GE Grid Solutions





GIL

Gas-Insulated Lines up to 800 kV, 63 kA, 6 300 A

GE makes the most of 50 years of experience in design, material selection, development, engineering, manufacturing and servicing of gas-insulated substations.

GE's gas-insulated lines meet the challenges of networks up to 800 kV for all applications: power generation, transmission and heavy industry.

Highest Experience

- Design grounded by 50 years of experience
- First super-long (17 km) 420 kV GIL installed in 1997
- Superior know-how, out of over 200 km of GIL installed all over the world

Shortest Site Works

- Optimum design
- Easy installation



420 kV GIL - SF₆-free with g³ gas mixture

Smart Grid Features

• Full-digital monitoring, control and protection

Low Environmental Impact

- SF₆-free option, g³, with more than 99 % global warming potential reduction versus SF₆
- First-in-class gas sealing system

Customer Benefits

- Maximum safety
- Low environmental impact
- Field-proven reliability
- No induced current
- Lowest electromagnetic field
- Low total cost of ownership



Applications: Gas-Insulated Lines up to 550 kV



245 kV GIL - Total length: 2 100 m



362 kV GIL in vertical shaft (140 m high) Total length: 900 m



420 kV GIL - Total length: 1 260 m



420 kV GIL - Total length: 1 200 m



420 kV GIL - Total length: 1 200 m



420 kV GIL - Total length: 2 550 m



550 kV GIL - Total length: 5 900 m



420 kV GIL - Total length: 15 000 m

Main Ratings

Voltage	kV	253	420	550	800
Withstand voltages, to earth					
Short-duration power-frequency	kV	460	650	740	960
Switching impulse	kVp	-	1050	1175	1550
Lightning impulse	kVp	1050	1425	1550 / 1675	2100
Continuous current	Α	4000	5000	5000 / 6300	5000
Short-time withstand current	kA	63	63	63	50
Peak withstand current	kAp	170	170	170	135

Other data available on request.

For more information please contact GE Grid Solutions

Worldwide Contact Center

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GEGridSolutions.com

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