



NG7-40.5 40.5kV SF6 GAS INSULATED SWITCHGEAR

NG7-40.5 series SF6 gas-insulated switchgear is a new generation of miniaturized products designed and manufactured by CHINT according to **IEC 62271-200**.

It has a variety of combinations and can be flexibly extended, which not only meets the requirements of power distribution, but also meets the needs of various secondary distribution application for flexible compact switchgear. It is widely used in public power grids, rail transit, new energy E-house, solar farm, wind farm, data center and other new energy fields.

Complete mechanical interlock

The reliable interlock design ensures safety of operators. No any additional tools needed when opening the cable room door.

Compact structure

The compact design makes the best use any of the space inside the cabinet, and the width of the 420/500 cabinet is the first-class in the industry.

Lifetime maintenance-free

The live actuated parts are fully sealed inside the gas tank and are not affected by the environment, maintenance-free during its life cycle.

Easy to operate

1.4m is the most comfortable height for people, combined with reliable mechanical interlocking, which is convenient for the operator.

Flexible extension

The modular design realizes the building block installation of each component, and the field extension is convenient and flexible.

Adapt to harsh environments

The completely sealed insulating structure makes it extremely adaptable to environmental influences. It is suitable for various harsh environments such as high altitude, high pollution, high salt spray, etc.

Product Advantages

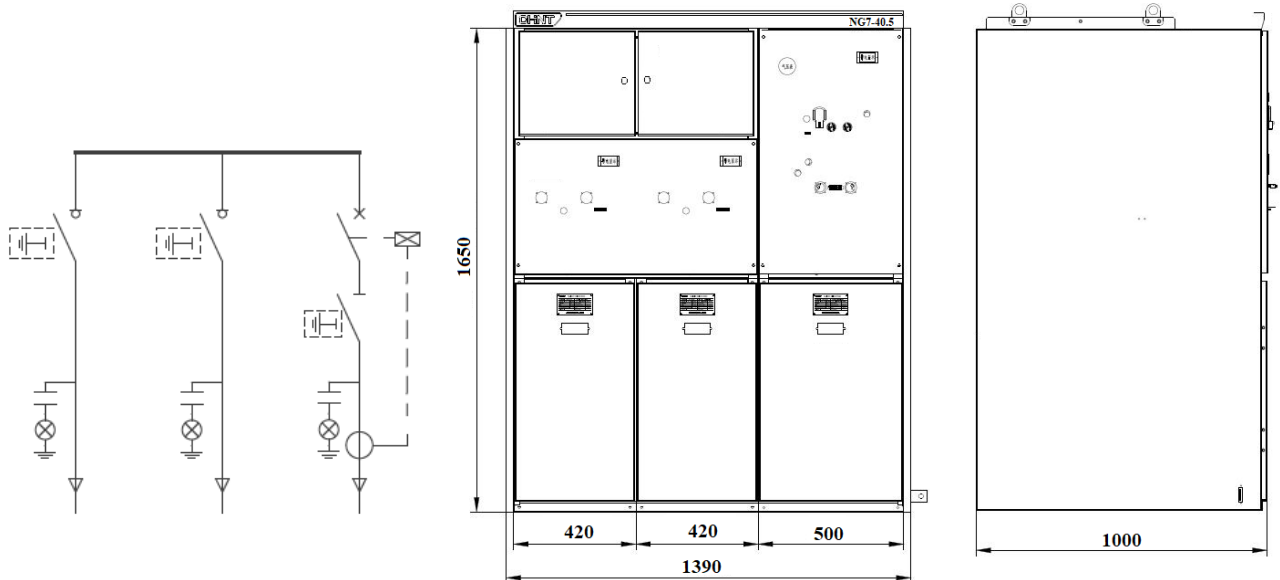
Parameters & Layout

Item	Unit	Value	
		Load switch unit (C)	Circuit breaker unit (V)
Rated voltage (IEC/GB)	kV	36 / 40.5	
Rated frequency	Hz	50 (60)	
Rated normal current *	A	630 (x 1.1)	630 / 1250 (x 1.1)
Rated short-duration power frequency voltage (1min)	To earth & between phases (IEC/GB)	70 / 95	
	Across the isolating distance (IEC/GB)	80 / 118	
Rated lightning impulse voltage	To earth & between phases (IEC/GB)	170 / 185	
	Across the isolating distance (IEC/GB)	195 / 215	
Rated power frequency voltage of control and auxiliary circuits (1min)	kV	2	
Rated short-time withstand current & duration **	kA/s	25/4 (20/4)	
Rated peak withstand current **	kA	63 (52)	
Rated short-circuit breaking current **	kA	-	25 (20)
Rated short-circuit making current **	kA	63 (52)	
Mechanical endurance	Circuit breaker	-	10000
	Load switch / Disconnecter	-	5000
	Earthing switch	-	3000
Rated functional pressure for insulation and interruption (relative at 20°C)	MPa	0.04	
Minimum functional pressure for insulation and interruption (relative at 20°C)	MPa	0.02	
Gas leakage rate	/Year	≤ 0.01%	
Degree of protection	Gas tank	-	IP67
	Enclosure	-	IP4X, IK10
Internal arc classification AFLR	kA/s	16/1, 20/1, 25/1	
Altitude	m	≤ 5000	
Dimension (Width x Depth x Height) ***	mm	420 x 1000 x 1650	500 / 550 x 1000 x 1650

* Nominal current is 630/1250A, temperature rise is tested by 1.1 times.

** Inside parentheses are the parameters of 60Hz.

*** For side panels, there should be left or right covers (25mm width each side).



Reference drawing