



Maeraj Eng.Co.Ltd

Production of Special HV Equipments

Today, electricity energy and its sustainability plays a vital and important role in economic development. It is considered as a core activity in economic development process. On the other hand, almost all practitioners and scientists believe that running systems is relying on Technologic transformation and right management. Also, resolving Technologic problems is conditioned to wisdom and using modern tools and methods.

Our highly motivated experts in Maeraj for making step toward self-sufficiency have made efforts to design and construct much needed product, portable High Voltage Tester, in Iran. After 5 year and half, we could finally send it to sale in domestic market.

Variables such as total price, providing services after sale, necessary guarantees and above all, electrical engineers explanations is one of the main factors that have made our tester, in competition with foreign products, most popular in the market.

It has to be mentioned that Maeraj has always a commitment to enhance quality of its products by keep studying on new technologies and do our best to fulfill it.

Mehdi Shekariz
Managing Director

**The future is the same one that we think.
Hope is the path and Victory is the fate.**





Quality Principles of Maeraj:

- Understanding customer demands [in a bid] to make them feel satisfied
- Attention to human resources through[on-the-job] training to keep them updated and enhance the quality
- Producing high quality goods with lowest costs -Designing new products meeting customers' needs
- Securing a foothold in the global market



Maeraj explores every ground of knowledge.



New

PHT 25/40A400

To bridge the old fashioned ways and apply the modern methods in the power utility networks to reduce energy loss and to optimize usage of the equipments used in the networks, we are proud to present the new and modern version of the HVDC TESTER. The latest version is fully built in Iran.



PHT 40 D100

Technical characteristics:

- Avoiding multiple switching, while maneuvering to eliminate the network defects.
- Improving the useful life of equipments used in airlines by reducing the electrical swings.
- Performing test to setup the network before connecting the feeder while getting repairs done.
- Continuous supervision in high Voltage systems.
- Identifying the health of the HV cable.
- Ensuring about the network reliability.
- Reducing the loss of energy.
- Reducing the time of the black-outs and the undistributed energy.

Social aspects:

- Increasing the consumer trust due to un-interruptible generation of electricity.
- Increasing consumers' satisfaction.
- Preventing any interruptions in the vital activities of the country such as communication, defense, medical services and etc.
- Decreasing the costs because of pausing the vital activities of the country.
- Increasing the trust of the managers and planners of the various industrial, economical and social sections in power utility network.

Economical aspects:

- Reducing the enormous cost of electrical distribution networks maintenance.
- Decreasing the incurred losses of industrial, commercial and domestic subscribers.
- Increasing the efficiency of the distribution networks.
- Decreasing the costs of generation and distribution of electricity.
- Generating more revenue by increasing sales of electricity.



The advantages of using HVDC TESTER during maneuvering over the network:

- Fast detecting of defects
- Reducing the cut off time
- Preventing the shutting down of the feeder and therefore increase customer satisfaction
- Preventing the flow of the electricity in the short circuit networks
- Reduction of undistributed energy
- Increasing the energy sales
- Increasing the equipment life
- Increasing the safety of the maneuver personnel
- Reducing the harmful effects of switching
- Independent performance of the operator during maneuver over network
- Reducing the stress of personnel during network maneuvering
- Reducing the time of detecting the defects
- Reducing the number of maneuvers in time



In tandem with high technology in the world



Maeraj explores
every ground of
knowledge.



PHT 25/40A100

Portable high voltage tester

The high power and constant adjustment of the voltage in different ranges characteristic of this tester in addition to being portable, makes it ideal for testing different equipments in power generation, transmission and distribution networks.

The HVDC TESTER guarantees the optimized usage of the power distribution network and the continuous flow of energy to the consumers.

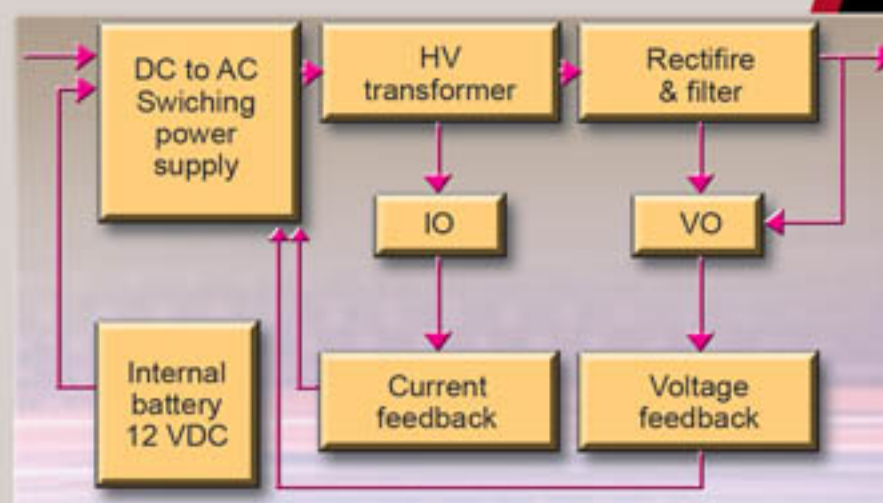
HVDC TESTER system is designed and produced individually by applying special high voltage techniques



PHT 5/25A100

Technical Instruction:

According to the block diagram below, the input of 12 volts (of direct current) is fed to the primary of an increasing transformer by switching circuits.



At the output of the HV transformer by adding a rectifier and a high voltage filter, rectified voltage will be present which can be adjusted with a good precision from zero to the maximum amount by voltage setting. Also the output power can be controlled by sampling the output current and voltage.

characteristics /model	Unit	PHT25-100	PHT40-100	PHT5/25-100	PHT25/40100	PHT25/40-400
Output power	W	100				400
Output voltage	kV	25	40	5/25	25/40	25/40
Output current	mA	4	2.5	20/4	4/2.5	16/10
Short circuit current	mA	150				250
Current reading accuracy	μA	From 1μA to 10 mA				
Duty cycle	%	100%				
insulation	dry	No need to recharge with SF ₆ gas				
work		The inner battery/ The car battery				
The inner battery power	Ah	7				20
Time of full charging of the inner battery	hr	10 hours				
The total Sizes	cm ³	(28*52)*40				(40*60)*45
The total weight	kg	20				30



After sale services:

- Special training.
- Fully guaranteed for 24 months.
- Support for 10 years.



Best quality
Easy to use
Easy carrying

Maeraj Eng. Co. Production of Special HV Equipments



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