



# T500 Series Universal Tester

## Model T200A

### Specifications

#### High power AC current output (I1)

Range	0.2A~8A	1A~40A	10~250A
Accuracy	±0.5%		
Output voltage	150V~100V	40V~30V	10V~8V
Power	800VA(8A)	1200VA(40A)	2000VA(250A)
Load time			
Output	250A	100A	50A <50A
Time	120s	750s	3000s continuous

#### High power AC voltage output (U1)

Range	10~500V
Accuracy	±0.5%
Power	1200VA(400V)
Load time	<1A : continuous 1~3A : Max 60min

#### High precision AC/DC current output (I3)

Mode	AC output	DC output
Range	0~200mA	0~200mA
Accuracy	±0.5%	±0.5%
Power(200mA)	75 Ω	75 Ω
Frequency	20~100Hz	—

### Features :

- Constant current design
- Long output time at 250A (120s)
- Can test all types high burden relay
- Automatic local test modules, such as df/dt, ramp, pick up, time, harmonic restraint check, directional relay, etc
- In-built CT test functions
- Test results can be transferred to external PC

#### High power DC voltage output (Udc)

Range	10~300V
Accuracy	±0.5%
Power (300V)	600W
Load time	Output : <1A >1A Time : continuous Max 60min

#### Binary inputs

Number	2
Input characteristics	30~250V DC, or dry contact
Time resolution	±1ms(0.001~1s) ±0.1%(1~9999.999s)
Max. measuring time	9999.999s

#### Auxiliary DC voltage output (Aux Udc)

Range	20~240V
Accuracy	±1%
Power	55W at 110V/110W at 220V
Load time	continuous at 0.5A

#### Binary output

Number	1
Type	Potential free relay contacts
Break capacity AC	Vmax 250V AC/ Imax 8A/ Pmax 2000VA
Break capacity DC	Vmax 250V DC/ Imax 8A/ Pmax 150W

#### AC/DC current output (I2)

Mode	AC output	DC output
Range	0~20A	0~20A
Accuracy	±0.5%	±0.5%
Power(20A)	200VA	200W
Frequency	20~420Hz	—
Phase angle	0~360°	—
Phase angle accuracy	0.5 °	—
Distortion	1A~20A <0.5%	—
Transient response	500 μ s	500 μ s
Load time	20A : 60s 10A : 240s <10A : continuous	
Harmonic(2nd,3rd,5th,7th)accuracy	1%	

#### Power supply

Nominal input voltage	110/220Vac
Permissible tolerance	-20% ~+15%
Nominal frequency	50/60Hz
Permissible frequency	45~65Hz

#### Voltmeter

Range	0~600V AC/DC
Accuracy	±1%

#### Ammeter

Range	0~6A AC/DC
Accuracy	±1%

#### Certificates

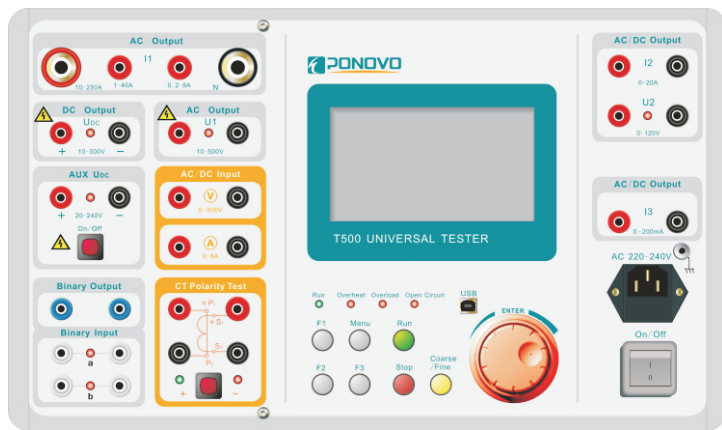
EMC (Emission)	IEC-61000-3-2/3
EMC (Immunity)	IEC 61000-4-2/3/4/5/6/11
Safety	IEC 61010-1

#### Others

Operation temperature	-5 ~ +50°C
Operation humidity	5~95 %, non-condensing
Weight	20.7kg
Dimensions (W x H x D)	430 mm×250mm×250 mm
PC connection	USB
Ground Socket (earth)	4 mm banana socket; front side

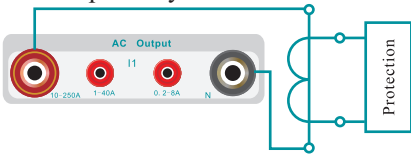
#### AC/DC voltage output (U2)

Mode	AC output	DC output
Range	0~120V	0~120V
Accuracy	±0.5%	±0.5%
Power(120V)	60VA	60W
Frequency	20~100Hz	—
Phase angle	0~360°	—
Phase angle accuracy	0.5 °	—
Distortion	5V~120V <0.5%	—
Transient response	500 μ s	500 μ s

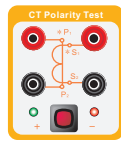


## CT test

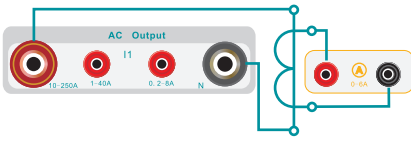
1、 Feed into the ct's primary side



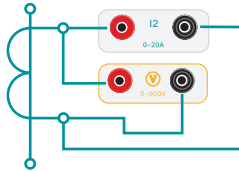
2、 Polarity check



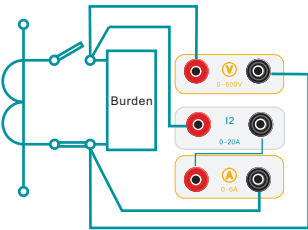
3、 CT ratio



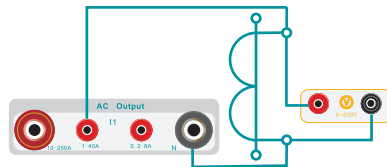
4、 CT resistance



5、 CT burden



6、 CT excitation



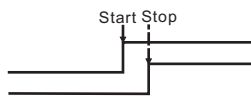
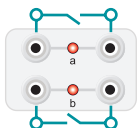
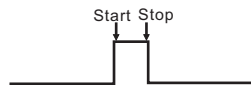
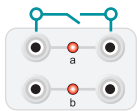
## Ammeter and voltmeter



Internal measurement

External measurement

## Single/ Dual timer



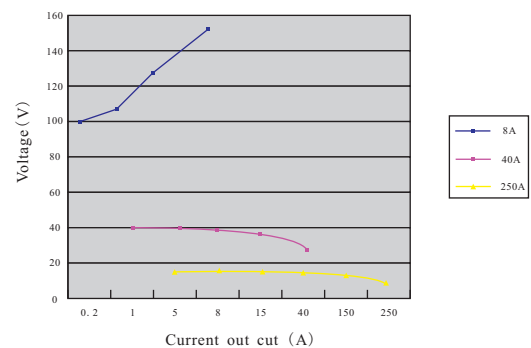
## Relay test examples

Relays type	IEEE No.
Distance protection equipment (phase by phase)	21
Undervoltage relays	27
Directional power relays	32
Undercurrent or underpower relays	37
Negative sequence overcurrent relays	46N
Overcurrent relays/Ground fault relays	50
Inverse time overcurrent relays	51
Power factor relays	55
Overvoltage relays	59
Directional overcurrent relays	67
Directional ground fault relays	67N
DC overcurrent relays	76
Automatic reclosing devices	79
Frequency relays	81
Motor overload protection	86
Directional voltage relays	91
Tripping relays	94
Voltage regulation	—
Thermal relays	—
Timer	—
Synchronising or synchronism-check relays	25

## The hardware configuration list

Type	T200A
High power AC current output(I1)	250A
High power AC voltage output (U1)	•
High power DC voltage output (Udc)	•
High precision AC/DC current output (I2)	•
High precision AC/DC voltage output (U2)	•
High precision AC/DC current output (I3)	•
Auxiliary DC voltage output (Aux Udc)	•
Voltmeter AC/DC	•
Ammeter AC/DC	•
Binary inputs 2	•
Binary outputs 1	•

## High burden relay test



## Auto test

