



## Product description

The ZCSFC-40.5 series of gas-insulated switchgear is used to receive, control, distribute and protect power in the three-phase 50 Hz system. It is reliable, maintenance free, small size and suitable for high humidity (with condensation issue), high altitude and polluted environments. Its main application includes wind power plants, substations, railways, mining, constructions and other civil and commercial areas.

## Working environment

- Environmental temperature: -40°C (min) to 65 °C (max)
- Altitude: no more than 4,500 meter
- Ambient humidity: daily average  $\leq 95\%$ , monthly average  $\leq 90\%$
- Atmospheric environment: no fire, explosion hazard, serious pollution, chemical corrosion
- Seismic intensity:  $\leq 8$

## Technical specification

- GB/T 3906: Alternating-current metal-enclosed switchgear and controlgear for rated voltages above 3.6kV and up to and including 40.5kV
- IEC 62271-200: High-voltage switchgear and controlgear - Part 200: AC metal-enclosed switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV

- Safe and reliable: the switchgear has two separate gas boxes filled with SF<sub>6</sub> with relative pressure of 0.03 MPa. Optimized by electric field simulation, the switchgear meets insulation performance requirements under zero gauge pressure
- Fully insulated and enclosed, highly adaptable to different environment
- Maintenance-free, easy to install
- Compact structure design taking up less space
- Plug-in modules for easy and convenient application

Parameter		
Rated voltage	kV	40.5
Rated frequency	Hz	50
Rated power frequency withstand voltage (1min)	kV	95/118
Rated lightning impulse withstand voltage	kV	185/215
Rated current		1250, 2500
Rated short-time withstand current	kA	31.5
Rated peak withstand currents	kA	80
Protection level of gas box		IP67
Protection level of switchgear		IP42
Internal Arc		AFLR, 31.5kA, 0.5s
Annual gas leakage rate	%/Y	≤0.05%
SF <sub>6</sub> rated gas pressure (20°C manometer pressure)	MPa	0.03
Dimensions of switchgear (W* D* H)	mm	600 * (1500~1800) * 2450 1250A 800 * (1500~1800) * 2450 2500A

## Optional intelligent modules

