

Since 1980, **Zeefax** has built an enviable reputation on its ability to provide excellent and reliable electrical and mechanical engineering services and solutions to the Drilling industry in many countries around the world. This experience, combined with a well-trained, highly skilled and motivated multi-disciplined workforce, based at our own fully equipped manufacturing facility in the South of England, means that we are the one-stop-shop in the UK for all electro-mechanical projects, targeted mainly at the Drilling and associated sectors.

Compact Workstation

Zeefax has engineered a compact and fully integrated simulator for testing Hill Graham and Ross Hill type AC and DC Control Modules.

The unit is divided into two sections; one to test AC modules and the other to test DC modules, and they can be used simultaneously. The simulators are powered from a common 3-phase supply making installation simple.

The internal components are easily accessible, and the front panel mounted switches, lamps and indicators provide instant diagnostics for rapid identification of the most common module faults.

The AC simulator has a built-in emulation of an engine-generator set which provides a realistic simulation of a closed-loop control operation. The circuitry is configured to give a comprehensive test for Engine Speed and Load regulation, as well as generator Voltage and Kvar control.

The DC simulator is able to test modules which have been configured for either Series or Shunt motor operation, and includes a complete 6-pulse thyristor bridge. All of the DC module functions can safely be checked, including the various limits and trip set-points.



Key Features

AC Module Simulator

- ❖ kW and kVAr closed loop test
- ❖ Simulated engine and generator load
- ❖ Engine start-up check
- ❖ Loss of pulse-pick-up check
- ❖ Reverse power test
- ❖ Diagnostic meter and selector switch for quick fault finding.

DC Module Simulator

- ❖ Motor assignment check
- ❖ Current Limit calibration
- ❖ Shunt and Series motor simulation
- ❖ Power Limit check
- ❖ 6 pulse SCR bridge
- ❖ Diagnostic meter and selector switch for quick fault finding.

Specifications

Power Supply
Dimensions
Weight

380-415V, three phase, 50 or 60 Hz
Width=600 mm, Depth=800mm,
Height=1500mm including wheels
270 kg

AC Simulator

❖ Controls

Power ON / Battery Supply OFF_ON/
Master/Slave Select / CB Push to open / CB push
to close / STOP-IDLE-RUN Select / Engine Start /
Closed / Open Loop Select / No Pulses / Pulses
Manual / Normal - Reverse Power / Speed Ref /
Voltage Ref / Engine Load / Gen Load / Slave Ref /
Meter Selector.

❖ Indicators

Power on / Reverse Power Trip / Circuit Breaker
Open / Circuit Breaker Closed

❖ Meter Positions

Exciter Current / Exciter Voltage / Speed Ref /
Voltage Ref / Throttle / kW Load / kVAr Load / I_{tot} /
Power Limit / Slave / kW Meter / kVAr Meter



DC Simulator

❖ Controls

Power ON / Shunt_Series Motor / Assignment /
Motor Load / Speed Ref 1 / Foot Throttle / Speed
Ref 2 / RT Current Limit / Slave / Power Limit.

❖ Indicators

Power on / Dynamic Brake.

❖ Meter Positions

Off / Bridge Voltage / Speed Feedback / Motor
Current / 3x Motor Current / Load / Ref 1 / Ref 2 /
RT/TD Current Limit / Slave / Power Limit.



Contact us

For all Hill Graham services and manufactured parts, **Zeefax** is now the preferred supplier worldwide; we also provide a host of other related Drilling services and products. Please call us to find out more about how we can help to preserve your capital investment, through a program of works, carefully designed to optimise the utility and the performance of your Power and Motor Systems, whilst ensuring that it provides reliable and dependable operation for all your drilling applications.

Zeefax inc.

6049 Keller's Church Road, Pipersville, PA 18947
Tel: +1 215 230 5500
Email: ussales@zeefax.com

Zeefax Limited

320 King Street, London, W6 ORR, ENGLAND
Tel: +44(0) 20 8748 7808
Email: uksales@zeefax.com