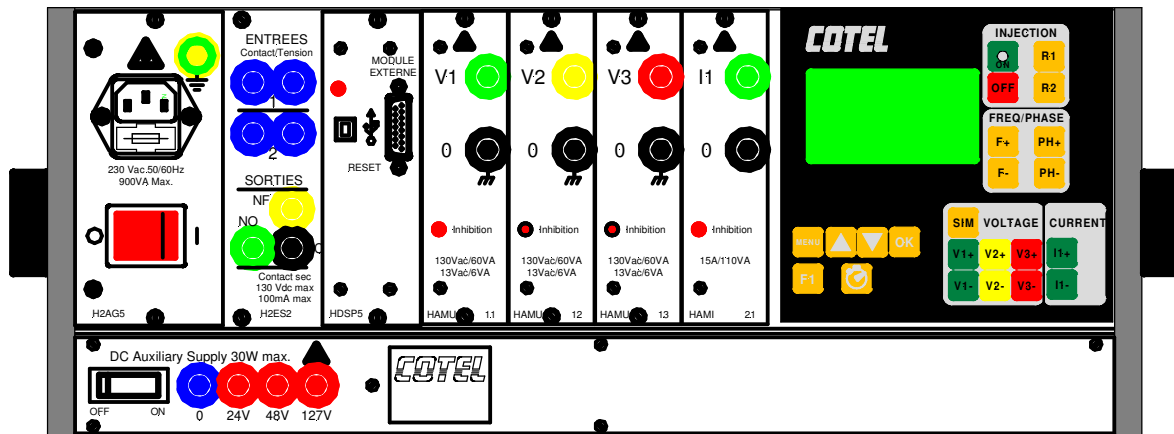


HEXAN II Three-Phase Relay Test Set Version G59

by **COTEL**



- 300 V, 70 VA/ phase
- Very User Friendly
- Manual or Computer control
- Freq. 0 to 500 Hz.
- RoCoF Capability
- Phase-Shift 360°
- Light Weight, 13kg
- Current o.p. option

The HEXAN Type II Version G59 is a new version of the popular HEXAN system in which COTEL uses advanced technologies of component integration, power supply configuration and digital signal processing to produce a unit weighing only 13 kg (28 lbs) which can be operated **Manually** from the **front face**, using the simple and intuitive controller. It can also be operated by **Computer**, using our user-friendly free software packages.

The three voltage amplifiers can supply up to **300 volts at 70 VA** per phase continuously, or over **500 V ph/ph** as a balanced network, **directly from the instrument** (no need for an additional transformer). These outputs, with 0.1% accuracy, are compatible with digital, electronic and electro-magnetic relays, and can be used for vector-jump tests. The Phase-Shift range is from—to +180° or from 0 to 360° and is accurate to 0.1°.

The in-built controller includes a simple **ROCOF** (df/dt) function, and can generate signals with controlled harmonics.

A full-function **chronometer** is included.

Options include an auxiliary supply of **24/48/127 Vdc** for powering the relay under test, and an in-built **15 Amp Current Amplifier**, giving either 40 or 110 VA. for testing power and current flow relays

HEXAN II V G59 is particularly suitable for testing decoupling relays associated with distributed generation sources such as PV and Wind farms, and also power and current flow protection circuits. Both the instrument and the software offer the versatility to cover many other applications.

Advanced Technology Marketing Services—26, High Street, HASLEMERE GU27 2HW

Tel - 07717763510 E-mail—sales@advantechms.com

www.advantechms.com

Exclusive U.K. Service Organisation for COTEL products — **Norwich Instrument Services Ltd.** Tel 01603416900

Technical Characteristics

Integrated Manual Interface

This control keyboard, easily accessible on the face of the instrument, enables instant operation of all the functions of the unit without any prior data-entry. It simulates the operation of a traditional test-set, but has more functions available to ease the task of systematic relay testing.

Primary functions -

Control of the three voltage outputs and (optional) current output. Each value is controlled by 2 buttons, increase & decrease.

Setting the frequency of these outputs.

Setting the phase-shift between voltage and current.

Generating a Rate of Change of Frequency.

Resolution of these values
100mV, 10mA, 10 mHz. 0.1%

Setting two networks, correct and faulted.

Injection mode - direct or step-by-step

Simultaneous adjustment of all three voltages

Displacement of the Neutral Point

Adjustment of Phase to Phase voltages.

Vector jump.

Testing reclosers

Chronometer and digital injection control

A backlit LCD graphic display shows all the injection parameters.

Timer range 0 - 199.999 secs, resolution 1 ms.

Timer start on injection or external event.

Cycle measurement e.g. Recloser.

Two independent timer inputs configurable as dry-contacts or voltage input.

HEXAN II - G59

Amplifiers - All protected for temperature, overload & short-circuit, and connected to a common earth.

Voltage 0 - 150 V & 0 - 300V/70 VA

3 x Ph-N 0 - 300V.

1 x Ph-Ph 0 - 600 V

Resolution 5 mV at 150 V, 9 mV at 300 V

Accuracy 0.1 %

130 V and 260 V versions are available

Current (optional) 0-15A at 40 VA or 110 VA

Resolution 460 μ A Accuracy 0.1%

Distortion 0.1 % THD at full power.

Power Supply

180-264 Vac, 50/60 Hz 1 phase + earth

Power 900VA max.

connection IEC 320 plug

Analogue Timer Inputs - both isolated

Trigger Criteria - Voltage-free contact

or voltage up to 250 V ac or dc

Connection 4mm. Banana plug

Accuracy ± 1 ms. ± 0.02 % value

Resolution 1 ms.

Logic Output - voltage-free output (NO/NC)

Connection 4mm. Banana plug

Frequency generation (continuous)

Range 0.1 to 500 Hz

Resolution 500 μ Hz

Accuracy ± 1 mHz at 50 Hz

Aluminium case with carrying handle/support

Dimensions 44.8 x 32 x 18 centimeters

Operating temperature 0 to 45 °C

Storage Temperature -25 to 70 °C

Weight 13 kg

EMC Standards

This instrument conforms with the 2004/108/CE directive on electromagnetic compatibility/

Security - Complies with Dir. 2006/95/CE, and in particular NF EN 61010-1. There is an earthing point in case the power connection does not include one.

Options include -

Auxiliary output 24/48/127 Vdc 30 W regulated.

15 Amp Current amplifier

Rigid transport case.

For operation using a PC, our software suite includes MANUSOFT, a versatile general-use package, and other packages intended for specific testing tasks. They are compatible with Windows 2000/XP/Vista/7 & 8 - 32/64 bits.