KYN61–40. 5

type outdoor AC armoured movable type metal sealed switchgear



Brief Introduction

KYN61–40.5 Armoured movable AC metal enclosed switchgear (hereinafter referred to as switch cabinet) is applicable to 3–phase AC 50Hz and 40.5kV single bus and single–bus staged power system. It is mainly used as the reception and distribution of electrical energy transformation and distribution in the power transformation and distribution power plant, substation and industrial and mining establishment as well as high–rise. It controls and protects as well as monitors the circuit. It meets the requirement of IEC60298, GB3906 and DL404 standards and so on. It has the perfect "5 protections" function.

Service Environmental Condition

Altitude: No higher than 2000m;
Ambient temperature: the upper limit is +40℃ and the lower limit is –15℃;
Relative humidity: The daily average value is not more than 95% and the monthly mean value is not more than 90%;
Earthquake intensity: Not more than 8 degrees;
The location without severe dirtiness such as fire explosion hazard and strenuous vibration as well as chemical corrosion and so on.

feature

The thermal shrinkage insulating material and epoxy–coated insulating process is used. The electrode shape is optimized. The structure of cabinet body is compact and the floor area is reduced.
For the switch cabinet body, the high–grade cold rolled steel plate is formed by the NC sheet–metal processing and then it is connected by the high–strength bolt and nut as well as riveting nut. For the surface of structural member, the plastic–spraying or galvanizing process is adopted.

It can be equipped with the homemade ZN85–40.5 (3AV3) vacuum circuit breaker and French Schneider SF1 and SF2 model as well as Alston FP series of sulfur hexafluoride circuit breaker to meet the demands of different clients.

The metal partition is used to separate among every function chamber in the switch cabinet. The individual pressure relief channel is installed.

Operations of circuit breaker and grounding switch and so on can be performed under the situation that the door of switch cabinet is closed. The door–close operation can be realized.

The structure adaptability of switch cabinet is strong. The main wiring scheme can be up to above 198 types. Therefore, demands from different clients can be met.

The mechanical interlocking device preventing misoperation is installed among trolley, circuit breaker, grounding switch and rear cabinet door. "5 protections" function is complete and safe as well as reliable.

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Technical parameter

Technical parameter of switch cabinet

Serial nuamber	Item		Unit	Parameter	
1	Rated voltage		kV	40.5	
2	Rated frequency		Hz	50	
3	Rated current of main bus-bar		A	1250, 1600, 2000	
4	Rated current of branch bus-bar		A	630, 1250, 1600	
5	Rated insulating level	1min Power-Frequency withstand voltage (Valid value)	kV	Interphase & phase to ground	Primary separation fracture
				95	115
		Rated lightning impulse withstand voltage (peak value)		185	215
		1min Power-Frequency withstand voltage in the auxiliary control circuit	V	2000	
6	Rated short circuit breaking current.		kA	25, 31.5	
7	Rated short-circuit making current (peak value)		kA	63, 80	
8	Rated short-time withstand Current (4s)		kA	25, 31.5	
9	Rated impulse Withstand Current		kA	63, 80	
10	Rated voltage of auxiliary control circuit		V	-110, -220, -220	
11	Protection degree			Among compartments and when the door of circuit breaker room is opened: IP2X	
12	Physical dimension (W × D × H)		mm	(*the number in the parenthesis is scheme of SF6 trolley)	
13	Weight		kg	bout 2300	

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Technical parameter of ZN85–40.5(3AV3) vacuum circuit breaker

Serial nuamber	Item		Unit	Parameter
1	Rated voltage		kV	40.5
2	Rated frequency		Hz	50
3	Rated insulating level	Power–Frequency withstand voltage (Valid value)	kV	95
		Rated lightning impulse withstand voltage (peak value)	kV	185
4	Rated current		A	630，1250，1600，2000
5	Rated short–circuit breaking current.		kA	25，31.5
6	Rated short–circuit making current (peak value)		kA	63，80
7	Rated short–time withstand Current (4s)		kA	25，31.5
8	Rated peak–value withstand current		kA	63，80
9	Rated drop–out current of capacitor bank		A	630
10	Total breaking times of rated short circuit breaking current		Times	20
11	Rated operation sequence			0–0.3s–CO–180s–CO
12	Switching–off time		ms	35–60
13	Switching–on time		ms	45–100
14	Mechanical life		Times	10000
15	Open distance of contact		mm	20 ± 2
16	Over stroke		mm	6 ± 2
17	Allowable wearing accumulation thickness of contact		mm	3
18	Average switching–on speed		m/s	0.5–0.8
19	Average switching–off speed (10mm)		m/s	1.6–2.0

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Serial nuamber	Item	Unit	Parameter
20	Rebound time of contact switching on	ms	≤ 2
21	Asynchronous switching off of 3-phase contact	ms	≤ 2
22	Asynchronous switching on of 3-phase contact	ms	≤ 2
23	DC resistance of circuit for every phase	μ Ω	≤ 50
24	Rated spring pressure of contact under the switching-on state	N	3100 ± 200
25	Interphase center distance	mm	300

Technical parameter of FP40 series of sulfur hexafluoride circuit breaker

Maximum operating voltage kV	Insulating level		Drop-out current kA	Operating current A							
	Impact withstand kVP	Power-frequency withstand voltage 50Hz kV1min		400	630	800	1250	1600	2000	2500	3150
40.5	185	95	12.5	FP4012A	FP4012B	FP4012C	FP4012D				
			16		FP4016B	FP4016C	FP4016D	FP4016E			
			20			FP4020C	FP4020D	FP4020E	FP4020F	FP4020G	FP4020H
			25			FP4025C	FP4025D	FP4025E	FP4025F	FP4025G	FP4025H
			31.5								

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Technical parameter of Schneider SF-type sulfur hexafluoride circuit breaker

Serial nuamber	Item		Unit	Parameter
1	Rated voltage		kV	40.5
2	Rated insulating level	Power-frequency withstand voltage	kV	95
		Rated lightning impulse withstand voltage (peak value)	kV	185
3	Rated current		A	630, 1250, 2000
4	Rated short-circuit breaking current		kA	25, 31.5
5	Rated short-circuit making current		kA	63.80
6	Rated short-time withstand Current (3s)		kA	25, 31.5
7	Rated peak-value withstand current		kA	63, 80
8	Rated drop-out current of capacitor bank		A	440, 875, 1750
9	Total breaking times of rated short circuit breaking current		Times	20
10	Rated operation sequence			0-0.3s-CO-180s-CO
11	Switching-off time		ms	45±4
12	Switching-on time		ms	68±4
13	Mechanical life		Times	10000

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Technical parameter of LZZB9-35 Current transformer

Rated primary current (A)	Combination of accuracy class	Rated output under the corresponding accuracy class (VA)					Rated short-time withstand Current (1S valid value) (kA)	Rated peak-value withstand Current (peak value) (kA)
		0.2	0.5	10P10	10P15	10P20		
30-100	0.2/10P10	15	30	50	30	20	150lin	375lin
150	0.2/10P15	15	30	50	30	20	31.5	80
200	0.2/10P20	15	30	50	30	20	44.5	80
300-500	0.5/10P10	15	30	50	30	20	54.5	80
600-800	0.5/10P15	30	50	50	40	30	63	80
1000-2000	0.5/10P20	40	50	50	50	30	80	100

Technical parameter of LDBJ8-40.5 box current transformer for fully-enclosed contact box poured with epoxy resin
Main technical parameter:
Rated insulating level: 95/185kV
830mm Surface creeping distance: 830mm
Rated secondary current: 5A(or 2A, 1A)
Amount of partial discharge: ≤ 20PC
Accuracy class: 0.2S,0.2.0.5.10P10,10P15, 10P20

Rated primary current (A)	Combination of accuracy class & corresponding rated output (VA)				Rated short-time withstand Current (1S valid value) (kA)	Rated peak-value withstand Current (peak value) (kA)
	0.2/10P10	0.5/10P10	0.2/0.5	10P10/10P10		
5-300	10/30	20/30	10/20	20/20	150lin	375lin
400-500	10/40	15/40	10/15	25/25	63	130
600-800	20/50	30/50	20/30	30/30	63	130
1000-1600	30/50	50/50	30/50	40/40	80	180
2000-3150	40/50	50/50	40/50	50/50	100	180

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Technical parameter of JN22–40.5/31.5 grounding switch

Serial nuamber	Item		Unit	Parameter
1	Rated voltage		kV	40.5
2	Rated insulating level	Power–Frequency withstand voltage	kV	95
		Rated lighting impulse withstand voltage (peak value)	kV	85
3	Rated short–time withstand Current (4s)		kA	31.5
4	Rated peak–value Withstand Current (Peak value)		kA	80
5	Rated short–circuit making current (Peak value)		kA	80

Structure

Structure

KYN61–40.5 metal enclosed switchgear mainly consists of two parts, namely, cabinet body and trolley. The cabinet body is divided into 4 individual compartments, namely, circuit breaker compartment (it is also called trolley compartment), bus–bar compartment, cable compartment and relay instrument compartment. The protection degree of casing is IP4X. The protection degree is IP2X when the door of circuit breaker is opened. The trolley of circuit breaker consists of two parts, namely, circuit breaker and chassis trolley. It has leading in and outlet of cable, leading–in and outlet of rack chamber, contact, counting and isolation and other function schemes.

Cabinet body

The cabinet body is made from the high–grade cold–cooled steel plate or aluminized zinc plate. It is assembled through the high–strength bolt and nut (grade 8.8) or riveted nut after the plate is machined and bent as well as formed by the NC sheet metal equipment. For every structural member of cabinet body, the plastic–spraying or surface galvanizing process is used. Therefore, the cabinet body not only has the very high height but also it can have such features as lightweight and high mechanical strength as well as beautiful appearance comparing with the similar equipment. At same time, there are such features as strong versatility, short machining period, small floor area for production of component because the assembly–type structure is adopted. The production can be organized conveniently depending on the ordering condition.

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Trolley

1.The framework of trolley is bent and welded by the high-grade sheet steel. The trolley can be divided into the trolley of circuit breaker, separation trolley, trolley of voltage transformer and trolley of lightning arrester and so on according to the purpose. Trolley of same specification can be interchangeable.

2.The pushing device of trolley consists of leading screw nut pushing mechanism, overrunning clutch and interlocking mechanism and so on. The leading screw nut pushing mechanism can operate easily to make the trolley move between the testing position and working position. The self-locking property of leading screw nut can be utilized to lock the trolley at the working position reliably and prevent the accident from play of trolley due to action of electrical force. The overrunning clutch will enable the operating shaft to separate from the lead screw automatically and the operating shaft runs idly when the trolley moves back to the testing position and advances to the working position, and thus avoid damage to the construction.

Compartment

The individual compartment, namely, compartment of circuit breaker, bus compartment, cable compartment and compartment of relay instrument, is installed in the KYN61-40.5 metal enclosed switchgear. The pressure-relief channel is installed in the compartment of circuit breaker and bus compartment as well as cable compartment.

1.compartment of circuit breaker

The guide rail is installed at the bottom of circuit breaker compartment to function as the correct guidance for the smooth operation of trolley between the testing position and working position. The valve is installed in front of the contact box. The upper and lower valve opens automatically during the process that the trolley moves to the working position from the testing position. When the trolley moves oppositely, the valve closes automatically to form the effective separation. The upper and lower valve can be locked while overhauling so that it can ensure that the maintainer will not contact the charged body. The trolley can be operated when the cabinet door is closed. The emergency switching-off operating hole is installed at the door face for manual switching off. The position where the trolley is located at and on/off position indicator of circuit breaker as well as energy-storage state of switching-on spring can be observed through the observation window on the door.

2.Bus compartment

The main bus and staged bus is fixed through the branch bus and contact box and the support from the other insulator is not necessary. The main bus and connecting bus as well as branch bus is the red copper bus. The wall sleeve is separated between adjacent cabinets so that it can prevent the accident form spreading effectively. At same time, it functions as the auxiliary support for main bus. The compound insulation technique is used for main insulation in the bus compartment to ensure the insulation reliability.

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3.Cable compartment

1–3 cables can be connected in parallel in every phase. Maximum 6 single–core cables can be connected in parallel. After the trolley is moved away, the installer and maintainer can enter into the cabinet from the front side to repair and install such elements as current transformer, voltage transformer, grounding switch and lightning arrester and so on. It is equipped with the slotted dismountable sealing plate for easy cable construction.

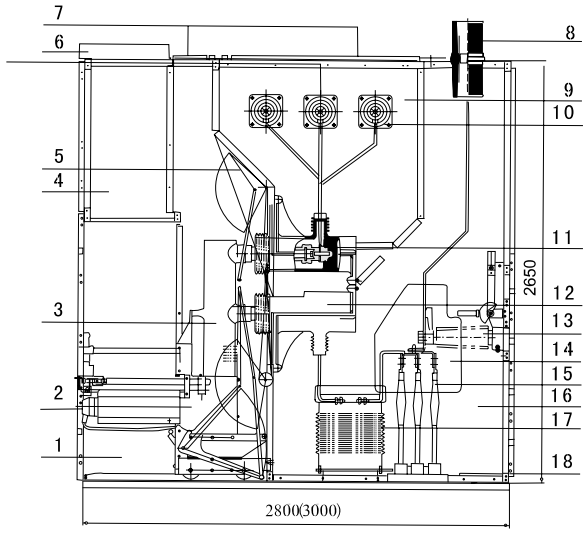
4.Compartment of relay instrument

The relay protection and control element and instrument as well as secondary equipment with special requirement can be installed in the compartment of relay instrument. The small bus is located at the top of compartment of relay instrument for laying and control of small bus.

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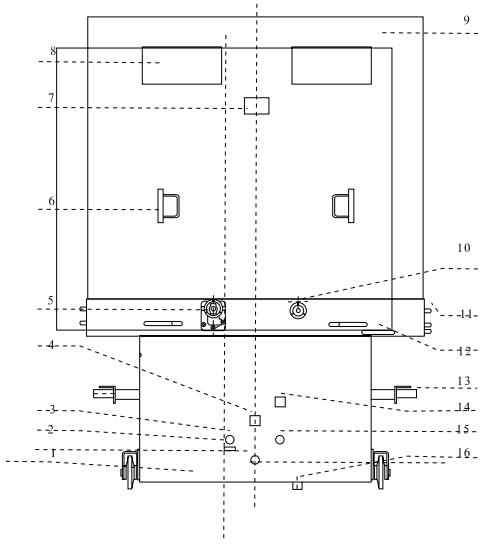
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1.Trolley compartment
2.Secondary plug
3.Trolley of circuit breaker (ZN85 or SF6)
4.Secondary instrument chamber
5.Valve
6.Small bus-bar chamber
7.Pressure relief device
8.Wall tube insulator of overhead leading-in & outlet
9.Bus-bar compartment
10.Bus sleeve
11.Contact box with current transformer
12.Contact box
13.Grounding switch
14.Insulating partition
15.Cable
16.Cable chamber
17.Current transformer
18.Earth bus

Figure 1 schematic diagram of internal structure for KYN61-40.5 switch cabinet



1.Manual energy-storage hole
2.Mechanical counter
3.Manual switching-on button
4.Indicating plate of energy storage
5.Hole & valve of swing-in mechanism
6.Handle
7.Nameplate of circuit breaker
8.Observation window
9.Trolley panel
10.Emergency tripping button
11.Beam embolus
12.Interlocking rod of grounding switch
13.Valve opening device
14.Off/on position indicating plate
15.Manual switching-off button
16.grounding contact

Figure 2 Layout plan of panel for ZN85-40.5 vacuum circuit breaker & trolley

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Interlocking device preventing false operation

KYN61–40.5 metal enclosed switchgear is equipped with reliable interlocking device preventing false operation so that it can meet the "5–pretection requirement".

1.There are operating button with obvious prompting sign or KK changeover switch and prompting sign on the analog drawing board from the client (e.g. red/green drawing) on the door of relay instrument compartment. They are cooperated to prevent the circuit breaker from wrong switching on and off.

2.The switching–on/off operation of circuit breaker can be done only when the trolley of circuit breaker is located at the testing position or working position. Moreover, the trolley can be pushed to the working position from the testing position or returned back to the testing position from the working position only when the circuit breaker is located at the switching–off position. Thus, it prevents switching on and off isolating contact with charge.

3.The switching–on operation of grounding switch can be done only when the trolley is located at the testing position to prevent switching on the grounding switch with charge.

4.When the grounding switch is located at the switching–on state, the trolley cannot be entered into the working position to prevent switching on the grounding switch.

5.The rear door of switch cabinet cannot be opened if the grounding switch does not switch on. On the other hand, the grounding switch cannot switch off if the rear door is not closed. Thus, it can be prevented that the charged compartment is entered wrongly.

6.For the circuit breaker cabinet and subsection cabinet of bus as well as bus contact cabinet and so on without installation of grounding switch, the corresponding electromagnetic lock (or program lock) is needed to cooperate and finish all mistake–prevention functions.

7.The secondary plug–in unit can be inserted in or plugged out only when the trolley is located at the testing position. The secondary plug–in unit is locked at the working position and it cannot be plugged out if the trolley is located at the working position.

Earthing device

1.There is a reliable earthing device between the trolley and cabinet body.

2.The $5 \times 40(mm^2)$ copper grounding bar is installed in the cable compartment individually. This copper bar can be through the whole arrangement and contacts with the cabinet body well. It is provided to the direct grounding element for its use. Thus, the whole cabinet is located at the good grounding state.

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Pressure relief device

circuit breaker room,busbar room and cable room all have pressure relief ways, one side of each pressure relief room cover is fixed by metal bolt,the other side is fixed by plastic bolt. When the fault is happening,so that high-pressure inside can burst the relief cover easily to ensure the safety of operator and device.

①Switching–on operation of grounding switch:At first, it is confirmed that the trolley has been located at the testing position and the indicating lamp of voltage display device has extinguished entirely. Afterwards, the locking between the trolley and operating shaft of grounding switch is unlocked. The operating handle of grounding switch is inserted to rotate by 270° in the clockwise direction. The grounding switch is switched on.

②Switching–off operation of grounding switch:At first, it is confirmed that the trolley has been located at the testing position and the front and rear door is closed. Afterwards, the locking between the trolley and operating shaft of grounding switch is unlocked. The operating handle of grounding switch is inserted to rotate by 270° in the counter–clockwise direction. The grounding switch is switched off.

3.Operation of isolation cabinet:The isolation trolley has not the capacity connecting and breaking the load current. Therefore, the isolation trolley accesses into the working position from the testing position and return back to the testing position from the working position in the cabinet, the operation correctness can be ensured through the electrical interlock between the isolation trolley and self–contained circuit breaker. It means that the isolation cabinet door can be opened only the circuit breaker is in the switching–off position. The other detailed operating procedure is the same as the circuit breaker trolley.

Installationa

1. Preparation for installation:a.At first, check the model and size and quantity of switch cabinet is conformed to the contract. It canbe unpacked if there is no problem.b.Please check if the received goods are in accordance with the packing list as per the packing listprovided by the manufacturer. If there is a conflict, please contact with the manufacturer bytelephone or fax in time. c.Check the cabinet body and element of circuit breaker and so on for damage. The manufacturershall be contacted quickly in case of any damage.d.Remove the dirt especially insulating surface shall be cleaned up.e.Manual switch off the circuit breaker and manual store the energy to switch on and off at same time.The switch cabinet is installed after it is in good condition. f.Note that the proper force is applied and the product is lifted up and down slightly during the processof unpacking and handling as well as transportation to protect the product against the undesirable oss or damage.

2. Installationa.At first, check if the foundation meets the design requirement and foundation requirement of thisproduct (see the figure 18.1). The installation can be proceeded after it is acceptableb.For the installation of switch cabinet, the intermediate cabinet shall be conveyed on the foundationat first. Afterwards, the both sides of switch cabinet are well arranged and aligned. The bolt amongcabinets is tightened. Afterwards, the bolt between the cabinet body and foundation is fixec.Clean up the lapped face of main bus and branch bus respectively. Check if connection of every busand branch end bus is tightened. The 0.05mm ruler shall be used. The insertion is not more than5mm. Note: The inspection shall be carried out according to the requirement of every circuit breakerbefore various circuit breakers (including the actuator) is installed.

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Inspection

1.Check if the trolley enters into and exits the cabinet smoothly.
2.Check if the action of valve is good and reliable.
3.Check if the interchangeability of same type of trolley is good.
4.Check if the "5-protection" function is good and reliable.
a.Check that the circuit breaker shall switch on and off when the trolley of circuit breaker is a the locking state of working position or testing position and the circuit breaker shall not switch off when the trolley of circuit breaker is located between the working and testing position.
b.Check that the trolley is not pushed to the working position when the grounding switch is at the switching-on state and the grounding switch shall not switch on when the trolley is located at the working position.
c.Check that the rear door cannot be opened when the grounding switch does not switch on and he grounding switch does not switch off when the rear door is not closed.
d.Check that the secondary plug shall not be plugged out when the trolley is located at the working position.
5.Check if the action of every stroke switch is good.
6.Check the insertion strength of isolation plug and it meets the requirement or not.
7.Testing of circuit resistance
a. Main circuit (circuit breaker)
b.The resistance value of total circuit of every phase (it includes the circuit breaker and isolating contact at the entrance and exit and does not contain the current transformer) is not more than 400 μ Ω.
8.Power-frequency withstand voltage test
a.Main circuit & interphase and phase to ground (the trolley shall be at the working position)
b.Circuit breaker fracture & isolation fracture
c.Secondary control circuit for ground 2000V, 1min
Note: The inspection item for circuit breaker is carried out according to the requirements of various circuit breakers (including the actuator)

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Operation test

The next operation test shall be done after the foregoing inspection is proved good:

1.The secondary plug-in unit is inserted after the trolley is located at the testing position. The control power supply is switched on. Check if the signal on the instrument board is regular. For example, the energy-storage signal lamp is regular or not if the spring mechanism stores the energy manually.

2.The switching-on button on the instrument panel is pressed to switch on. After it is in good condition, the switching off is executed. Afterwards, switching on and off is executed. The switching and off action shall be performed for 5 times respectively. The signal indicates it is good.

3.The trolley is pushed to the working position to check if the signal on the control board in the control room is regular. Afterwards, the switching on and off operation is carried out for 5 times if there is no problem to check if the action and alarm as well as signal are good.

4.After the circuit breaker is switched on, the analog relay protection action switches on again for action test for totally twice to check if the action and alarm as well as signal are good. At the same time, check if the relay protection, circuit breaker and wiring of secondary control circuit are correct.

5.The circuit breaker is switched on and off manually on site. After the re-switching on relay acts to switch on, the manual switching on is carried out immediately. At this time, the circuit breaker cannot be switched on immediately (duration is not more than 10s). Check if the action and alarm as well as signal are correct and unsuccessful re-switching-on time is set correctly.

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Routine maintenance

1.The state maintenance system specified by the electrical power department shall be followed. The preventive test shall be performed when carry out the minor overhaul. The power-frequency withstand voltage test is performed at the circuit breaker fracture.
2.The moisture content test shall be performed for circuit breaker every year: not more than 300PPm.
3.Power failure maintenance (including the minor overhaul item) is carried out depending on the working condition of switch cabinet.
a.Clean the internal and external part of switch cabinet
b.Check if the connecting position of conductor is well tightened.
c.Check if the isolation contact overheats and the color is changed. Otherwise, it is amended or replaced. If necessary, the insertion depth of isolation contact and contact resistance is tested.
d.Check if the "5-protection" interlocking is good if necessary
e.Check if the terminal of secondary line contacts well (including the terminal block). Otherwise, it shall be tightened.
f.It shall be carried out according to the overhauling item of various circuit breakers (including the actuator)
g.The temporary inspection shall be carried out when the frequent operation (capacitor bank) is up to 1000 times.
h.The major overhaul is carried out once every 6-12 year according to the regulation from the power department. It is carried out according to the specified item of major overhaul.

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Packing & transportation and storage

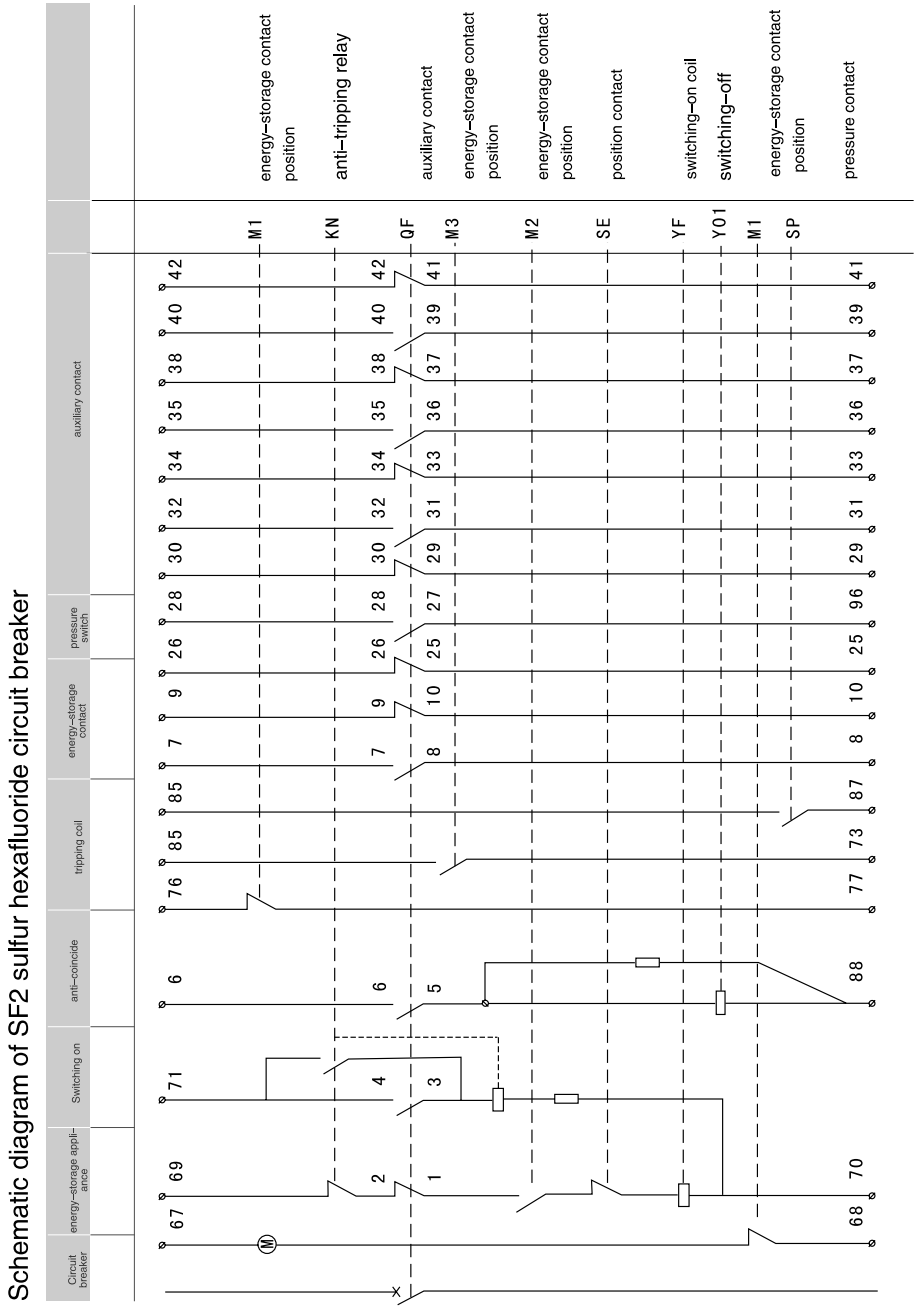
1.The trolley and cabinet body is packed separately. the trolley of circuit breaker is located at the switching–on position. The spring mechanism is located at the releasing state. For the packing & transportation and storage, the special packing unit is used. It is packed according to the single cabinet. The model of switch cabinet and delivery place as well as ordering unit and other related signs are indicated outside.
2.During the transportation and handling process, the severe vibration, jolt, impact and inversion shall be avoided. The damping and corrosion is not allowed. The handling and placement shall be carried out according to the requirements in the sign on the packing box.
3.The product is placed in the well–ventilated and dry room. The damping and harmful corrosion is not allowed. It is not allowed that there is the combustible and explosive substance around the product.

Attached document & list

Conformity certificate of product;
<<Product catalog>> or <<Installation & operating instruction of product>> (including the circuit breaker
Packing list
"factory inspection report of product"
Secondary wiring diagram
Spare part & wearing part and special tool

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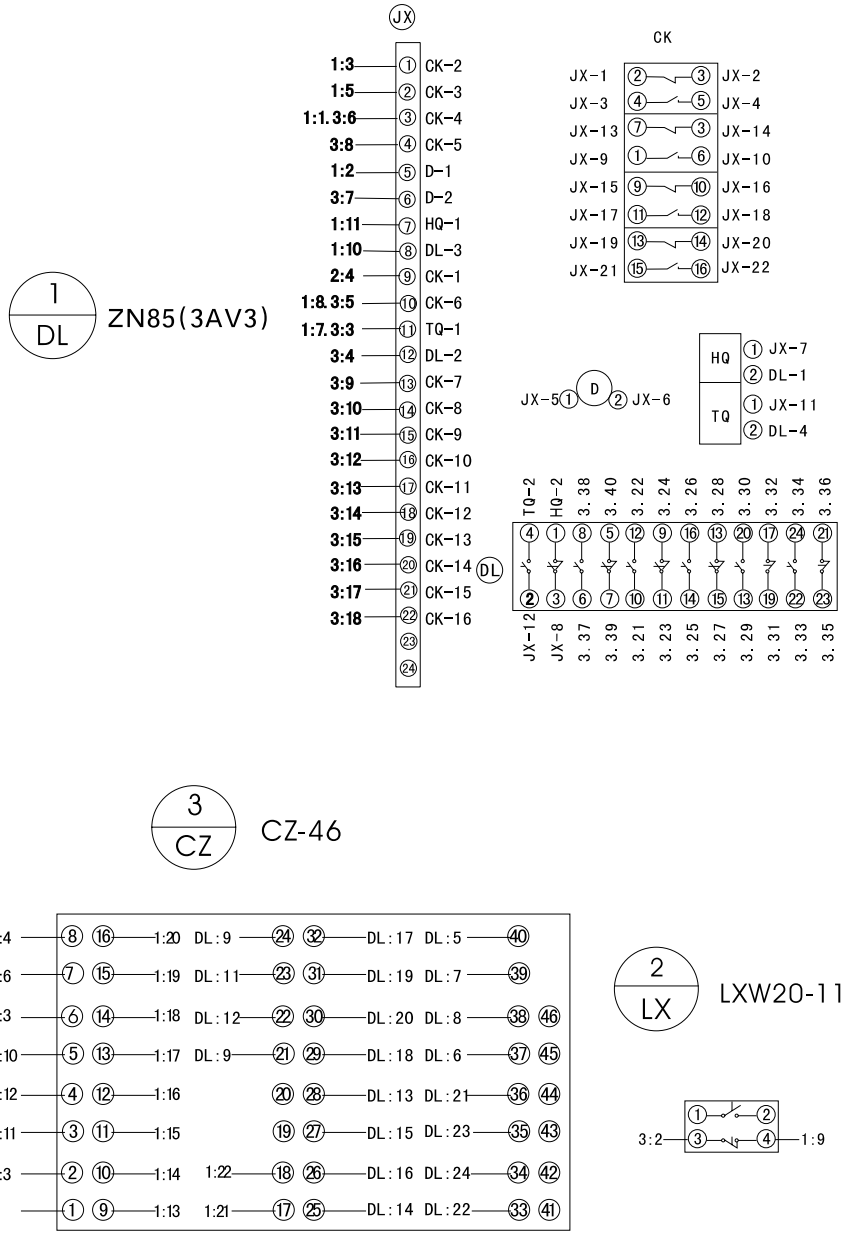


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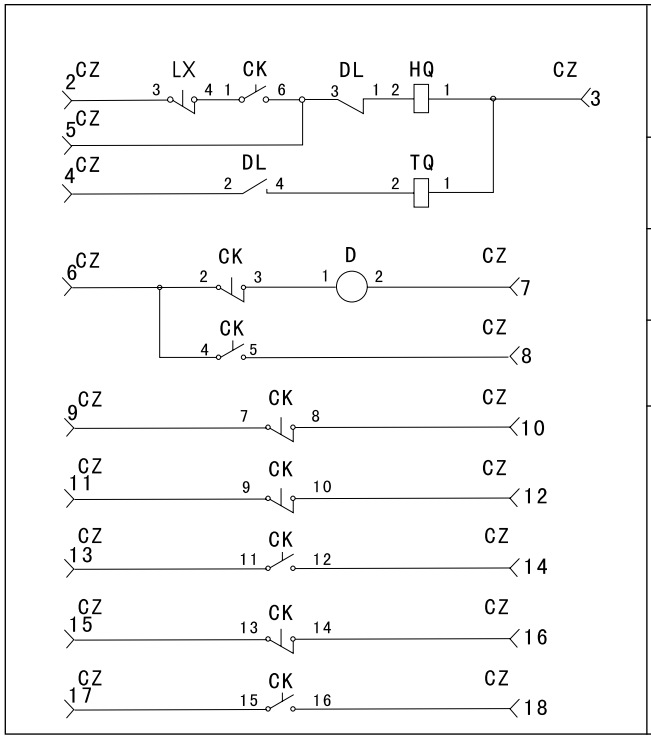
Wiring diagram of vacuum circuit breaker



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Serial number	Label	Name	Model & specification	Quantity	Remarks
1	LX	Micro switch	LXW20-11	1	
2	CZ	Secondary plug	CZ-46	1	
3	DL	Auxiliary switch	Accessories in the spring actuator	1	
4	CK	Stroke switch	Accessories in the spring actuator	4	
5	HQ	Switching-on coil	Accessories in the spring actuator	1	
6	TQ	Switching-off coil	Accessories in the spring actuator	1	
7	D	Energy-storage motor	Accessories in the spring actuator	1	
8	JX	Terminal	Accessories in the spring actuator	24	

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FP schematic diagram

	Shunt field coil	Additional shunt field coil	Switching-on coil	Motor	Fuse of motor circuit	Anti-tripping relay	Indicating switch of energy-storage state	Heater	Alarm switch for low pressure
	5	71	1	35		79	33 31	29	25
	6	72	2	36			34 32	30	26
	04	24	02	01	21	22	31	15	86
BLR	×	○	○	–	–	–	○	○	○
BLRM	×	○	×	×	○	○	○	○	○

Legend ☒ Basic ⊡ equipment for client selection ⊟ non-selection

If some options are selected (e.g. 04, 24, 02 and 22), it must be equipped with the auxiliary switch. For these auxiliary switch and option, the same color is used to indicate.

If the option is not selected, this color-coated auxiliary switch still can be selected. The terminal block is still maintained.When connecting in the anti tripping, the switching-on circuit is connected to 79 and the monitoring signal circuit is connected to 1.

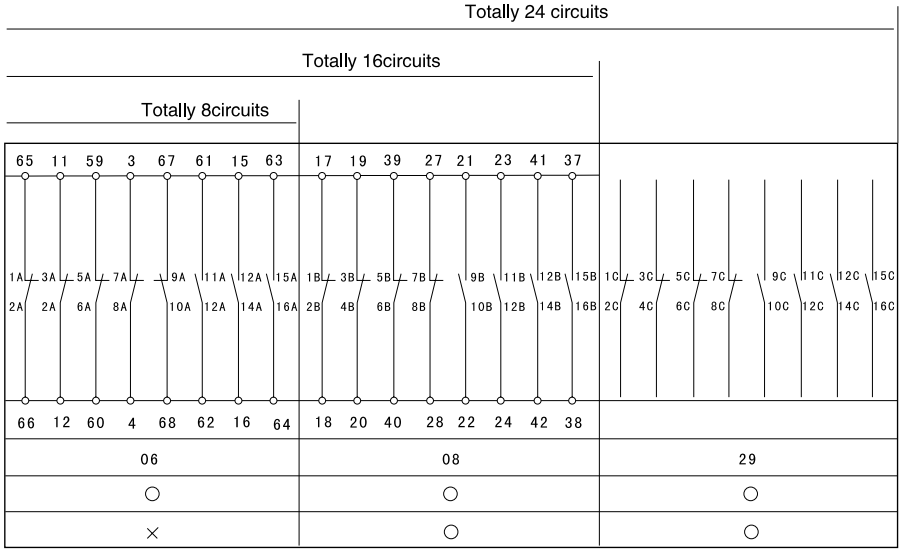
Terminal arrangement diagram

Number of wire holder	9	13	25	26	1	2	3	4	5	6	11	12	15	16	17	18	19	20	21	22	23	24	27	28	29	30	31	32	33	34
Option number	01		86		02		06		04		06				08										15		31			

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Number of wire holder	35	36	37	38	39	40	41	42	59	60	61	62	63	64	65	66	67	68	71	72	79
Option number	01		08						06										24	22	

Note

The maximum auxiliary contact connected to the terminal with the single circuit breaker is 6NO and 6NC.

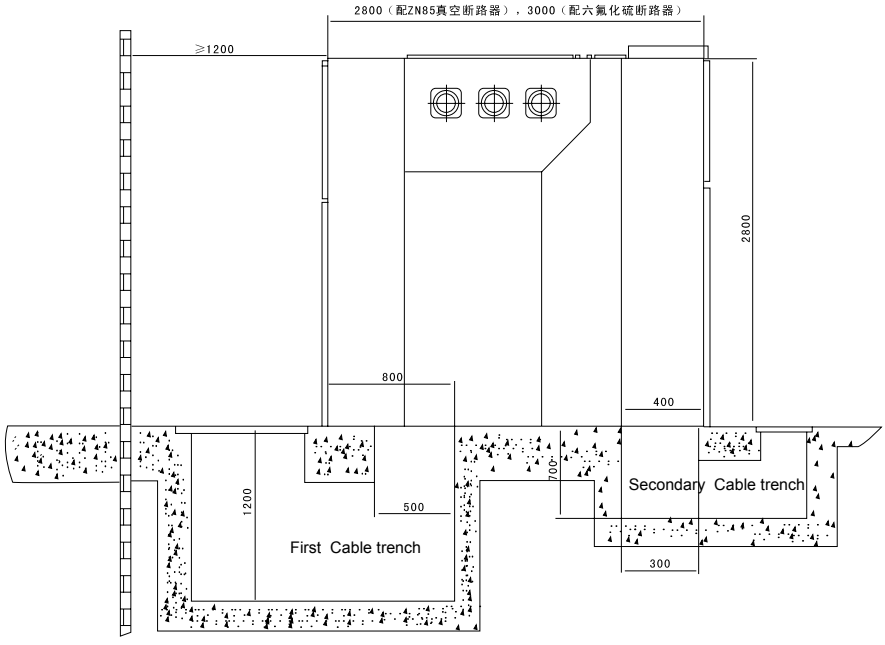
The quantity that auxiliary contact is connected to the terminal provided to the client for use is determined depending on the item selected by the client because there is limited space in the terminal block. We will provide the corresponding the schematic diagram and terminal block diagram according to the requirement from client. For the auxiliary contact which cannot be led to the terminal block, (e.g. for option 29, the wire is not led.), the client can use the connector lug provided by us to and the connector lug is connected from the auxiliary contact.

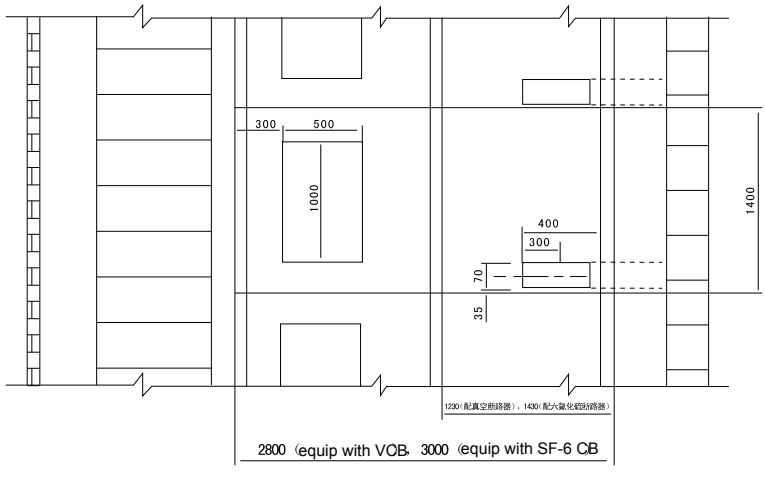
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Installation foundation drawing





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