 40; 45*; 50* VA
Rated power for $\cos \varphi = 1$	0; 0,5; 0,75; 0,8; 1; 1,25; 1,5; 1,875; 2; 2,5; 3,75; 4; 5; 6; 7,5; 10; 12,5; 15; 30; 50* VA
Output voltage (without a load)	40 V (at current range from 0,005 to 45 A)
	5 V (at current range from 0,05 to 900 A)
	2 V (at current range from 0,1 to 6000)

* Values are possible for 1 to 120 % of rated current.

Equipment		Size (W × H × D), mm	Weight, kg
M100 Comparator		250 × 150 × 350	5
M400 Electronic Current Burden (rated current - 1 A)		250 × 140 × 330	5
M401 Electronic Current Burden (rated current - 5 A)		250 × 140 × 330	5
M500 Programmable Standard Current Transformer		470 × 150 × 390	17
M500E1 Range Extender		115 × 355 × 225	7
S100 Automatic Current Source	S100SU	470 × 180 × 480	27
	S100PT1	170 × 355 × 230	17
	S100PT2	170 × 355 × 230	17
	S100PT3	365 × 285 × 295	29
	S100A1	250 × 140 × 310	8

Power mains

Rated voltage	220/230 V
Rated frequency	50 Hz
Power consumption at the maximum load	10 kVA
Operating temperature	0...40 °C
Relative humidity	up to 80 % non-condensing

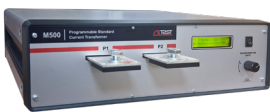
Standards

Safety	EN 61010-1:2010
EMC	EN 61326-1:2013

ORDERING INFORMATION

Scope of supply

The following items are supplied with the standard MS100 modification:

No	Item	Part no.	
1	M100 Comparator (Standart Package)	411439.019	
2	M400 Electronic Current Burden (Standart Package)	M4002.000	
3	M401 Electronic Current Burden (Standart Package)	M4012.000	
4	M500 Programmable Standard Current Transformer (Standart Package)	671221.022	
5	M500E1 Range Extender (Standart Package)	M500E1.000	
6	S100 Automatic Current Source (Standart Package)	421415.014-01	
Additional order			
7	S100A1.1 FS Switching Unit (FS measurement function)	468349.043	
8	Current transformer connection device	UP1.000	

No	Item	Part no.
9	Tables and racks	— 
10	Trolleys	— 

OLTEST LLC (UKRAINE)

Development and production
of measurement devices

POSTAL ADDRESS

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