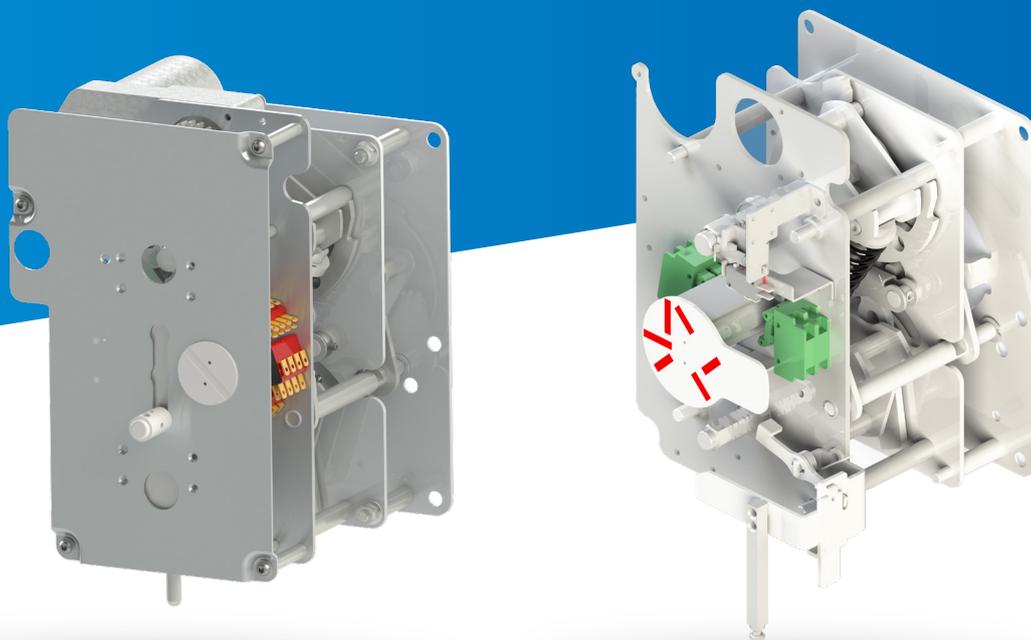


SPE T THREE-POSITION OPERATING MECHANISM



Product Introduction

SPE Spring Operating Mechanism uses compression spring over-travel control. Three positions: close, open, earth. Mechanical interlock between close and earth prevents misoperation. Compact size, easy installation.

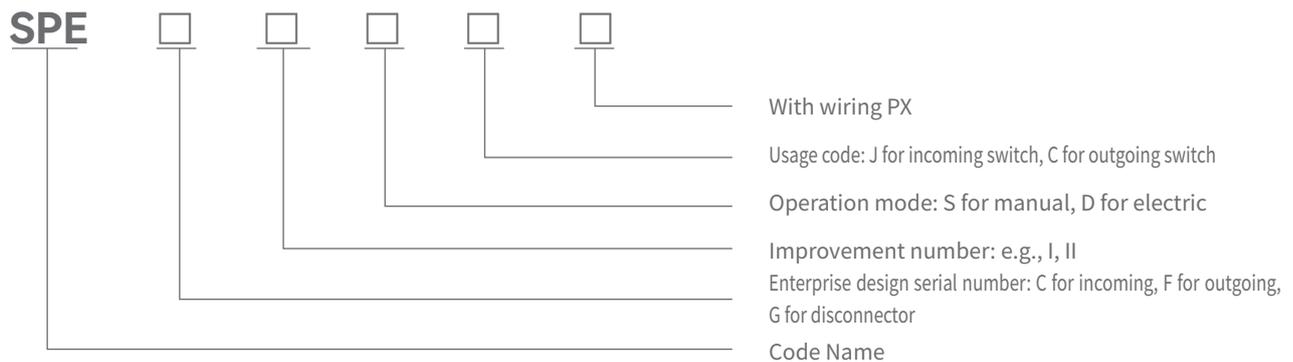
Complies with GB/T3804-2017, GB/T16926-2009, and references GB/T11022-2020, GB/T3309-1989.

Product Features

-  Single compression spring, dual-shaft design, simple and stable.
-  Mechanical interlock prevents misoperation
-  Compact, easy to install, strong adaptability
-  Mechanical endurance ≥ 5000 operations

The SPE spring operating mechanism is used with SF6 load switches and combination apparatus in AC metal-enclosed switchgear. The spring operating mechanism (commonly divided into Type C and Type F) is equipped with indoor high-voltage AC load switches with Type C mechanism, mainly for incoming line control units. Fuse-switch with Type F mechanism is mainly for transformer protection units, also known as outgoing line control units.

Model Composition and Meaning



Operating Instructions

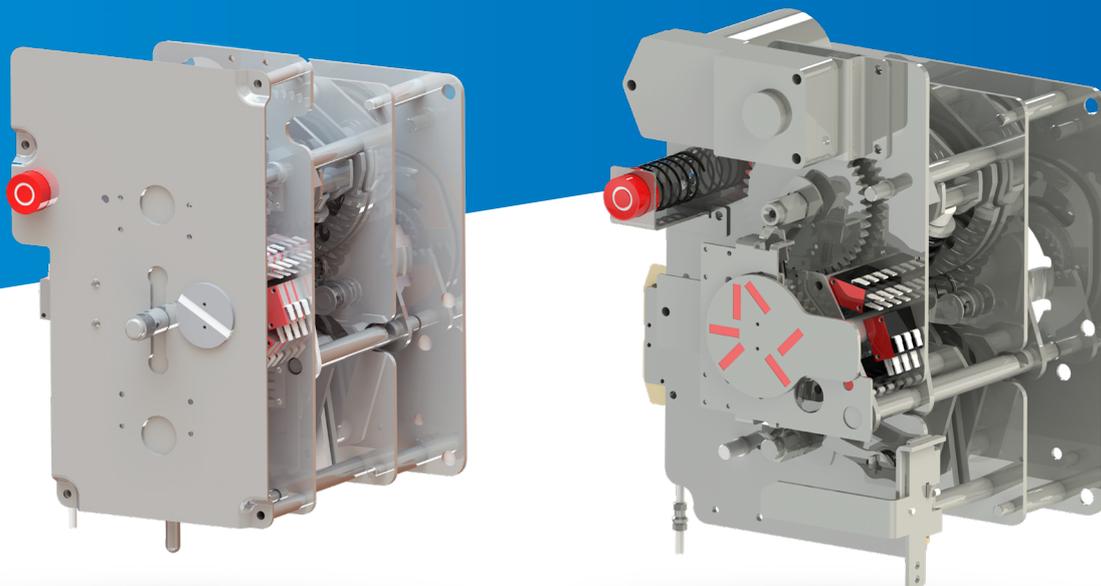
 **Closing Operation** Fix mechanism to switch. Insert handle into upper shaft (closing shaft), turn clockwise. Main circuit closes via spring force.

 **Opening Operation** Insert handle into upper shaft, turn counterclockwise. Main circuit opens via spring force.
Electric Closing:
Motor drives spring for closing.

 **Earthing Operation** **Earthing Close:**
Insert handle into lower shaft (earthing shaft), turn clockwise. Earthing circuit closes via spring force.

Earthing Open:
Insert handle into lower shaft, turn counterclockwise. Earthing circuit opens via spring force.

SPE T THREE-POSITION OPERATING MECHANISM (TYPE F)



Product Introduction

SPE spring operating mechanism is designed for 12kV AC metal-enclosed switchgear. It uses compression spring over-travel control with three positions: close, open, and earth. Mechanical interlock between close and earth prevents misoperation. Compact size, easy installation, strong adaptability.

This mechanism complies with GB/T3804-2017, GB16926-2009, and references GB/T11022-2020, GB/T3309-1989.

Operating Environment

-  Ambient Temperature: Upper limit +40° C, lower limit -25° C
-  Altitude: Maximum installation altitude $\leq 1000\text{m}$
-  Humidity: Daily average relative humidity $\leq 95\%$, monthly average $\leq 90\%$
-  Seismic Intensity: ≤ 8 degrees. Air must be free from corrosive or flammable gases, water vapor, and other obvious pollution. No frequent violent vibrations.

Main Technical Parameters

ITEM	UNIT	PARAMETERS
Rated voltage (motor)	V	DC:220V/110V/48V/24/
Electric operation (charging) time	S	10
Average closing speed (with switch)	m/s	≥ 3
Average opening speed (with switch)	m/s	≥ 4
Maximum manual operating torque	N.m	≤ 120
Opening time triggered by release	ms	50-65
Trip actuator impact energy	J	2-5
Load break switch mechanical endurance	Operation cycles	5000
Earthing switch mechanical endurance	Operation cycles	3000

Operating Instructions

-  **Closing Operation** Install mechanism on switch. Insert handle into upper shaft (closing shaft), turn clockwise to charge spring, or use motor. Auto-closes after charging.

-  **Opening (Fuse Trip)** Press open button (or simulate fuse trip) or energize opening coil. Spring releases, switch opens, circuit disconnects.

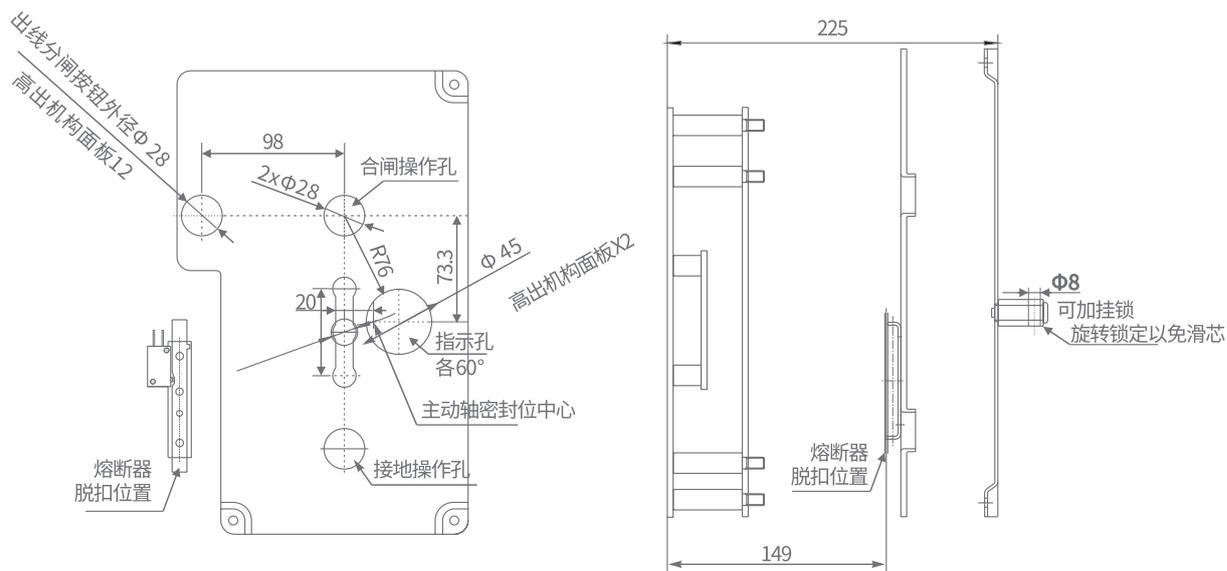
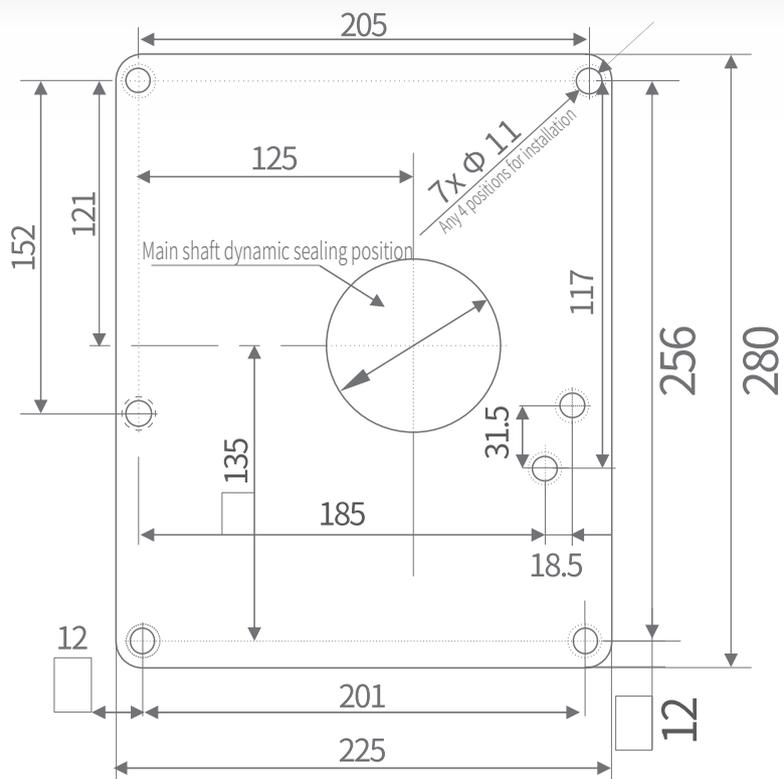
-  **Earthing Operation**

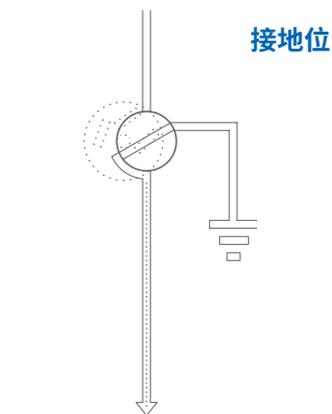
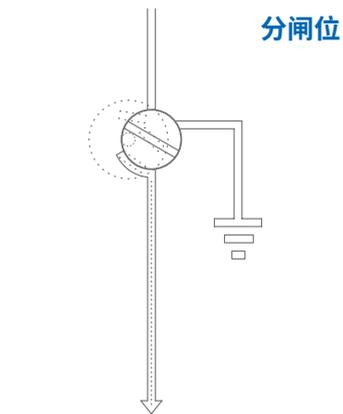
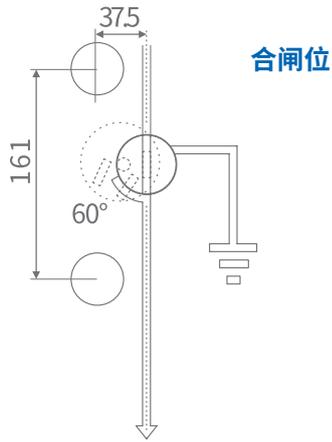
Earthing Close: Insert handle into lower shaft (earthing shaft), turn clockwise. Earthing circuit closes.

Earthing Open: Insert handle into lower shaft, turn counterclockwise. Earthing circuit opens. Mechanical interlock between closing and earthing. In open position, only one operation possible; the other hole is blocked.

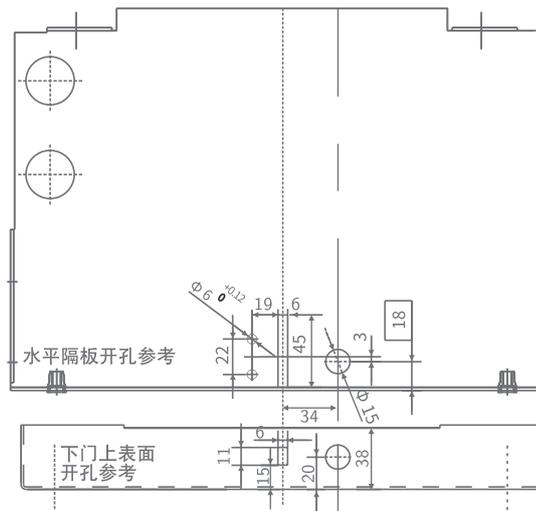
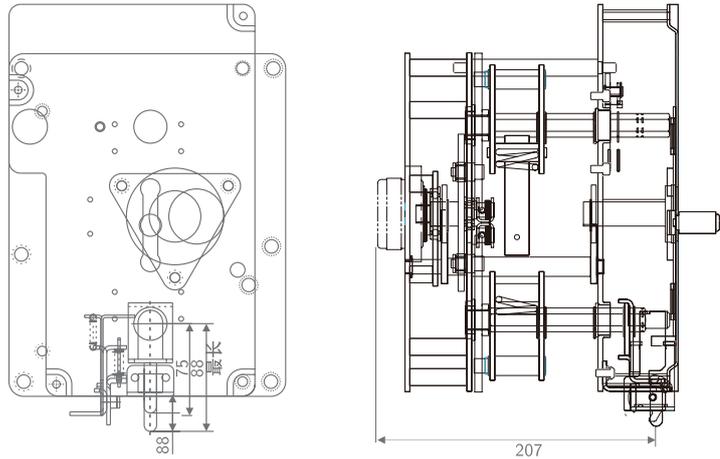
Dimensions

Base plate mounting positions and external dimensions mounting holes (choose any four positions for installation)





下门连锁方案 1

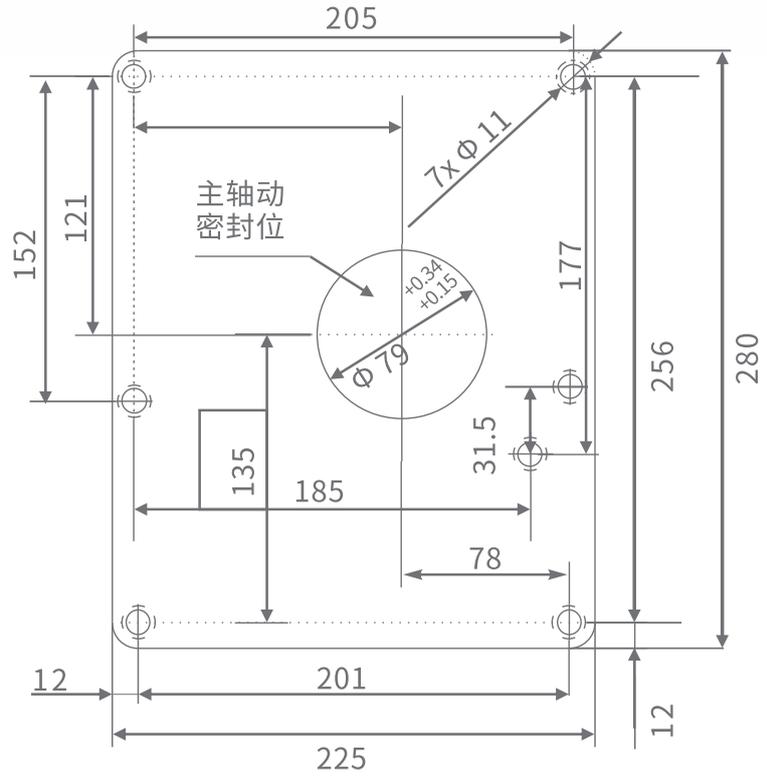


新下门连锁使用说明 (拍合式) 机构合接地后关闭操作手柄孔
 (手提位置在中间位置) 方可打开下门, 下门打开后无法打开任何操作孔
 同时主回路和接地回路操作孔有互锁功能。

机构外形图

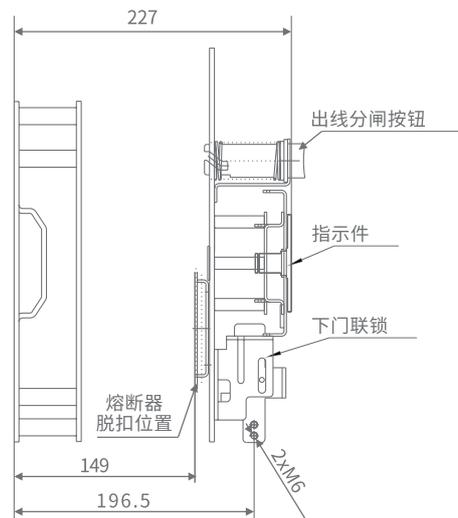
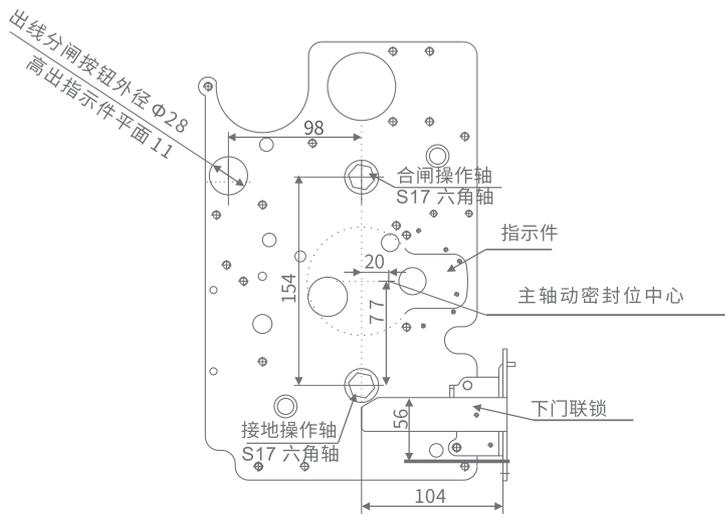
Dimensions

底板安装位置及外形尺寸安装孔
(任选四个位置安装)



板前机构

安装孔



合闸位

分闸位

接地位

