

Automatic step transformer



- Integrated function unit to Modula system
- Power line dips to 0%, 40%, 70% and 80%
- Complies with EN/IEC 61000-4-11
- Includes EUT power control switch

The automatic step transformer type INA 6502 is a standard accessory for the Schaffner Modula 6000 instrumentation series. It enables the ac power supply voltage, which is fed to the EUT, to be set to 0%, 40%, 70% or 80% of U_{IN} under program control.

The INA 6502 complies with the requirements of EN/IEC 61000-4-11(2004) for voltage dips and undervoltages. A large number of product standard specifications can be fully met as they do not ask for continuous and arbitrary voltage variations.

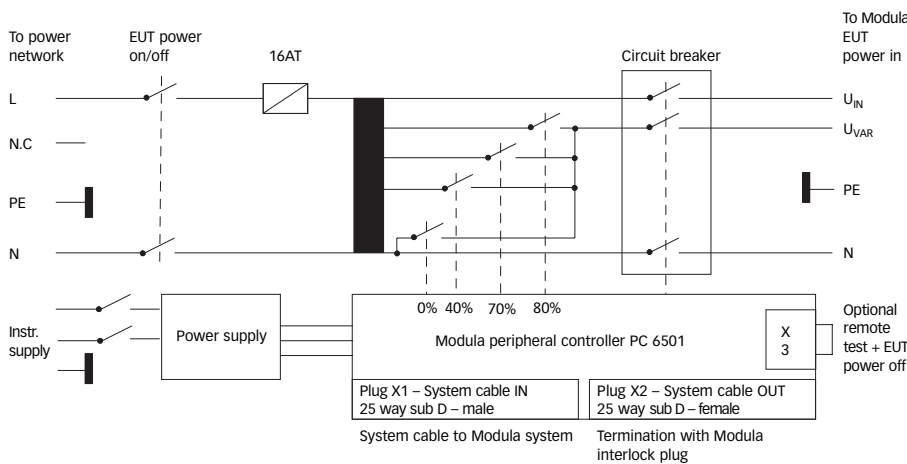
The device is connected to the Modula system via the system cable and is fully embedded in the configuration management concept, the software control and the report mechanism.

The voltage steps, U_{VAR} , are programmed as a percentage of the power line voltage using either the mobile hand-held controller or by means of WinModula. The updated version of WinModula includes preprogrammed tests using the INA 6502 for the basic standard, the generic standards and a considerable number of product standards.

A circuit breaker is incorporated into the housing of the INA 6502. This allows the on/off switching of the power to the EUT at any moment via the user interface or automatically under program control. A remote EUT-off hardware switch to cut power and high voltage pulse generation is available as an option.

The step transformer is designed into a sturdy aluminum housing fitted with convenient handles. In applications the INA 6502 can be used in any position and may even be placed under the test bench if the space on the set-up becomes limited.

Block diagram



Technical specifications

Input voltage U_{IN} :	0 to 250VAC, 50/60Hz
Output voltage U_{VAR} :	4 steps: 0% - 40% - 70% - 80% of U_{IN}
Accuracy:	±5%
Voltage change with load:	
100% output, 0 to 16A	less than 5%
80% output, 0 to 20A	less than 5%
70% output, 0 to 23A	less than 5%
40% output, 0 to 40A	less than 5%
Output current capability at 230V input voltage:	
	16A _{rms} at 100% output
	20A _{rms} at 80% output, for 5s
	23A _{rms} at 70% output, for 5s
	40A _{rms} at 40% output, for 5s
Voltage selection:	Software driven by Modula user interface
EUT power ON/OFF function:	Front panel switch with power ON indicator, circuit breaker operated by Modula user interface
Connectors:	Harting type HAN3A, compatible with Modula safe power linking concept
Possible extensions:	Connector for optional remote EUT power-off switch, interlock connection to door switch
Instrument supply:	Selectable 100–110VAC, 220–250VAC, 15VA, 47 to 63Hz
Dimensions:	L x W x H 460 x 200 x 160mm (18.1 x 7.9 x 6.3")
Weight:	15kg (33lbs) approx.
Cable:	Power network receptacle to INA 6502 ~2m (~79") (uses input cable delivered with Modula mainframe), INA 6502 to Modula EUT power input ~2m (~79")
Control cable:	2m (79"), 25 way sub D, twisted pair, shielded (included in delivery)
Modula system requirements:	Master controller revision 2 (copper interface) Master controller firmware 1.17 or higher MHC software, ModPDA version 2.30 or higher WinModula version 2.30 or higher

Option

Remote EUT-off hardware switch INA 6581

