# SECONDARY INJECTION TEST CASE

# High accuracy electronic generator:

- 3 Voltages up to 300Vac 50VA
- 3 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.

# Packaging

- Box «Flight Case».
- Dimensions : L = 535 W = 450 H = 460 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 excecute 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.

300V

50A

3U 3I



**PTR 233** 

# • 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

## 3 Current generators 200VA:

Range I	5A	12.5A	25A	50A
U max.	40V	16V	8V	3V
Time	10 min	10 min	5 min	1 min

Version PTR233: 3 current ranges 5A/25A/50A (200VA). Version PTR233-P: 3 current ranges 5A/12,5A/25A (200VA). Version PTR233-N: 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.





1/12