



- 3-phase current simulator for testing of generator guards and protection units
- Built-in phase sequence indicator
- LED display for easy reading
- For testing of current, current differential, overcurrent and short circuit, active (kW) and reactive (VAr) power, etc.
- All current outputs are galvanically isolated from the mains supply
- Built into a solid Pelicase suitcase with integrated wheels and handle for easy carriage and safe transport handling
- Storage space for working tools, wires, etc.

**Specifications**

Input AC Voltage	100-120V, 200-240V, 380-420V, 440-480V or 660-690VAC, 30- 70Hz
Output AC Current	0-3A, 5VA / 0-15A, 80VA
Power Factor	App. 0,85
Fuses	5 of 5x20MM, 0.63A, 250VAC
Dimension (LxWxD)	55.9 x 35.1 x 22.9 cm
Weight	App. 26kg
Certifications	IP64

**Description**

IMA15 is a 3-phase current simulator in the Megacon range of transportable test equipment.

IMA15 is built into a solid Pelicase suitcase P1510 with integrated wheels and handle for easy carriage and safe transport handling.

This unit is designed for general testing of Megacon’s or other brands range of protective guards and controllers for generator and power plant automation systems (current, current differential, overcurrent and short circuit, active (kW) and reactive (VAr) power, etc.).

IMA15 has multiple input supply voltage range from 100VAC and up to 690VAC and selectable current output, 0-3A & 0-15A for each phase (R - S - T).



**Phase Sequence**

IMA15 is fitted with a phase-sequence indicator. Correct phase sequence is a precondition for measurement of active power and reactive power.

If LED’s shows **INCORRECT**, please change your input wiring.

**Digital Amp-meter**

4 digit 7 segment LED display for easy reading of current measurement.

**Outputs**

Each output current terminal’s phase reference (R-S-T) and the direction of current flow (K: supply, L: load) is clearly marked.

However, if the input sequence is for example S-T-R, you have the correct phase sequence but output current will also come out in the same sequence S-T-R.

The current outputs are individually adjustable 0-3A or 0-15A. (selectable on selector switch)

**Variable Current Output**

The maximum current to be drawn from any of the current outputs largely depends on the ohmic resistance of the external current loop.

The current terminals are rated 20A, and 4mm plugs may be flipped into the centre of the terminal.

Use large size wires for high current levels to reduce ohmic losses. Recommended wire is minimum 2.5mm<sup>2</sup>.

**Fuses**

Ceramic fuses on unit front protect the supply inputs.



OPERATING & TESTING

Be sure to connect the input voltage to the correct input terminals. The output current is directly related to the phase sequence of the input phases. Power input to IMA15 is to be provided from 3 or 4 wire system, 30-70Hz.

Testing of Current

The adjustable level of each phase current output is read on the digital meters. Maximum continuous output current is 6A, up to 15A for max 5 minutes. Current levels **must not exceed** 15A for more than 15 seconds. Each current output is isolated from each other and from the mains supply, and can be grounded or connected to any system voltage up to 690VAC.

Testing of Active Power

Connect voltage inputs in correct phase sequence (R/S/T). Connect also current outputs in correct sequence (R/S/T) with specified direction of current flow (K= Supply, L= Load).

**NB!** You have to connect the output current in series with the secondary current loop.

For calibration/check of wattmeters adjust the output currents according to the calibration data for the kW-meter.

Testing of Reactive Power

Connect voltage inputs in correct phase sequence (R/S/T). Connect also current outputs in correct sequence (R/S/T) with specified direction of current flow (K= Supply, L= Load).

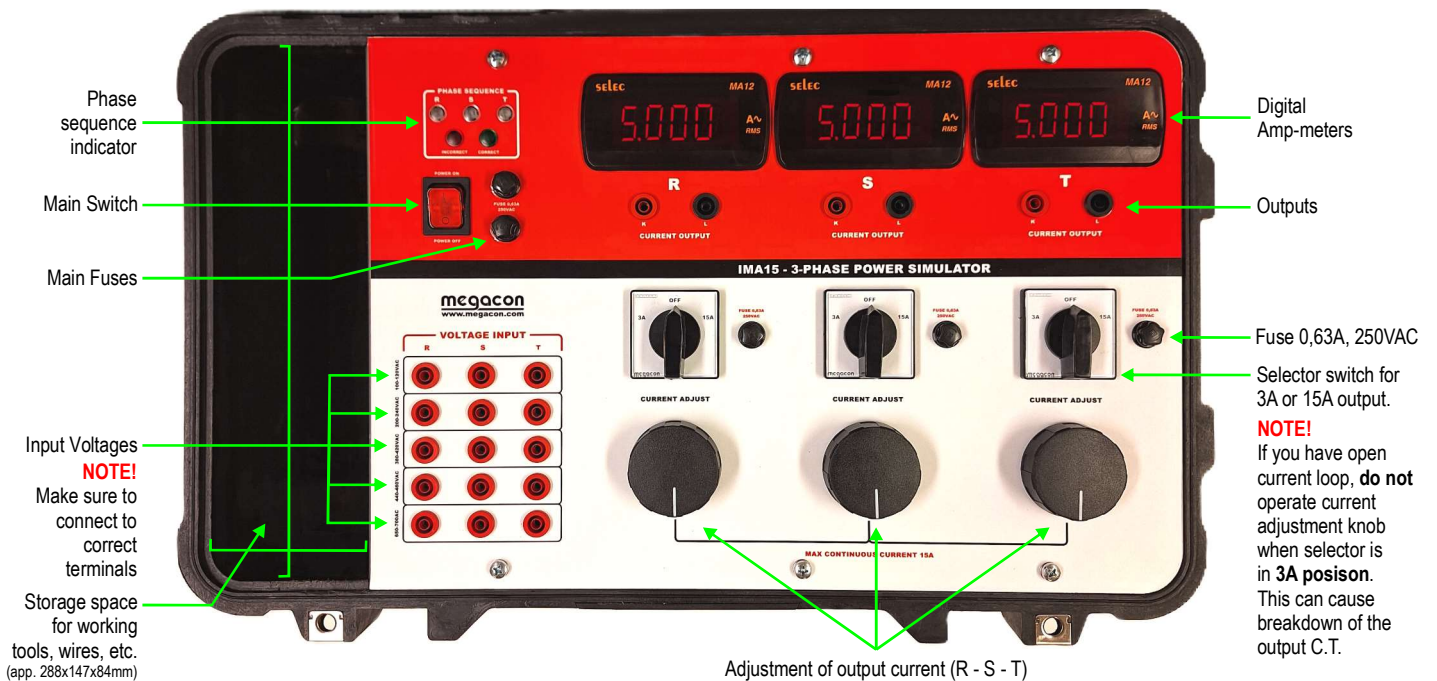
**NB!** You have to connect the output current in series with the secondary current loop.

For calibration/check of Var-meters adjust the output currents according to the calibration data for the kVAr-meter.

Testing of Reverse Power

Connect voltage inputs in correct phase sequence (R/S/T). Connect also current outputs in correct sequence (R/S/T) with reversed direction of current flow (L= Supply, K= Load).

**NB!** You have to connect the output current in series with the secondary current loop.



The MEGACON policy is one of continuous improvement, consequently equipment supplied may vary in detail from this publication.

