

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

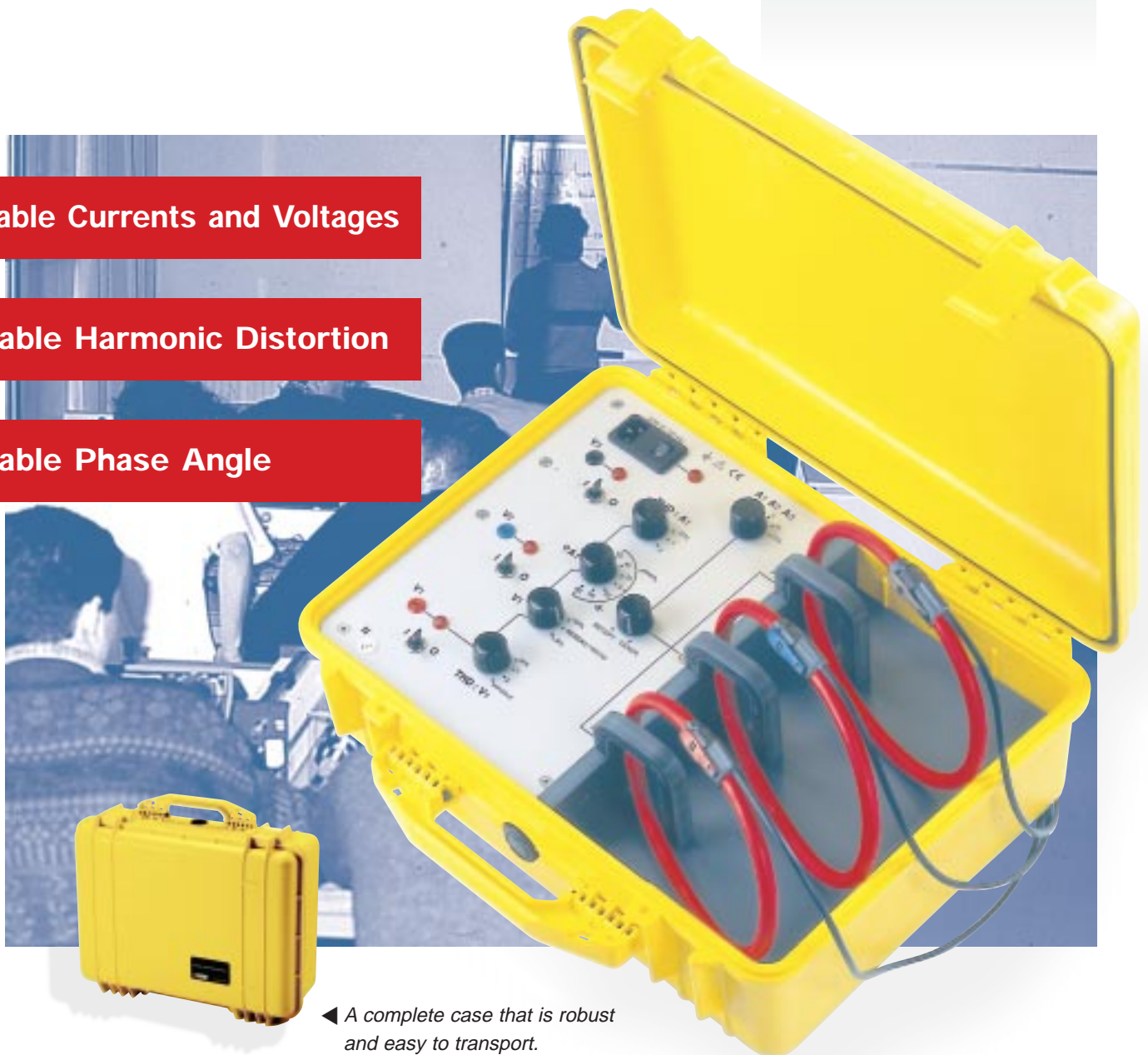
TRAINING CASE

Power and
Harmonics

Variable Currents and Voltages

Variable Harmonic Distortion

Variable Phase Angle



◀ A complete case that is robust
and easy to transport.

- 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



AN ESSENTIAL TRAINING TOOL

To train in the various energy analysis and network pollution checks, the ideal situation would be to carry out the operations directly on genuine electrical installations. However, access to an electrical distribution cabinet (for example) does not always allow you to measure all the parameters frequently encountered on the network. Simulation is a particularly effective

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 there are no electrical risks. This type of training is designed for

student-electricians and electro-technicians, 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 $\pm 15\%$ (THD V1 switch on MIN) |
| Output impedance | $< 15 \text{ k}\Omega$ |
| Influence of a load on the outputs | 1 M Ω causes a variation of -2% / 500 k Ω causes a variation of -4% |
| Adjustment of harmonic distortion on phase 1 (V1) | MIN position: network level position 1: approx. 15% position 2: approx. 25% VARIABLE position: Alternates MIN / Position 2 for 30 s |

CURRENTS

| | |
|---|---|
| Currents | 1, 2, 5, 10 and 20 A $\pm 10\%$ (THD A1 switch on MIN) |
| Adjustment of harmonic distortion on phase 1 (V1) | MIN position: network level 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

Power and Harmonics training case **01NC5003**
Delivered with mains lead.

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**

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
- F3N:** TRMS current clamp

Please consult us when choosing current sensors:

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

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