

1. Electrical Circuit

1.1 Selection Table of Pump Contactor and Thermal Overload Relay (230V)

Selection Table of Pump Contactor and Thermal Overload Relay (Low Pressure)
(230V)

Model	Power (kw)	Stock No.	
		Contactor	Thermal Overload Relay
SIC-48A-R2	2.2	YE00601721000	YE01169125000
SIC-58A-R2	2.2	YE00601721000	YE01169125000
SIC-75A-R2	2.2	YE00601721000	YE01169125000
SIC-100A-R2	3.0	YE00602522000	YE01260110000
SIC-114A-R2	4.0	YE00602622000	YE01260140000

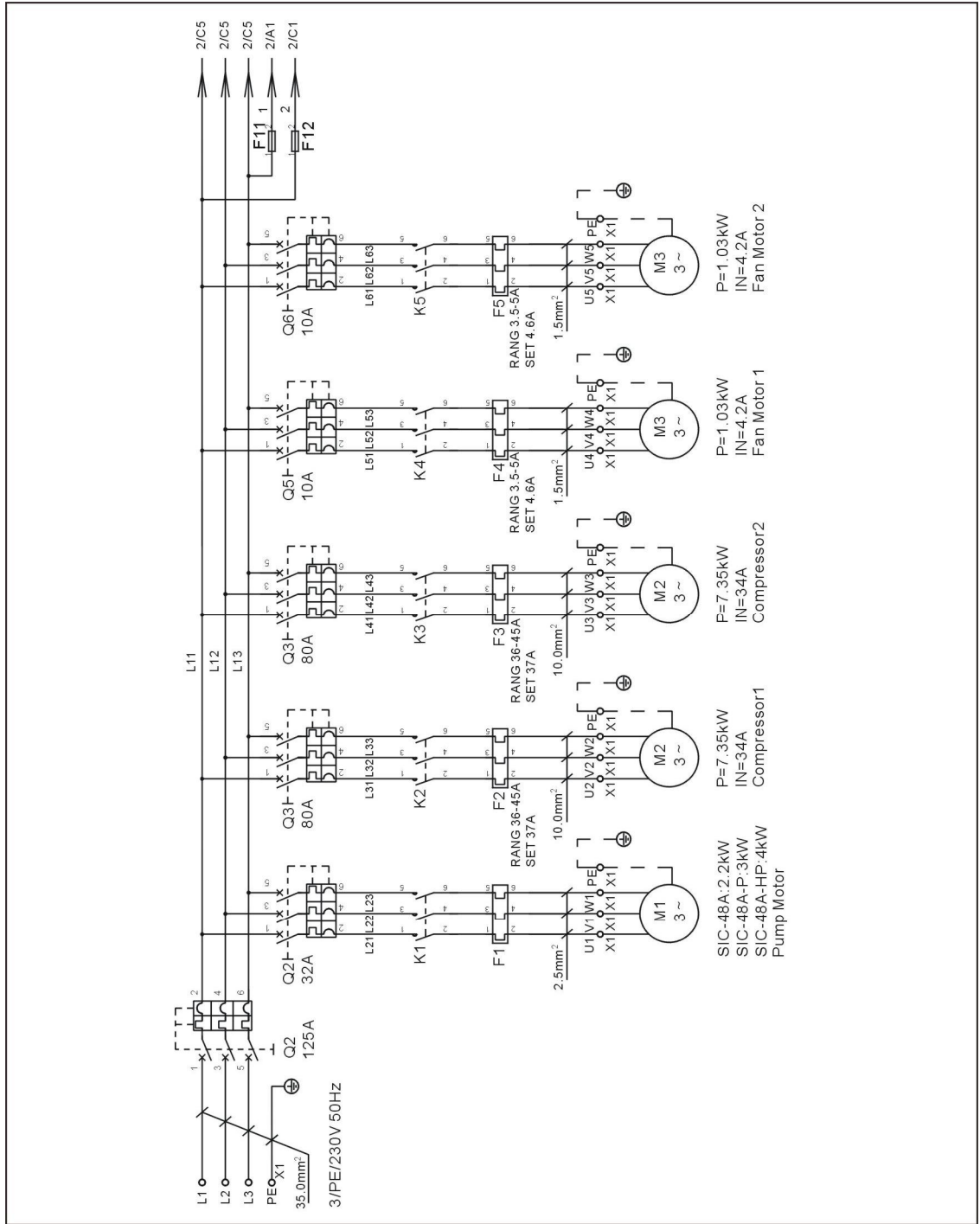
Selection Table of Pump Contactor and Thermal Overload Relay (Medium Pressure)
(230V)

Model	Power (kw)	Stock No.	
		Contactor	Thermal Overload Relay
SIC-48A-R2-P	3.0	YE00602522000	YE01260110000
SIC-58A-R2-P	3.0	YE00602522000	YE01260110000
SIC-75A-R2-P	3.0	YE00602522000	YE01260110000
SIC-100A-R2-P	3.0	YE00602522000	YE01260110000
SIC-114A-R2-P	4.0	YE00602622000	YE01260140000

Selection Table of Pump Contactor and Thermal Overload Relay (High Pressure)
(230V)

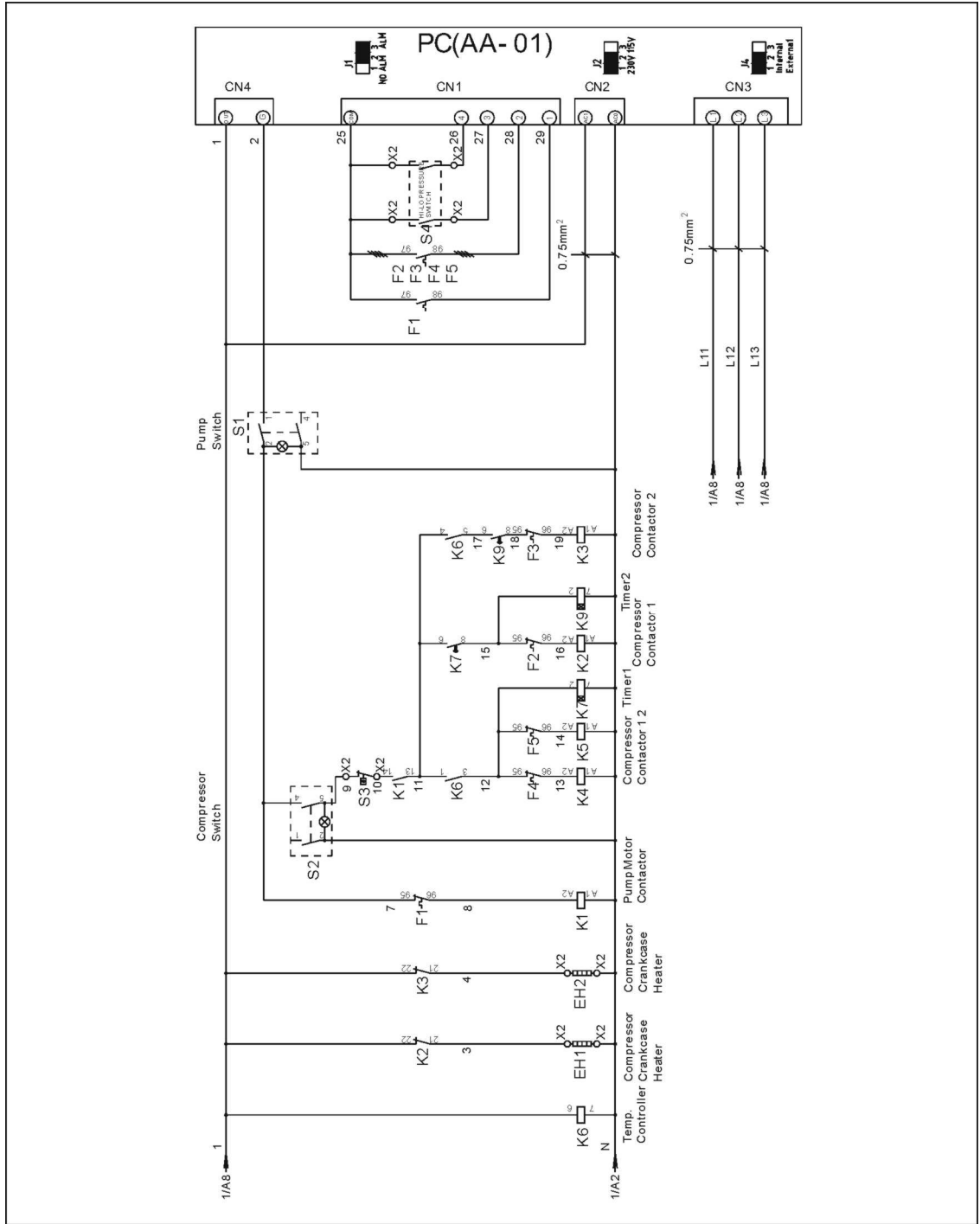
Model	Power (kw)	Stock No.	
		Contactor	Thermal Overload Relay
SIC-48A-R2-HP	4.0	YE00602622000	YE01160140000
SIC-58A-R2-HP	4.0	YE00602622000	YE01160140000
SIC-75A-R2-HP	4.0	YE00602622000	YE01160140000
SIC-100A-R2-HP	4.0	YE00602622000	YE01160140000
SIC-114A-R2-HP	5.5	YE00602722000	YE01260200000

1.2 Main Electrical Circuit (SIC-48A-R2) (230V)



Main Electrical Circuit (SIC-48A-R2) (230V)

1.3 Control Circuit (SIC-48A-R2) (230V)



Control Circuit (SIC-48A-R2) (230V)

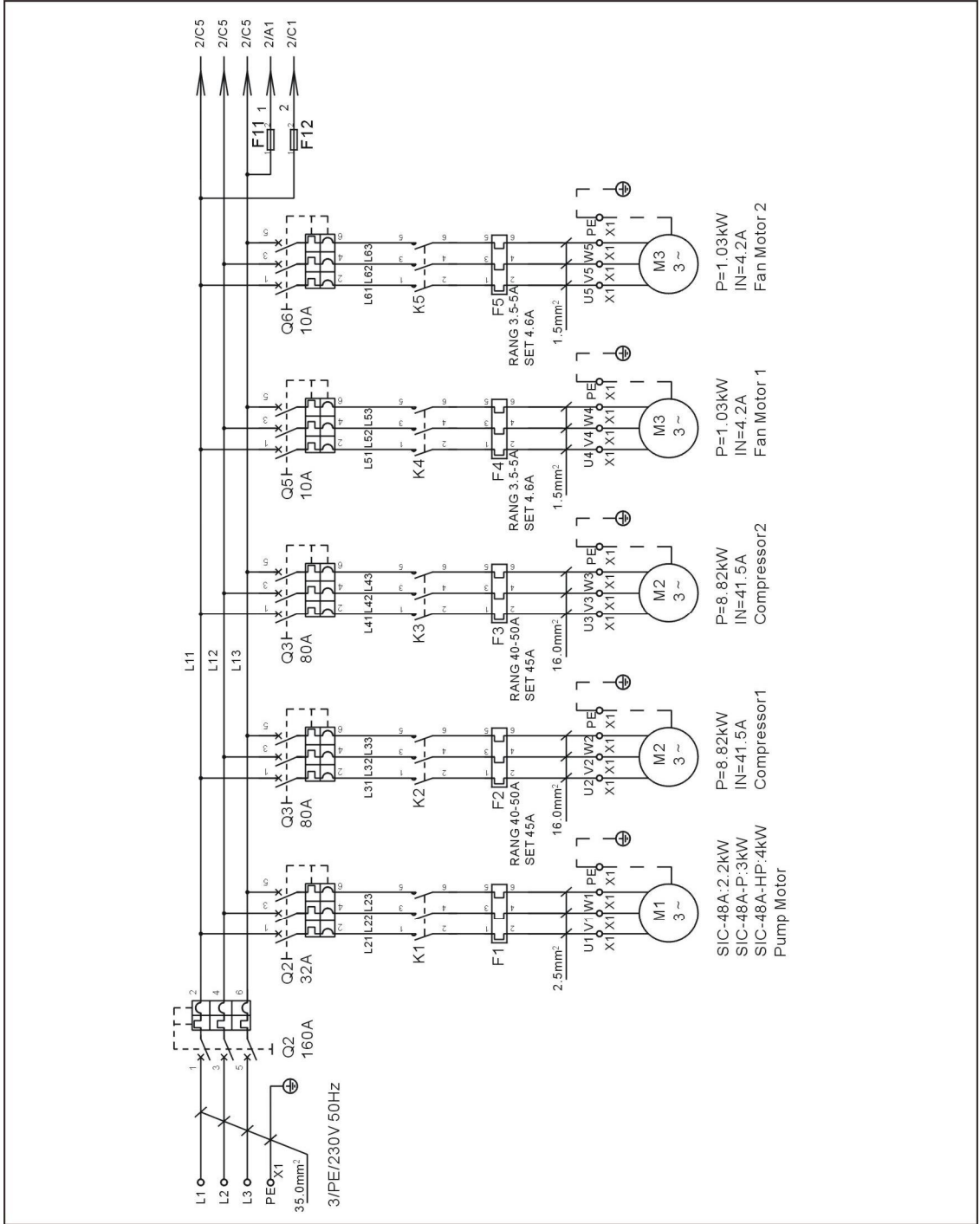
1.5 Electrical Components List (SIC-48A-R2) (230V)

Electrical Components List (SIC-48A-R2) (230V)

No.	Symbol	Name	Specificatons	Parts No.
1	Q1	Circuit breaker *	125A	YE41161200000
2	Q2	Circuit breaker *	32A	YE40603200000
3	Q3 Q4	Circuit breaker *	80A	YE40800300000
4	Q4 Q5	Circuit breaker *	10A	YE40600300000
5	K1	Contactor *	220VAC 50/60Hz	-
6	K2 K3	Contactor *	220VAC 50/60Hz	YE00503500000
7	-	Auxiliary block	1NC	YE00592110100
8	-	Auxiliary block	1NO	YE00592110000
9	-	Auxiliary block	1NO	YE00592110000
10	-	Auxiliary block	1NO	YE00592110000
11	K4 K5	Contactor *	220VAC 50/60Hz	YE00601521000
12	K6	Temperature controller *	115~230VAC	YE85120200000
13	K7 K9	Timer	3S-60M AC220V	YE86300300000
14	K8 K11	Middle realy	AC220V	YE03270700000
15	F1	Overload relay *	-	-
16	F2 F3	Overload relay *	36~45A	YE01612660000
17	F4 F5	Overload relay *	3.5~5A	YE01160350000
18	F11 F12	Fuse**	2A	YE41001000000
19	S1 S2	Control switch *	250V~10(5)A 4P WH	YE10210400000
20	S3	Anti-frozen switch *	-	-
21	S4	HI-LO pressure switch	-	-
22	PCB	Control board *	230V 50/60Hz	YE80000100000
23	X1	Terminal board	-	YE61353500000
24	-	Terminal board	-	YE61100000000
25	-	Terminal board	-	YE61103500000
26	-	Terminal board	-	YE61250040000
27	-	Terminal board	-	YE61253500000
28	X2	Terminal board	-	YE61250040000
29	-	Terminal board	-	YE61253500000
30	-	Terminal board	-	YE61250040000
31	-	Terminal board	-	YE61253500000
32	-	Terminal board	-	YE61250040000
33	-	Terminal board	-	YE61253500000
34	M1	Pump motor	230V 50/60Hz	-
35	M2 M3	Compressor	230V 50/60Hz 7.35kW	-
36	M4 M5	Fan motor	230V 50/60Hz 1.03kW	-
37	EH1	Compressor crankcase heater	230V 50/60Hz	-
38	Y1 Y2	Solenoid valve**	230V 50/60Hz	-
39	Y3 Y4	Solenoid valve**	230V 50/60Hz	-

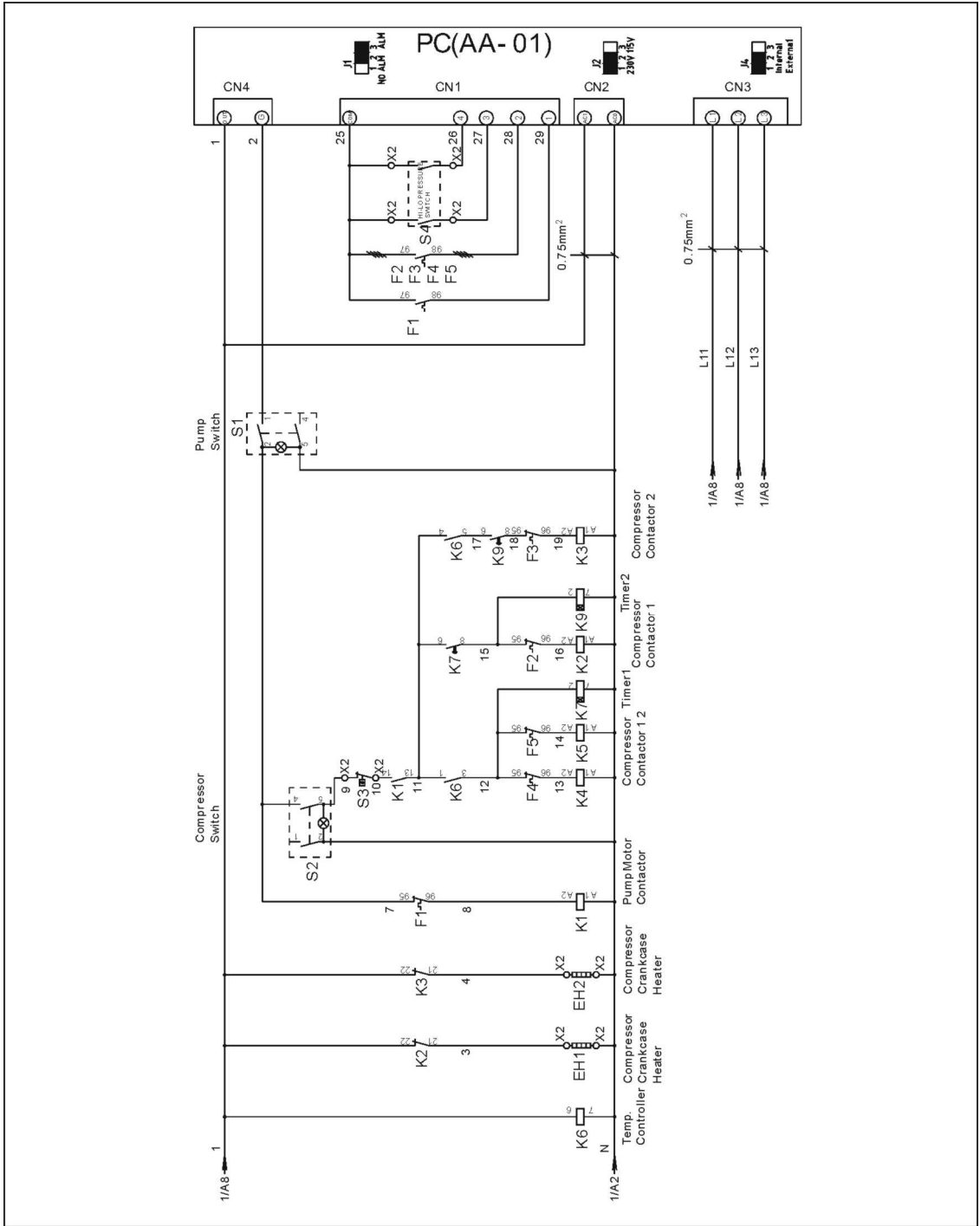
* means possible broken parts. ** means easy broken parts. Spare backup is suggested. Please confirm the version number of the manual before you order to ensure the stock number and the parts are consistent.

1.6 Main Electrical Circuit (SIC-58A-R2) (230V)



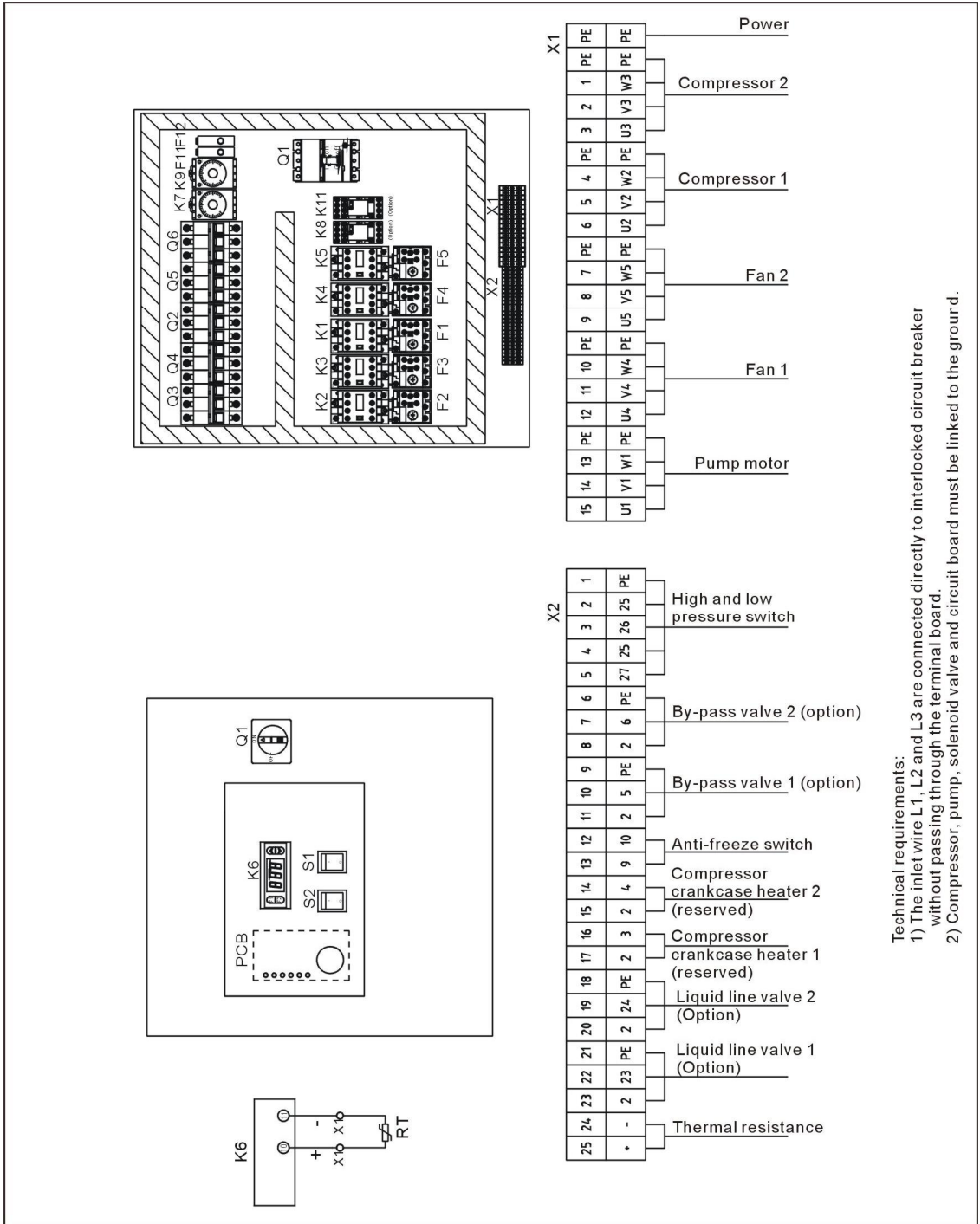
Main Electrical Circuit (SIC-58A-R2) (230V)

1.7 Control Circuit (SIC-58A-R2) (230V)



Control Circuit (SIC-58A-R2) (230V)

1.8 Electrical Components Layout (SIC-58A-R2) (230V)



Electrical Components Layout (SIC-58A-R2) (230V)

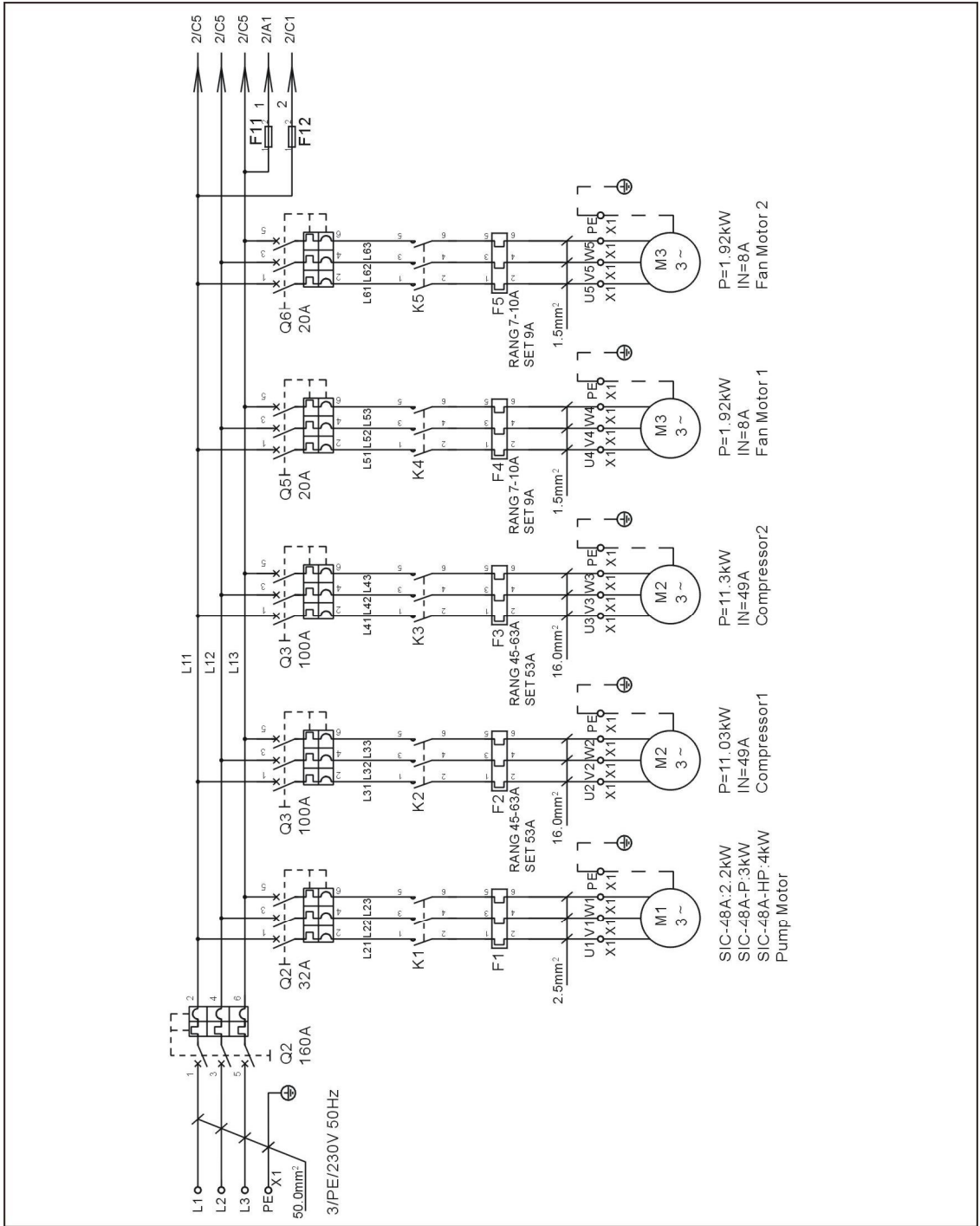
1.9 Electrical Components List (SIC-58A-R2) (230V)

Electrical Components List (SIC-58A-R2) (230V)

No.	Symbol	Name	Specificatons	Parts No.
1	Q1	Circuit breaker *	160A	YE41161600000
2	Q2	Circuit breaker *	32A	YE40603200000
3	Q3 Q4	Circuit breaker *	80A	YE40800300000
4	Q4 Q5	Circuit breaker *	10A	YE40600300000
5	K1	Contactor *	220VAC 50/60Hz	-
6	K2 K3	Contactor *	220VAC 50/60Hz	YE00503600000
7	-	Auxiliary block	1NC	YE00592110100
8	-	Auxiliary block	1NO	YE00592110000
9	-	Auxiliary block	1NO	YE00592110000
10	-	Auxiliary block	1NO	YE00592110000
11	K4 K5	Contactor *	220VAC 50/60Hz	YE00601521000
12	K6	Temperature controller *	115~230VAC	YE85120200000
13	K7 K9	Timer	3S-60M AC220V	YE86300300000
14	K8 K11	Middle realy	AC220V	YE03270700000
15	F1	Overload relay *	-	-
16	F2 F3	Overload relay *	40~50A	YE01513600900
17	F4 F5	Overload relay *	3.5~5A	YE01160350000
18	F11	Fuse**	2A	YE41001000000
19	S1 S2	Control switch *	250V~10(5)A 4P WH	YE10210400000
20	S3	Anti-frozen switch *	-	-
21	S4	HI-LO pressure switch	-	-
22	PCB	Control board *	230V 50/60Hz	YE80000100000
23	X1	Terminal board	-	YE61353500000
24		Terminal board	-	YE61160000000
25		Terminal board	-	YE61163500000
26		Terminal board	-	YE61250040000
27		Terminal board	-	YE61253500000
28	X2	Terminal board	-	YE61250040000
29	-	Terminal board	-	YE61253500000
30	-	Terminal board	-	YE61250040000
31	-	Terminal board	-	YE61253500000
32	-	Terminal board	-	YE61250040000
33	-	Terminal board	-	YE61253500000
34	M1	Pump motor	230V 50/60Hz	-
35	M2 M3	Compressor	230V 50/60Hz 8.82kW	-
36	M4 M5	Fan motor	230V 50/60Hz 1.03kW	-
37	EH1	Compressor crankcase heater	230V 50/60Hz	-
38	Y1 Y2	Solenoid valve**	230V 50/60Hz	-
39	Y3 Y4	Solenoid valve**	230V 50/60Hz	-

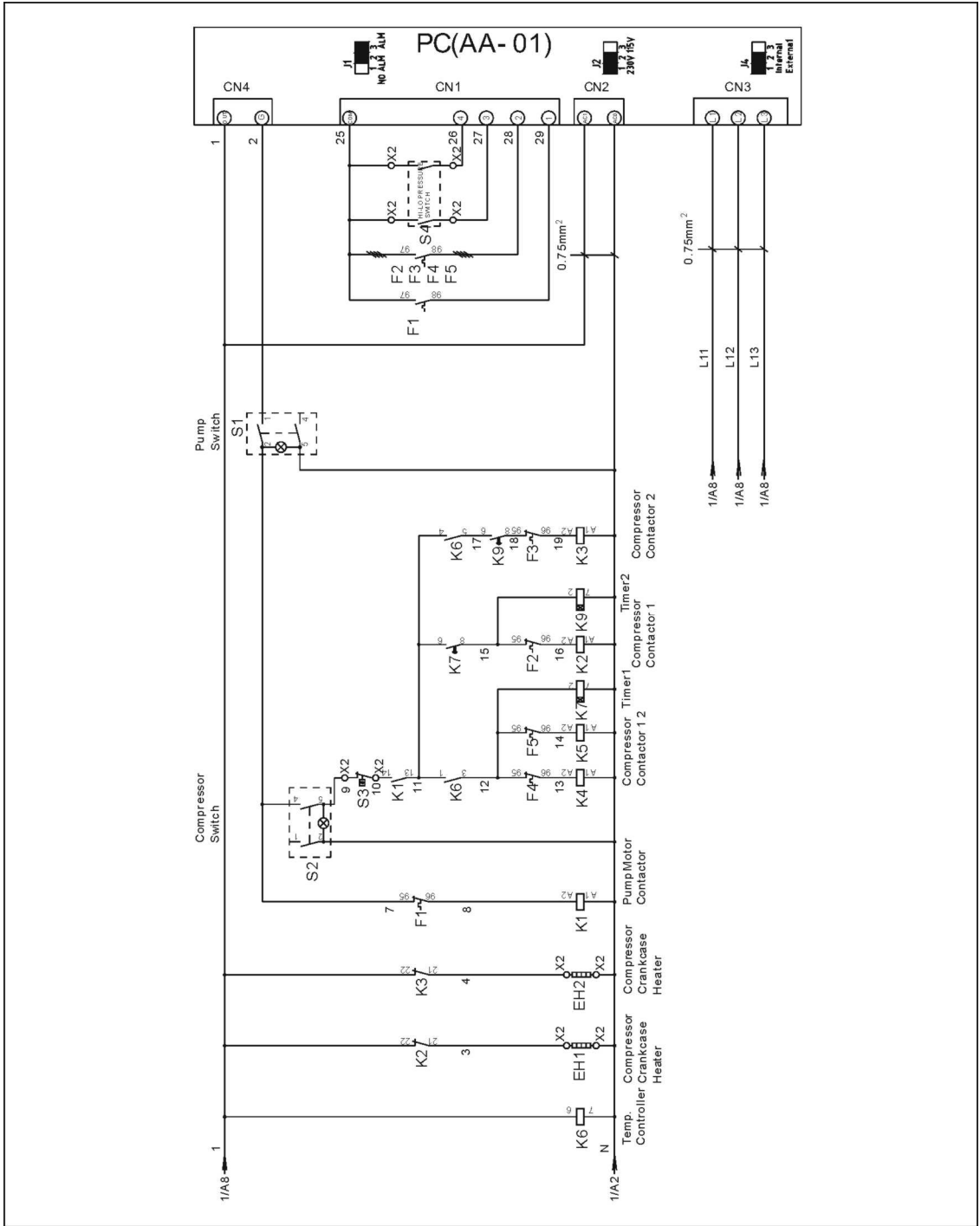
* means possible broken parts. ** means easy broken parts. Spare backup is suggested. Please confirm the version number of the manual before you order to ensure the stock number and the parts are consistent.

1.10 Main Electrical Circuit (SIC-75A-R2) (230V)



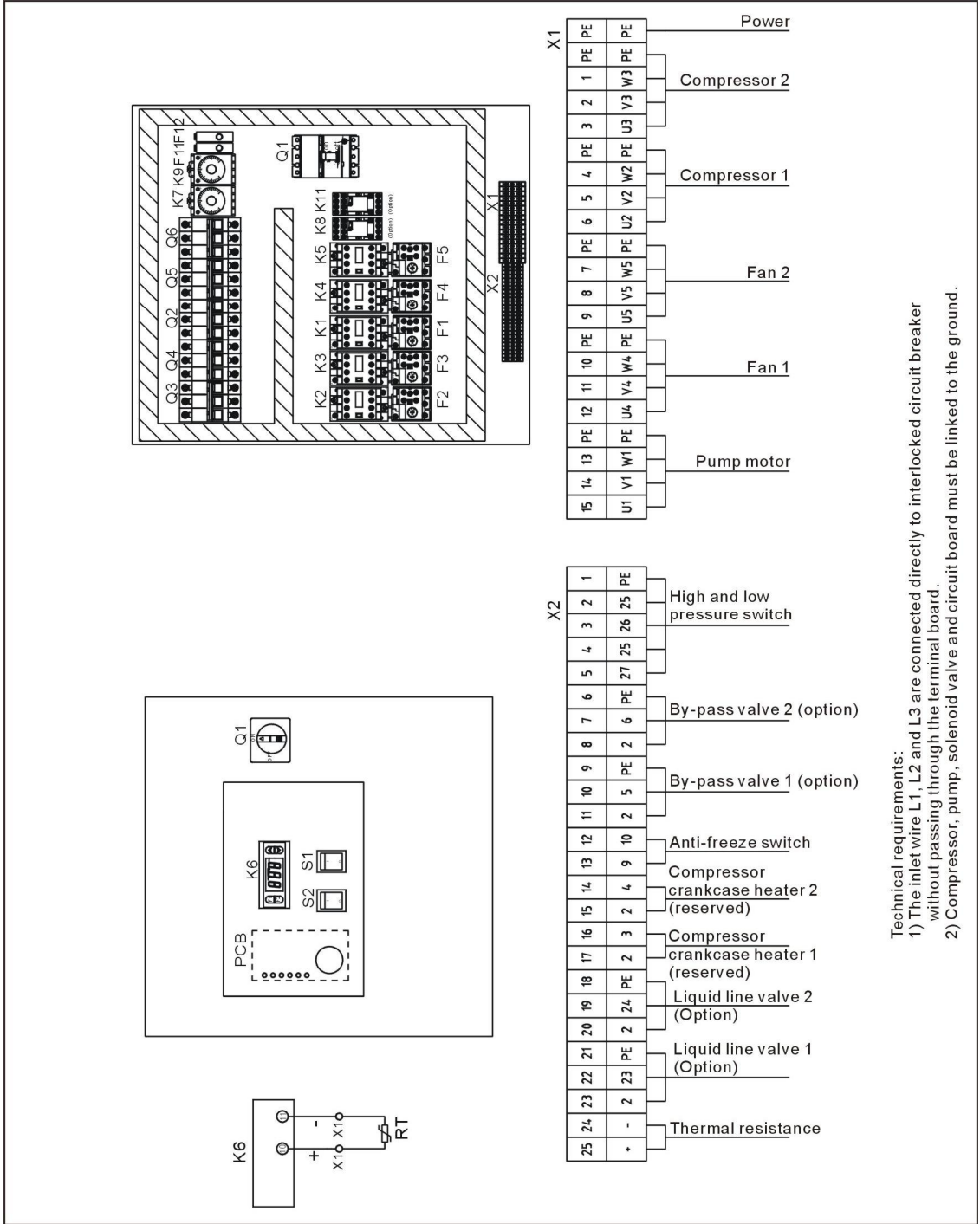
Main Electrical Circuit (SIC-75A-R2) (230V)

1.11 Control Circuit (SIC-75A-R2) (230V)



Control Circuit (SIC-75A-R2) (230V)

1.12 Electrical Components Layout (SIC-75A-R2) (230V)



Electrical Components Layout (SIC-75A-R2) (230V)

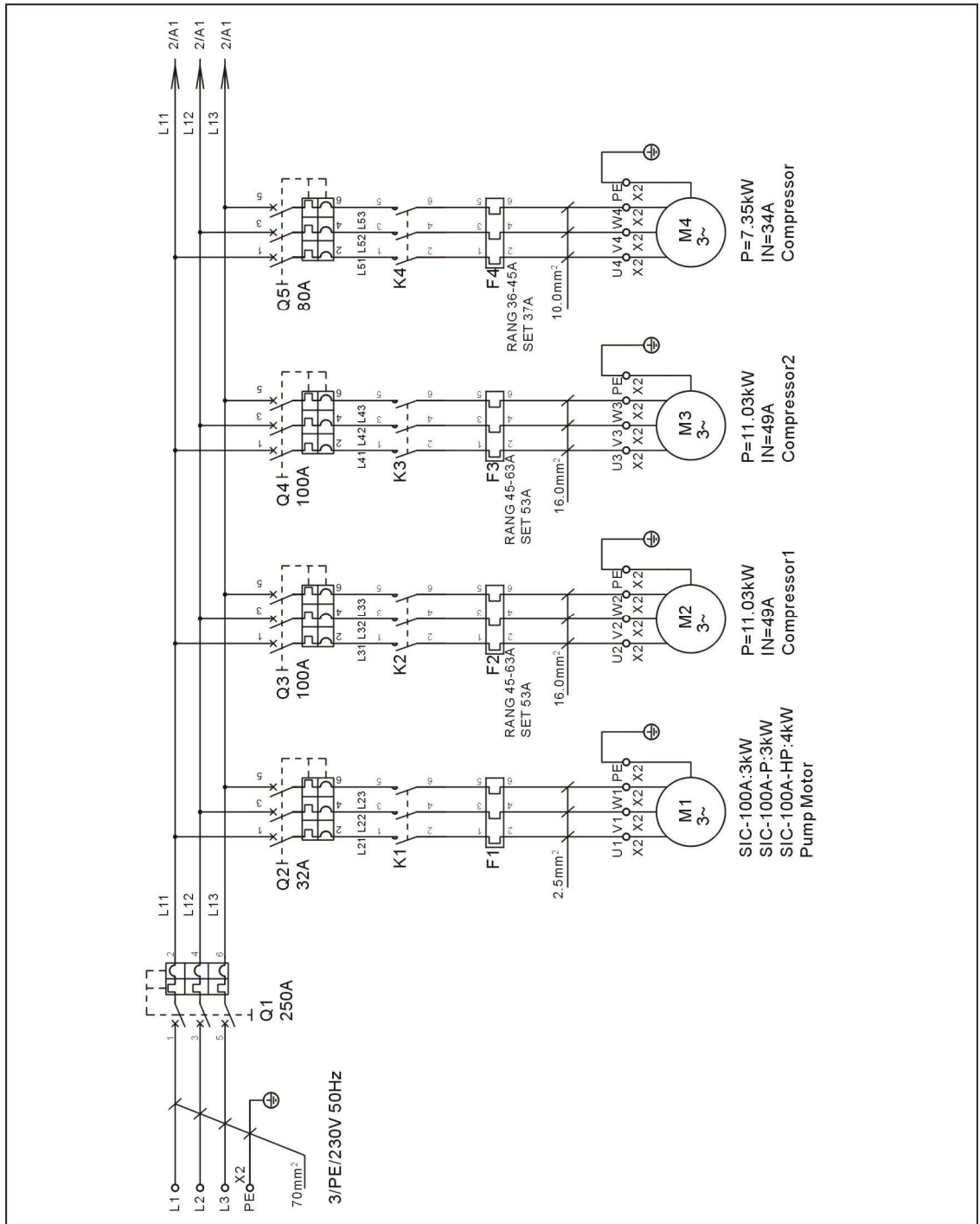
1.13 Electrical Components List (SIC-75A-R2) (230V)

Electrical Components List (SIC-75A-R2) (230V)

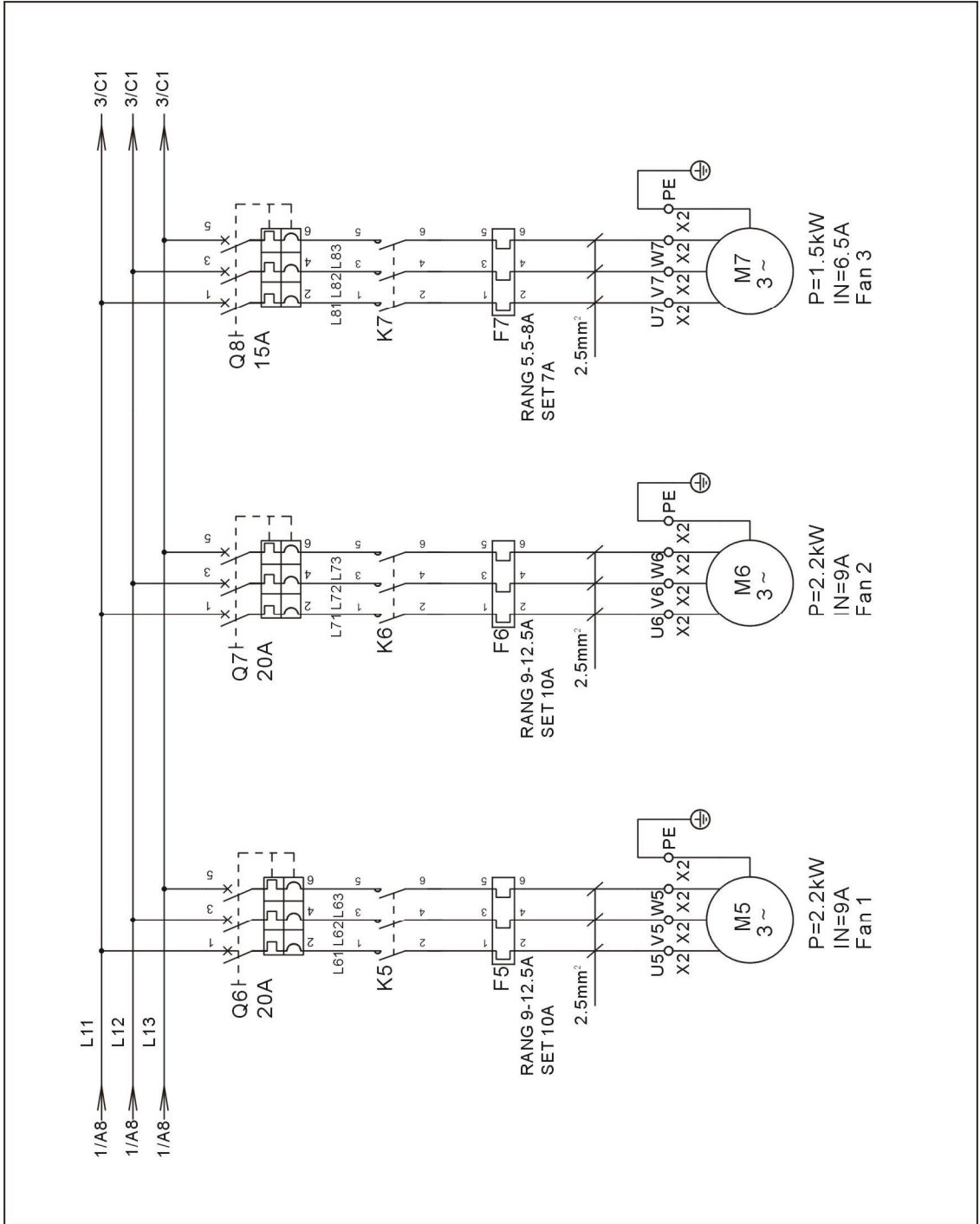
No.	Symbol	Name	Specifcatons	Parts No.
1	Q1	Circuit breaker *	160A	YE41161600000
2	Q2	Circuit breaker *	32A	YE40603200000
3	Q3 Q4	Circuit breaker *	100A	YE40100300000
4	Q4 Q5	Circuit breaker *	20A	YE40602000000
5	K1	Contactor *	220VAC 50/60Hz	-
6	K2 K3	Contactor *	220VAC 50/60Hz	YE00504400000
7	-	Auxiliary block	1NC	YE00592110100
8	-	Auxiliary block	1NO	YE00592110000
9	-	Auxiliary block	1NO	YE00592110000
10	-	Auxiliary block	1NO	YE00592110000
11	K4 K5	Contactor *	220VAC 50/60Hz	YE00601721000
12	K6	Temperature controller *	115~230VAC	YE85120200000
13	K7 K9	Timer	3S-60M AC220V	YE86300300000
14	K8 K11	Middle realy	AC220V	YE03270700000
15	F1	Overload relay *	-	-
16	F2 F3	Overload relay *	45~63A	YE01514640000
17	F4 F5	Overload relay *	7~10A	YE01167100000
18	F11	Fuse**	2A	YE41001000000
19	S1 S2	Control switch *	250V~10(5)A 4P WH	YE10210400000
20	S3	Anti-frozen switch *	-	-
21	S4	HI-LO pressure switch	-	-
22	PCB	Control board *	230V 50/60Hz	YE80000100000
23	X1	Terminal board	-	YE61353500000
24	-	Terminal board	-	YE61160000000
25	-	Terminal board	-	YE61163500000
26	-	Terminal board	-	YE61250040000
27	-	Terminal board	-	YE61253500000
28	X2	Terminal board	-	YE61250040000
29	-	Terminal board	-	YE61253500000
30	-	Terminal board	-	YE61250040000
31	-	Terminal board	-	YE61253500000
32	-	Terminal board	-	YE61250040000
33	-	Terminal board	-	YE61253500000
34	M1	Pump motor	230V 50/60Hz	-
35	M2 M3	Compressor	230V 50/60Hz 11.03kW	-
36	M4 M5	Fan motor	230V 50/60Hz 1.92kW	-
37	EH1	Compressor crankcase heater	230V 50/60Hz	-
38	Y1 Y2	Solenoid valve**	230V 50/60Hz	-
39	Y3 Y4	Solenoid valve**	230V 50/60Hz	-

* means possible broken parts. ** means easy broken parts. Spare backup is suggested. Please confirm the version number of the manual before you order to ensure the stock number and the parts are consistent.

1.14 Main Electrical Circuit (SIC-100A-R2) (230V)

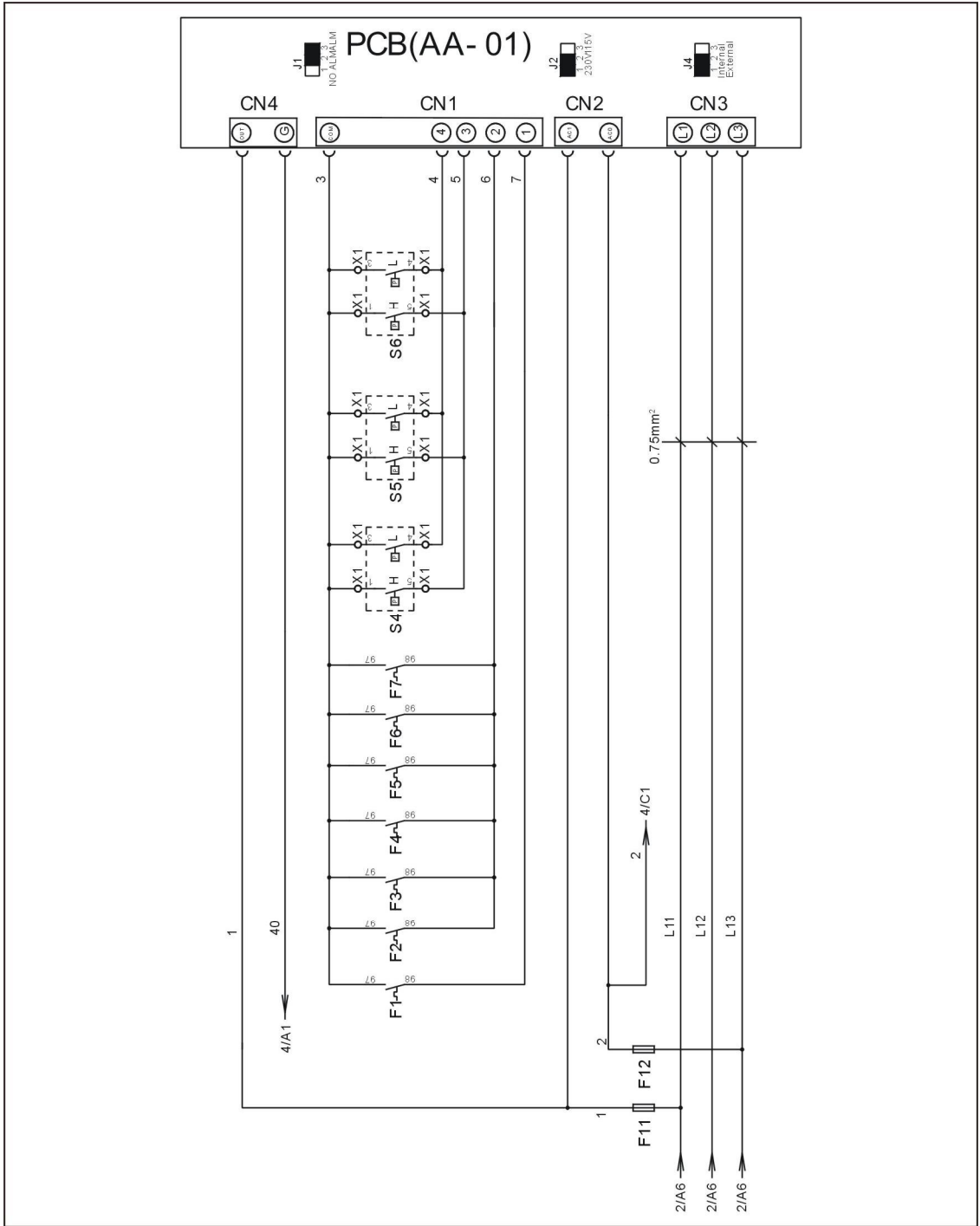


Main Electrical Circuit 1(SIC-100A-R2) (230V)

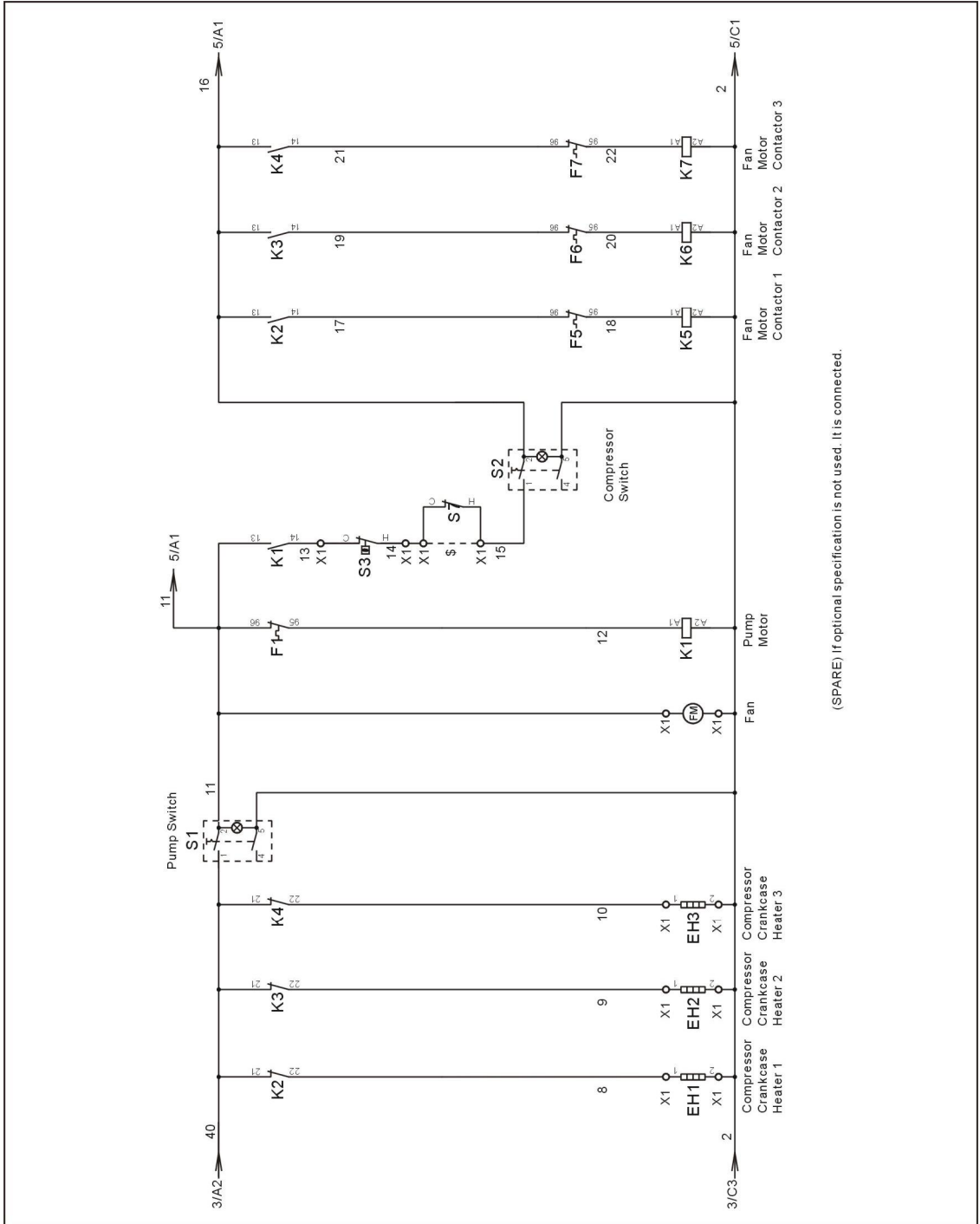


Main Electrical Circuit 2(SIC-100A-R2) (230V)

1.15 Control Circuit (SIC-100A-R2) (230V)

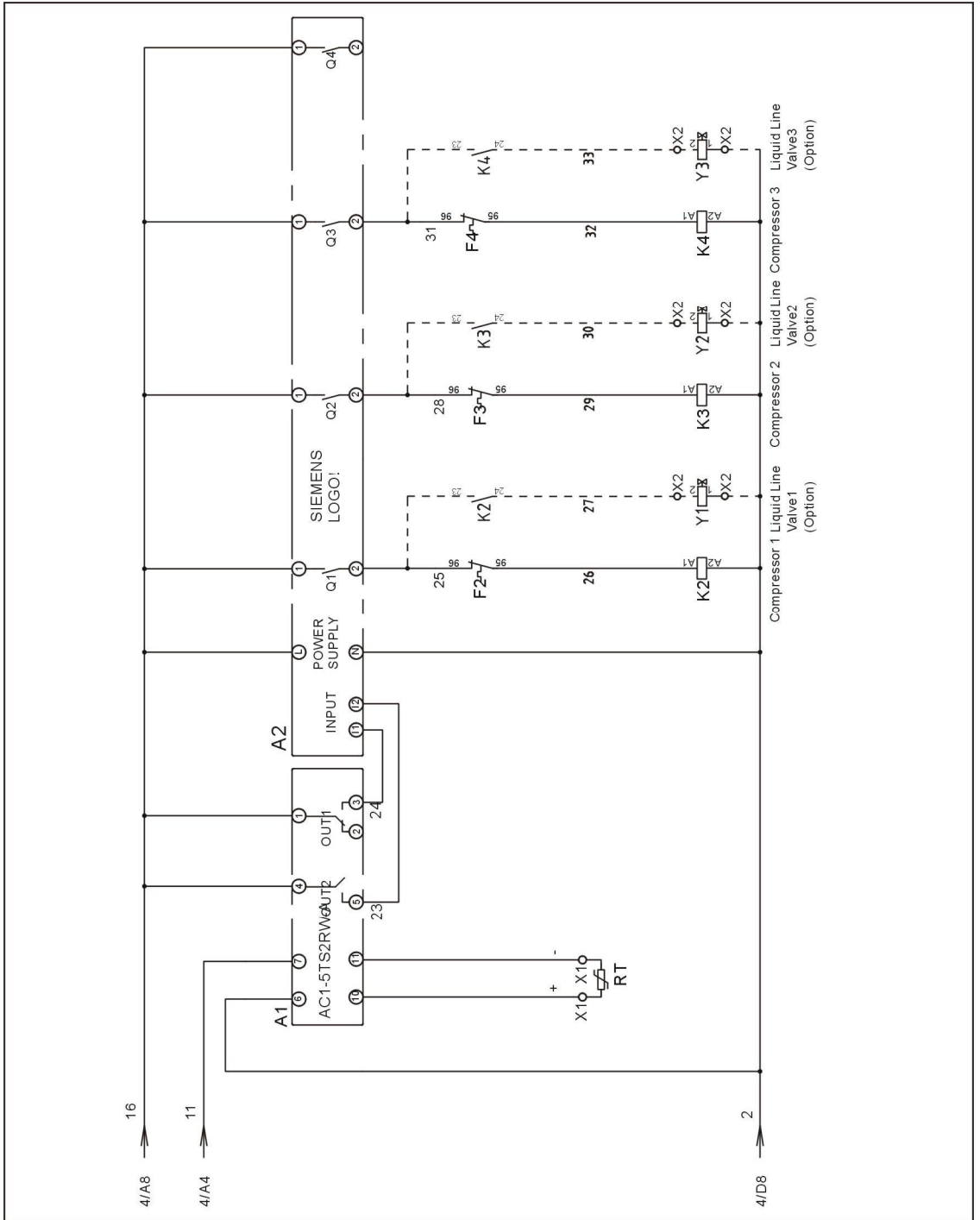


Control Circuit 1(SIC-100A-R2) (230V)



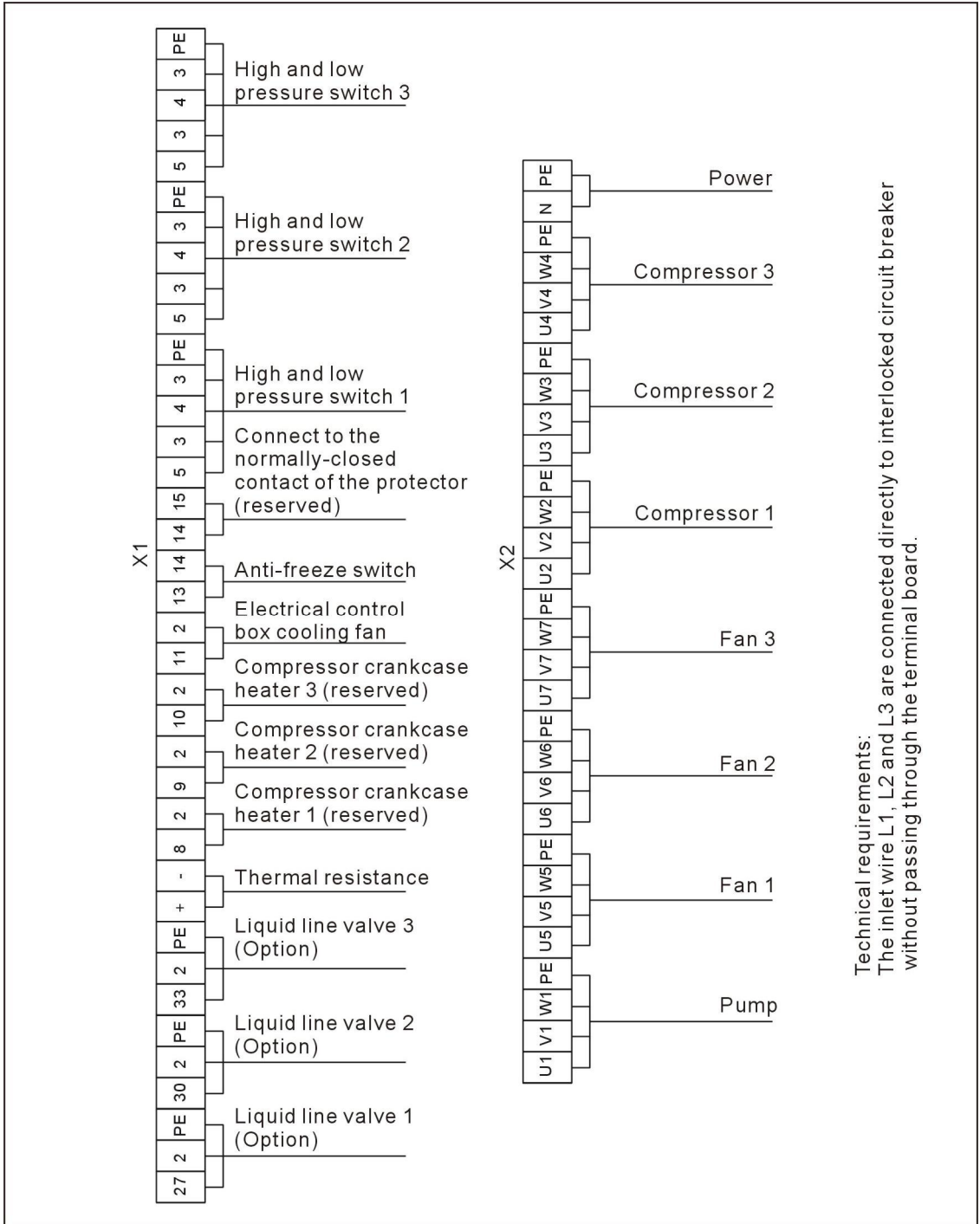
(SPARE) If optional specification is not used, it is connected.

Control Circuit 2(SIC-100A-R2) (230V)



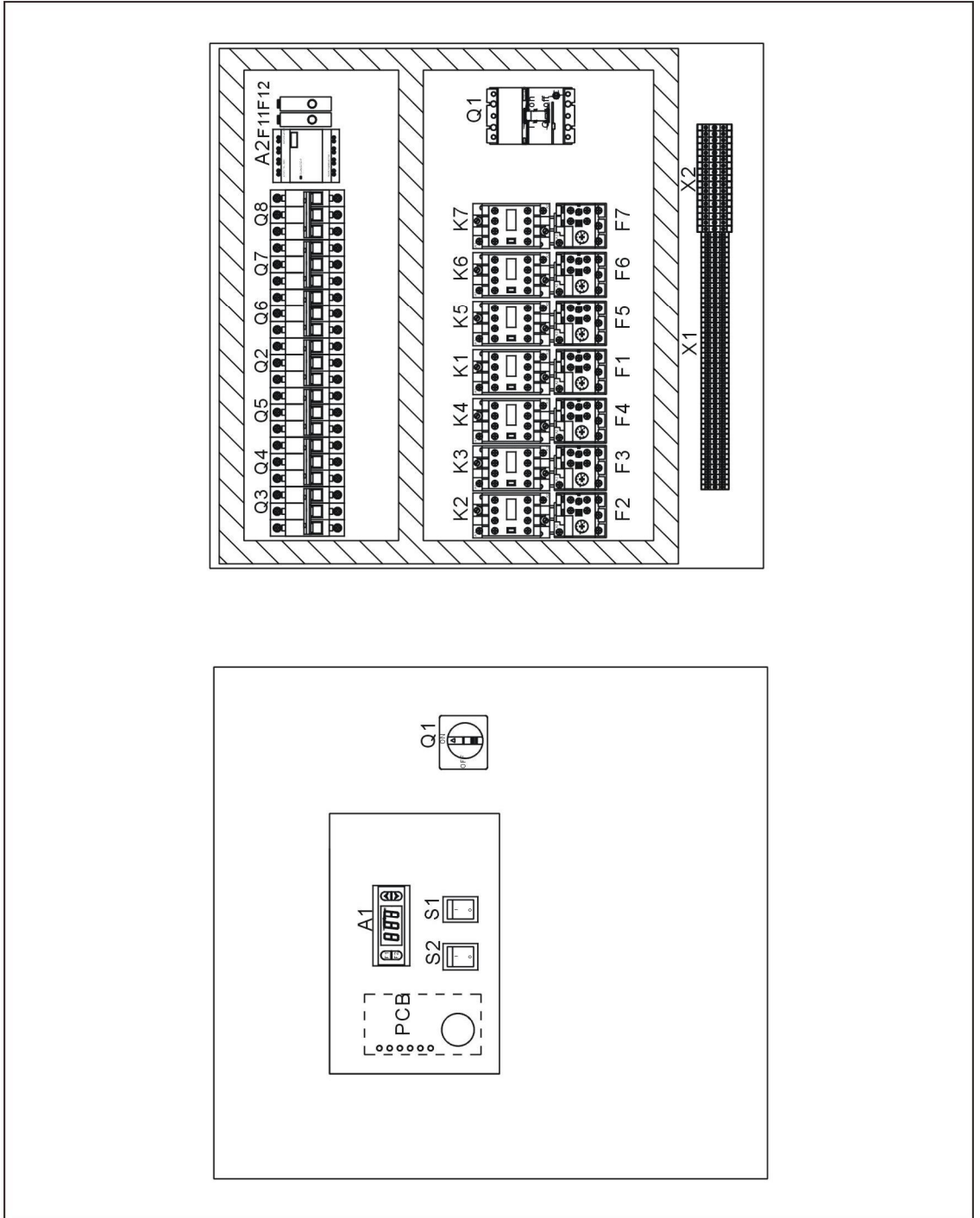
Control Circuit 3(SIC-100A-R2) (230V)

1.16 Electrical Components Layout (SIC-100A-R2) (230V)



Technical requirements:
 The inlet wire L1, L2 and L3 are connected directly to interlocked circuit breaker without passing through the terminal board.

Electrical Components Layout 1(SIC-100A-R2) (230V)



Electrical Components Layout 2(SIC-100A-R2) (230V)

1.17 Electrical Components List (SIC-100A-R2) (230V)

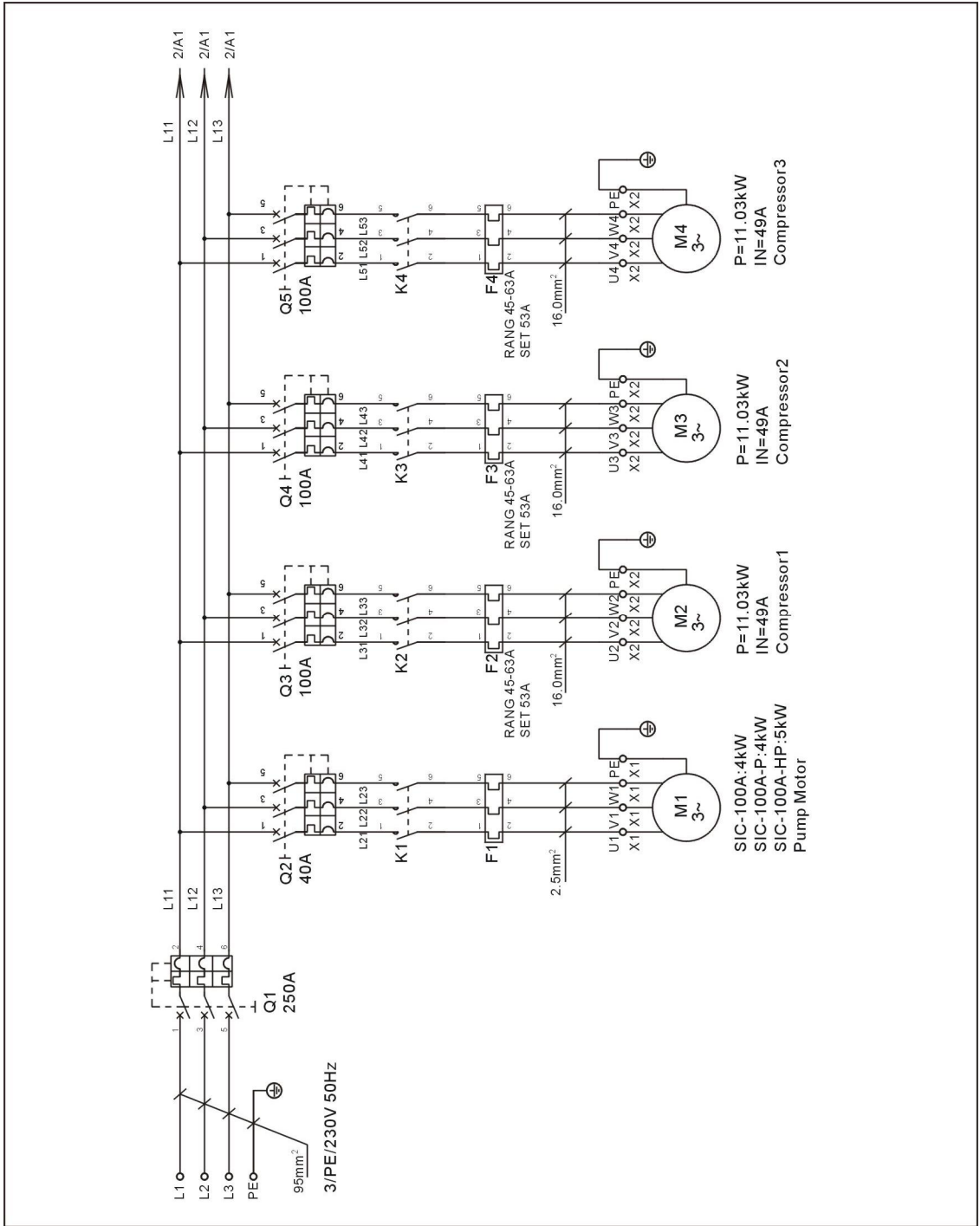
Electrical Components List (SIC-100A-R2) (230V)

No.	Symbol	Name	Specificatons	Parts No.
1	Q1	Circuit breaker *	250A	YE41252500000
2	Q2	Circuit breaker *	32A	YE40603200000
3	Q3 Q4	Circuit breaker *	100A	YE40100300000
4	Q5	Circuit breaker *	80A	YE40800300000
5	Q6 Q7	Circuit breaker *	20A	YE40602000000
6	Q8	Circuit breaker *	20A	YE40602000000
7	K1	Contactora *	220VAC 50/60Hz	-
8	K2 K3	Contactora *	220VAC 50/60Hz	YE00504400000
9	K4	Contactora *	220VAC 50/60Hz	YE00503500000
10	-	Auxiliary block	1NC	YE00592110100
11	-	Auxiliary block	1NO	YE00592110000
12	-	Auxiliary block	1NO	YE00592110000
13	K5 K6	Contactora *	220VAC 50/60Hz	YE00601721000
14	K7	Contactora *	220VAC 50/60Hz	YE00601621000
15	A1	Temperature controller *	115~230VAC	YE85120200000
16	A2	LOGO! Controller	AC115~230V	YE81023000000
17	RT	Temperature sensor	-	-
18	F1	Overload relay *	-	-
19	F2 F3	Overload relay *	45~63A	YE01514640000
20	F4	Overload relay *	36~45A	YE01612660000
21	F5 F6	Overload relay *	9~12.5A	YE01169125000
22	F7	Overload relay *	5.5~8A	YE01160550000
23	F11 F12	Fuse**	2A	YE41001000000
24	S1 S2	Control switch *	250V~10(5)A 4P WH	YE10210400000
25	S3	Anti-frozen switch *	-	-
26	S4~S6	HI-LO pressure switch	H:5~30bar L:-0.7~6bar	-
27	PCB	Control board *	230V 50/60Hz	YE80000100000
28	X1	Terminal board	-	YE61250040000
29	-	Terminal board	-	YE61253500000
30	-	Terminal board	-	YE61250040000
31	-	Terminal board	-	YE61253500000
32	X2	Terminal board	-	YE61353500000
33	-	Terminal board	-	YE61160000000
34	-	Terminal board	-	YE61163500000

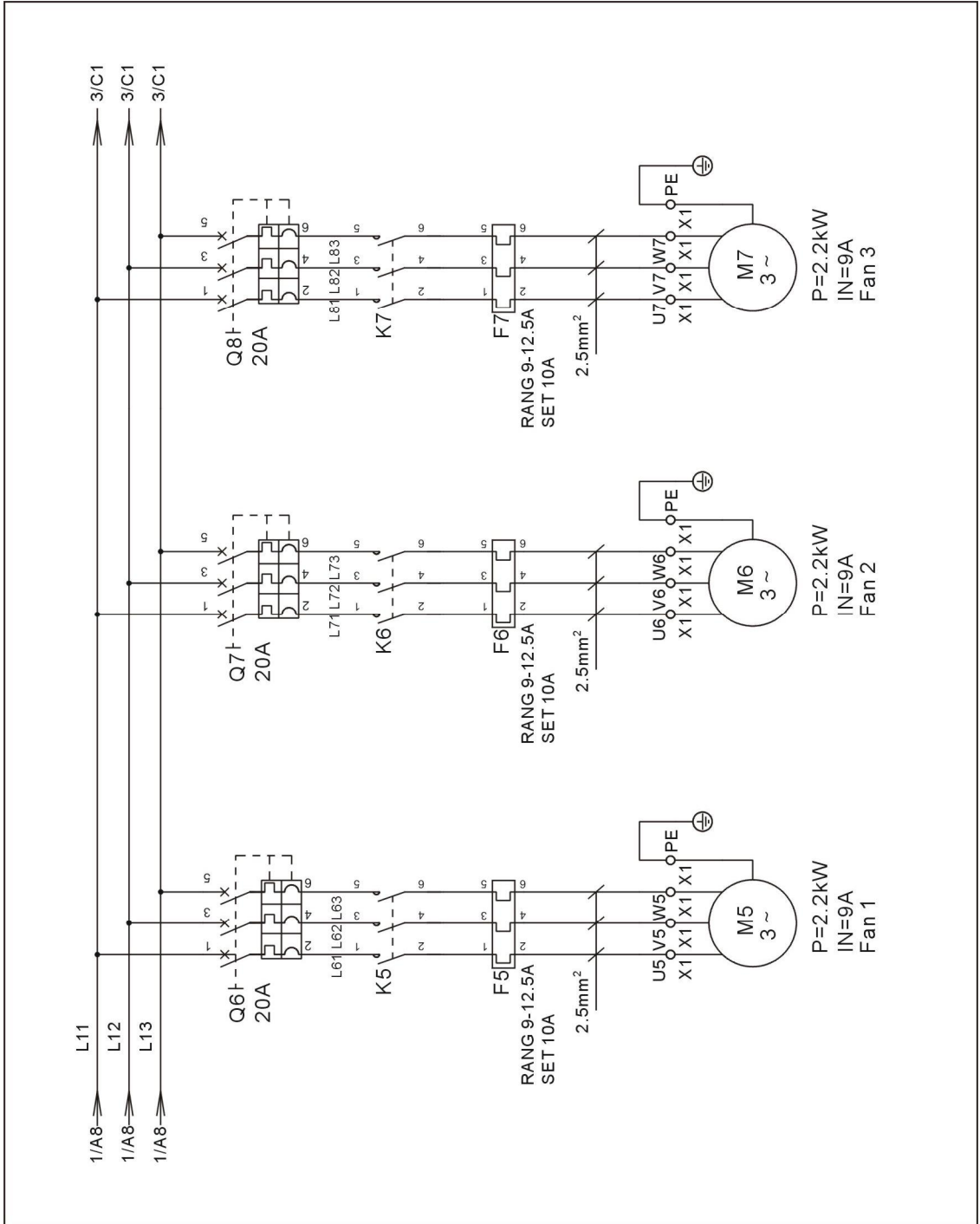
No.	Symbol	Name	Specificatons	Parts No.
35	-	Terminal board	-	YE61100000000
36	-	Terminal board	-	YE61103500000
37	-	Terminal board	-	YE61250040000
38	-	Terminal board	-	YE61253500000
39	M1	Pump motor	230V 50/60Hz	-
40	M2 M3	Compressor	230V 50/60Hz 11.03kW	-
41	M4	Compressor	230V 50/60Hz 7.35kW	-
42	M5	Fan motor	230V 50/60Hz 2.2kW	-
43	M6 M7	Fan motor	230V 50/60Hz 1.5kW	-
44	EH1~EH3	Compressor crankcase heater	230V 50/60Hz 45W	-
45	Y1~Y3	Solenoid valve**	230V 50/60Hz	-

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1.18 Main Electrical Circuit (SIC-114A-R2) (230V)

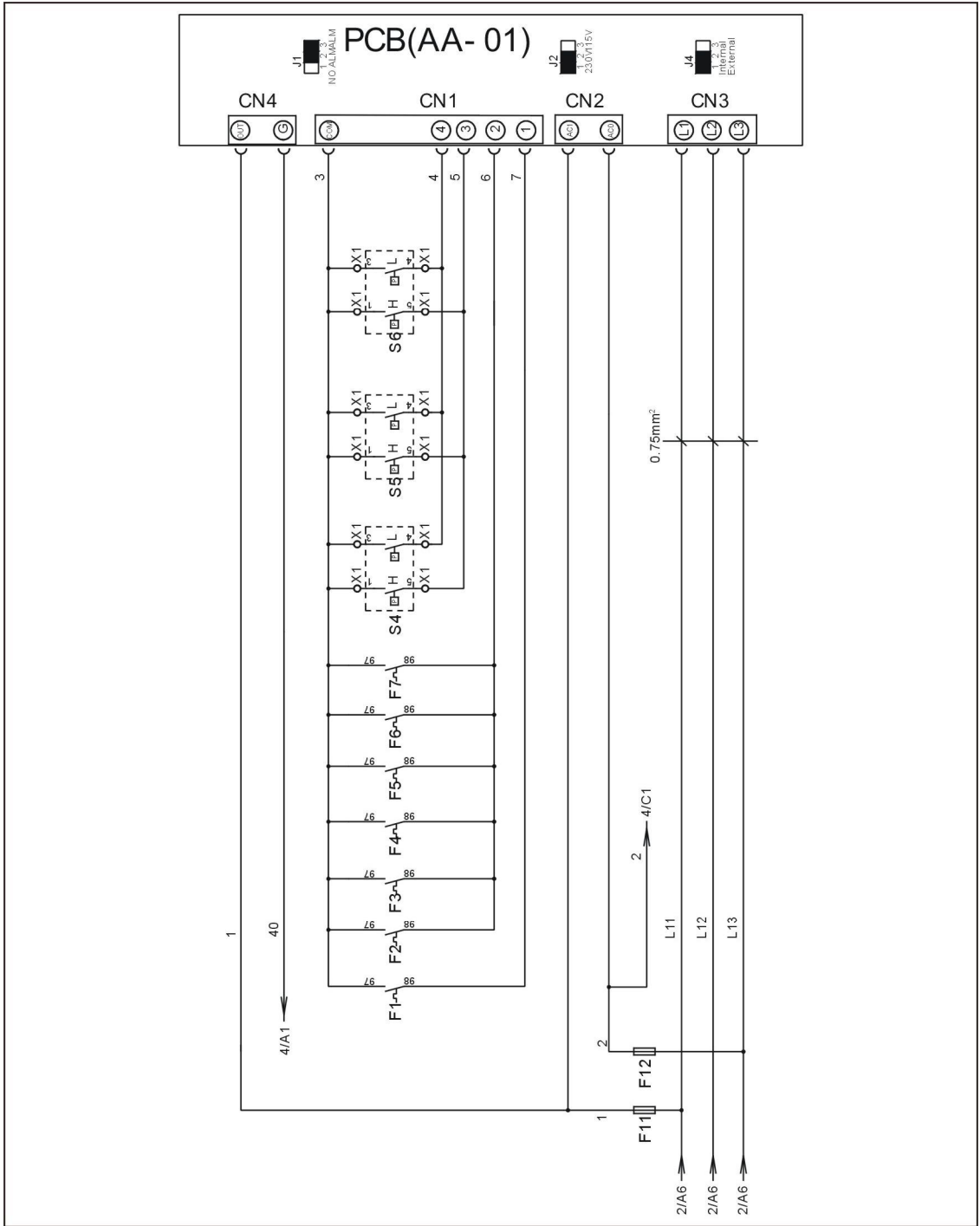


Main Electrical Circuit 1(SIC-114A-R2) (230V)

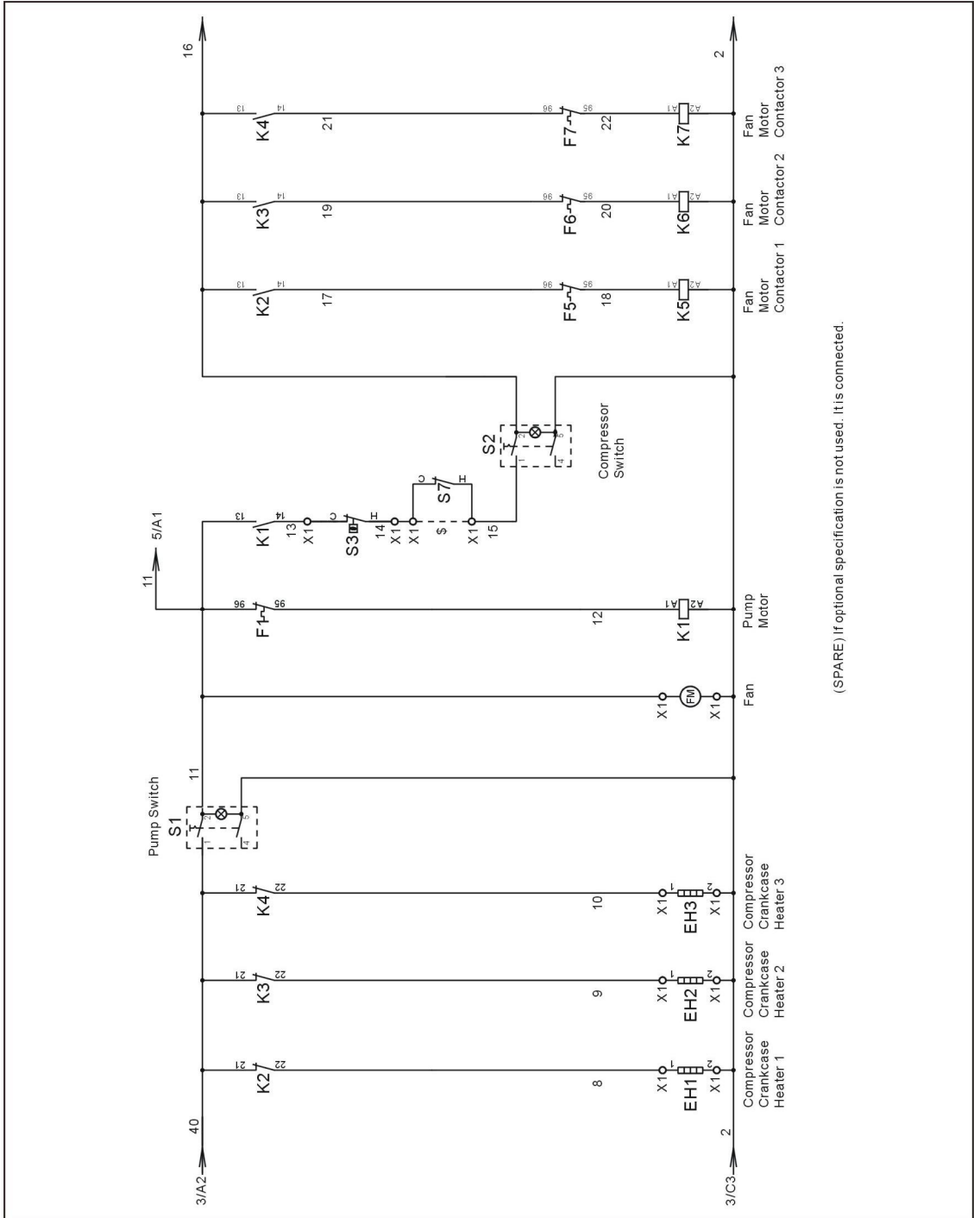


Main Electrical Circuit 2(SIC-114A-R2) (230V)

1.19 Control Circuit (SIC-114A-R2) (230V)

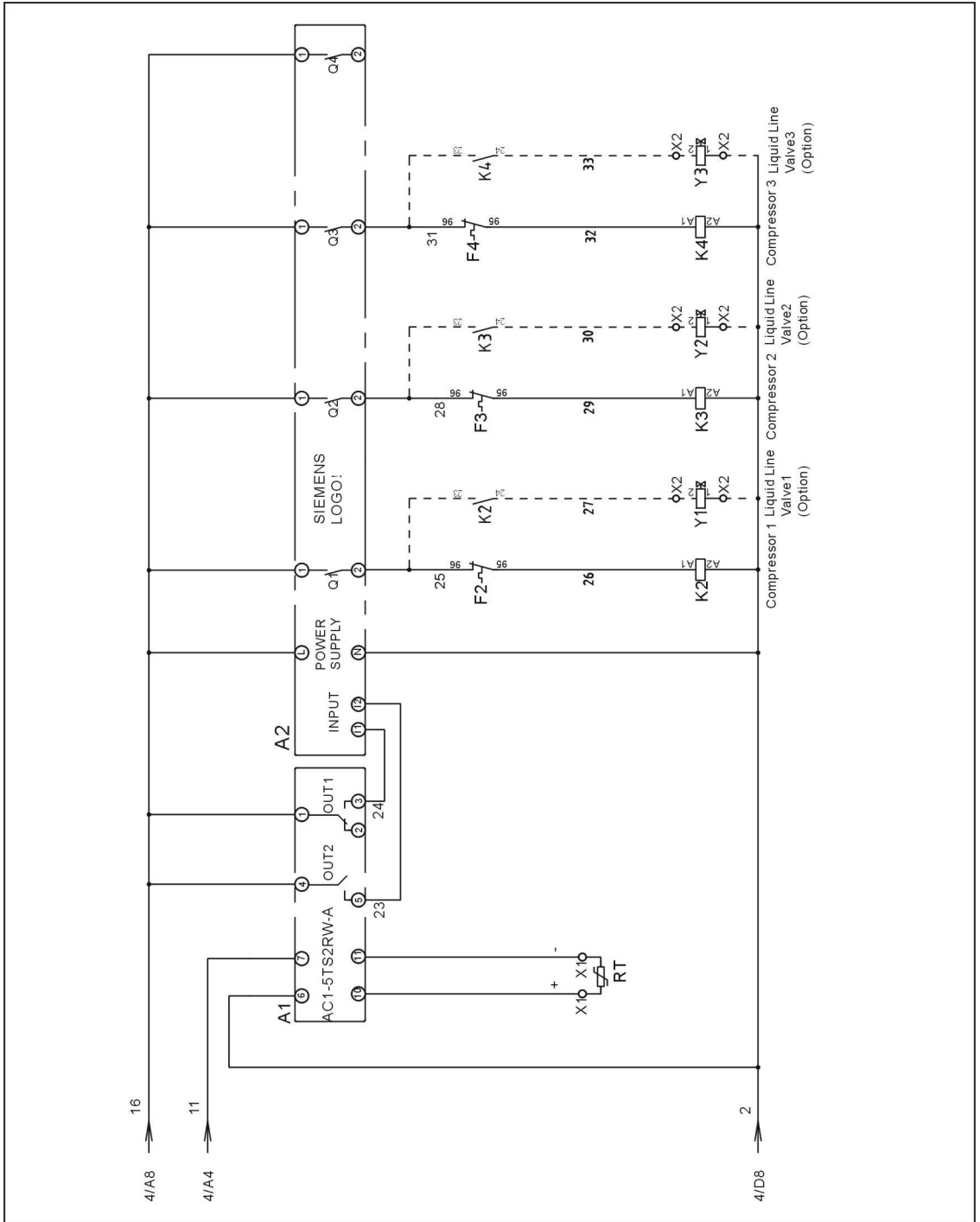


Control Circuit 1(SIC-114A-R2) (230V)



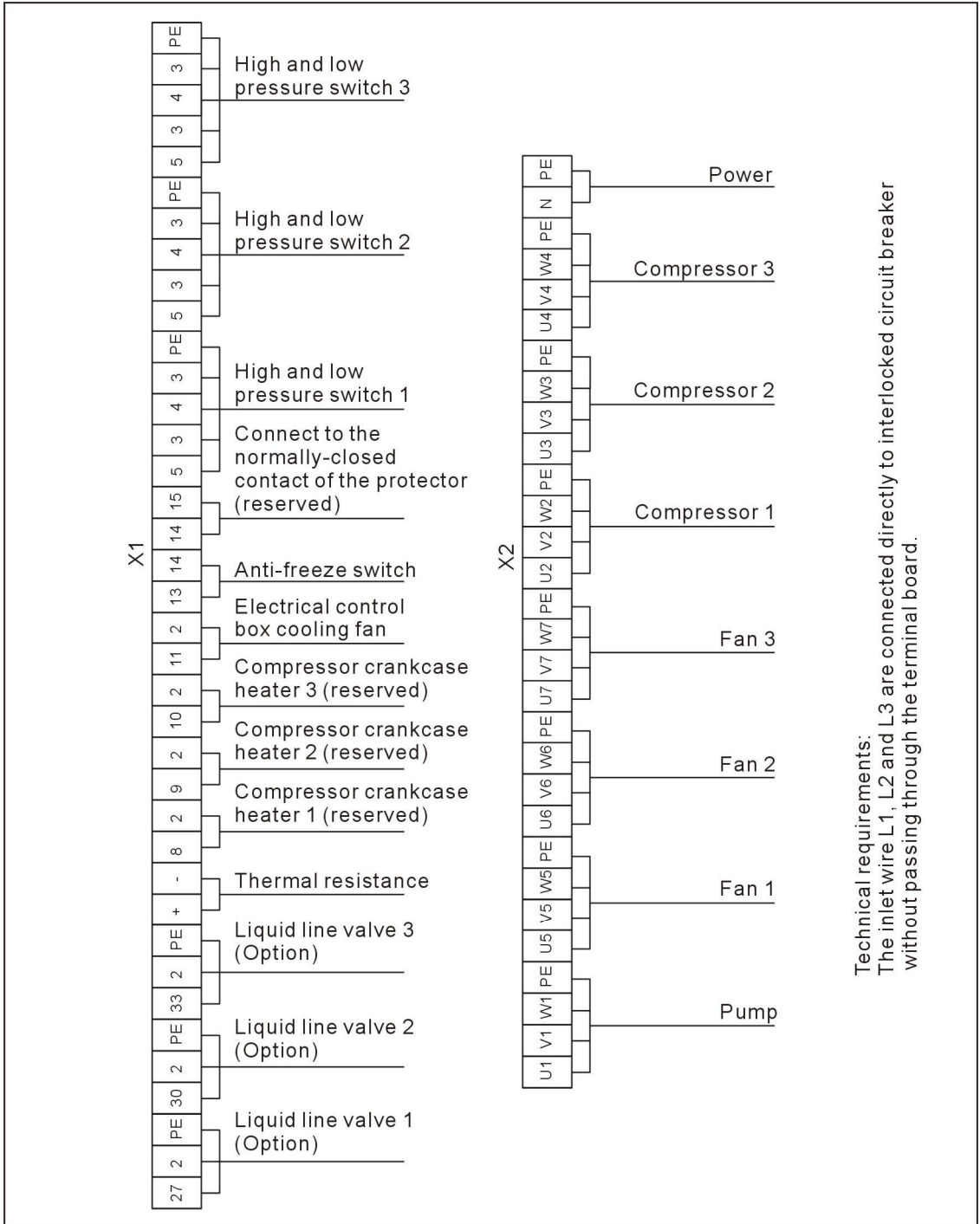
(SPARE) If optional specification is not used. It is connected.

Control Circuit 2(SIC-114A-R2) (230V)

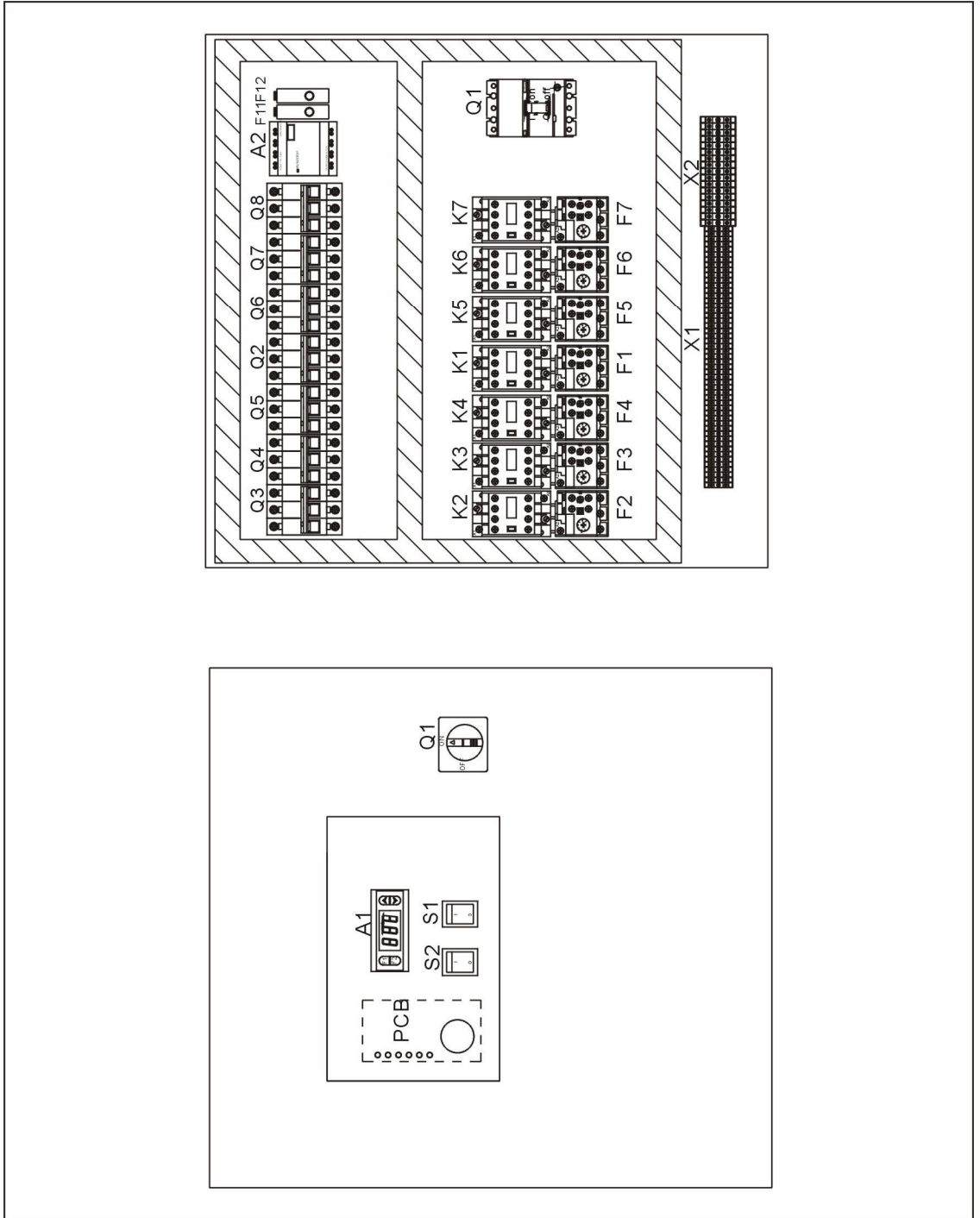


Control Circuit 3(SIC-114A-R2) (230V)

1.20 Electrical Components Layout (SIC-114A-R2) (230V)



Electrical Components Layout 1(SIC-114A-R2) (230V)



Electrical Components Layout 2(SIC-114A-R2) (230V)

1.21 Electrical Components List (SIC-114A-R2) (230V)

Electrical Components List (SIC-114A-R2) (230V)

No.	Symbol	Name	Specificatons	Parts No.
1	Q1	Circuit breaker *	250A	YE41252500000
2	Q2	Circuit breaker *	40A	YE40604000000
3	Q3~Q5	Circuit breaker *	100A	YE40100300000
4	Q6~Q8	Circuit breaker *	20A	YE40602000000
5	K1	Contactoer *	220VAC 50/60Hz	-
6	K2~K4	Contactoer *	220VAC 50/60Hz	YE00504400000
7	-	Auxiliary block	1NC	YE00592110100
8	-	Auxiliary block	1NO	YE00592110000
9	-	Auxiliary block	1NO	YE00592110000
10	K5~K7	Contactoer *	220VAC 50/60Hz	YE00601721000
11	A1	Temperature controller *	115~230VAC	YE85120200000
12	A2	LOGO! Controller	AC115~230V	YE81023000000
13	RT	Temperature sensor	-	-
14	F1	Overload relay *	-	-
15	F2~F4	Overload relay *	45~63A	YE01514640000
16	F5~F7	Overload relay *	9~12.5A	YE01169125000
17	F11 F12	Fuse**	2A	YE41001000000
18	S1 S2	Control switch *	250V~10(5)A 4P WH	YE10210400000
19	S3	Anti-frozen switch *	-	-
20	S4~S6	HI-LO pressure switch	H:5~30bar L:-0.7~6bar	-
21	PCB	Control board *	230V 50/60Hz	YE80000100000
22	X1	Terminal board	-	YE61250040000
23	-	Terminal board	-	YE61253500000
24	-	Terminal board	-	YE61250040000
25	-	Terminal board	-	YE61253500000
26	X2	Terminal board	-	YE61353500000
27	-	Terminal board	-	YE61160000000
28	-	Terminal board	-	YE61163500000
29	-	Terminal board	-	YE61250040000
30	-	Terminal board	-	YE61253500000
31	M1	Pump motor	230V 50/60Hz	-
32	M2~M4	Compressor	230V 50/60Hz 11.03kW	-
33	M5~M7	Fan motor	230V 50/60Hz 2.2kW	-
34	EH1~EH3	Compressor crankcase heater	230V 50/60Hz 45W	-
35	Y1~Y3	Solenoid valve**	230V 50/60Hz	-

* means possible broken parts. ** means easy broken parts. Spare backup is suggested. Please confirm the version number of the manual before you order to ensure the stock number and the parts are consistent.