

# YAOZE SKM-40.5 Circuit Breaker Operating Mechanism Assembly

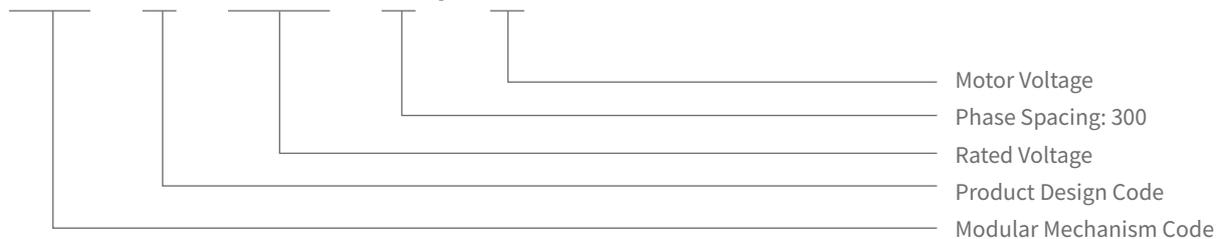


## Product Overview

Yaoze SKM-40.5 indoor high-voltage vacuum circuit breaker mechanism assembly is suitable for three-phase AC 50Hz, 40.5kV systems. It can be used in industrial and mining enterprises, power plants and substations for making and breaking load current, overload current and fault current, and is suitable for frequent operation.

## Model Composition And Meaning

SKM 1 - 40.5 - □ / □



## Product Features

-  Circuit breaker assembly: mechanism, frame & racking mechanism, matched height.
  -  Frame pole mounting holes compatible with mainstream solid-sealed poles.
  -  Mechanism bottom layout, easy commissioning & maintenance.
  -  The racking mechanism supports  $\geq 3000$  racking in/out operations.
- Mechanism: stable performance, high reliability, mechanical life  $\geq 5000$  operations.

## Service Conditions

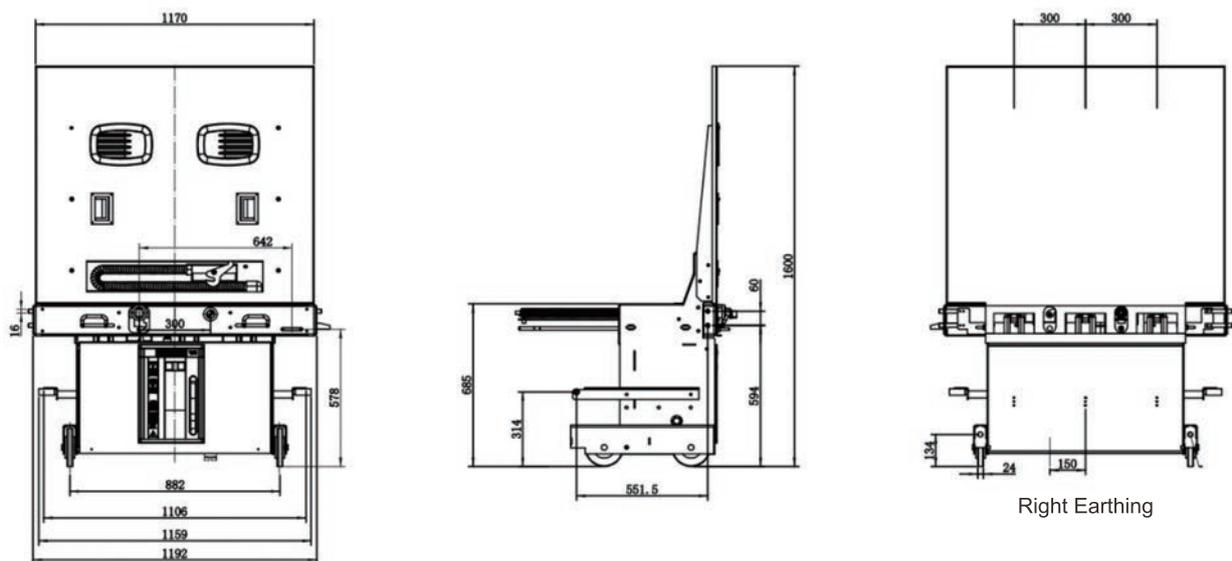
**Altitude:** Not exceeding 2000 m;

**Ambient Temperature:** Upper limit  $+40^{\circ}\text{C}$ , lower limit  $-50^{\circ}\text{C}$ ;

**Ambient Humidity:** Daily average relative humidity  $\leq 95\%$ , monthly average relative humidity  $<90\%$ ;

**Seismic Intensity:** Not exceeding Grade 8; No fire or explosion hazard, no severe vibration, and no serious pollution such as chemical corrosion.

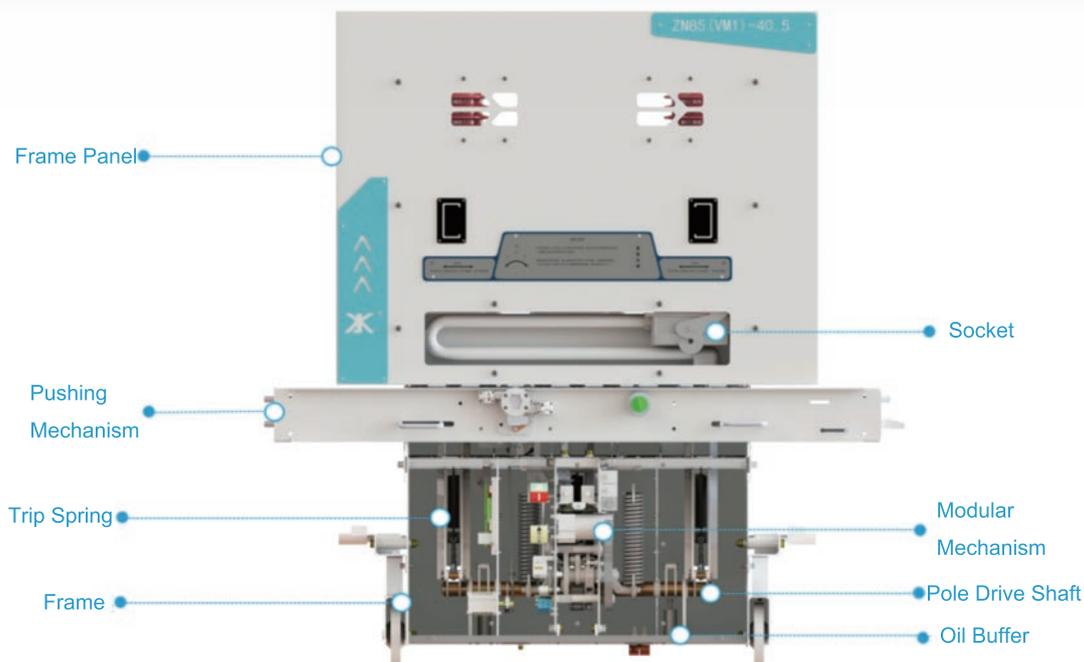
## Outline and Installation Dimensions



## Main Technical Parameters

Item	Unit	Value	
Rated Voltage	V	DC:220V/110V/48V/24V	
Rated Current	S	≤ 15	
Rated Short-Circuit Breaking Current	m/s	≥ 3	
Peak Withstand Current	m/s	≥ 4	
4s Short-Time Withstand Current	N.m	≤ 120	
Rated Short-Circuit Making Current (Peak)	ms	≤ 60	
Rated Short-Circuit Breaking Times	J	2-5	
Rated Operating Sequence		0-0.3S-C0-180s-CO	
Rated Insulation Level	1min PFWV	kV	95
	LIW (Peak)		185
Mechanical Life	Times	10000	
Rated Single Capacitor Bank Switching Current	A	630	
Rated Back-to-Back Capacitor Bank Current	A	400	
Rated Voltage of Energy Storage Motor	V	AC、DC: 110; 220	
Rated Power of Energy Storage Motor	W	≤ 230	
Energy Storage Time of Motor	s	≤ 15	
Rated Voltage of Closing/Opening Coil	v	DC: 110; 220	
Rated Current of Closing/Opening Coil	A	1.05(110V) 0.96(220V)	
Contact Opening Distance	mm	20 ± 2	
Contact Overtravel	mm	7.5 ± 1.5	
Three-Phase Closing/Opening Asynchronism	ms	≤ 2	
Contact Bounce Time at Closing	ms	≤ 3	
Main Circuit Resistance (excluding contact arm)	μΩ	≤ 40	

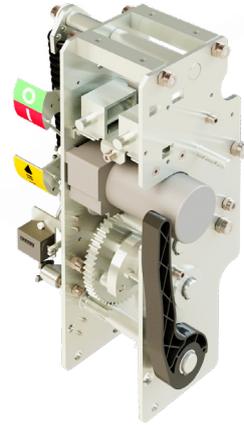
## Circuit Breaker Assembly (Without Poles)



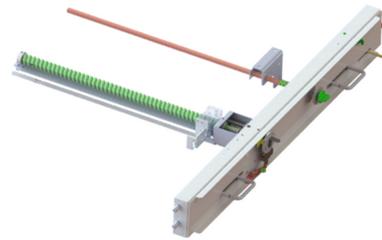
## Matching Selection Table



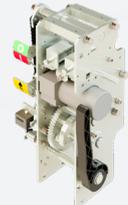
Circuit Breaker Frame



Modular Mechanism



Pushing Mechanism

Name	Picture	Applicable Cabinet Width	Model
Modular Mechanism		1400mm; 1680mm	SKM1-12-31.5/1250A
Circuit Breaker Frame			ZN85G-40.5/1250-31.5 (1400) SKM2-40.5-1476-1250/31.5/P400/ D/DK1-PT2 (1680)
pushing mechanism			TJ-1-1400(6666)-DR(Manual) TJ-1D2S-1400(6666W)-DR (Electric) TJ-1-1680(6666)-DR (Manual) TJ-1D2S-1680(6666W)-DR (Electric)