

Surge Generator Motor Test Sets

SGM Series



Testing Applications

- Perform offline testing of new or in-service rotating machines or coils
- Designed to test the winding to winding and rotating machine which prevents failures and unexpected down time
- An advanced, powerful, portable line of surge generators for testing of small or high power motors

Safety and Design Features

- Emergency Stop switch
- Laptop controller included
- Integrated cable storage
- Wheeled-transport case
- Optional battery-operated Bluetooth printer

- **Powerful features** in an **easy to use** package
- **Lightweight** and **ruggedly constructed** for years of field or shop use



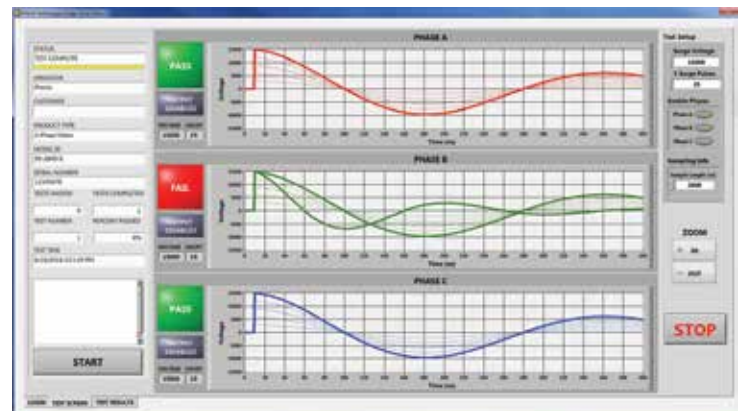
PHENIX Surge Generator Motor Test Sets are designed for motor repair facilities, motor, and coil manufacturers. The SGM Series are lightweight and packed in a rugged, wheeled transport case that is useable under the harshest conditions.

These instruments are equipped with sophisticated software which can be installed on an industrial PC or a laptop for field use. The software package is loaded with many useful features, such as a motor database, automated 3-phase testing, and automated analysis which can automatically determine pass/fail parameters.

All data is displayed on the screen and report generation in Excel* makes creating professional test reports easy and intuitive. The built-in data base function saves all results for future comparison and analysis.

The generous energy rating allows testing of even low inductance high power test objects. High voltage designs up to 75 kV are available upon request.

* Excel is registered trade mark of Microsoft.



| MODEL | SGM12-7.2 | SGM15-11 |
|---------------------|-----------|-----------|
| Voltage Uncertainty | ±5% | ±5% |
| Surge Energy | 7.9 J | 12.4 J |
| Capacitor Size | 110 nF | 110 nF |
| Max Output Voltage | 12 kV | 15 kV |
| Min Output Voltage | 0.3 kV | 0.3 kV |
| Discharge Frequency | 6 Hz | 5 Hz |
| 3 Phase Output | Yes | Yes |
| Surge Current | 1600 A | 1600 A |
| Input Voltage | 100-240 V | 100-240 V |
| Frequency | 45-65 Hz | 45-65 Hz |

Options

Insulation Resistance

Range: min 1 GΩ, max 100 GΩ, Accuracy ±1%
Output: 0-15 kV @ 4 mA

Winding Resistance

Ranges: min 100 μΩ, max 1 mΩ, Accuracy <3%
min 1 mΩ, max 1 KΩ, Accuracy 1%
min 1 KΩ, max 100 KΩ, Accuracy <3%
Output: 5 V @ 0-10 A

| | |
|------------------|--|
| Dimensions | 22" L x 26" W x 14.75"H (560 mm L x 660 mm W x 375 mm H) |
| Weight | 50 lbs (22.6 kgs) |
| Enclosure Rating | Nema 4 (IP56) |

CABLES AND ACCESSORIES

| | |
|--------------------------|--|
| Output Cables | 4 x Output Cables, 33' (10 m), with battery clamps** |
| Input Power Cable | 6' (1.8 m) |
| Power Interconnect Cable | 6' (1.8 m) |
| USB Cable | 6' (1.8 m) |
| Ground Cables | 2 x 33' (10 m) with alligator clips |

** Additional cable ends are available as an option

Defect Detection

- ✓ Low Turn-to-Turn Isolation
- ✓ Low Phase-to-Phase Isolation
- ✓ Low Insulation Coil-to-Coil
- ✓ Open Winding
- ✓ Bad Breakout Leads



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Environmental/Operating Conditions

- 32-113°F (0-45°C), indoor/outdoor in fair weather
- Humidity <95% non-condensing
- Low pollution level
- Altitude <3300 ft (1000 m)
- Storage 5°-131°F (-15-55°C)

ISO
9001:2008
Compliant

