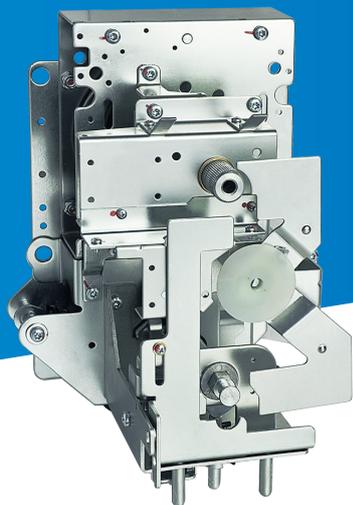
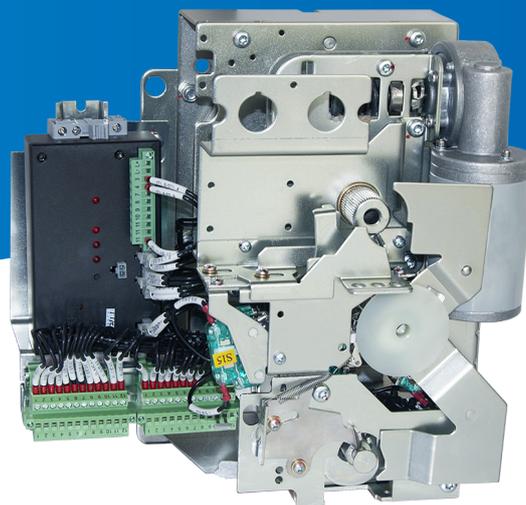


SPE 03 □ J Spring Operating Mechanism

Gas-insulated switchgear: XGN-12D switchgear accessory — SPE 03 operating mechanism



XGN □ -12(C type) Manual mechanism
Model type: SPE 03SJ



XGN □ -12(C type) Motorized mechanism
Model type: SPE 03DJPX

Product Introduction

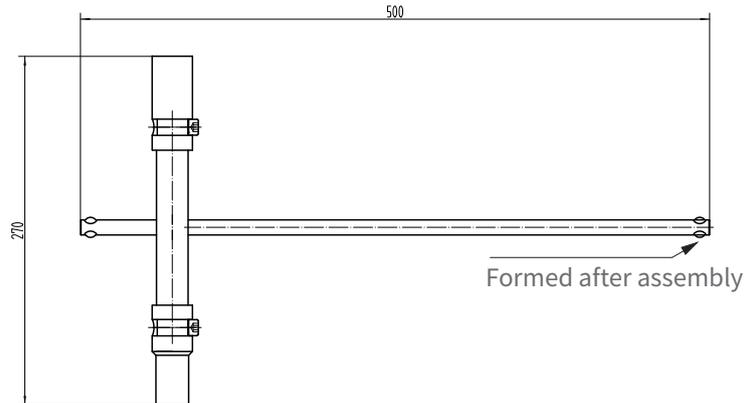
XGN-12D equipped with SPE type spring operating mechanism is accessory equipment for 12kV AC metal-enclosed switchgear. This series of mechanisms uses a planar spiral spring to control load switch operation, and earthing operation is controlled by a compression spring over-center mechanism. The working positions include closed, open, and earthed — mechanical interlock between closed and earthed positions prevents incorrect operation. Mechanism output angle is approx. 80 °, average closing and opening speed ≥ 3 m/s, mechanical endurance: 5000 operations for closing, 3000 for earthing. The mechanism features a compact design, easy installation and operation, and strong adaptability.

This product complies with GB3804-2004 "3.6kV ~ 40.5kV AC high-voltage load switches" and GB16926-1997 "AC high-voltage load switch-fuse combination apparatus".

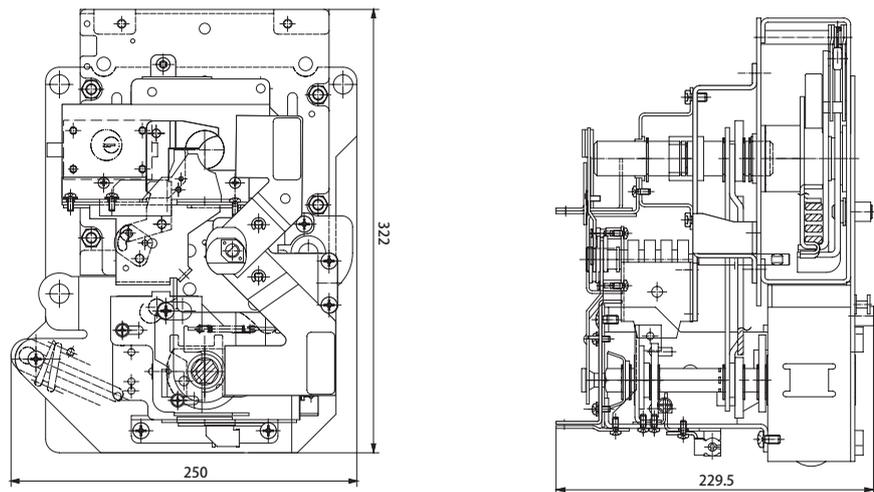
Operating Handle

Dimensions

SPE03 Mechanism handle
 Drawing: XGN.5XJ.253.030



Outline Dimensions



SPE 03SJ/DJ Instructions and Operation Specifications

Mount mechanism on switch. Insert handle into upper part (closing shaft), turn clockwise approx. 90° — main circuit closes under spring force. Electric operation: press close button to energize motor.



Opening operation

Insert handle into upper mechanism (closing shaft), rotate counterclockwise by approximately 90°. Main circuit opens via spring force of mechanism. Press open button for electric operation, the motor drives the mechanism to complete the opening operation.



Earthing close operation

Insert handle into lower mechanism (earthing shaft), rotate clockwise by approximately 90°. Earthing circuit closes via spring force of mechanism.

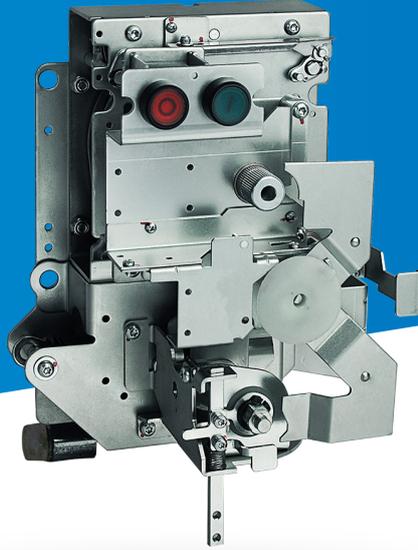


Earthing open operation

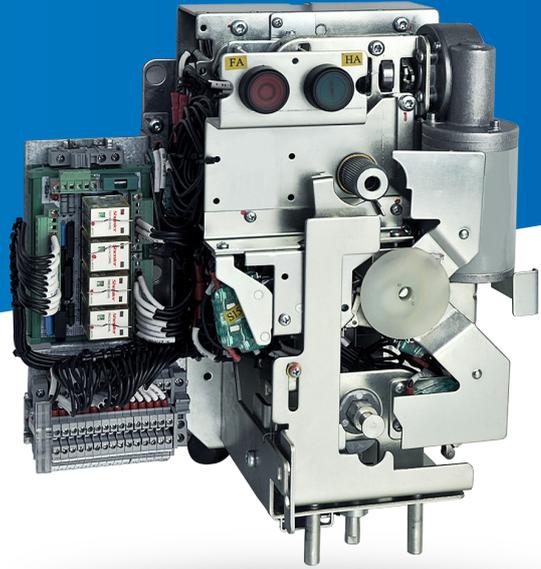
Insert handle into lower mechanism (earthing shaft), rotate counterclockwise by approximately 90°. Earthing circuit opens via spring force of mechanism.

SPE 03 □ C Spring Operating Mechanism

Gas-insulated switchgear: XGN-12D switchgear accessory — SPE 03 operating mechanism



XGN □ -12(F type) Manual mechanism
Model type: SPE 03SC

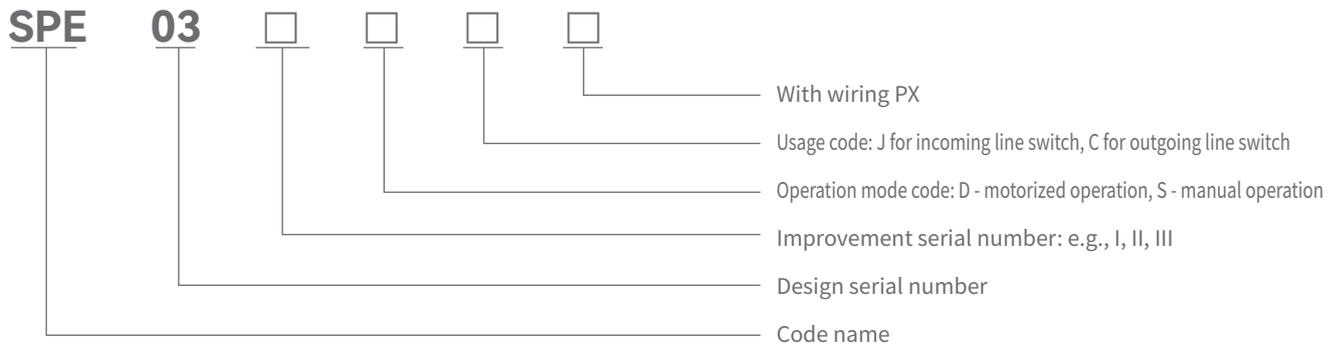


XGN □ -12(F type) Motorized mechanism
Model type: SPE03DC PX

Model Composition and Meaning



Note: This mechanism has fuse trip function.



SPE 03SC/DC Mechanism Operating Instructions



Mechanism Charging

Install and fix the mechanism onto the switch, insert the dedicated operating handle into the upper part of the mechanism (closing operation shaft), rotate clockwise by approximately 120° to complete mechanism spring charging, or energize the motor for electric operation charging.



Closing Operation

Press the closing button or energize the closing coil for electric operation (the energy storage spring). The spring energy releases, the mechanism drives the switch to close, and the main circuit conducts.



Earthing Close Operation

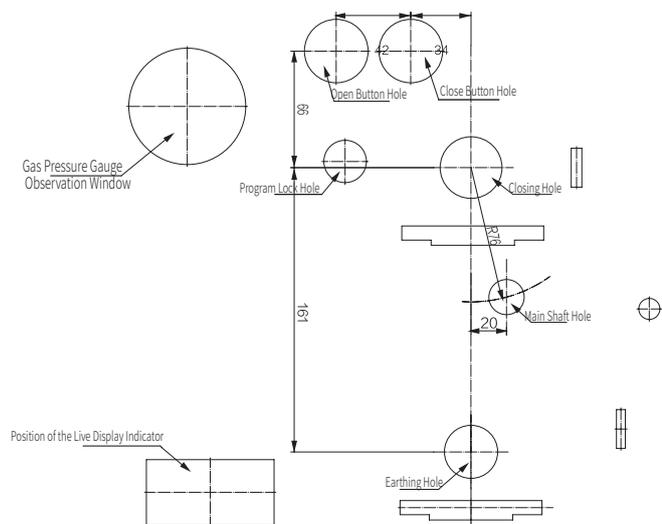
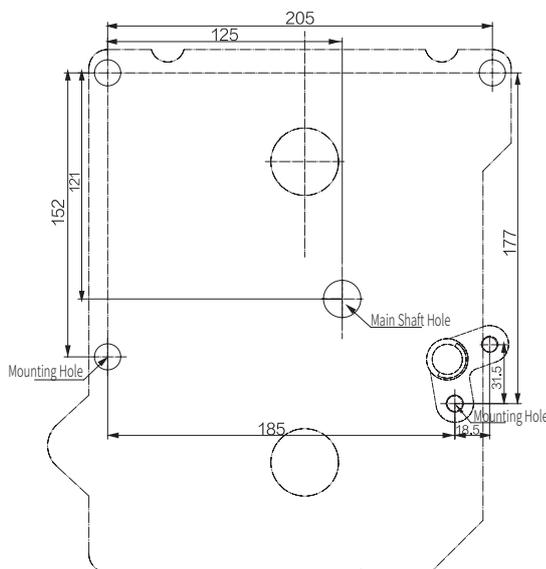
Insert the operating handle into the lower part of the mechanism (earthing operation shaft), rotate clockwise by approximately 90°. The earthing circuit closes under the spring force of the mechanism.



Earthing Open Operation

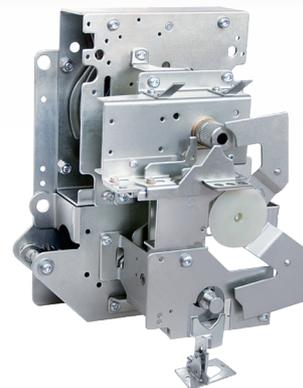
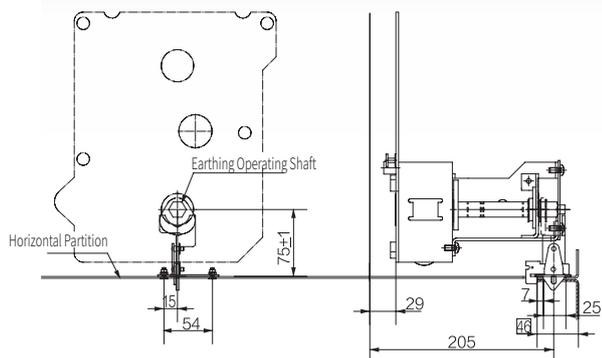
Insert the operating handle into the lower part of the mechanism (earthing operation shaft), rotate counterclockwise by approximately 90°. The earthing circuit opens under the spring force of the mechanism.

External and Mounting Dimensions

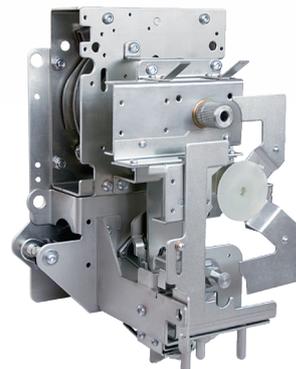
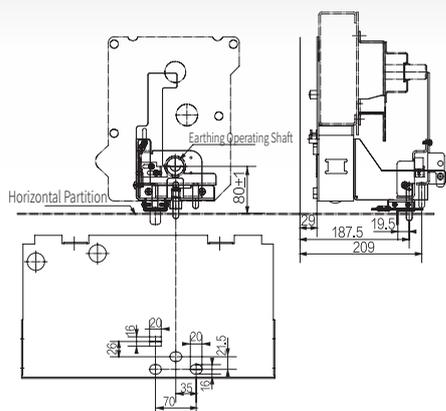


Interlocked SPE03 Operating Mechanism

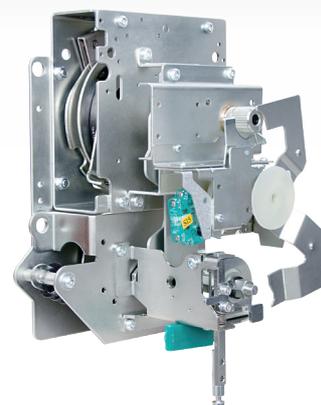
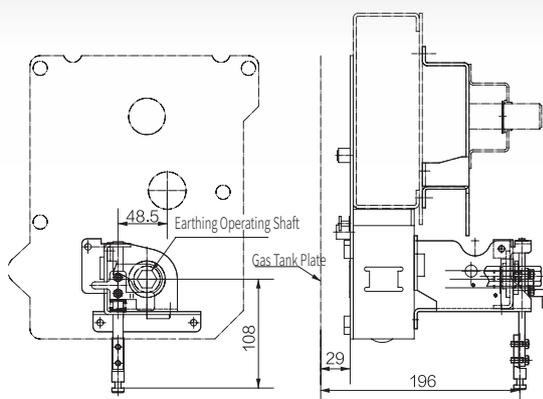
IV Type Mechanism



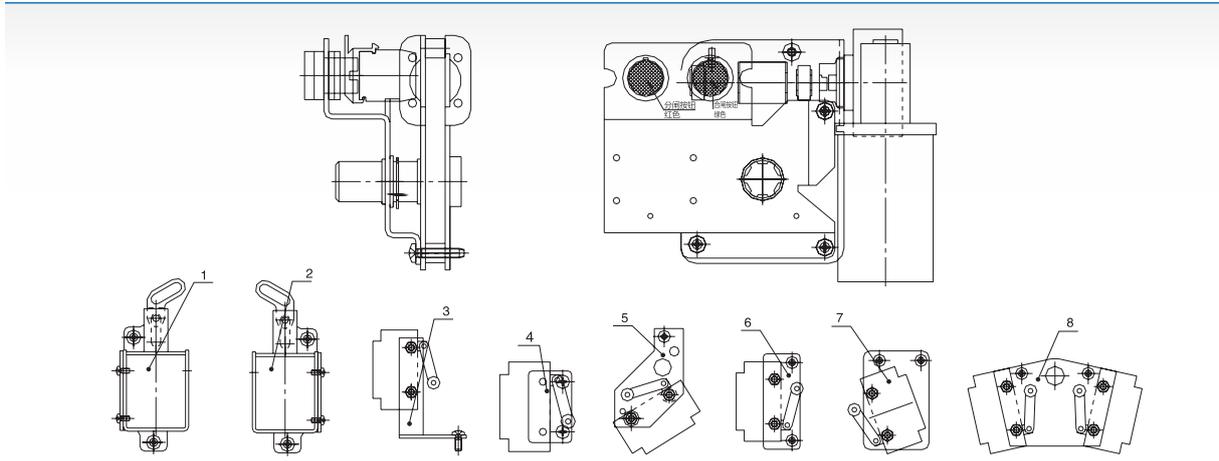
V Type Mechanism



VII Type Mechanism



SPE 03 □ C Mechanism Motor Assembly



SPE03 Mechanism Motor Accessories Table

No.	Name	Model Type	Qty	Note
1	Opening coil assembly	XGN.6XJ.610.002	1	
2	Closing coil assembly	XGN.6XJ.610.001	1	
3	Mounting plate (fuse contact) assembly	XGN.5XJ.062.010	1	For cabinet
4	Mounting plate (manual/electric switch) assembly	XGN.5XJ.062.013	1	
5	Mounting plate (charging indicator) assembly	XGN.5XJ.062.008	1	
6	Mounting plate (charging switch) assembly	XGN.5XJ.062.011	1	
7	Mounting plate (cable compartment door) assembly	XGN.5XJ.062.009	1	For cabinet
8	Mounting plate (position switch) assembly	XGN.5XJ.062.012	1	

SPE 03 操动机构附件及其他配件

SPE 03 Operating Mechanism Accessories and Other Components

照片	图号	名称	备注
	XGN.5XJ.271.005	限位块装配	控制下门未安装时机构无法进行合闸操作的联锁
	XGN.5XJ.261.013	门滑块装配	控制机构在接地的位置时下门可以进行开启操作的联锁
	XGN.5XJ.885.001	门扣组件	控制 SPE 03 □ C 机构在接地状态时，才允许打开机构前的面板
	XGN.5XJ.271.004	限位件装配	用于机构和柜体的连接，将机构安装固定在柜体上