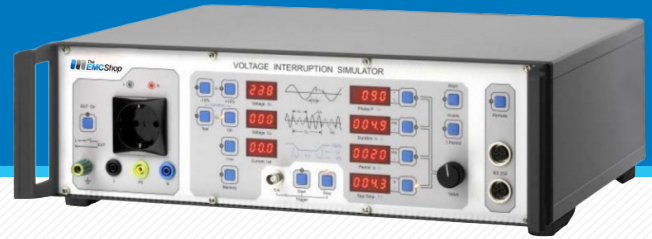**MODEL NUMBER:**
PQF-1129

VOLTAGE INTERRUPTION SIMULATOR

FEATURES:

- **AC-Test: IEC / EN 61000-4-11**
- **DC-Test: IEC / EN 61000-4-29**

- **Inrush current measurement**
  at any phase position 0° - 360 °
- **Automatic AC + DC ramp function**
  (fig.2), second voltage source not necessary

INTRODUCTION

The clearly adjustable simulator PQF-1129 can simulate the voltage dips and voltage variations that can be found on supply nets (AC and DC). Different modes of operation are possible:

Short interruptions 100%: The supply network of the EUT can be interrupted in any phase position for a defined time (0,1 ms – 9980 ms)

Voltage dips: The switching between the rated voltage U1 and the variable voltage U2 (U2 always <= U1) is always erratic. It can be set at each phase angle of the mains begin or end. The standard test is defined at 40%, 70% and 80%. This test re-quires the injection of the same phase voltage U2 at the rear of the device. A step transformer (PQF-740) fulfilled the standard requirement. **Fig. 1**
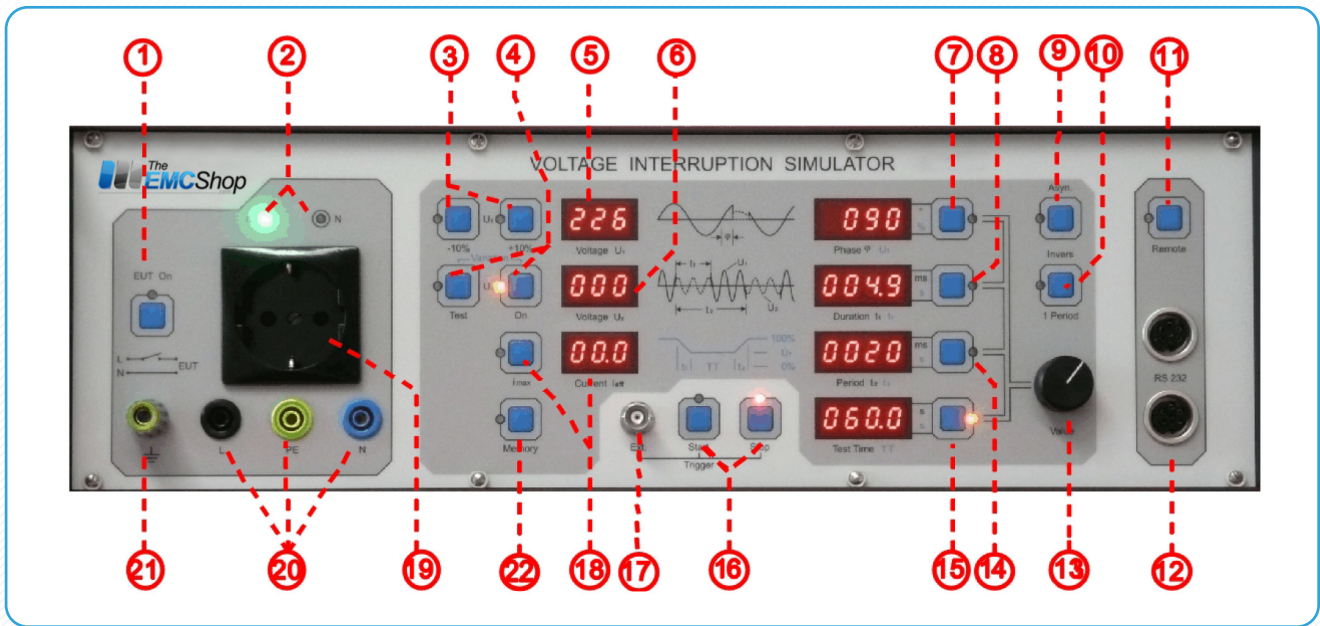
Voltage fluctuation: Fluctuation to an adjustable voltage (0 95 % of U1). The parameters for re-lease time (0,1 – 70 sec.), test time (0,01 – 70 sec.) and recovery time (0,1 – 70 sec.) can be set individually. This is not an additional supply voltage re-quired. **Fig. 2**

Inrush current: For each EUT up to max. 16 A rated current (AC) can be measured the inrush current on any phase position (0 – 360°).

For oscilloscope analysis there are three BNC jacks on the back side of the unit to examine the parameters voltage, current and trigger.

STANDARD REQUIREMENTS

Fig.1: Voltage dips

Fig.2: Voltage fluctuation
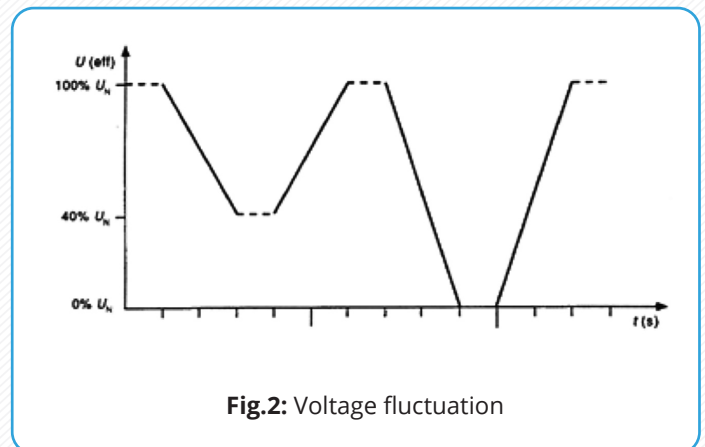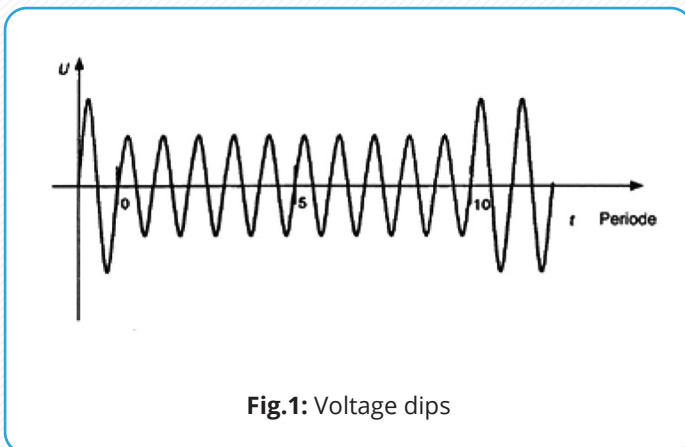
TECHNICAL DATA

EUT supply

■ **Nominal voltage**
AC max. 2 8 0 V
DC max. 3 6 0 V

■ **Nominal current**
Voltage dips **(fig. 1)**

AC max. 16 A
DC max. 8 A

Voltage fluctuation **(fig. 2)**
AC max. 16 A
DC max. 4 A

■ **Phase indication** ⑫ lamp red / green

FUNCTIONS:

⑨ Interruptions / voltage variations - synchro-nous and asynchronous

③ Supply voltage $U_1 = U_N$: reversing to+10% U_N and -10% U_N

⑤ Display supply voltage U1

④ Variable voltage U_2 test and U_2 on, activationof the >automatic ramp function< (fig. 2)

⑥ Display variable voltage U_2

① EUT on / off

⑱ Starting inrush current I_{max} / rated current measurement

⑩ Inverse operation within one period

⑪ Switch for remote control release

⑫ RS 232-interface

⑬ Adjustment for phase angle ⑦, duration ⑧, period ⑭ and test time ⑮ with digital potentiometer

㉒ MEMORY key

FUNCTIONS:

⑦	Phase angle	0 - 359°, step 1°
⑧	Duration t_1	0,1ms - 9980ms
⑭	Period t_2	Asynchronous 5,0ms - 9990ms
		Synchronous 20ms - 9980ms
⑮	Test time	0,1sec - 9990sec, further-more single event and continuous operation
⑯	Trigger	Start- and Stop-key
⑰	Trigger externa	IBNC connector
⑲	EUT connection	Protection earth outlet
⑳		Additional lab. jacks
㉑	Ground connection	Ground jack at the front side and back side

■ **Measurement** BNC outputs (on rear) for voltage, current and scope triggering

■ **EUT supply "U_1"** On rear

■ **EUT supply "U_2"** On rear (e.g.variac)

■ **EUT Fail** Trigger-input, on rear

COMMON

■ **Operation temp.** 0 - 40 °C
■ **Dimensions** 19" housing, 3 HE
■ **Weight** 13 kg
Power supply 230V / 50 Hz, 80VA,

OPTIONS:

■ **PQF-740** Step transformer 16,0 A For voltage fluctuation, **fig.2**