

- **High current output up to 7000 A**
- **Powerful output up to 35 kVA**
- **Modular design for easy transport**
- **Primary current injection testing**
- **Protection relay testing**
- **Low voltage Breaker testing**
- **Heat runs**
- **CT testing**

## A P P L I C A T I O N

KAM test system is designed for primary injection testing of protection relays and circuit breakers, for commissioning and revamping of substations and electrical network.

### Output current

MODEL	CURRENT A	POWER VA	CURRENT A	POWER VA	CURRENT A	POWER VA
KAM 2/5	0...2000	2000	0...6000	5000	7000	5000
KAM 5/12.5	0...2000	5000	0...6000	12500	7000	15000
KAM 5/12.5G	0...3000	5000	0...6000	12500	7000	15000
KAM 10/25	0...2000	10000	0...6000	25000	7000	35000
Duty Cycle	Continuous	Continuous	5 seconds	5 seconds	1 second	1 second



## KAM SPECIFICATION

The test system KAM is a high current unit consisting of a control unit and one or two external power transformers, that can be easily taken in proximity of bus-bars, thus keeping to the minimum the test cable length.

KAM range comprises four models:

- . KAM 2/5;
- . KAM 5/12.5;
- . KAM 5/12.5G;
- . KAM 10/25.
- Current range selection: 500 - 1000 - 2000 - 6000 A, (750 - 1500 - 3000 - 6000 for KAM 5/12.5G).
- Current and power range selection.
- Coarse and fine output adjustment.
- Output metering: by 4 and half digit instrument, with hold function.
- Auxiliary Voltage output: 0-120V or 0-230V, 15A maximum.

### Timer

Metering: relay timing or current duration.

Digital timer with large LED display.

Timer range: 9.999; 99.99; 999.9; 9999s, auto ranging.

Input contacts dry or wet.

Voltage range: 24 V to 220 V, d.c. or a.c..

### Power supply

Power supply: 230 V  $\pm$ 15%; 50/60 Hz.

### Protections

Thermo-magnetic breaker on the mains.

Fuses on internal supplies.

Output interlock if the metering C.T. is not connected.

Thermal protection in the power transformer.

### Case

Control unit: aluminium case with cover and handles.

Power transformers: aluminium case with handles and wheels.

### Weight and dimensions

CONTROL UNIT

KAM 2/5, KAM 5/12.5 and KAM 5/12.5G: 33 kg.

KAM 10/25: 37 kg.

Dimensions: 300 x 620 x 260 mm.

### POWER TRANSFORMERS

Number: one for KAM 2/5; two for KAM 5/12.5, KAM 5/12.5G, and KAM 10/25.

KAM 2/5: 70 kg.

KAM 5/12.5 and KAM 5/12.5G: 70 kg and 85 kg.

KAM 10/25: 104 kg and 125 kg.

Dimensions:

- . KAM 2/5, KAM 5/12.5 and KAM 5/12.5G: 410 x 270 x 490 mm;
- . KAM 10/25: 440 x 270 x 490 mm.

Transformers are supplied complete with a C-shaped plate, for their interconnection.

### Accessories supplied with the unit

Each KAM unit is supplied complete with the following accessories:

- . Mains cable;
- . Operating manual.

### Optional accessories

- N. 4 cables, heavy duty, 200 sq. mm. cross section. Lengths: 0.5 - 1 - 2.5 - 5 m.
- N. 1 Set of twisted cables, 6 m long, for tests up to 1300 A with KAM 2/5; 2200 A with KAM 5/12.5; more than 4000 A with KAM 10/25 (overload).
- N. 1 set of 2 clamps, screw driven.
- N. 1 Set of twisted cables, 6 m long, for tests up to 1300 A with KAM 2/5; 2200 A with KAM 5/12.5; more than 4000 A with KAM 10/25 (overload).

## APPLICABLE STANDARDS

### Electromagnetic compatibility

Directive no. 89/336/CEE dated May 3, 1989, modified by the directive 92/31/CEE dated May 5, 1992.

Applicable Standards:

EN 61326; EN 55011; En 6100-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-8; EN 61000-4-11;

### Low voltage directive

Directive n. 73/23/CEE, modified by the directive 93/68/CEE.

Applicable standards, for a class I instrument, pollution degree 2, Installation category II: CEI EN 61010-1.

In particular:

Operating temperature: 0 - 50°C;

Storage: -25°C to 70°C.

Relative humidity: 5 - 95% without condensing.

**Ordering information:**

CODE	MODULE
30084	KAM/2.5
80085	<a href="#">KAM/5.12,5</a>
60085	KAM/5.12,5 G
60086	<a href="#">KAM/10.25</a>
15085	Heavy Duty Test Leads (4) for KAM range 0,5 m - 200 mm <sup>2</sup> EACH
16085	<a href="#">Heavy Duty Test Leads (4) for KAM range 1 m - 200 mm<sup>2</sup> EACH</a>
17085	Heavy Duty Test Leads (4) for KAM range 2,5 m - 200 mm <sup>2</sup> EACH
18085	<a href="#">Heavy Duty Test Leads (4) for KAM range 5 m - 200 mm<sup>2</sup> EACH</a>
19085	N. 1 Set of twisted cables, 6 m long, for tests up to 1300 A with KAM 2/5; 2200 A with KAM 5/12.5; more than 4000 A with KAM 10/25 (overload).