



Ring Main Unit

HXGN-40.5 Box-Type Ring Main Unit

HXGN□-40.5 box-type AC metal-enclosed ring-network switchgear serves indoor three-phase AC 50Hz systems rated 40.5kV — used mainly in wind power, substations, industrial & mining enterprises and high-rise buildings for receiving and distributing power with protection, control and monitoring. Designed with advanced foreign technology, it is long-lived, highly reliable and compact enough to build into a box substation. The main switch is an SF6 or vacuum load switch, or a load-switch + fuse combination. Final configuration is confirmed against the approved project specification.

MODEL DESIGNATION

HXGN□-40.5

H	ring-network	X	box-type
G	fixed-mounted	N	indoor
□	design series	40.5	rated voltage (kV)

TECHNICAL SPECIFICATIONS

Rated voltage	40.5 kV
Rated frequency	50 Hz
Active-load breaking current (F)	400 A
Cable-charging breaking current (F)	21 A
Short-time withstand current (F)	16 kA / 3 s
Peak withstand current (F)	40 kA
Short-circuit breaking current (F.R)	31.5 kA
Short-circuit making current (F.R)	80 kA
Power-frequency withstand voltage	95 kV / 1 min
Lightning impulse withstand voltage	185 kV
SF6 rated / minimum operating pressure	0.05 / 0.03 MPa
Mechanical life	5000 operations
Enclosure protection	IP3X

KEY FEATURES

- ▶ Advanced foreign design — long service life, high reliability, compact; can be built into a box substation

▶ Simple structure, easy assembly, simple and reliable interlocking, expandable
- ▶ Main switch: SF6 load switch, vacuum load switch, or load-switch + fuse combination

▶ Spring operating mechanism (150 W charging motor), manual or motor operation

NORMAL OPERATING ENVIRONMENT

- ▶ Ambient air temperature max +40 °C (24h average $\leq$ +35 °C), min -5 °C
- ▶ Altitude $\leq$ 1000 m; seismic intensity $\leq$ 8
- ▶ Relative humidity: 24h average $\leq$ 95%, monthly average $\leq$ 90%
- ▶ Air free of significant dust, smoke, corrosive / flammable gas, steam or salt-mist pollution