LW8-40.5 outdoor SF6 circuit breaker is an outdoor device used in AC 50HZ three-phase 40.5KV power system, to act as the protecting and control unit for grid equipments and industrial mining enterprises equipments. It is applicable to locations that need frequent operating in rated current or under repeatedly on/off short circuit current. Containing the current transformer for measurement and protection.

It can directly replace SW2-35 less oil circuit breaker and various types of oil circuit breaker with transition bracket, also be used as a tie breaker and switching capacitor group situations with CT14 type spring mechanism.

## **Environmental conditions:**

- Ambient temperature: -30°C~+40°C

Altitude: not exceed 1000m.Wind pressure: ≤700Pa

- Relative humidity:

Daily average relative humidity: ≤95%; Monthly average relative humidity≤90;

Daily average saturated vapor pressure ≤2.2KPa; Monthly average value ≤1.8KPa

- Earthquake intensity:  $\leq 8 \text{ degree}$ 

- No fire, explosion, severe vibration, chemical corrosion and serious pollution

## **Technical Data**

Rated voltage			40.5
Rated insulation level	Lightning impact withstand voltage(full wave peak)	KV	185/215(isolating break)
	1min power frequency withstand voltage		95
Rated current		Α	1600, 2000
Mechanical life		Times	3000
Rated SF6 gas pressure(at 20℃)		Мра	0.45
Self-locking pressure(at 20℃)			0.45
Lowest working ambient temperature		$^{\circ}$	-30
Rated short circuit breaking current		KA	25, 31.5
Rated short circuit making current(peak)			63, 80
Rated short withstand current(Thermal steady current)			25, 31.5
Rated peak withstand current(dynamic steady current)			63, 80
Rated out-of-phase breaking current		KA	63, 80
Duration of rated short circuit current		S	4
Closing time(at rated operating voltage)			≤1
Opening time(at rated operating voltage)			≤0.07
Rated operating sequence		(O)-0.3S-(CO)-180S-(CO)	
Rated breaking/making single capacitor bank current		А	400
Nos of breaking rated short circuit breaking current		times	15, 10
Yearly gas leakage		%	≤1
Water content in SF6 (at 20℃)		PPM(V)	≤150
Rated voltage of assemblied spring operating mechanism		V	-220
Voltage of closing coil, opening coil			AC:220, DC:220
Voltage of charging motor		V	AC:220, DC:220
SF6 Weight		KG	8
Breaking weight including operating mechanism			1400

## **Outline Dimension**

