



LW62-252 六氟化硫断路器 LW62-252 SF₆ Circuit Breaker

LW62-252/4000-50 高压交流 SF₆ 断路器用于开断、关合及承载运行线路的正常电流，也能在规定时间内承载、关合及开断规定的异常电流如过载电流和短路电流，以实现输电线路的控制和保护。



- 灭弧室采用自能式双动结构设计，利用一套传动系统使动、静触头在分、合闸过程中相对运动，提高相对运动速度，操作功小，性能稳定可靠，开断效率提高；
- 容性电流开合能力 C2 级，电寿命 E2 级，机械寿命 M2；
- 采用全弹簧操作机构，结构紧凑，易于安装，免维护；
- 在 CESI 通过全套型式试验。

LW62-252/4000-50 HV AC SF₆ circuit breaker series are mainly used for breaking, closing and bearing the normal current in circuit and the abnormal current such as overload current and short-circuit current within stipulated time to control and protect the transmission line.

- Self-energy dual-action interrupter unit, making moving and fixed contacts move relatively in opening and closing operation through one set of driving system, increasing the moving speed, low operating energy, high performance, reliable, high breaking efficiency;
- Class C2, E2, M2;
- Spring mechanism, compact construction, easy installation and maintenance-free;
- Fully type tested and certified in accordance with the latest IEC and GB standards in CESI, Italy.



★ 环境条件

- 环境温度：-30℃ ~ +40℃
- 风速：≤ 34m/s
- 污秽等级：IV 级
- 海拔高度：1000m (可根据要求调整)

★ Service Conditions

- Ambient temperature: -30℃ ~ +40℃
- Wind speed: ≤ 34m/s
- Pollution level: IV
- Altitude: 1000m(Higher altitudes on request)

主要技术参数 / Main Technical Parameters

项目 Item	单位 Unit	参数值 Data
额定电压 Rated voltage	kV	252
额定频率 Rated frequency	Hz	50/60
额定电流 Rated current	A	4000
主回路电阻 Main loop resistance	μΩ	≤ 60
额定短路开断电流 Rated short circuit breaking current	kA	50
额定短路关合电流 Rated short circuit making current	kA	125
电寿命 Electrical endurance		E2
首开极系数 First-pole-to-clear factor		1.3
额定短时耐受电流 Rated short-time withstand current	kA	50
额定短路持续时间 Duration of short-circuit	s	3
额定峰值耐受电流 Rated peak withstand current	kA	125
开断时间 Breaking time	ms	≤ 50
合分时间 CO time	ms	≤ 60
分闸时间 Opening time	ms	28 ± 3
合闸时间 Closing time	ms	70 ± 10
重合闸时间 Dead time	ms	≥ 300
分闸平均速度 Opening speed	m/s	5.5 ± 0.5
合闸平均速度 Closing speed	m/s	3.5 ± 0.5
分闸同期性 Opening simultaneity	ms	≤ 3
合闸同期性 Closing simultaneity	ms	≤ 5
机械寿命 Mechanical endurance	次 Times	10000
额定操作顺序 Rated operation sequence		O-0.3s-CO-180s-CO
无线电干扰电压 Ratio interference voltage	μV	≤ 500
噪音水平 Noise level	dB	≤ 110



主要技术参数 / Main Technical Parameters

项目 Item		单位 Unit	参数值 Data
容性电流开合试验 (实验室) Capacitive current switching test (laboratory)	试验电流 Test current	V	线路: 125, 电缆: 250 Line: 125, Cable: 250
	级别 Class		C2
近区故障试验 Short-line fault test	L90	kA	45
	L75	kA	37.5
失步关合和开断试验 Out-of-phase making and breaking test	开断电流 Breaking current	kA	12.5
爬电距离 (对地 / 断口) Creepage (To earth / Across the open contacts)		mm	6360/9400
端子静负载 Terminal static load	水平纵向 Longitudinal	N	2250
	水平横向 Transverse		1750
	垂直 Vertical		1250
单极断路器 (含机构) 重量 Weight of single-pole circuit breaker (Including mechanism)		kg	1200
单极断路器外形尺寸 Outline dimension of single-pole circuit breaker		mm	1355 × 805 × 6803
额定 1min 工频耐受电压 Rated 1min power frequency withstand voltage	对地 Phase to earth	kV	460
	断口 Across the open contacts	kV	460 + (146)
额定雷电冲击耐受电压 (峰值) (1.2/50 μ s) Rated lightning impulse withstand voltage (1.2/50 μ s) (peak)	对地 Phase to earth	kV	1050
	断口 Across the open contacts	kV	1050 + (206)
SF ₆ 气体压力 (20℃ 表压) SF ₆ gas Pressure (at 20℃)	额定 Rated pressure	MPa	0.6 ± 0.015
	报警 Alarming pressure	MPa	0.55 ± 0.015
	最低 (闭锁) Lockout pressure	MPa	0.55 ± 0.015
	包装运输时充气压力 Gas-filled pressure for transport	MPa	0.025
SF ₆ 气体湿度 SF ₆ gas humidity	交接验收值 Pre-delivery	10 ⁻⁶	≤ 150
	运行允许值 In service		
SF ₆ 气体漏气率 SF ₆ gas leakage ratio		%/年 %/per year	≤ 300

