

TSR Series

Tank Series Resonant Systems - 30...200kV : 250kVA...2,500kVA

The **TSR series** is a high voltage source that ensures your power cables, power factor correction capacitors, generators, bushings and GIS are tested in accordance with the latest standards.

TSR systems, with multiple taps, can power a range of applications. As part of a series resonant circuit, they provide undistorted high voltage at system frequency for testing high kVAR capacitive loads. TSR systems are designed with high system Q's, and hence, require low single phase input power which results in lower installation and operating costs.

A comprehensive range of voltages between 30kV to 200kV and power ratings from 250kVA to 2500kVA are available.



FEATURES

- ☑ **Multiple Q Values** to meet variety of applications
- ☑ **Minimum Power** input requirements
- ☑ **Compact Design**
- ☑ **Series or Parallel Resonant Operation**
- ☑ **Low PD Operation**
- ☑ **No EMI Mains Noise / Interference**
- ☑ **Oil Temperature Indicator(s)**
- ☑ **Windows Based Controls**

BENEFITS

- ☑ **Low Life-Cycle Cost** - rugged design minimizes system down time
- ☑ **Series Resonant** - provides a protective voltage collapse should device under test fail
- ☑ **Pure AC Sine Wave** at output
- ☑ **Lower Installation Cost** for power service
- ☑ **Testing Made Easy** with upgraded software

INDUSTRY APPLICATIONS

Ideal for testing:

- Power Cables
- Generators
- Power Factor Correction Capacitors
- Other Possible Applications (CTs, PTs, and CCVTs; GIS; Bushings; PD Testing)

TYPICAL MODELS AND RATINGS BY APPLICATION

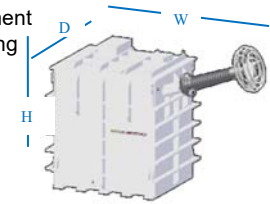
FOR POWER CABLE						
Model	kV Class Cables (maximum voltage)		Voltage (kV)	Tap Voltage	Tank Size (m) W x H x D <i>including output</i>	Tank Weight (kg)
	Per IEC	Per AEIC				
TSR75-750	45 kV	35 kV	75	75/50	1.4 x 1.9 x 1.95	4300
TSR100-1M0	66 kV	46 kV	100	100/75/50	1.5 x 2.1 x 2.2	5700
TSR150-2M0	66 kV	69 kV	150	150/125/100/75	1.7 x 2.1 x 2.4	7100
TSR200-2M0	138 kV	115 kV	200	200/100/50	2.0 x 3.2 x 4.9	14000
TSR250-2M5	161 kV	138 kV	250	250/150/75	2.1 x 3.8 x 4.9	23000

Included:

- Double-Shielded Isolation Transformer (DSIT)
- Power Regulator / Line Filtering
- Exciter Transformer
- High Voltage Variable Reactor
- High Voltage Filter / Base Load
- High Voltage & Grounding Cables
- Voltage Divider
- iHV Controller
- Control / Power Interconnect Cables (10, 20, 30 or 50m)

Accessories & Options:

- Partial Discharge Test Equipment
- Power Factor / Tan δ Measuring Equipment
- Shielded Room
- Engineering Package



Consolidated prior to shipment.

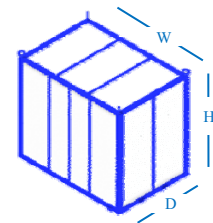
FOR GENERATORS				
Model	Voltage (kV)	Tap Voltage	Cabinet Size (m) W x H x D	Cabinet Weight (kg)
TSR60-600	60	60/30	2.0 x 2.0 x 2.7	4500
TSR60-750	60	60/30	2.0 x 2.0 x 2.7	5000
TSR60-1M2	60	60/30	2.0 X 2.3 X 2.8	5500
TSR60-2M2	60	60/30	2.0 X 2.3 X 2.8	6500

Included:

- Power Regulator
- Exciter Transformer
- High Voltage Variable Reactor
- Control / Power Interconnect Cables
- Portable System Enclosure
- Protective Sphere Gap
- iHV Controller
- Voltage Divider
- Base Load

Accessories & Options:

- Power Factor / Tan δ Measuring Equipment
- Partial Discharge Test Equipment



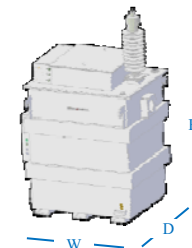
FOR CAPACITORS			
Model	Voltage (kV)	Tank Size (m) W x H x D <i>including output</i>	Tank Weight (kg)
TSR30-2M0	30	1.9 x 3.2 x 2.2	14000

Included:

- Power Regulator
- Exciter Transformer
- High Voltage Variable Reactor
- Control / Power Interconnect Cables (10, 20, 30 or 50m)
- iHV Controller

Accessories & Options:

- Power Factor / Tan δ Measuring Equipment
- Partial Discharge Test Equipment



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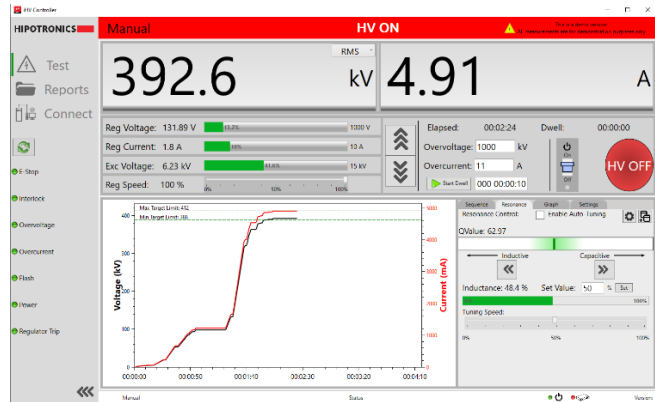
Notes:

- Dimensions and weights are approximate
- For other input voltages please consult factory*

Customer Supplied Cables per Local Electrical Codes:

- Mains Input
- System and Device Under Power

IHV CONTROLLER



ONSITE PHOTOS



ORDERING INFORMATION

