

 EUROCHEM LLC "EUROCHEM NORTH-WEST-2"	AMMONIA AND UREA PRODUCTION, KINGISEPP	NEWJCM
	3000 MTPD AMMONIA 4000 MTPD UREA MELT AND GRANULATION PLANT	

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PROJECT NAME НАЗВАНИЕ ПРОЕКТА	3000 MTPD AMMONIA&4000 MTPD UREA MELT AND GRANULATION PLANT
PROJECT NO. Номер ПРОЕКТА	24136
PO DESCRIPTION описание	3000 MTPD AMMONIA
DOCUMENT TITLE Заголовок документа	Feed Gas VFD Drawing
TAG NO. /Номер бирки	(11-100-J) Feed Gas Compressor
Doc. NO.	4124-GP-VD-LG11111100J0004

2	IFR	Apr.18,2025	L.Y	Q.Q	X.SJ
1	IFR	Mar.3,2025	L.Y	Q.Q	X.SJ
0	IFR	Nov.27,2024	L.Y	Q.Q	X.SJ
REV.	ISSUE PURPOSE Причина проблемы	DATE дата	WRITTEN BY АВТОР:	CHECKED BY ПРОВЕРЕНО	APPROVED BY ОДОБРЕНО

WOLONG

WOLONG ELECTRIC GROUP
LIAONING RONGXIN ELECTRIC DRIVE CO.,LTD.

0802RX109531A

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Design

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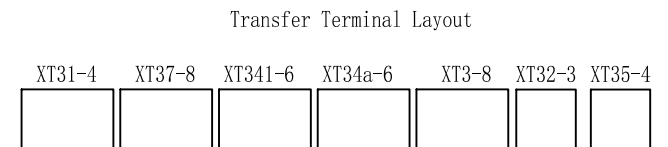
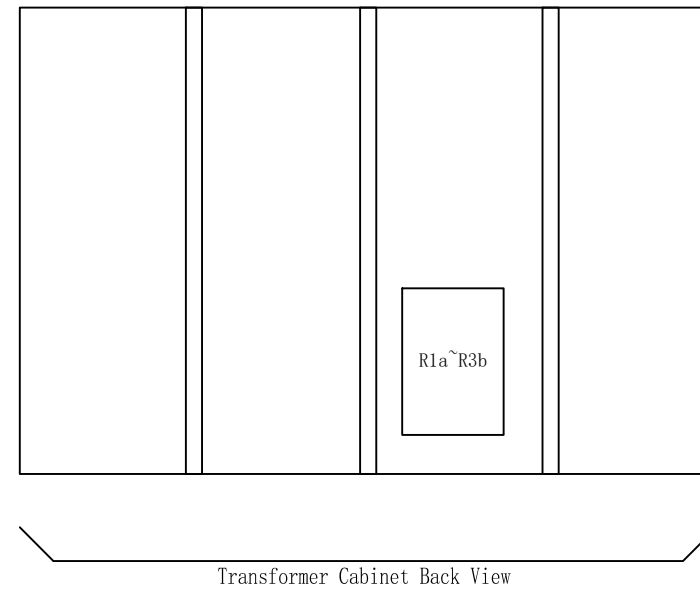
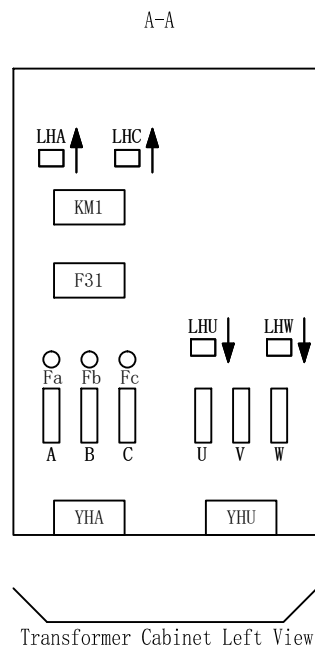
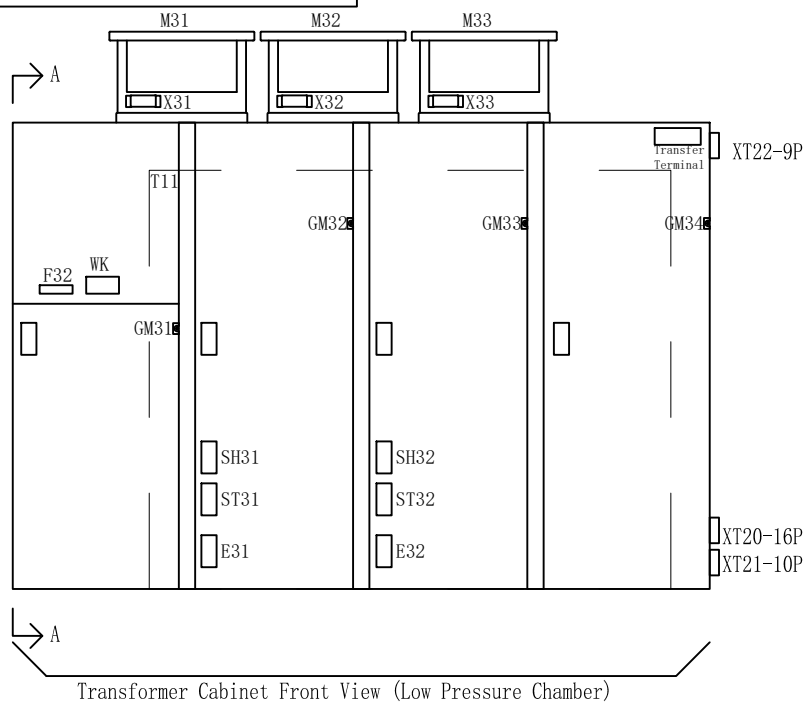
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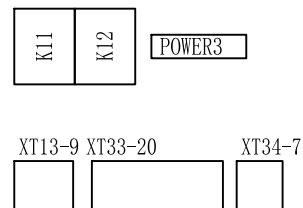
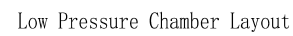
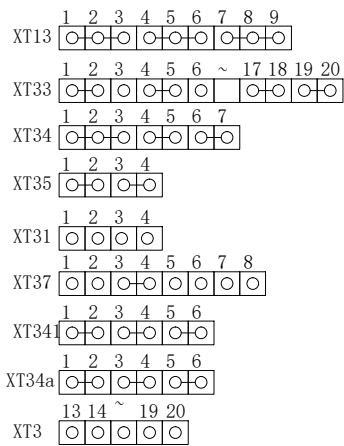
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[illegible]



30	XT35	Terminal	U2. 5	4	
29	E31 E32	heater	AC220V	2	
28	SH31 SH32	sensor		2	
27	ST31 ST32	sensor		6	
26	XT32	Terminal	U6	3	
25	K11 K12	Contactora	DC220V	2	
24	KM1	Incoming Switch	12kV 630A	1	
23	YHA/YHU	MV Detection Device		2	
22	R1a-R3b	Charging Resistor		6	
21	GM31-GM34	Travel Switch		4	
20	M31-33, X31-33	Fan And Terminal	560/TB1506	3	
19	LHU/LHW	Current Sensor	500A	2	
18	LHA/LHC	Current Sensor	500A	2	
17	XT3	Terminal	U2. 5	8	
16	XT34a	Terminal	U6	6	
15	XT341	Terminal	U6	6	
14	XT37	Terminal	U6	8	
13	XT31	Terminal	U16	4	
12	XT34	Terminal	U2. 5	7	
11	XT33	Terminal	U2. 5	20	
10	XT13	Terminal	U2. 5	9	
9	XT22	Plug Terminal	9P	1	
8	XT21	Connector	10P	1	
7	XT20	Connector	16P	1	
6	POWER3	Switching Power Supply	65W $\pm$ 15V	1	
5	F32	Voltage Monitor		1	
4	WK	Temperature Controller		1	
3	Fa/Fb/Fc	Voltage Monitor Sensor		3	
2	F31	Surge Arrester		1	
1	T11	Phase Shifting Transformer		1	
NO.	Label	Designation	Specification	QTY.	Mark



					VFD General Layout I I	0802RX109531A				Version	
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AI and AO

External	Terminal	Internal
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AI
4~20mA

Speed Given
Closed Loop
Feedback/ Spare
Spare

X3

X3:1		1013+
X3:2	○	1013-
PE	↗	
X3:3		1014+
X3:4	○	1014-
PE	↗	
X3:5		1015
X3:6	○	1000a
PE	↗	

AO
4~20mA

Motor Current
Motor Voltage
Motor Speed
Motor Power

X3

X3:7		2005
X3:8	○	
PE	↗	
X3:9		2006
X3:10	○	1000a
PE	↗	
X3:11		2007
X3:12	○	1000a
PE	↗	
X3:13		2008
X3:14	○	1000a
PE	↗	

X3

X3:15		5001
X3:16		5002
X3:17		5003
X3:18		1000a
PE	↗	
X3:19		P+15c
X3:20		P-15c
X3:21		1000c

Modbus Communication /Spare

X3

X3:22		1RS485A
X3:23		
X3:24		1RS485B
PE	↗	
X3:25		

Motor Temperature 1

XD6

XD6:1		BY1-1
XD6:2		BY1-2
XD6:3		BY1-3
XD6:4		BY2-1
XD6:5		BY2-2
XD6:6		BY2-3
XD6:7		BY3-1
XD6:8		BY3-2
XD6:9		BY3-3
XD6:10		BY4-1
XD6:11		BY4-2
XD6:12		BY4-3
XD6:13		BY5-1
XD6:14		BY5-2
XD6:15		BY5-3
XD6:16		BY6-1
XD6:17		BY6-2
XD6:18		BY6-3
XD6:19		BY7-1
XD6:20		BY7-2
XD6:21		BY7-3
XD6:22		BY8-1
XD6:23		BY8-2
XD6:24		BY8-3

G1

G2

G3

G4

G5

G6

G7

G8

DI

External	Terminal	Internal
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DI
No Power Contact
VFD Provides Power Supply

Remote Start
Remote Stop
Remote Reset
Remote E-Stop
Upstream MV Auxiliary Remote
Forward/Reverse
Spare/Charging Allowed

X2

X2:1	○	P24b
X2:2	○	3001a
X2:3	○	3002a
X2:4	○	3003a
X2:5	○	3004a
X2:6	○	3005a
X2:7	○	3006a
X2:8	○	3007a
X2:9	○	3008a
X2:10	○	3009a
X2:11	○	3010a
X2:12	○	3011a
X2:13	○	3012a
X2:14	○	3013a
X2:15	○	3014a
X2:16	○	3015a
X2:17	○	3016a

KM12

X2:18	○	
X2:19	○	3014a

KM1

X2:20	○	P24b
X2:21	○	3006a
X2:22	○	3011a
X2:23	○	3012a
X2:24	○	3013a
X2:25	○	3014a

Remote E-Stop

Remote E-Stop

Upstream MV Auxiliary

X6

X6:1		XP103
X6:2		XP102
X6:3		XP106
X6:4		XP105
X6:5		XP116
X6:6		XP117

D0

black 1.5mm²	Internal	Terminal	External
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11 14 4001a

Ko1 4001b

11 14 4002a

Ko2 4002b

11 14 4003a

Ko3 4003b

11 14 4004a

Ko4 4004b

11 14 4005a

Ko5 4005b

11 14 4010a

Ko10 4010b

11 14 4015a

Ko15 4015b

11 14 4017a

Ko17 4017b

11 14 4018a

Ko18 4018b

11 14 4020a

Ko20 4020b

11 14 4016a

Ko16 4016b

21 22 4001c

Ki5 3005d

X4

X4:1		
X4:2		
X4:3		
X4:4		
X4:5		
X4:6		
X4:7		
X4:8		
X4:9		
X4:10		
X4:11		
X4:12		
X4:13		
X4:14		
X4:15		
X4:16		
X4:17		
X4:18		
X4:19		
X4:20		
X4:21		
X4:22		
X4:23		
X4:24		
X4:25		
X4:26		
X4:27		
X4:28		
X4:29		
X4:30		
X4:31		
X4:32		
X4:33		
X4:34		
X4:35		
X4:36		
X4:37		
X4:38		
X4:39		
X4:40		
X4:41		

VFD Running

VFD Fault

VFD Ready

VFD Alarm

MV Switch On Allowed

MV Indication

Cocal/Remote Indication

Forward/Reverse Indication

DOL/VFD Indication

Spare

VFD Stop

Input Switch On

Input Switch Off

Output Switch On

Output Switch Off

Bypass Switch On

Bypass Switch Off

Switch Cabinet

Door Locked

Fan Interlock/Spare

Cancel short connection when the fans interlocks.

X4:42

X4:43

3019a'

3019a''

Fan Chain

Cabinet Door Interlock/Spare

Cancel short connection when the cabinet door interlocks.

X4:44

X4:45

3009a'

3009a''

Door Chain

4005g

4005c

4005c

4005d

X6:7

X6:8

X6:9

X6:10

trip MV (Normally close)

trip MV (Normally open)

trip MV (common port)

To QF0

Share(General parts Register

Design

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General No.of original tracing dring

General No.of Tracing dring

sign

Date

Revision

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Modification file No.

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VFD Control Interface

0802RX109531A

Drawing Mark

Special Mark

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Total: 16 Pages

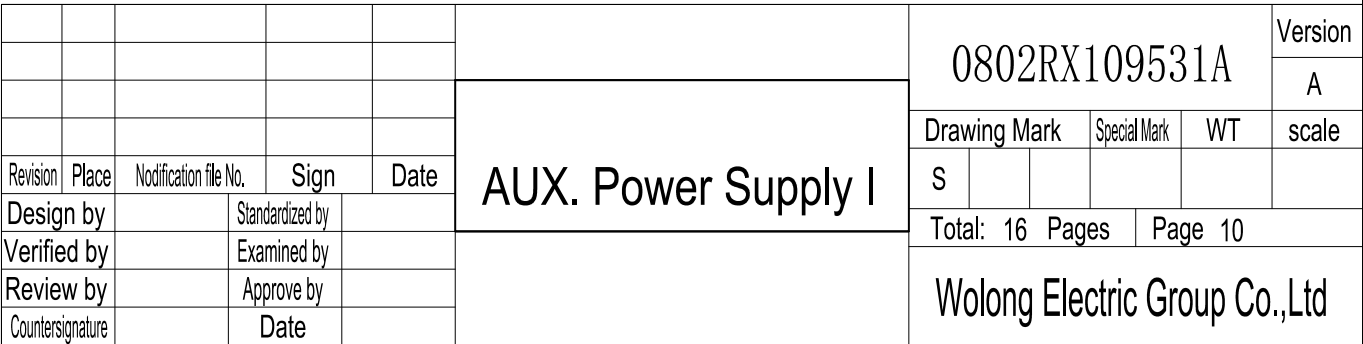
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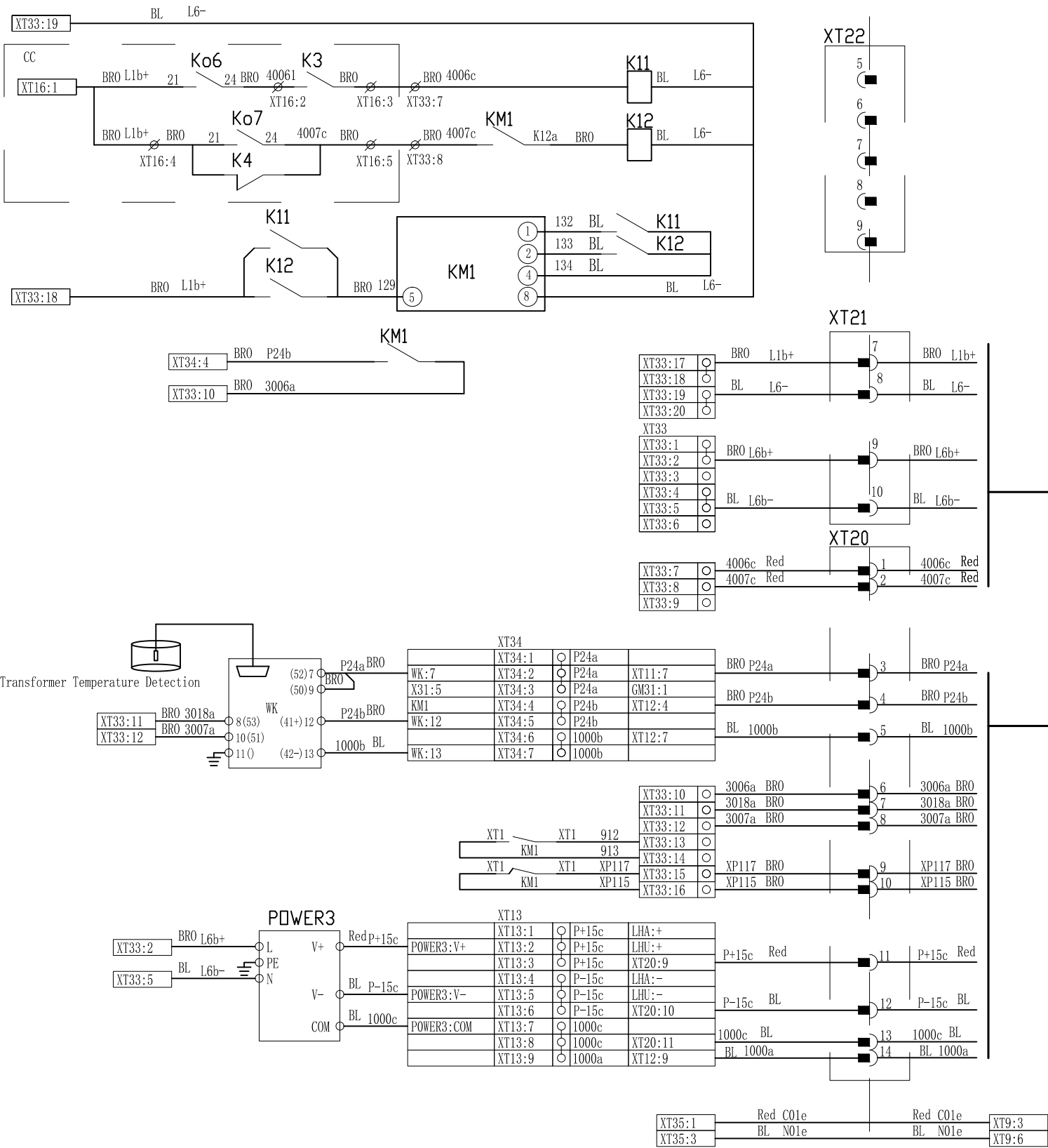
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Version

A

scale





XT16		
XT16:1	○	
XT16:2	○	
XT16:3	○	
XT16:4	○	
XT16:5	○	
XT16:6	○	
XT16:7	○	
XT16:8	○	
XT16:9	○	
XT16:10	○	

XT14		
XT14:1	○	BRO L6b+
XT14:2	○	L6b+
XT14:3	○	BRO L6b+
XT14:4	○	BL L6b-
XT14:5	○	L6b-
XT14:6	○	BL L6b-
XT14:7	○	BL L6b-

/S5:1

/Z102

/POWER1:L

/S5:3

/Z102

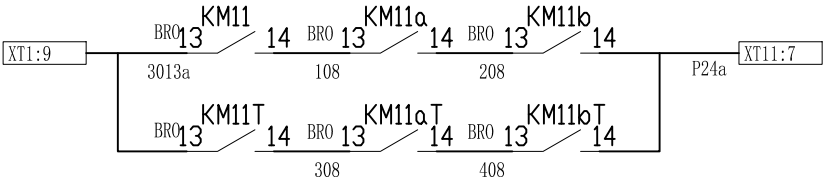
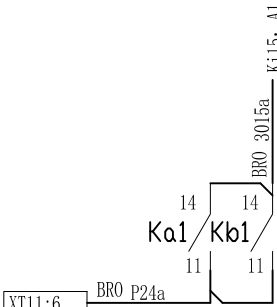
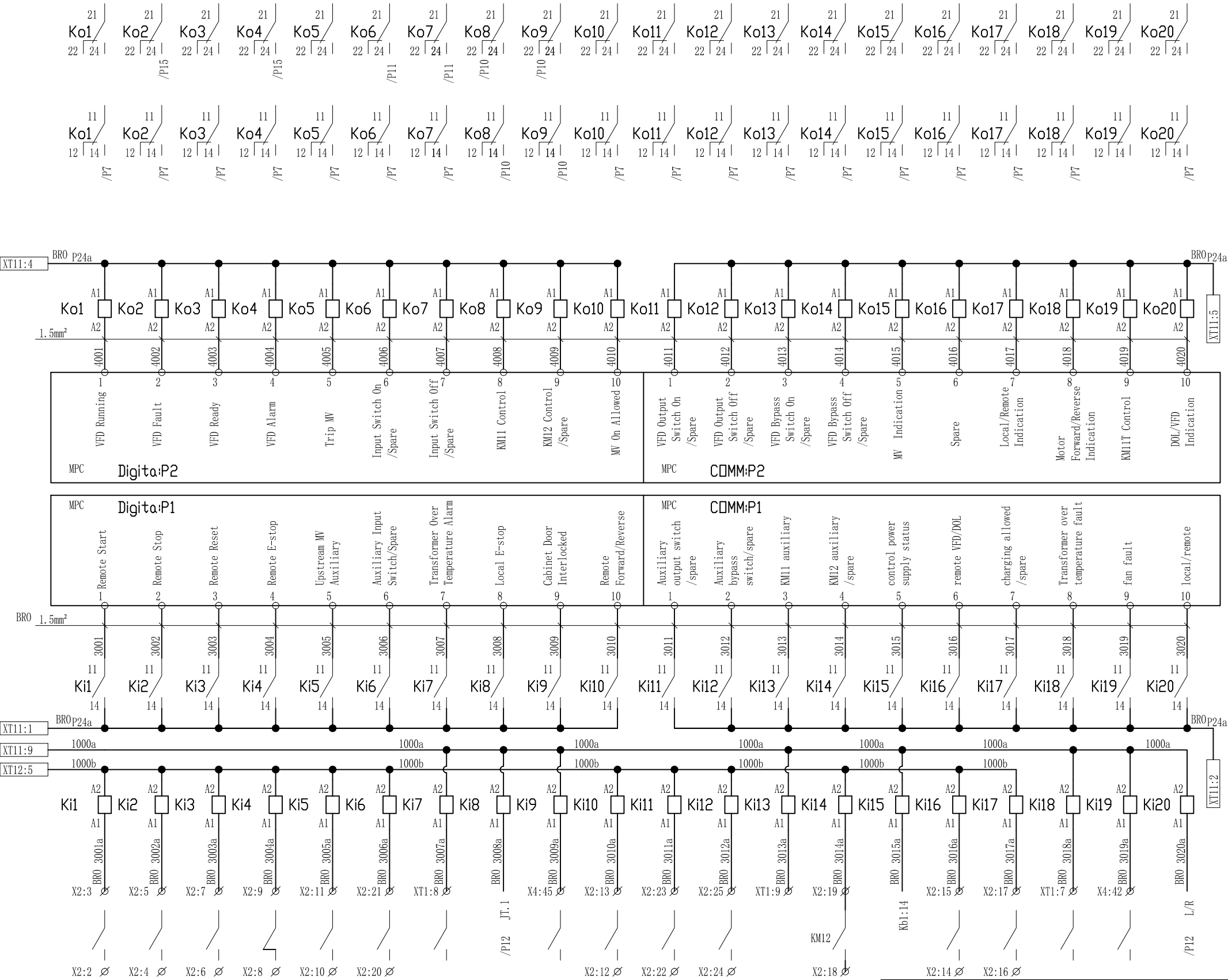
/POWER1:N

XT12		
Ka1:21	○	P24b
POWER2:V+	○	P24b
XT12:1	○	P24b
XT12:2	○	P24b
XT12:3	○	P24b
XT12:4	○	P24b
XT12:5	○	1000b
XT12:6	○	1000b
XT12:7	○	1000b
XT12:8	○	1000b
XT12:9	○	1000a
XT11:12	○	XT11:12

XT11		
Ki1:14	○	P24a
Ki20:14	○	P24a
POWER1:V+	○	P24a
Ko1:A1	○	P24a
Ko20:A1	○	P24a
XT11:1	○	P24a
XT11:2	○	P24a
XT11:3	○	P24a
XT11:4	○	P24a
XT11:5	○	P24a
XT11:6	○	P24a
XT11:7	○	P24a
XT11:8	○	1000a
XT11:9	○	1000a
XT11:10	○	1000a
XT11:11	○	1000a
XT11:12	○	1000a
XT11:13	○	
XT11:14	○	P24e
XT11:15	○	
XT11:16	○	1000e
XT11:17	○	
XT11:18	○	P24d
XT11:19	○	P24d
XT11:20	○	1000d
XT11:21	○	1000d

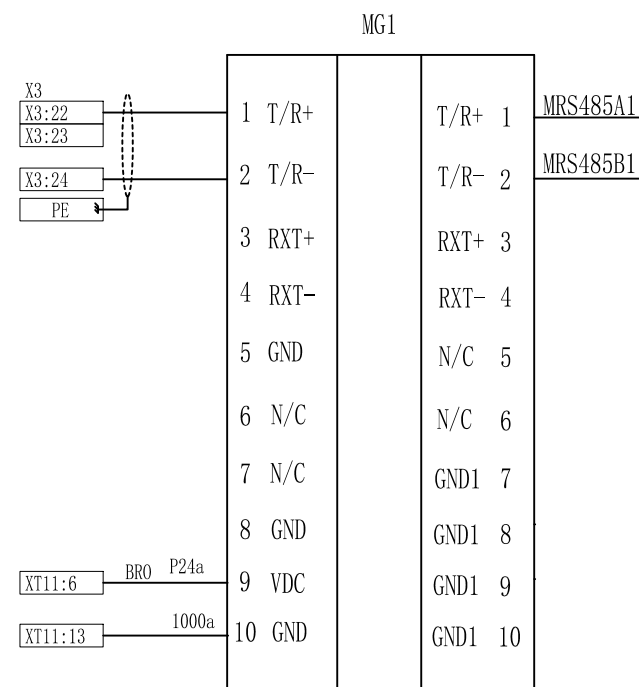
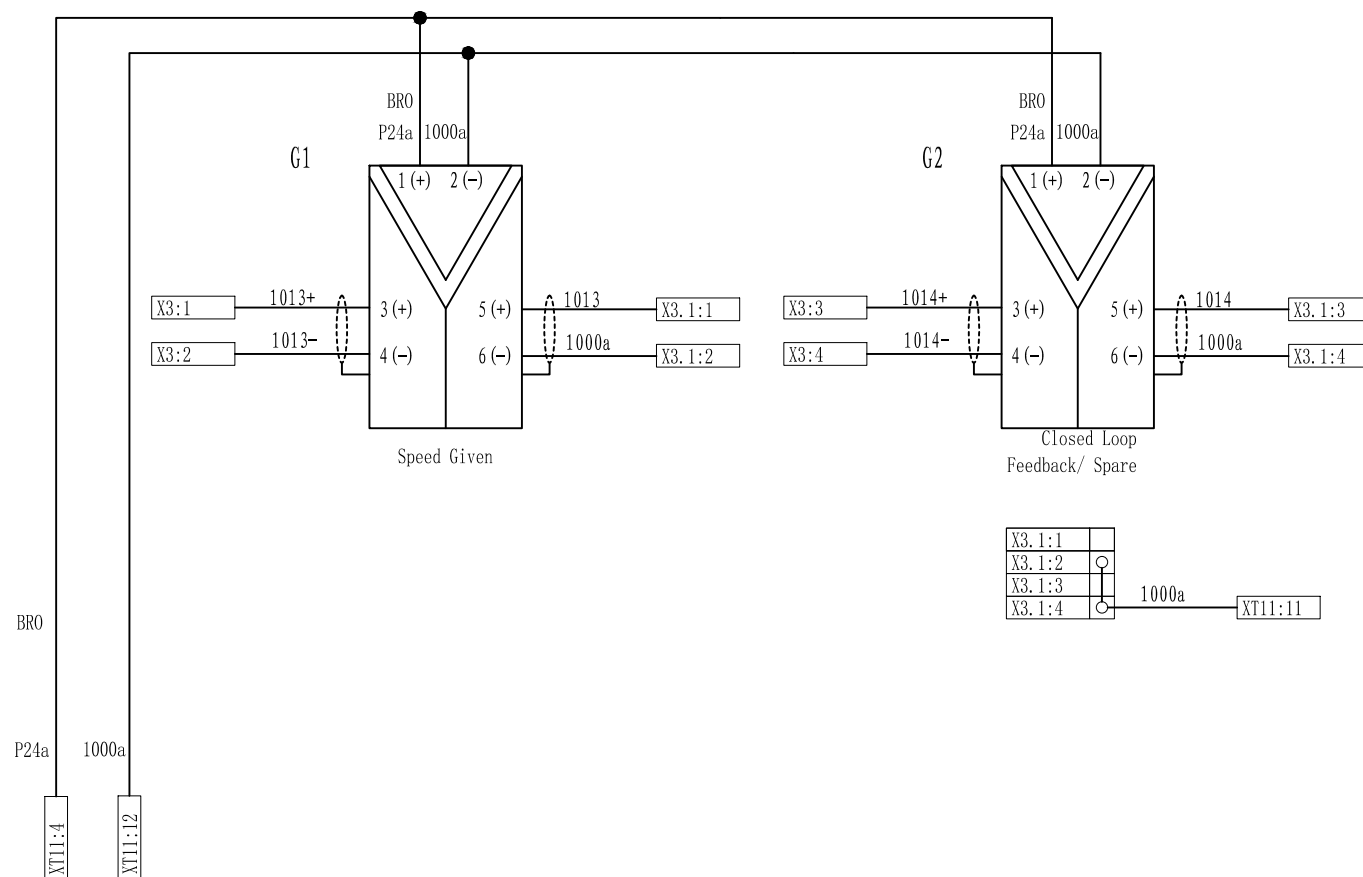
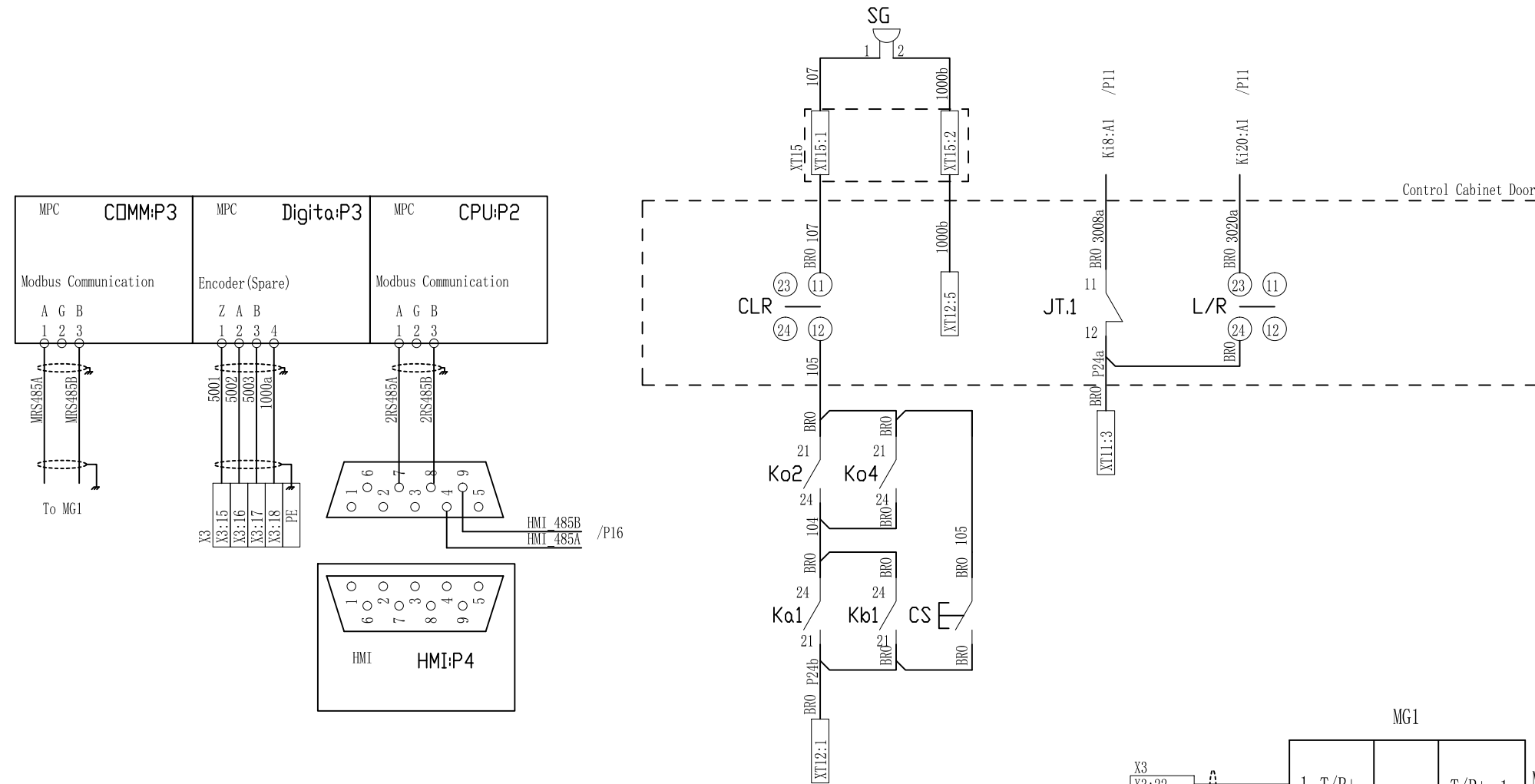
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Design by			Standardized by						Wolong Electric Group Co.,Ltd		
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Unmarked Cables: 1.5mm² Or BL



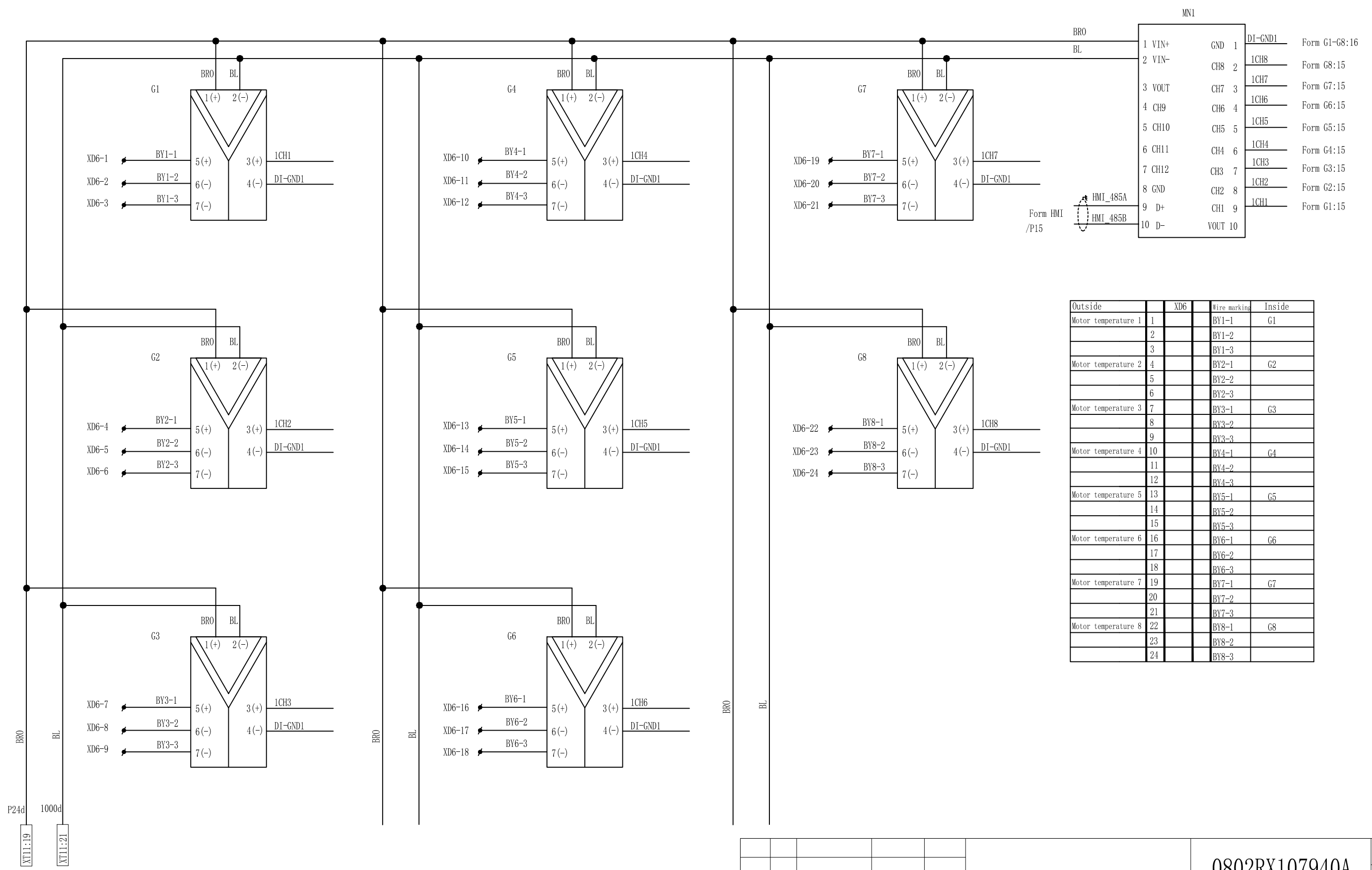
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Shield Cable: 4*1.0mm²
Unmarked Cables: 1.5mm² Or BL



						0802RX109531A	Version			
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							Drawing Mark	Special Mark	WT	scale
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Countersignature			Date							

Shield cable: 4*1.0mm²
unmarked cables: 1.5mm² or black



Outside		XD6	Wire marking	Inside
Motor temperature 1	1		BY1-1	G1
	2		BY1-2	
	3		BY1-3	
Motor temperature 2	4		BY2-1	G2
	5		BY2-2	
	6		BY2-3	
Motor temperature 3	7		BY3-1	G3
	8		BY3-2	
	9		BY3-3	
Motor temperature 4	10		BY4-1	G4
	11		BY4-2	
	12		BY4-3	
Motor temperature 5	13		BY5-1	G5
	14		BY5-2	
	15		BY5-3	
Motor temperature 6	16		BY6-1	G6
	17		BY6-2	
	18		BY6-3	
Motor temperature 7	19		BY7-1	G7
	20		BY7-2	
	21		BY7-3	
Motor temperature 8	22		BY8-1	G8
	23		BY8-2	
	24		BY8-3	

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Design

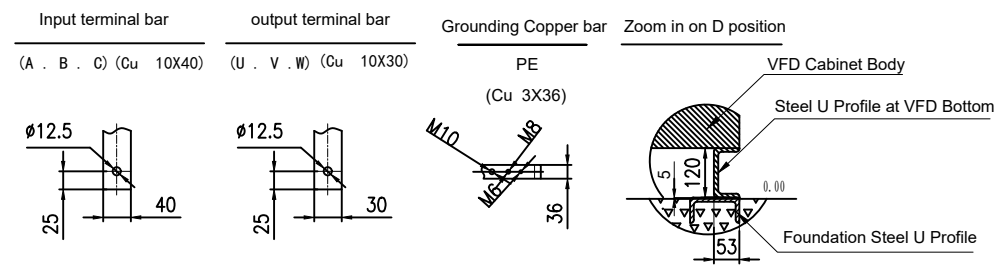
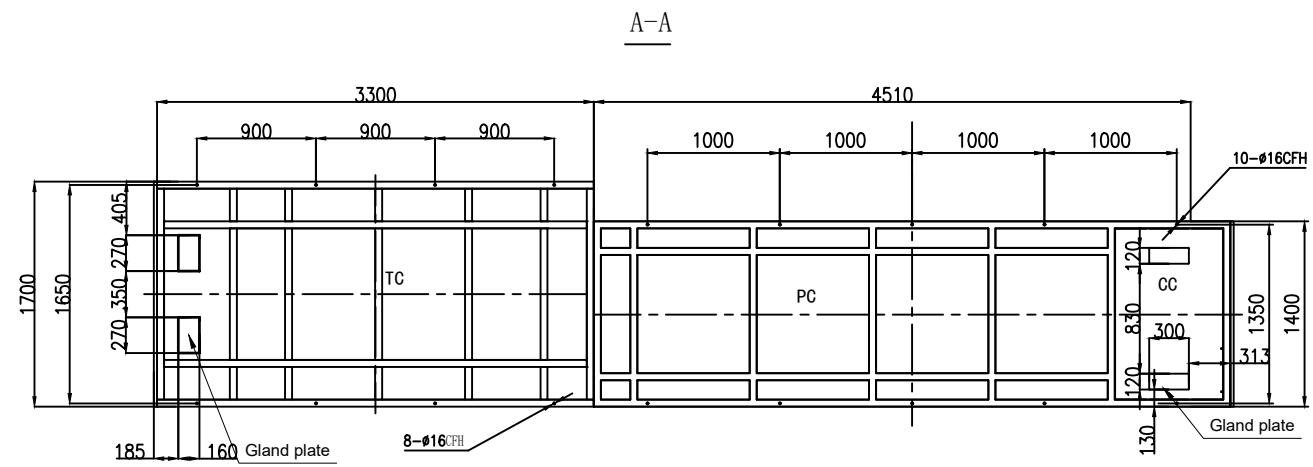
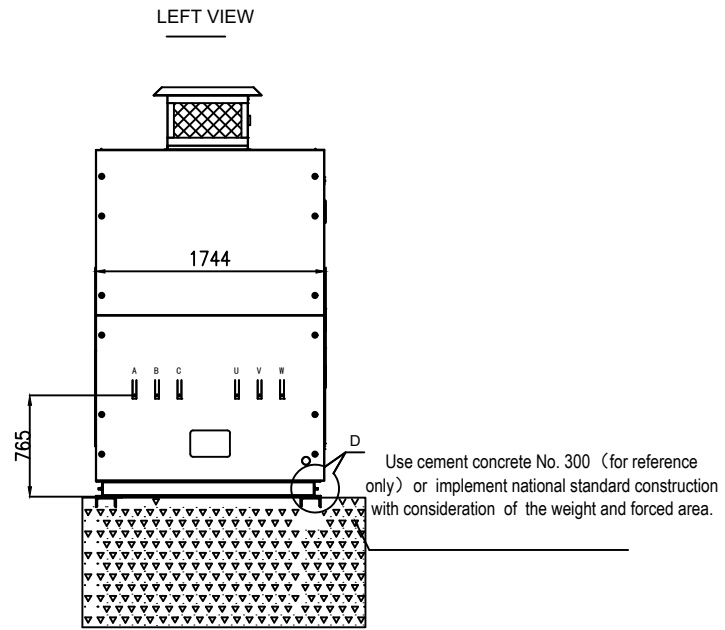
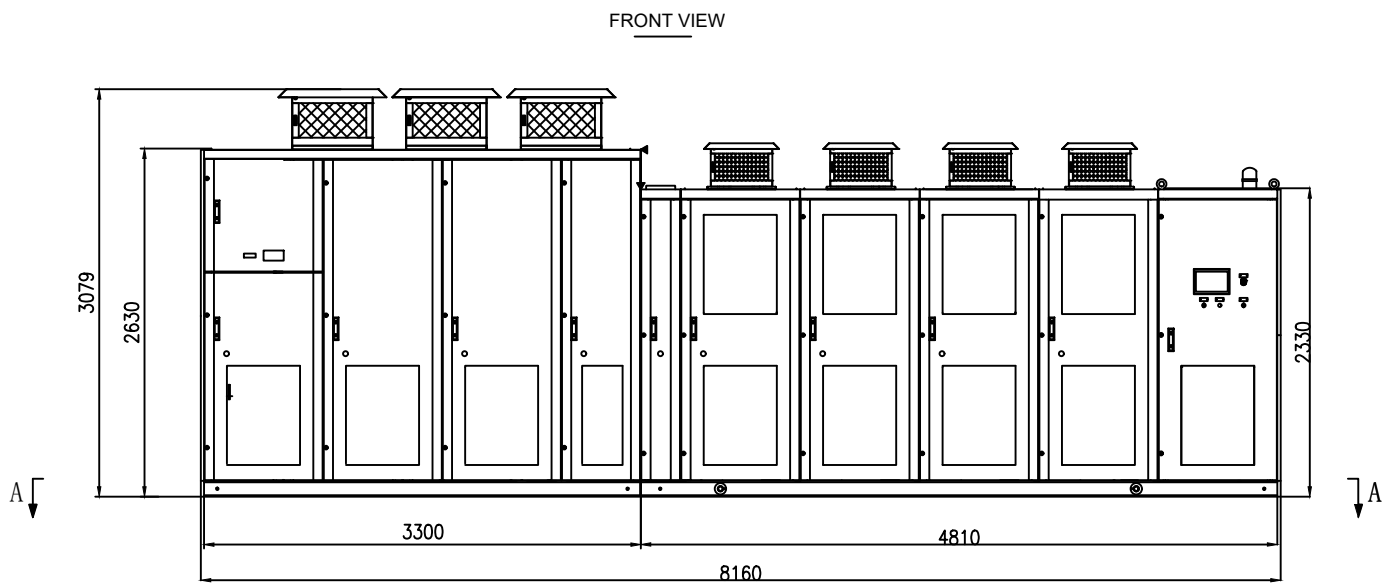
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Tracing dring

sign

Date



TECHNICAL REQUIREMENTS

1. When installing the VFD, spot-weld its steel U profile to that of the foundation.
2. The cable trench have to be waterproof, dustproof and rodent-proof.
3. Always make sure that the cabinets are grounded stably and reliably.
4. Installation of angle iron brackets are recommended to assure isolation between cables. The bracket specification and interval space shall be determined by actual specification, weight and length of cables.Only one layer of bracket is adequate on condition that the waterproof performance of trench is comparatively good.
5. “▼” indicates the segmentation position during handling and transportation.
6. The weight data is the maximum possible value of this capacity range, and it is for reference only.
- 7.TC: 560 Fan 3 pieces/set PC : 400 Fan 4 pieces/set

REMARKS

1. Recommended reserved space on the left and right side of VFD ≥ 600mm.
2. Recommended reserved space in front of VFD ≥ 1700mm.
3. Recommended reserved space between the VFD and back wall ≥ 800mm.
4. Recommended reserved space between the VFD and ceiling ≥ 500mm.

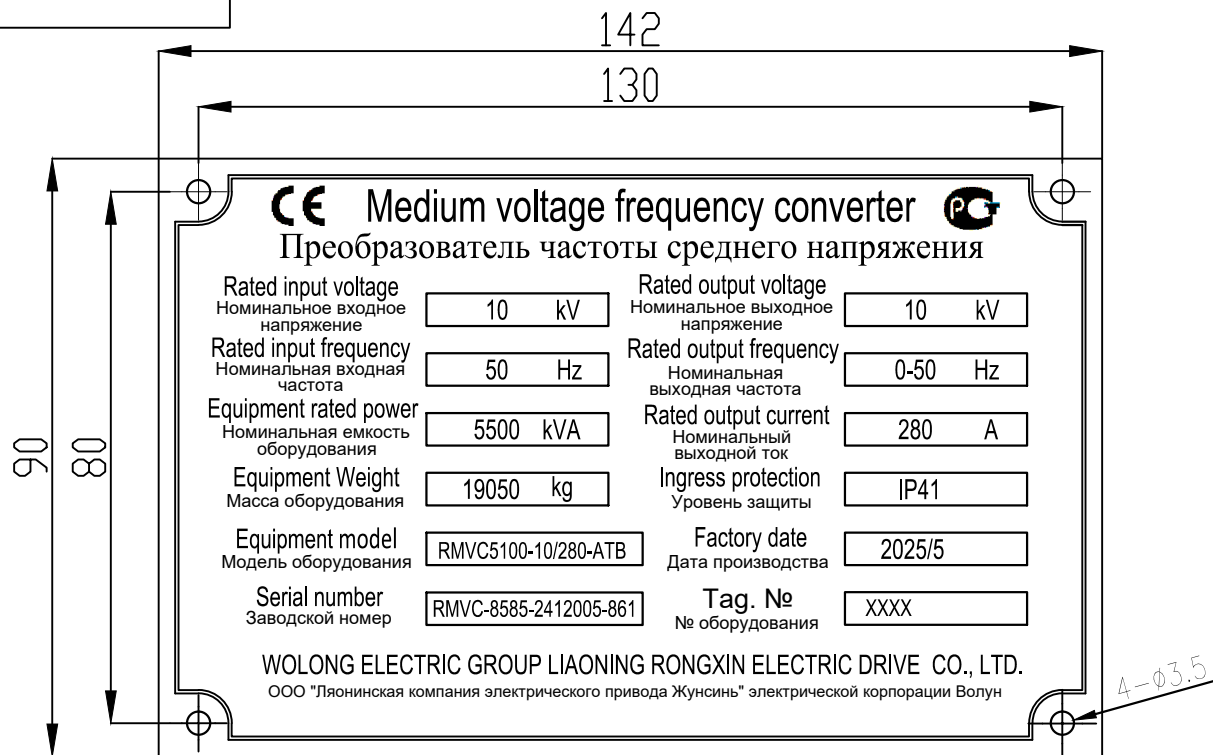
1	RMVC5100-10/280-ATB	12100	6150	800	19050	39000
No.	Equipment Model	TC Weight (kg)	PC Weight (kg)	CC Weight (kg)	Total Weight (kg)	Air Flow(m³/h)
This drawing is for : Transformer 10kV/5001-7000kVA; 385mm width power cell ; 8 cells per phase						

ABBREVIATIONS

Cabinet Fixing Hole : CFH
Control Cable Hole : CCH
Grounding Copper Bar : GCB

Transformer Cabinet : TC
Power Cabinet : PC
Control Cabinet : CC

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					Wolong Electric Group Co.,Ltd			
Revision	Place	Modification file No.	Sign	Date	VFD General Layout I			
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Tracing dring

sign

Date

Technical requirements:

- 1. The surface of the nameplate is coated with film;
- 2. The font for the nameplate is "Arial",
- 3. The title word height is 9.5mm, and the content word height is 4.5mm, with a company name font height of 5.5mm;
- 4. The outer frame width of the nameplate is 0.5mm, The inner frame has a width of 0.25mm and a color of black.
- 5. Material: 304 stainless steel.

						Nameplate	0802RX109532A			Version
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Revision	Place	Modification file No.		Sign	Date		Total: 1 Pages Page 1			
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Countersignature		Date								