

# SECONDARY INJECTION TEST CASE

300V

50A

3U  
1I

## High accuracy electronic generator :

- 3 Voltages up to 300Vac - 50VA
- 1 Current up to 50Aac - 200VA

## Two user modes available :

- **Manual Mode :**
  - Manual adjustment of the different injection values by push button and potentiometers.
  - Test configuration thanks to the MICROPILOT® menus.
- **Driving Mode:**
  - Driving mode thanks to the PTRPILOT software running under Windows XP/NT/Vista/7.

Picture for illustration purposes only.



PTRS 231

## • Packaging

- Box - «Flight Case».
- Dimensions : L = 400 - W = 295 - H = 400 mm.

## • Main power supply

- 230 Vac Single Phase + Earth - 50 /60 Hz.
- Connection by Europa plug - Cord supplied.
- Protected by mini circuit-breaker.

## • Fixed auxiliary voltage supply

- 24 / 48 / 127 / 250 Vcc (15W). Selection by switch button.

## • MICROPILOT®

Microcontroller controlled module with backlight LCD display, function keys, and navigation menus, allowing to execute the following operations :

- Configuration of the test type.
- Configuration of the setting mode «normal» or «fault».
- Choice of current and voltage ranges.
- Display current, voltage and homopolar values.
- Measure of the amplitude (RMS) : 0.2% of the range.
- Control of current and/or voltage injection and start of the timer when the configuration changes between «normal» and «fault» state. Timer stops automatically when receiving an information on «stop» terminals.
- Frequency measure (accuracy 0.01Hz ± 1 digit).
- Phase angle measure (accuracy 1° + 1 digit).
- Delay measure up to 2000 sec (resolution 1ms).
- Measure of recloser delays.
- Recognition of the state of the tripping information (contact or voltage 24 to 240Vdc).
- Automatic measure of the tripping value (hold function).
- Serial output RS232.

## • Connectivity

- Output current lockable security plugs : ø6mm.
- Output voltage and timer security plugs : ø4mm.
- Lockable threaded rods suitable to current terminals.
- ø6 / ø4 adaptators for current terminals.

## • Electronic generators

- Electronically controlled current and voltage.
- Adjustment with potentiometers by 0.01A steps for current and 0.1V steps for voltage.
- Protection against overload, led indicator and reset switch.
- Frequency : Fixed 50Hz - Adjustable from 40 to 65Hz by 0.01Hz steps.
- Phase angle : Adjustable from 0 to 360° using «+» and «-» keys.
- Possibility to simulate a homopolar voltage phase opposed with U1 voltage without distort the RST triangle.

## 3 Voltage generators 50VA :

Range U	75V	150V	300V
I max.	0.66A	0.33A	0.16A
Time	Permanent	Permanent	Permanent

## 1 Current generator 200VA :

Range I	5A	12.5A	25A	50A
U max.	40V	16V	8V	4V
Time	10 min	10 min	5 min	1 min

Version PTRS231P : 3 current ranges 5A/12,5A/25A (200VA).

Version PTRS231 : 3 current ranges 12,5A/25A/50A (200VA).

## • Options

- Main power supply 115Vac.
- Frequency : 40 to 400 Hz by 0.1Hz steps.
- Auxiliary power supply : 24 / 48 / 127Vcc (15W) 100Vca (15VA).
- Other voltage or current ranges on request.
- Rolling tray.
- **CTRWIN** : Real time capture software of all results running on Windows XP/NT/Vista/7.
- **PTRPILOT** : Driving software running on Windows XP/NT/Vista/7. Purposes both manual and driving modes.

## • Others

- This Material is CEM certified according to EN50081-2 and EN50082-2.

Guarantee one year parts and labor. All interventions are carried out exclusively in our factory.

Due to continuous research program, these characteristics can be modified.