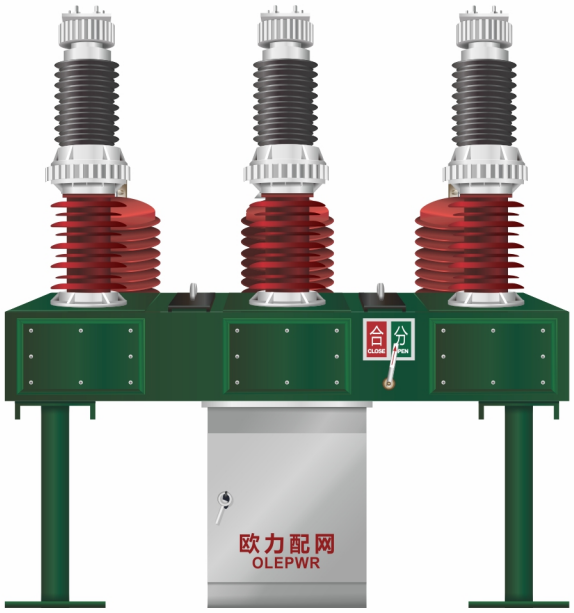
CIRCUIT BREAKER

ZW□-40.5kV SERIES OUTDOOR HV VACUUM CIRCUIT BREAKER

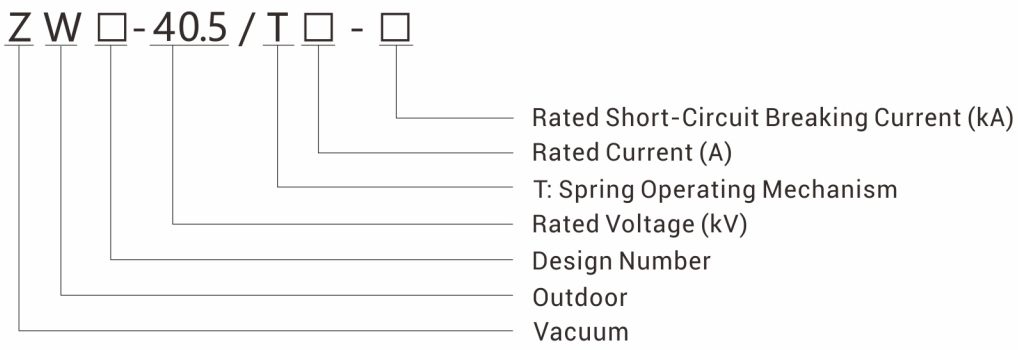


INSULATING MATERIALS | STABLE OPERATION | USER-FRIENDLY OPERATION | EXCELLENT INSULATION | EXTERNALLY-MOUNTED CTS/VTS | STAINLESS STEEL ENCLOSURE | TIN-PLATED CONTACTS

REFERENCE STANDARD:

GB 311.1	Insulation Coordination for High-Voltage Transmission and Transformation Equipment
GB 1984	High-Voltage Alternating-Current Circuit-Breakers
GB/T 11022	Common Technical Requirements for High-Voltage Switchgear and Controlgear Standards
GB 50150	Acceptance Test Specifications for Electrical Equipment Installation in Domestic Projects
DL/T 403	Technical Ordering Conditions for 12kV-40.5kV High-Voltage Vacuum Circuit-Breakers
DL/T 615	Guidelines for Parameter Selection of AC High-Voltage Circuit-Breakers
DL/T 593	Common Technical Requirements for High-Voltage Switchgear and Controlgear Standards
DL/T 884	General Technical Conditions for 12kV Low-Maintenance Outdoor Distribution Switchgear
Q/GDWXXX	Technical Specifications for High-Altitude External Insulation Configuration
IEC62271-100	High-Voltage Switchgear and Controlgear – Part 100: Alternating-Current Circuit-Breakers

MODEL AND NOMENCLATURE



USE CONDITIONS:

Ambient Air Temper.	-25°C~+70°C daily temperature variation ≤ 25°C
Altitude	≤ 2000m(> 2000m, correction factors for high altitude conditions apply. Specified when ordering)
IP Rating	IP67
Wind Pressure	≤ 700Pa (Equivalent to wind speed of 35m/s)
Sunlight Intensity	0.1W/c (At wind speed of 0.5m/s)
Pollution Degree	≤ Class IV
Seismic Intensity	≤ Level 8
Ice Thickness	≤ 10mm
Earthing Method	Neutral point grounding system: Ungrounded, grounded via arc suppression coil, or low-resistance grounded
Installation Site	Free from flammable/explosive hazards, chemical corrosion, and severe vibration

MAIN CONFIGURATION



Vacuum Interrupter



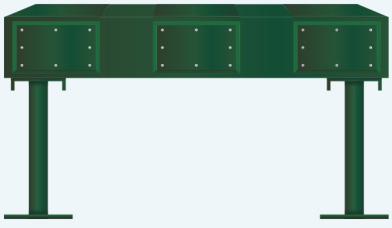
Manual Spring Operating Mechanism



Solid Insulated Unit Pole



Current Transformer



Enclosure



Operating Mechanism Compartment

TECHNICAL DATE SHEET

Item	Unit	Without Disconnector	With Disconnector
Rated Voltage	kV	40.5	
Rated Current	A	1250、1600、2500	1250、1600、2500
Rated Frequancy	Hz	50	
Rated Insulation Level	kV	95/118	
Rated Short-Circuit Breaking Current	kA	20、25、31.5	
Rated Short-Circuit Making Current (Peak)	kA	50、63、80	
Rated Short-Circuit Withstand Current	kA	20、25、31.5	
Rated Short-circuit Operations at Short-Circuit Current	Time	30	
Rated Short-Circuit Duration	s	4	
Rated Operating Voltage & Auxiliary Circuit Rated Voltage	V	Dc220、AC220、AC/DC220	
Rated Operating Sequence		Open -0.3s- Close/open -180s- Close/open	
Rated Overcurrent of Release Current	A	5	
Mechanical Life	Time	10000	
Permissible Cumulative Wear Thickness of Contacts	mm	3	
Overcurrent Release Setting	A	5	
Current Transformer Ratio		Based on User Requirements	
Contact Gap	mm	20±2	
Contact Overtravel	mm	3±1	
Average Opening Speed	m/s	1.8±0.3	
Average Closing Speed	m/s	0.8±0.3	
Opening Time	ms	20~40	
Closing Time	ms	30~60	
Contact Bounce Time (Closing)	ms	≤2	
Closing/Opening Asynchronism (Three Poles)	ms	≤2	
DC Resistance per Pole	μ Ω	≤100	≤200

ZW7-40.5KV SERIES OUTDOOR HV VACUUM CIRCUIT BREAKER

CENTRALLY-MOUNTED TYPE

Designed for control and protection in outdoor 35kV power transmission and transformation systems, this product is also suitable for normal operation and short-circuit protection in urban/rural distribution networks and industrial plants.

The product adopts a silicone rubber post-type structure, with an option for high pollution-resistant porcelain insulators. The vacuum interrupter is housed in the upper insulator, while the lower section consists of silicone rubber support. The operating mechanism is installed in the mid-lower section, resulting in a more compact and lightweight design compared to side-mounted configurations, which facilitates transportation and installation.

Excellent sealing performance, aging resistance, high temperature tolerance, non-flammability, explosion-proof design, extended service life, and convenient installation and maintenance.

