

HITACHI T&D Solutions, Inc.

Products



Gas Circuit Breakers



Extra High Voltage
Circuit Breakers



Vacuum Circuit Breakers



GIS
362 kV/63 kA



Transformers

HV Series Vacuum Circuit Breaker

- **72.5kV, 31.5/40kA, up to 3000A**
- **-50C – No Tank Heaters**
- **No SF₆ Gas**
- **Spring/Spring Mechanism**
- **Three Cycle Interruption**
- **Composite or Porcelain Bushings**
- **Over 3000 VI In- Service Years Since 2007**



Mobile VCB



145kV GCB

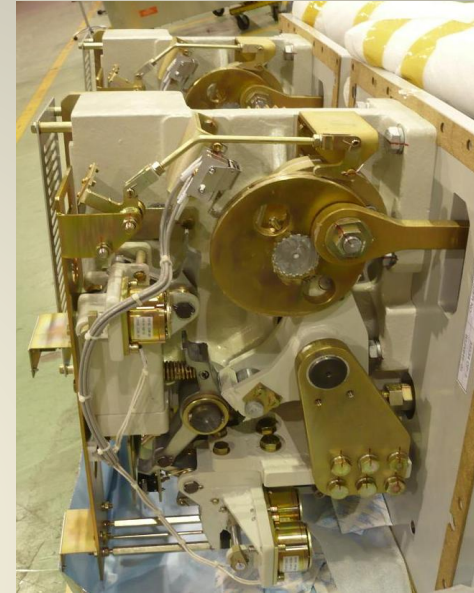
HS Series 145 kV/40-63 kA /3000 A

- 40/50/63kA Short Circuit
- Spring/Spring Mechanism
- Pure Puffer Interruption
- 3 Cycle Interruption
- Cast Aluminum Tanks
- Composite or Porcelain Bushings
- Trip Current @ 9 Amps
- [HS 145 Spare Parts Link](#)



Design Advantages of HS 145kV - 40kA

- ***Standardization of 145 and 170 kV GCB in one design.***
- ***Simplified driving mechanism and drastically reduced number of parts by adoption of solenoid, resulting in higher reliability.***
- ***Easy maintenance due to the use of cantilever construction for cam shaft and main shaft.***
- ***Pure Puffer Interrupter.***
- ***Tested for Fast TRV capabilities, according to C37.06.1-2000.***



PIR Technology

Pre-Insertion Resistor Technology



HS-R 145 kV/40 kA with PIR



HHI-R 362 kV/50 kA with PIR

145kV HSR
362kV HHIR
500kV HHIR
800kV HHIR

The successful applications of PIR technology for more than several decades has been proven by general practice of US utilities as a simple, reliable and effective technology for transient limitation, not only for OH Lines applications, but Capacitor Banks, Power Transformers, and Shunt Reactors, too.

245kV GCB

HS 245kV / 40-63kA / 4000A

- 40/50/63kA Short Circuit
- Spring/Spring Mechanism
- Pure Puffer Interruption
- Cast Aluminum Tanks
- 2 or 3 Cycle Interruption
- Composite or Porcelain Bushings
- 1050kV BIL
- Trip Current @ 5 Amps
- HS 245 Spare Parts List



HHI Series 550/800kV

- **Up to 6,300A Rated Current (550kV)**
- **Up to 4,000A Rated Current (800kV)**
- **Hydraulic Mechanism**
- **Compact Design**
- **Steel Tanks with Access points for internal inspection**
- **Independent Pole Operation**
- **2-Cycle Interruption**
- **Porcelain or Composite Bushings**
- **Optional Pre-insertion Resistors**
- **Slip Over CTs**



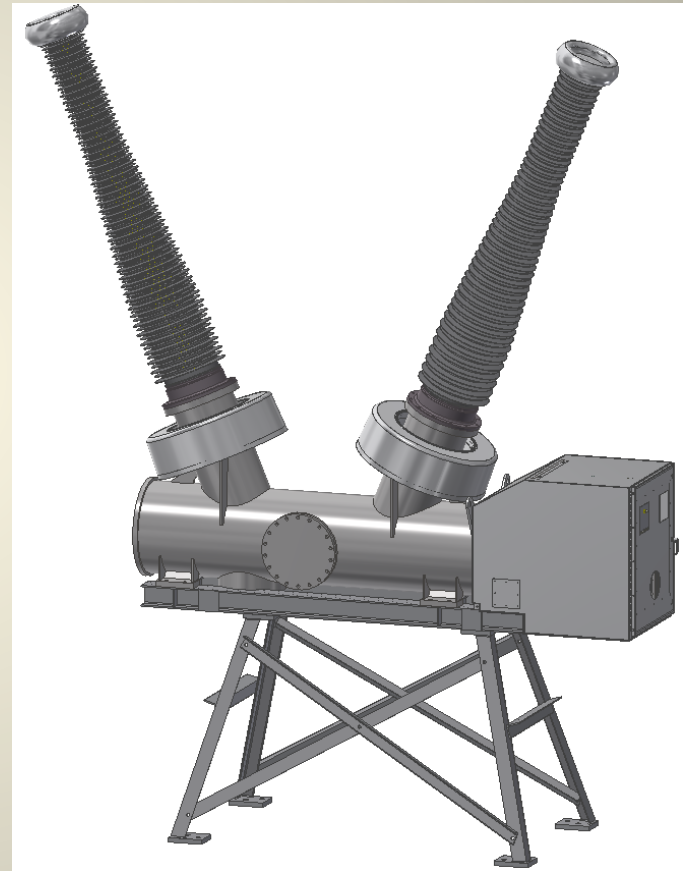
- ***HSI 362kV / 63kA without Capacitors (2016)***
- ***HS 145kV and 245kV / 63kA without Capacitors at (2017)***
- ***145kV - Vacuum Breaker (2018)***



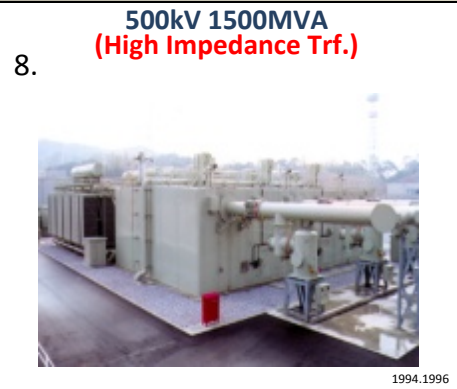
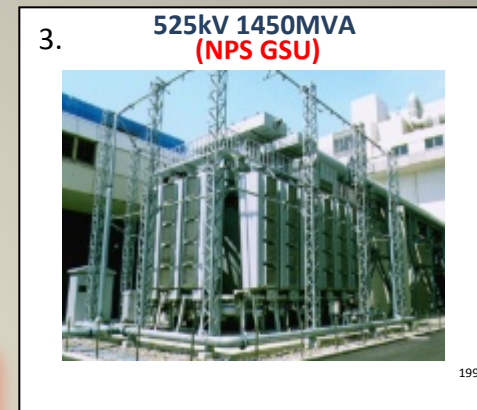
New 362 Spring

HSI Series 362kV

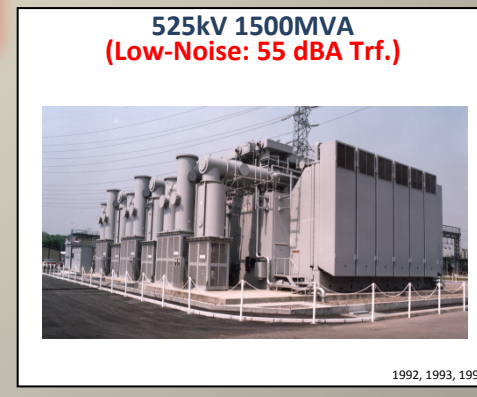
- 40/50/63kA – No Capacitors
- Ships with Bushings Installed
- Up to 5,000A Rated Current
- Spring Mechanism
- Slip Over CTs
- Cast Aluminum Tanks
- 2-Cycle Interruption
- Porcelain or Composite Bushings



Transformer's Product Line



- 1. High Voltage AC (Up to 1100kV)
- 2. High Voltage DC (Up to 500kV)
- 3. Large Capacity for Power Plant (GSU)
- 4. Phase Shifting Transformer
- 5. Low Operation Noise Transformer
- 6. On-Site Assembled Transformer
- 7. Non-Flammable Construction
- 8. High Impedance Transformer



Large Power Transformers in United States



**MidAmerican Council
Bluffs
Energy Center Unit 4
24/345kV 1,036MVA GSU
Year of 2005**



**NEPCO
El Dorado
18/525kV 315MVA GSU
Year of 2001**

Supply Record in US

51 units of Transformers(200MVA and above) supplied since year 2000.

GIS Product Line)

- **69kV - 138kV**
- **3 Phase Common Enclosure**
- **1200/2000/3000A & 40kA**

- **169kV**
- **3 Phase Common or Isolated Enclosure**
- **1200/2000/3000A & 40kA-63kA**

- **230kV**
- **3 Phase Common or Isolated Phase Main bus with Isolated Feeders**
- **2000/3000/4000A & 40kA-63kA**

- **362kV**
- **3 Phase Common or Isolated Enclosure**
- **2000/3000/4000A & 40kA-63kA**



145kV GIS



DIVISIÓN DE EQUIPOS E INFRAESTRUCTURA PARA SERVICIOS DE
ENERGÍA ELÉCTRICA

www.sejiroyazawaiwai.com
info@sejiroyazawaiwai.com