

MNS^{Type}

LV withdrawable switchgear

380V... 660V...

Compact design

Strong versatility for structure, flexible assembly

Adopt standard module design

Fine security



Comply with IEC / CEI / GB/JB/DL standards

Provided customized manufacture

Whole solutions for design, assembly, test...

Accountable solution for safety and reliability

Wide range offering, easy business and convenient installation



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Table of contents

About us / contact us	1
Summary	2
Technical feature	3
Working Principles	4
Main technical parameters and Structure characteristics	5
Interior structure Diagram	6
After-sale service	7



About us / Contact us

<https://www.cnrockwill.com>

Rockwill Group is one of the leading high technical enterprises professional deals in medium high voltage switchgear and components develop, manufacture and sales.

Located in Wengyang Industrial Zone, Wenzhou, used to known as Yueqing Real Electric Works (Registered in 1986), we have more than 20 years experiences in Medium & high voltage field. We strategically cooperate with worldwide high reputation medium& high voltage switchgear manufacturer and research institute, successfully developed series of medium voltage mutually; filled the blank in China.

We also teamed up with province grade intelligence high voltage switch laboratory, together developed new generation intelligence simultaneous technical vacuum switch, electronic current transformer, digital integrated substation etc. through the cooperation we obtain plenty achievements and build up experience technical team. Plentiful talent backup, advanced production equipment, perfect quality control system and reverse inspection procedure are powerful guarantee of our reliable product quality and high reputation.

We have always insisted the faith on grow together with customers, and to provide a safe, simply, green and efficient medium & high voltage switchgear and components.

ROCKWILL[®], China. Provide with best support.

If you have any question please consult below:

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Summary

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ROCKWILL[®] Electric strives to bring our customers the latest technology and competitive pricing and best service for distribution automatic.

MNS LV withdrawable switchgear (hereinafter referred to as device) is manufactured by standard module through consulting MNS series low voltage switch cabinet of Switzerland ABB Company, and synthetically improved. The device is applicable to the system with AC 50Hz, rated working voltage 660V and below, used as control device for various power generation, transmission, distribution, power transfer and power consumption device.

It is widely used in low voltage distribution system of various mining enterprise, tall building and hotel, municipal construction etc. Besides the general land use, after special disposal, it also can be used for marine petrol drill taken platform and nuclear power station. The device accords with international standard IEC439-1 and national standard GB7251.1.

Service environment:

Air Max temperature: $-5^{\circ}\text{C} \sim +40^{\circ}\text{C}$ average temperature: $< +35^{\circ}\text{C}$ in 24h

Air condition: With clean air. Relative humidity should not exceed 50% at $+40$. Higher relative humidity is allowed at lower temperature.

Altitude above sea level: Max 2000m

Transportation and store: $-25^{\circ}\text{C} \sim +55^{\circ}\text{C}$ in short time (within 24h) it reaches $+70$. Under the limiting temperature, device should not suffer damage that can't recover, and it can work normally under normal conditions.



Technical feature

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Compact design:

Contain more function units with less space. large quantity to effectively enhance the protective safety performance.

Strong versatility for structure, flexible assembly.:

C type bar section of 25mm modulus can meet the demands of various structure and type, protection grade and operating environment.

Adopt standard module design:

Can be combined into protection, operation, transfer, control, regulation, measurement, indication etc such standard units. User can choose assembly according to requirement at will. Cabinet structure and drawer unit can be formed with more than 200 components.

Fine security:

Adopt high strength antflaming type engineering plastic pack in .

High technical performance:

Main parameters reach the advanced level at home.

Circuit control:

Operators send signals through components such as control buttons. After being processed and amplified by the control circuit, these signals drive switching components like circuit breakers and contactors to achieve the on-off control of the main circuit and supply power to the load.

Protection function:

Overload protection is realized by using thermal relays, electronic trip units, etc. Short-circuit protection is achieved by the instantaneous trip units of circuit breakers. The undervoltage protection device detects abnormal voltage and causes the circuit breaker to open, ensuring the safety of the equipment.

Withdrawable structure:

Each functional unit is placed in an independent drawer. The drawer is connected to the cabinet body through primary isolation contacts and secondary connectors. Pulling out the drawer can isolate the electrical components, which is convenient for maintenance, and the drawers have interchangeability.

Power distribution:

The busbar system uses copper bars or aluminum bars to evenly distribute the incoming power to each outgoing line unit. The outgoing line units are configured with switching and protection components according to the load requirements to achieve precise power supply.

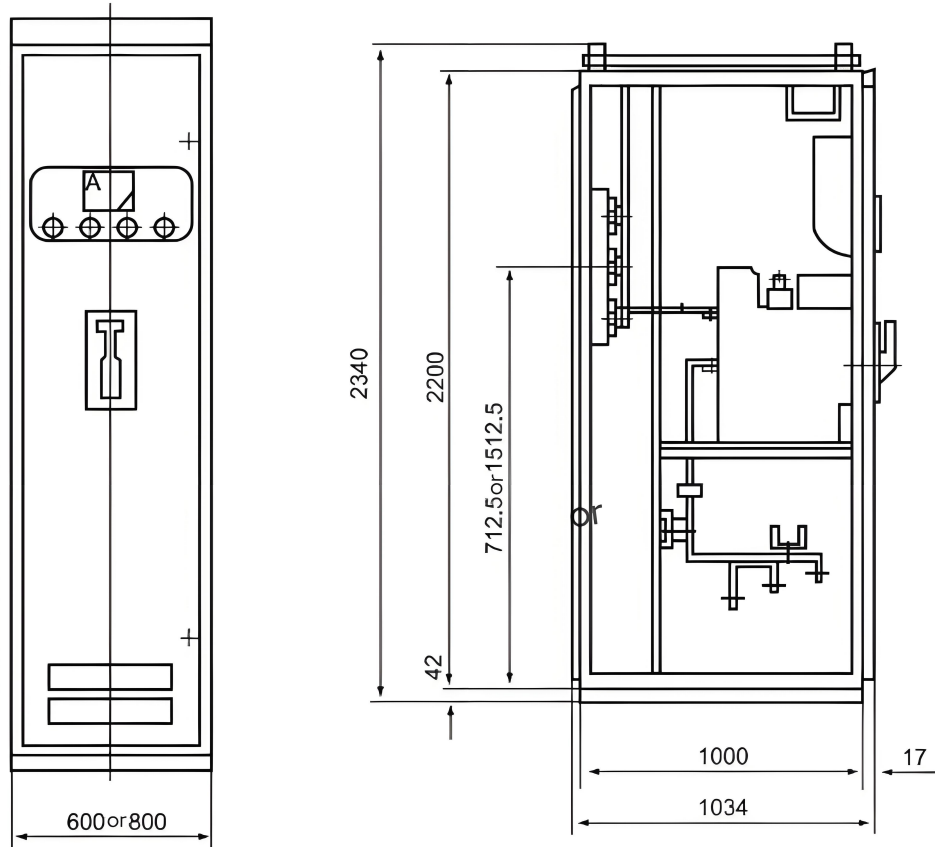
Rated working voltage (V)	Rated insulation voltage (V)	Rated working current (A)	
		Horizontal bus bar	Vertical bus bar
380、660	660、1000	630 - 5000	800 - 2000

Virtual value (IS)/peak value (kA) of rated short time withstand current		Protection grade of shell IP30、IP40
Horizontal bus bar	Vertical bus bar	Outline dimension H×W×D
50-100/ 105-250	60/130 -150	2200×600(800, 1000)×800(1000)

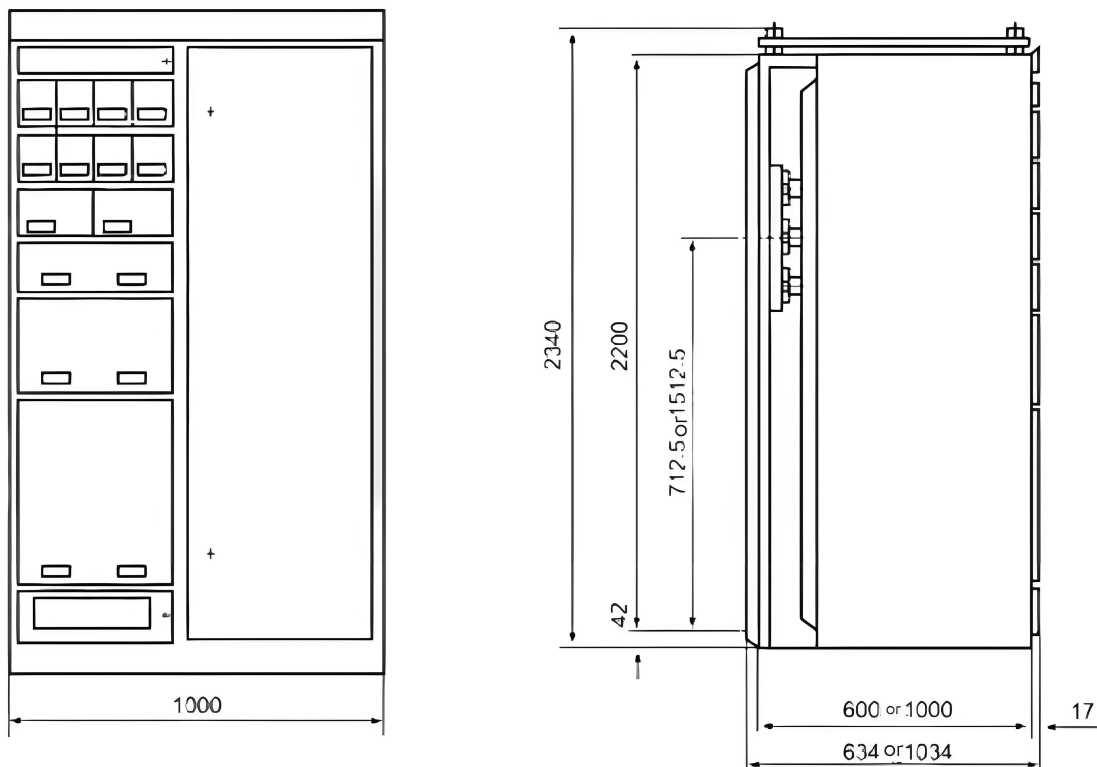
Rated working current of vertical bus bar: Draw-out type MCC with single side or double sides operation: 800A.
MCC with 1000mm depth and single operation: 800~2000A

Structure characteristics:

The basic cabinet of device is combined assembly structure. Basic structural pieces of cabinet is zinc plated, connected and firmed into basic bracket through self tapping locking screw or 8.8 grade square corner screw. According to the change demand of project, additionally add corresponding gate, closing board, baffle plate, installation support and the components of bus bar, function units, to assemble a complete set of device. Perform modulus to interior component and compartment size (Modulus unit e=25mm).



PC cabinet



Draw-out type MCC cabinet (Single side operation)



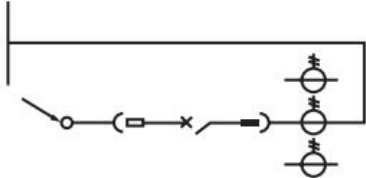
Field service operation and warranty issues:

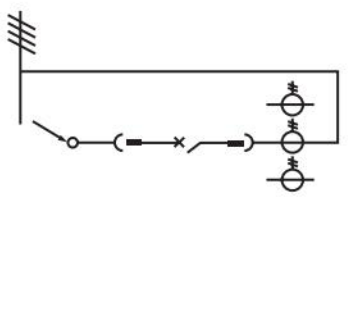
ROCKWILL® can provide competent, well trained field service representatives to provide technical guidance and advisory assistance for the installation, overhaul, repair and maintenance of ROCKWILL® equipment, processes and systems.

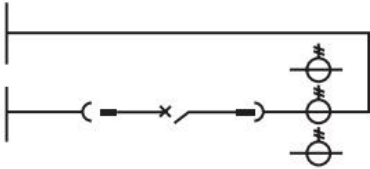
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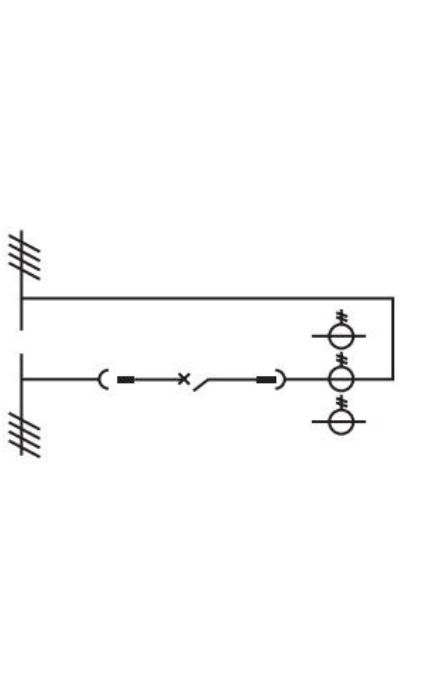
Email: rockwell@rockwill.com

Or check the website information: <https://www.cnrockwill.com/>

Scheme number	21	22	23	24	25	26	27	28	29	30
Primary scheme										
Cabinet width (mm)	400/600	800	1000	400/600	800	1000	600	800	1000	
Equipment chamber height	72E		72E		72E					
Max. working current	1500	2300	3150	1500	3000	4000	1600	3200	4000	
Main equipment	ME630~ ME - 1605 M16 BHG - 60II	ME2000~ ME2505~ BHG - 100	ME3200~ 3205 BHG - 120	AH6B~ AH - 16B BHG - 100	AH20CH~ AH - 30CH BHG - 120III	AH40CH BHG - 120II	M08~ M16 BHG - 100	M20~ M32 BHG - 100	M40 BHG - 120II	
Purpose	Incoming/outgoing line of cabinet top									

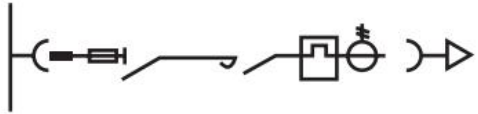
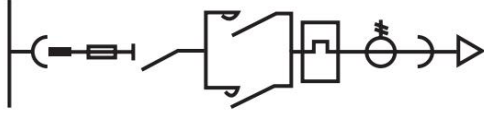
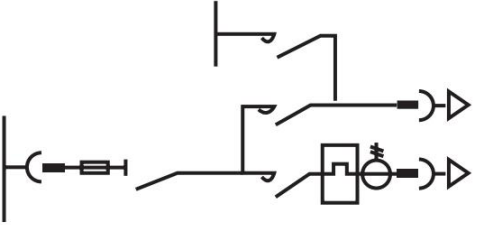
Scheme number	31	32	33	34	35	36	37	38	39	40
Primary scheme										
Cabinet width (mm)	600	800	1000	600	800	1000	600	800	1000	
Equipment chamber height	72E			72E			72E			
Max. working current	2000	3200	4000	2000	3200	3600		3200	4000	
Main equipment	F1 - 1250 ~F1 - 2000 BHG - 100	F2 - 2000 ~F4 - 3200 BHG - 100	F5 - 4000 BHG - 120	F1 - 1250 ~F1 - 2000 4 - pole switch BHG - 100	F2 - 2000 F2 - 3000 F3 - 3200 4 - pole switch	F4 - 3200 F4 - 3600 4 - pole switch BHG - 120II		M08~ M32 4 - pole switch BHG - 120II	M40 4 - pole switch BHG - 120	
Purpose	Incoming/outgoing line of cabinet top									

Scheme number	41	42	43	44	45	46	47	48	49	50
Primary scheme										
Cabinet width（mm）	600	800	1000	600	800	1000	600	800	1000	
Equipment chamber height	72E	72E			72E			72E		
Max. working current	1500	2300	3150	1600	3200	4000	1600	3200	4000	
Main equipment	ME630~ ME1605 BHG - 100	ME2000~ ME2505 BHG - 100	ME3200~ ME3205 BHG - 120	AH6B~ AH - 16B BHG - 100	AH20CH~ AH - 30CH BHG - 100	AH40C BHG - 120II	M08~ M32 BHG - 120	M20~ M16 BHG - 100	M40 BHG - 120II	
Purpose	Bus connection									

Scheme number	51	52	53	54	55	56	57	58	59	60
Primary scheme										
Cabinet width (mm)	600	800	1000	600	800	1000	600	800	1000	
Equipment chamber height	72E			72E			72E			
Max. working current	1600	3200	4000	1600	3000	3600		3200	4000	
Main equipment	F1 - 1250 ~F1 - 2000 BHG - 100	F2 - 2000 ~F4 - 3200 BHG - 100	F5 - 4000 BHG - 120	F1 - 1250 ~F1 - 1600 4 - pole switch BHG - 100	F2 - 2000~ F2 - 3000 4 - pole switch BHG - 120	F4 - 3200 F4 - 3600 4 - pole switch BHG - 120		M28~ M32 4 - pole switch BHG - 120II	M40 4 - pole switch BHG - 120	
Purpose	Bus connection									

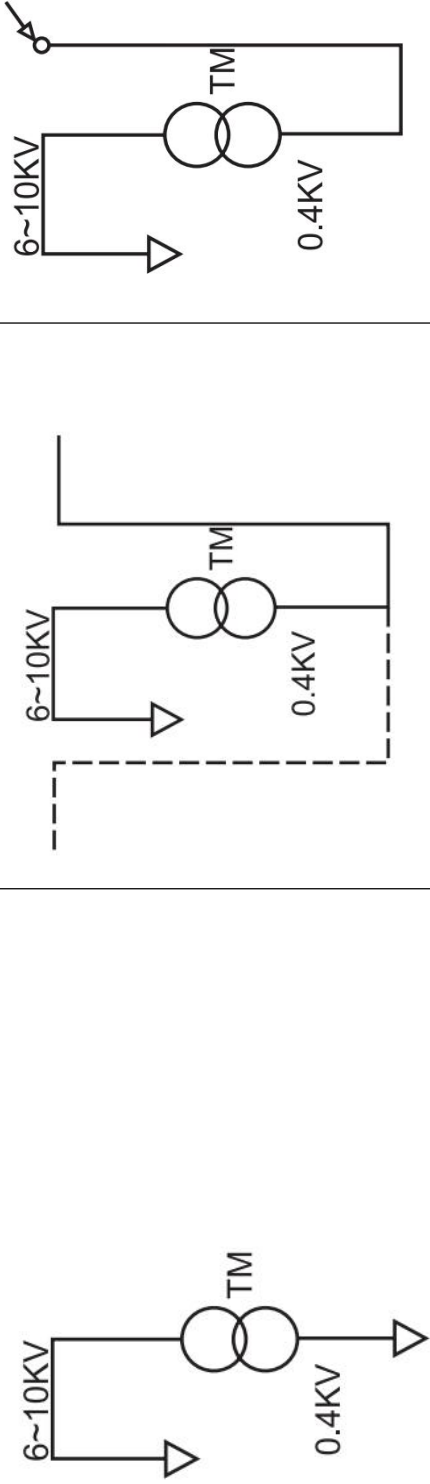
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Scheme number	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94
Primary scheme																				
Cabinet width (mm)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Equipment chamber height	16E	16E	8E/4	8E/2	8E/4	8E/2	8E/4	8E/2	8E	16E	24E	8E/2	8E	16E	24E	8E/2	8E	16E	24E	24E
Max. working current	300	500	7.5	15	7.5	15	7.5	15	45	75	160	15	37	65	110	7.5	15	55	110	110
Main equipment	DCHR 1 - 2 400A BHG - 60	DCHR 1 - 630A BHG - 60	S50 3 B16 - B25 BHG - 30	S50 3 B37 - B45 BHG - 30	NC100 L B16 - B25 BHG - 30	NC100 L B37 - B45 BHG - 30	S503 or NC100 L B16 - B25 T25 - 30	TG - 100 B B65 - B10 5 T105 - 40 BHG - 40	B65 - B10 5 T105 - 250 BHG - 40	TG - 225 B B65 - B10 5 T105 - 40 BHG - 40	TG - 400B EH370 TSA45 BHG - 30	S50 3 B16 - 45 T105 - 170 BHG - 40	TG - 100 B B65 - 85 T105 BHG - 40	TG - 225B B105 - 250 T250 BHG - 40	TG40 0B B250 T170 BHG - 40	S50 3 B16 BHG - 30	TG - 100B B37 TSA4 5 BHG - 30	TG - 225B B45 - 85 T105 BHG - 40	TG225 B105 - 170 T170 BHG - 40	
Purpose	Feed line		Irreversible	Irreversible		Irreversible	Irreversible							Reversible	BHG-40	Y/ Δ				

Scheme number	95	96	97	98	99	100	101	102	103	104	105	106	107
Primary scheme	  												
Cabinet width (mm)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Equipment chamber height	8E/4	8E/2	16E	24E	24E	8E/2	8E	24E	24E	8E/2	8E	16E	16E
Max. working current	7.5	22	55	110	160	15	30	65	100	7.5	15	55	90
Main equipment	NT - 00 KG64B B16 T16 or HH17 BHG30	NT - 00 KG64B B25 - 45 T25 - 45 or HH17 BHG30	QSA - 250 B65 - 170 T105 - 170 BHG - 40	QSA - 400 B170 - 250 T170 - 250 BHG - 40	QSA - 400 B250 - 370 T250 - 370 BHG - 40	NT - 00 KG64B B16 - 45 T16 - 45 or HH17 BHG30	QSA - 125 B65 - 85 T105 BHG - 30	QSA - 250 B105 - 170 T105 - 170 BHG - 40	NT - 2 B250 T250 BHG - 40	NT - 00 B16 T16 BHG - 30	QSA - 125 B25 - 45 TSA45 BHG - 30	QSA - 160 B45 - B85 T105 BHG - 40	QSA - 400 B105 - 170 T105 - 170 BHG - 40
Purpose	Irreversible					Reversible					Y/△		

Scheme number	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	
Primary scheme																	
Cabinet width (mm)	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	400	600	400	600	600	
Equipment chamber height	72E	72E	72E	72E	72E	72E	72E	72E	32E PC	72E	72E	72E	72E	72E	7E	16E	
Max. working current	1600 × 2	1600 × 2	1600 × 2	1600 × 2	1600 × 2	630 × 3	630 × 3	630 × 3	630	2500	4000	2000	4000				
Main equipment	ME630~ ME1605 (3P~4P) BHG-80	M08~ M10 (3P~4P) BHG-80	F1 1250~ F1 1600 (3P~4P) BHG-80	M08~ M1600 (3P~4P) BHG-80	F1 1250~ F11600 (3P~4P) BHG-80	AH630 or M08 BHG-80	M08 BHG-80	F1 1250 BHG-80	Select and combine models according to the 8E height - based or 165Emcc scheme	BHG-100 BHG-120 or provided by the user				DS862 -2 DX962 -2 DT862 -2 Maximum installation of 8 units	DS862 -2 DX962 -2 DT862 -2 Maximum installation of 8 units	DT 862 -3 units	
Purpose	Cable incoming or outgoing					Feeding				Metering		Bus connection	Metering				

Scheme number	124	125	126	127	128	129	130	131
Primary scheme								
Cabinet width (mm)	600	800	600	800	600 + 200	600 + 400	600 + 200	600 + 400
Equipment chamber height	72E	72E	72E	72E	72E	72E		
Max. working current	(8 × 16)128	(12 × 16)192	(8 × 16)128	(12 × 16)192	(8 × 16)128	(16 × 16)256	(8 × 16)128	(16 × 16)256
Main equipment	QSA - 400 NT or RT20 B30C BHG - 40 BCMJJ3 (10~16KVAR)	QSA - 400 NT or RT20 B30C BCMJJ3 (10~16KVAR)	QSA - 400 NT or RT20 B30C BCMJJ3 (10~16KVAR)	QSA - 400 NT or RT20 B30C BHG - 40 BCMJJ3 (10~16KVAR)	DCHR1 - 2 NT or RT20 B30C BHG - 40 BCMJJ3 (10~16KVAR)	DCHR1 - 3 NT or RT20 B30C BHG - 40 BCMJJ3 (10~16KVAR)	DCHR5 - 2 NT or RT20 BCMJJ3(10~16) BHG - 40	DCHR1 - 3 NT or RT20 B30C BCMJJ3(10~16) BHG - 40
Purpose	Automatic control compensation cabinet	Automatic control compensation cabinet	Compensation cabinet	Compensation cabinet	Automatic control compensation cabinet	Automatic control compensation cabinet	Compensation cabinet	Compensation cabinet

Scheme number	132	133	134	135	136	137	138	139	140	141	142	143
Primary scheme												
Device capacitance (kVA)	200~500	630 - 800	1000~1600	2000~2500	200~500	630 - 800	1000~1600	2000~2500	200~500	630 - 800	1000~1600	2000~2500
Outline dimension(height depth width)	2200×1800×1200	2200×2200×1400	2400×2400×1600	2600×2600×1600	2200×1800×1200	2200×2200×1400	2400×2400×1600	2600×2600×1600	2200×1800×1200	2200×2200×1400	2400×2400×1600	2600×2600×1600
Main equipment Electric power transformer	SCB - 200/10 SCB - 250/10 SCB - 315/10 SCB - 400/10 SCB - 500/10	SCB - 630/10 SCB - 800/10	SCB - 1000/10 SCB - 1250/10 SCB - 1600/10	SCB - 2000/10 SCB - 2500/10 SCB - 300/10 SCB - 400/10 SCB - 500/10	SCB - 200/10 SCB - 250/10	SCB - 630/10 SCB - 800/10	SCB - 1000/10 SCB - 1250/10 SCB - 1600/10	SCB - 2000/10 SCB - 2500/10	SCB - 200/10 SCB - 250/10 SCB - 300/10 SCB - 400/10 SCB - 500/10	SCB - 630/10 SCB - 800/10	SCB - 1000/10 SCB - 1250/10	SCB - 2000/10 SCB - 2500/10 SCB - 1600/10
Purpose	Cable lower incoming, lower outgoing			Cable lower incoming, bus side outgoing			Able lower incoming, busbar upper outgoing					

Scheme number	144	145	146	147	148	149	150	151	152	153	154	155
Primary scheme												
Device capacitance (kVA)	200~500	630~800	1000~1600	2000~2500	200~500	630~800	1000~1600	2000~2500	200~500	630~800	1000~1600	2000~2500
Outline dimension(h eight depth width	2200×1800×1200	2200×2200×1400	2400×2400×1600	2600×2600×1600	2200×1800×1200	2200×2200×1400	2400×2400×1600	2600×2600×1600	2200×1800×1200	2200×2200×1400	2400×2400×1600	2600×2600×1600
Main equipment Electric power transformer	SCB - 200/10 SCB - 250/10 SCB - 315/10 SCB - 400/10 SCB - 500/10	SCB - 630/10 SCB - 800/10	SCB - 1000/10 SCB - 1250/10 SCB - 1600/10	SCB - 2000/10 SCB - 2500/10 SCB - 300/10 SCB - 400/10 SCB - 500/10	SCB - 200/10 SCB - 250/10 SCB - 300/10 SCB - 400/10 SCB - 500/10	SCB - 630/10 SCB - 800/10	SCB - 1000/10 SCB - 1250/10 SCB - 1600/10	SCB - 2000/10 SCB - 2500/10 SCB - 300/10 SCB - 400/10 SCB - 500/10	SCB - 200/10 SCB - 250/10 SCB - 300/10 SCB - 400/10 SCB - 500/10	SCB - 630/10 SCB - 800/10	SCB - 1000/10 SCB - 1250/10	SCB - 2000/10 SCB - 2500/10 SCB - 1600/10
Purpose	busbar side incoming, cable lower outgoing				side outgoing, side outgoing				Bus side incoming, upper outgoing			

Instruction: 1.The transformer and its outgoing and incoming line can be chosen according to requirement.. 2.When on-load voltage tapping is installed, the width of outline dimension should be widened by 500mm or deepened by 400mm, please negotiate with factory for details. 3.The instruction and diagram reference will be updated successively as the times goes by, and we will not notice separately, so please contact our company.