Risk-free simulation of a network and three-phase load!

TRAINING CASE

Power and Harmonics



- Networks that can be simulated: SINGLE- or THREE-phase (230V mains power supply)
- Measurements that can be simulated*: U, I, W, W/h, var, φ, THD,...
- Connects directly to a 2P + E socket





^{*} if the case is used with appropriate measuring instruments

and safe way of gaining a concrete understanding of the effects of the variations in the current, voltage, phase angle and harmonic distortion that every electrician has to know how to deal with and rectify. It allows you to give people thorough training in the customary operations in industrial environments, while ensuring that that there are no electrical risks. This type of training is designed for

student-electricians and electrotechnicians, small electrical contractors, installers, maintenance technicians, engineers, etc. The "Power and Harmonics" training case will also be particularly useful for people demonstrating how to use the various measuring instruments.

- Power-on LED
- Activation switch for each phase
- Ø 4 mm safety sockets
- Input filter and protection by time-delay fuses
- 230 V 50 Hz mains power supply (lead supplied)
- Class 1 equipment: IEC 1010, 300 V, CAT II, pollution 2.

Weight: 11 kg - Dimensions: 470 x 390 x 180 mm



VOLTAGES

Output voltage (V1-N, V2-N, V3-N)	Mains ± 15% (THD V1 switch on MIN)		
Output impedance	< 15 kΩ		
Influence of a load on the outputs	1 MΩ causes a variation of -2% / 500 kΩ causes a variation of -4%		
Adjustment of harmonic distortion	MIN position:	network level	
on phase 1 (V1)	position 1:	approx. 15%	
	position 2:	approx. 25%	
	VARIABLE position:	Alternates MIN / Position 2 for 30 s	

CURRENTS

OUKKENIS		
Currents	1, 2, 5, 10 and 20 A ± 10% (THD A1 switch on MIN)	
Adjustment of harmonic distortion	MIN position:	network level
on phase 1 (V1)	position 1:	approx. 15%
	position 2:	approx. 25%

PHASE ANGLE

Phase angle between A1 / V1 0° or 60° / 45° / 30° capacitive $\pm 5^{\circ}$ or 60° / 45° / 30° inductive $\pm 5^{\circ}$

To ORDER

When ordering, indicate which of the following mains-lead models you require:

France type F
Europe (including Germany) type D
Italy type I
Switzerland type CH
Great Britain type GB

UNITED KINGDOM

Waldeck House - Waldeck Road Maidenhead SL6 8BR Tel.: 01628 788 888 Fax: 01628 628 099

Measuring Instruments

To take full advantage of all the possibilities offered by your training case, we advise you to use it with the following examples of measuring instruments:

C.A 8310: energy analyzer
C.A 8210: energy meter
F25: harmonics clamp
F27: wattmeter clamp
TRMS current clamp

Please consult us when choosing current sensors:

AmpFLEX (cover photo), clamps MN (photo above), ...

FRANCE

190, rue Championnet 75876 Paris Cedex 18 Tél. : (33) 01 44 85 44 85 Fax : (33) 01 46 27 73 89

