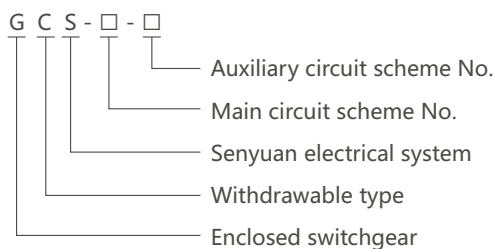




General

1. Rating: Rated voltage 400V, 690V, rated current reach to 4000A.
2. Application: mainly applicable in place with high automaticity and need to communicate with computer, like large power station and petrochemistry system, as the low voltage distribution device of the distribution and motor controlling, and reactive power compensation in power system.
3. Level of protection IP30, IP40
4. Standard: IEC60439-1

Type designation



Working Conditions

1. Ambient air temperature: $-15^{\circ}\text{C} \sim +40^{\circ}\text{C}$
Daily average temperature: $\leq 35^{\circ}\text{C}$
When the actual temperature exceed the range, it should be used by reducing the capacity accordingly.
2. Altitude: $\leq 2000\text{m}$
3. Relative humidity: $\leq 50\%$, when temperature is $+40^{\circ}\text{C}$
When temperature is low, larger relative humidity is allowed. when it is $+20^{\circ}\text{C}$, relative humidity can be 90%. Since the temperature change will make out condensation.
4. Installation inclination: $\leq 5\%$
5. Applicable in the places without corrosive and flammable gas.

Note: Customized products are available.

Main technical Parameter

Sheet 1

Item		Data
The main circuit of rated voltage(V)		AC400, 690
The auxiliary circuit of rated voltage(V)		AC220, 400; DC110, 220
Rated frequency(Hz)		50(60)
Rated insulation voltage(V)		660(1000)
Rated current(A)	Horizontal busbar	≤4000
	Vertical bus(MCC)	1000
Busbar rated short time withstand current(KA/1S)		50, 80
Busbar rated peak withstand current(KA/0.1s)		105, 176
Power frequency test voltage (V/1Min)	Main circuit	2500
	Auxiliary circuit	2000
Main Busbar	3 Phase 4 Wires	A, B, C, N
	3 Phase 5 Wires	A, B, C, PE, N

Products construction and characteristic

Construction feature

1. C type material adopted for the main frame, frame use the form of Assembling structure. Main frame have the installation modular hole E=20mm
2. The Compartment is divided into functional unit rooms, bus room, cable rooms, Each unit is relatively independent ."
3. Take the drawer as main body, meanwhile have the draw out type and fixed type, can mixed combination, Arbitrary selection.
4. Cabinet size (refer to sheet 2)

Sheet 2

Height	2200			
Width	400	600	800	1000
Depth	600	800	1000	

5. Functional unit

- 1) The higher modulus of drawer is 160mm, divide to 1/2 unit, 1 unit, 1.5unit, 2 unit, 3 unit 5 different size series. Unit loop rated voltage below 400A.
- 2) The same functional unit of the drawer has good interchangeability.
- 3) Each MCC cabinet can install max 11 set drawer with 1 unit, or 22 sets drawer with 1/2 unit. Drawer with more than 1 unit adopt multi-functional plate .
- 4) Drawer incoming and outgoing line adopt the same standardized plug of slice structure with different quantity according to current.
- 5) The transfer between ½ unit drawer and cable cabinet use ZJ-2 adapter.
- 6) The transfer between drawer which is above 1 unit and cable cabinet use standardized bar type or tube type ZJ-1 adapter according to different current rated.
- 7) Drawer panel have the open, close, test, draw out position indicator.
- 8) Drawer unit have Mechanical linkage.
- 9) Feeder cabinet and motor control cabinet have special cable insulation cabinet. The connection between functional unit and cable cabinet adopt adapter. Not only improves the reliability of the cable, and greatly facilitates the user safety and repair of cable.

6. Busbar

In order to improve the bus dynamic thermal stability and improved contact surface temperature rise, device use TMY-T2 series of hard copper, Copper plate surface will be treated with new advanced oxidation process. The performance index is superior to the traditional tin plating process.

1) Horizontal busbar

Horizontal busbar is arranged in Busbar compartment at the back of cabinet, double busbar for above 2500 A, single layer busbar for current below 2500A. Each phase is composed of 4 or 2 pcs busbar ,improve the Short circuit strength of bus.

2) Vertical bus

"L" shape hard copper tin bus is used for vertical busbar of drawer.

L type bus specification(mm):

(Height×thickness)+(button×Thickness)(50×5)+(30×5)

Rated current 1000A

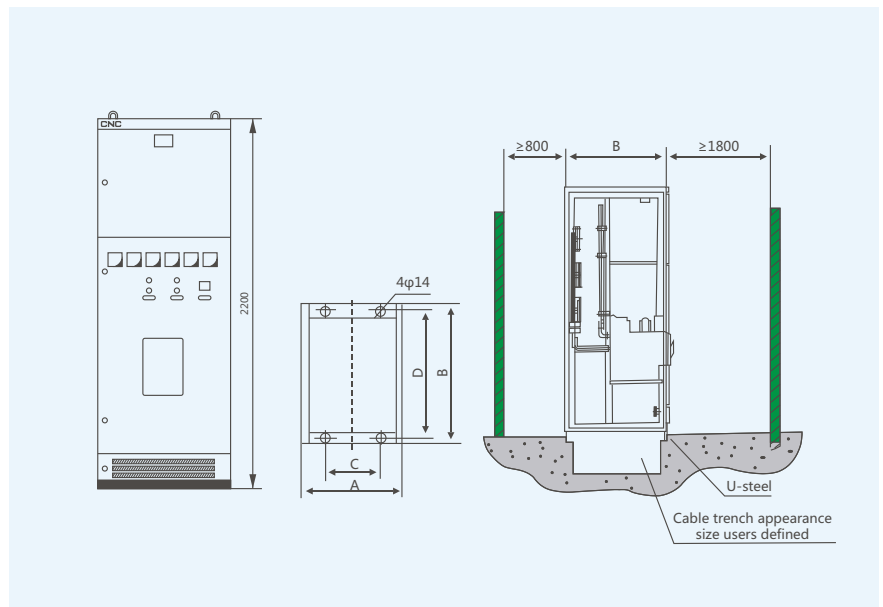
3) Neutral grounding busbar

Adopt hard copper. Through the level of neutral grounding wire (PEN) or ground +neutral line (PE+N).

Schematic diagram of foundation

Electric power, communication cabinet installation diagram

Picture 1



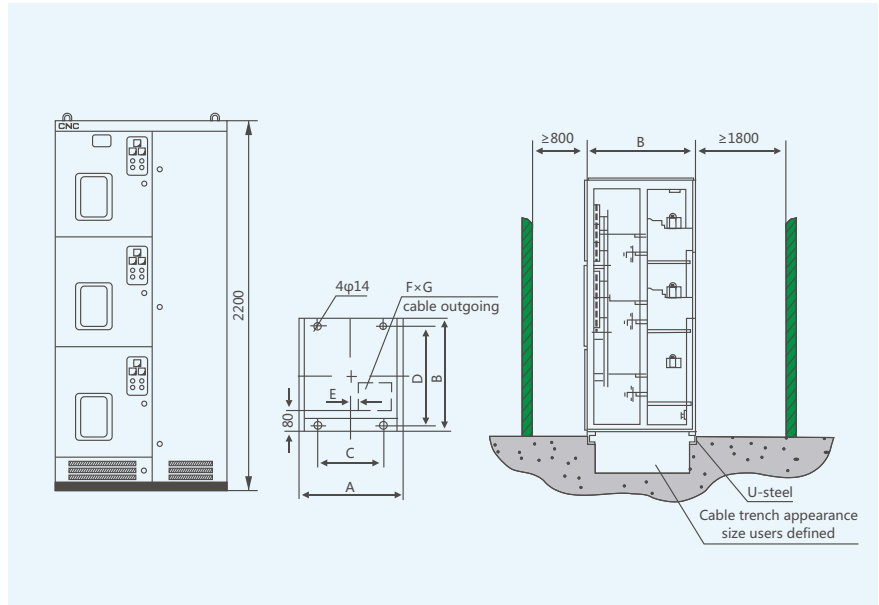
(mm) Sheet 3

Cabinet code	A	B	C	D	Remark
GCS-TG1010-4	1000	1000	900	900	Communication cabinet
GCS-TG0810-4	800	1000	700	900	Electric power cabinet
GCS-TG0808-4	800	800	700	700	Electric power cabinet
GCS-TG0608-4	600	800	500	700	Electric power cabinet

GCS
Low-Voltage Switchgear, Withdrawable Type

PC cabinet installation diagram

Picture 2

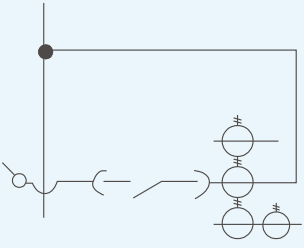
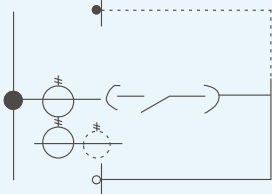
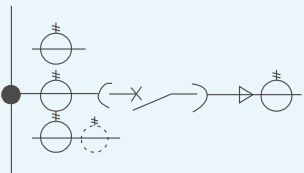
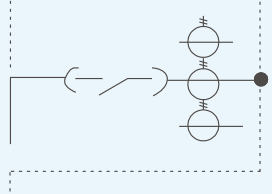


(mm) Sheet 4

Cabinet code	A	B	C	D	E	F	F×G
GCS-TG1010-2	1000	1000	1000	1000	1000	1000	400×400
GCS-TG0810-2	800	1000	1000	1000	1000	1000	200×400
GCS-TG1008-2	800	800	800	800	800	800	400×400
GCS-TG0808-2	600	800	800	800	800	800	200×400

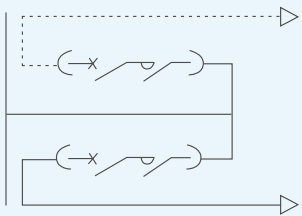
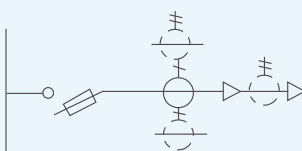
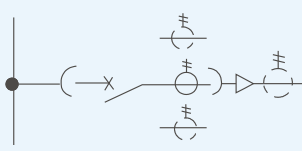
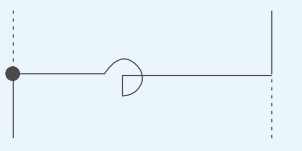
Main single line diagram

Sheet 5

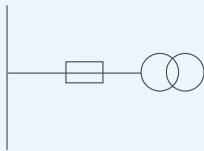
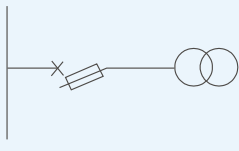
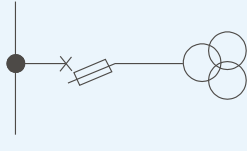
Program No.	01	02	03	04																																																											
Single line diagram																																																															
Application	Electric power (up incoming)				Electric power (bottom incoming)				Electric power (Electric cable incoming)				Communication																																																		
Specification No.	A	B	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D	E	F	G																																			
Short time withstand current/Instantaneous withstand current(kA)	80/176							50/105							50/105							80/176							50/105																																		
Rated current(A)	4000 3150 2500 2000 1600 1000 630							30/63							30/63							30/63							4000 3150 2500 2000 1600 1000 630																																		
YCW1-4000	1														1														1																																		
YCW1-3200	1														1														1																																		
YCW1-3200	1														1														1																																		
YCW1-2000	1														1														1																																		
YCW1-2000	1														1														1																																		
YCW1-2000	1														1														1																																		
YCW1-2000	1														1														1																																		
SDL-□																																																															
SDH-□□/5	3(4)							3(4)							3(4)							3(4)							3(4)							3(4)							3(4)							3(4)							3(4)						
Cabinet width(mm)	800(1000)							600							800(1000)							600							800							600							1000							800													
Cabinet depth(mm)	1000							800							1000							800							1000							800							1000							800													
Small compartment height usage(mm)																																																															

Program No.	05		06			07		08		
	Single line diagram		Feeder			Dual power switch manually		Dual power switch manually		
Application	Bus switching			Feeder			Dual power switch manually		Dual power switch manually	
Specification No.	A	B	C	A	B	C	A	B	A	B
Short time withstand current/Instantaneous withstand current(kA)	50/105			50/105			50/105		50/105	
Rated current(A)	30/63			30/63			30/63		30/63	
YCW1-2000	1600	1000	630				1000	630	1000	630
YCW1-2000	1			1					1	
YCW1-2000		1			1			1		1
QPS-1000							1		1	
QPS-630								1		1
SDL-□	(1)	(1)	(1)							
SDH-□□/5	1(3)	1(3)	1(3)				3(4)	3(4)	3(4)	3(4)
Cabinet width(mm)	400(600)			1000			1000		1000	
Cabinet depth(mm)	800(1000)			800(1000)			800		800	
Small compartment height usage(mm)	640									

Continued Sheet 5

Program No.	09	10	11	12
Single line diagram				
Application	Dual power supply switching	Feeder	Feeder	Current-limiting reactor
Specification No.	A B	A B C D	A B C	
Short time withstand current/Instantaneous withstand current(kA)	50/105 30/63	50/105 30/63	50/105 30/63	
Rated current(A)	400 250	630 400 250 160	400 250 100	600
QSA-630		1		
QSA-400		1		
QSA-250		1		
QSA-160		1		
Current-limiting reactor600A0.0084Q/φ				3
B370, LR1, CJ35	1			
B250, LR1, CJ35	1			
TG-400BD, YCM1-400L, TM30	1 1		1	
TG-225BD, YCM1-225M, TM30			1	
TG-100BD, YCM1-100M, TM30				
SDL-□		(1) (1) (1) (1)	(1) (1) (1)	
SDH-□□/5		1(3) 1(3) 1(3) 1(3)	1(3) 1 1	
Cabinet width(mm)	800(1000)	1000	800(1000)	800
Cabinet depth(mm)	600(800)	800(1000)	600(800)	600
Small compartment height usage(mm)	480×2	480	320	240(160)

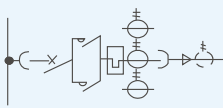
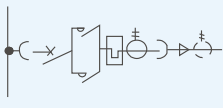
Main electric components

Program No.	13	14	15
Single line diagram			
Application	Potential transformer	Potential transformer	Potential transformer
Specification No.			
Rated current(A)			
QSA-63	1	1	1
NT00-□	3		
JDG-0.5 380/100	2	2	1
JSGW-0.5			
SDH-□□/5			
Cabinet width(mm)	Install in the electric power cabinet or 05 scheme Switching cabinet, connect with branch bus,		
Cabinet depth(mm)	Not occupy the space.		
Small compartment height(mm)			

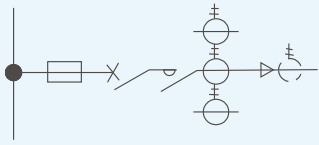
Continued Sheet 5

Program No.	16	17	18	19
Single line diagram				
Application	Motor (irreversible)		Motor (irreversible)	
Specification No.	A B C	A B	A B C	
Max control motor power (kW)	100 75 75	37 15	7.5	100 75 75
QSA-250	1			1
QSA-160	1			1
QSA-125	1	1		1
HH17-63		1		
NT00-□			3	
B250, LC1, CJ35	1			2
B170-105, LC1, CJ35	1 1			2 2
B85 or LC1-D80		1		
B45 or LC1-D32		1		
B16 or LC1-D18			1	
T85, LR1		1		
TSA45, LR1		1		
T16, LR1	1 1 1		1	
SDL-□	(1) (1) (1)	(1) (1)	(1)	(1) (1)
SDH-□□/5	3 3 3	1 1	1	3 3 3
Small compartment height usage(mm)	480 320 320	160	160	480
Main electric components				

Program No.	20	21	22	23
Single line diagram				
	Motor (reversible)		Motor (irreversible)	
Specification No.	A B	7.5	A B C	A B
Max control motor power (kW)	37 15		100 75 75	37 15 7.5
QSA-125	1			
HH17-63	1	3		
NT00-□				
YCM1-400L or TG-400BD, TM30			1	
YCM1-225M, TM30, TG225BD			1 1	
YCM1-1000L or TG-1000BD, TM30				1 1
NZMS4, TM30				1
B250, LC1, CJ35			1	
B170-105, LC1, CJ35			1 1	
B85 or LC1-D80	2			1
B45 or LC1-D32	2			1
B16 or LC1-D18		2		1
T85, LRI	1			1
TSA45, LC1	1			1
T16, LRI		1	1 1 1	1
SDL-□	(1) (1)	(1)	(1) (1) (1)	(1) (1) (1)
SDH-□□/5	1 1	1	3 3 3	1 1 1
Small compartment height usage(mm)	320 160	160	480 320 320	160
Main electric components				

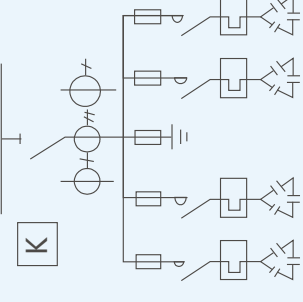
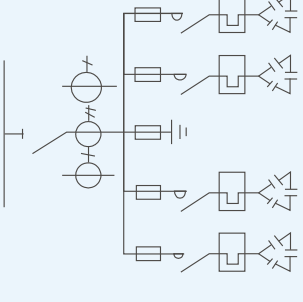
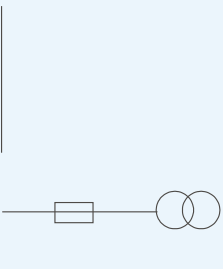
Program No.	24	25	26	27
Single line diagram				
Application	Motor (reversible)	Motor (reversible)		
Specification No.	A B C	A B C	A B C	
Short time withstand current/ Instantaneous withstand current(kA)	50/105 30/63		50/105 30/63	
Max control motor power (kW)	100 75 75		37 15 7.5	
YCM1-400L or TG-400BD, TM30	1			
YCM1-225M, TM30	1			
YCM1-1000M or TG-100BD, TM30	1		1 1	
NZMS4, TM30			1	
B250, LC1, CJ35	2			
B170-105, LC1, CJ35	2 2			
BB5 or LC1-D80			2	
B45 or LC1-D32			2	
B16 or LC1-D18			2	
T85, LR1			1	
TSA45, LR1			1	
T16, LR1	1 1 1		1	
SDL-□	(1) (1) (1)		(1) (1) (1)	
SDH-□□/5	3 3 3		1 1 1	
Cabinet width(mm)	800(1000)			800(1000)
Cabinet depth(mm)	600(800)			600(800)
Small compartment height usage(mm)	480	320	240	160

Main electric components

Program No.	28	
Single line diagram		
Application	Motor (irreversible)	
Specification No.	A B	
Max control motor power (kW)	200 160	
NT3-□	3 3	
YCM1-630L or TG-600BD	1	
YCM1-400L or TG-400BD	1	
B370, LC1, CJ35	1 1	
T16, LR1	(1) (1)	
LJZ-□		
SDH-□□/5	3 3	
Main electric components		
Cabinet width(mm)	1000	
Cabinet depth(mm)	800(1000)	
Small compartment height usage(mm)	800	

Continued Sheet 5

Program No.	30	31	32	33
Single line diagram				
Application	Y-Δ Start			
Specification No.	A B	A B	A B	A B
Max control motor power (kW)	160 90	37 15	160 90	37 15
QSA-400~250			1 1	
QSA-125				1
HH17-63				1
NT3-□	3			
TG-400B	1			
YCM1-225 or TG-225D	1			
YCM1-100M or TG-100D		1 1		
B370+B250	2+1		2+1	
B250+B170	2+1		2+1	
B85 or LC1-D80		3		3
B45, TC1-D32 or 3TB44				3
T85		1		1
TSA45				1
T16	1 1		1 1	
SDL-□	(1) (1)	(1) (1)	(1) (1)	(1) (1)
SDH-□□/5	3 3	1 1	1 1	1 1
Cabinet width(mm)	1000			
Cabinet depth(mm)	800(1000)		800(1000)	
Small compartment height usage(mm)	1120 960	320	800	320

Program No.	34	35	36
Single line diagram			
Application	Static Var Compensator		
Specification No.	A B C	A B C	Public power
Max control motor power (kW)	160 128 96	160 128 96	
QA-400	1 1 1	1 1 1	
am-32	30 24 18	30 24 18	
NT00-□			3
JBK3-400			1
B30C	10 8 6	10 8 6	
T45, LR1	10 8 6	10 8 6	
BCMJ-0.4-16-3	10 8 6	10 8 6	
SDH-□□/5	3 3 3	3 3 3	
Cabinet width(mm)	1000 800		
Cabinet depth(mm)	800(600)		
Small compartment height usage(mm)			