

Wiring Diagram

Diplomat

Diplomat
Diplomat Optimum
Diplomat Optimum G2
Diplomat Optimum G3



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The English language is used for the original instructions.
Other languages are a translation of the original instructions.
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1 Legend

1.1 Legend

Number/Note	Description
1	Heat pump
3	Outdoor unit
36	Circulation pump (system)
40	Expansion card
50	Outdoor sensor
51	System supply line sensor
52	Sensor for EM-Modul module/ret.line sensor
53	Hot water starting sensor
55	Hot water sensor top
62	Room Sensor
69	Shunted loop
71	Flow guard
115	Immersion heater
117	Additional heater
301	Compressor
302	Brine pump
303	Radiator pump
304	Circulation pump
305	Fan
306	System circulation pump
307	Distribution circulation pump
308	Condenser pump
309	Hot gas pump
310	Reversing valve
311	4 way valve
312	Bypass valve
313	Electronic expansion valve
317	Immersion heater
340	Temperature guard
341	Thermal overload relay
342	Circuit breaker
343	Line circuit breaker
344	Alarm relay
345	Contactora
350	Soft start
351	Capacitor
353	Drip tray heater
354	Compressor Heater
355	Drip tray heater cable
362	Shunt valve control

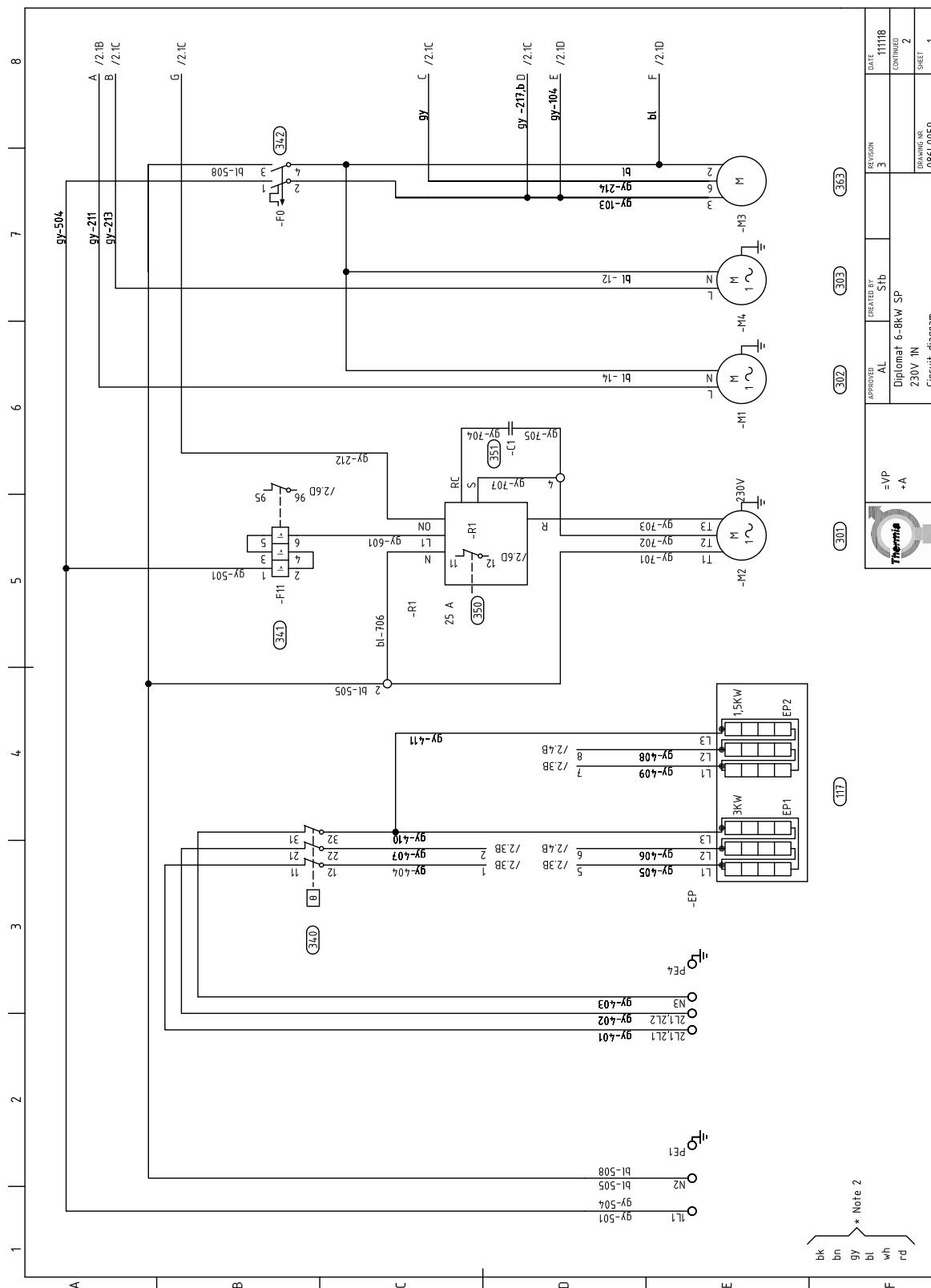
Number/Note	Description
363	Reversing valve hot-water
364	Shunt valve hot-water
365	Supply line sensor
366	Return line sensor
367	System shunt
368	Distribution circuit shunt
369	Pool heating valve
370	2nd distribution circuit pump
371	Auxiliary heating Oil/El
372	Auxiliary top heating
373	Distribution circuit shunt 2
374	Shunt defroster
375	Brine valve
376	Shunt cooling
403	Operating pressure switch
405	Heating out sensor
406	Room sensor
407	HGW sensor
408	EVU
410	Hot water
411	Heating return sensor
412	Brine out sensor
413	Brine in sensor
414	High pressure switch
415	Low pressure switch
416	Discharge pipe sensor
417	Defrost sensor
418	Refrigerant 1 sensor
419	Refrigerant 2 sensor
420	Pressure transmitter
421	Suction gas sensor
422	Dewpoint sensor
423	Sensor pool
424	Sensor cooling
425	Sensor buffer tank
426	Sensor system supply line
427	Sensor distribution circuit 1
428	Sensor distribution circuit 2
451	Control unit
452	I/O controller
453	Display

Number/Note	Description
454	Electronic expansion valve controller
455	Indoor hub controller
456	Current limiter
457	WM-HPC Control module
458	HPC-RM Relay module
459	HPC-EM Expansion module
460	HPC-CM Cooling module
461	HPC-OP Operator panel
* Note 1	Strapped at delivery
* Note 2	blue
* Note 2	brown
* Note 2	grey
* Note 2	green
* Note 2	yellow
* Note 2	violet
* Note 2	pink
* Note 2	red
* Note 2	black
* Note 2	white
* Note 3	Can be connected to 230V single phase if auxiliary heater is disconnected.
* Note 4	When connected to 230V single phase straps to auxiliary heater shall be removed.
* Note 5	Remove jumper when using separate supply of control circuit

Number/Note	Description
* Note 6	Remove jumper when using flowguard
* Note 7	Overload relay trip/tripped out
* Note 8	Alarm
* Note 9	Speed control
* Note 10	Please make sure that all supply lines are disconnected before attending any work to internal electrical parts!
* Note 11	Fan overload relay
* Note 12	To indoor unit
* Note 13	To slave unit
* Note 14	To electronic expansion unit
* Note 15	Immersion heater or external auxiliary heater
* Note 16	Potential free contact
* Note 17	To outdoor unit
* Note 18	To expansion Unit
* Note 19	Communication
* Note 20	Passive cooling Brine circuit
* Note 21	Passive cooling Radiator circuit
* Note 22	Combined heat source system
* Note 23	Passive cooling
* Note 24	Remove jumper when EVU
* Note 25	EVU constant power supply
* Note 26	Remove jumper if EVU is supplied separately
* Note 27	Remove jumper when flowguard or pressure switch Brine is used

2 Diplomat

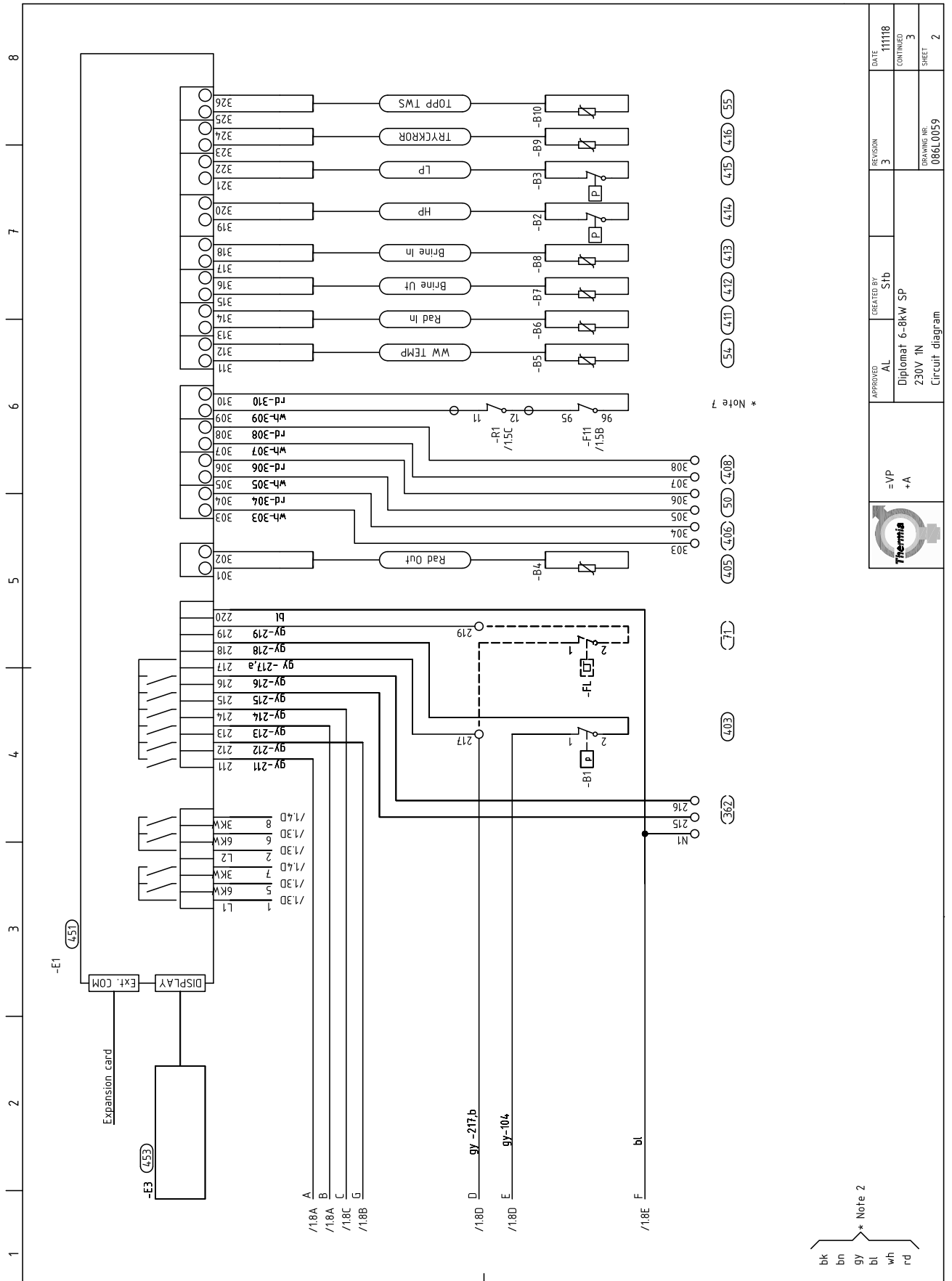
2.1 Diplomat 6-8kW 230V 1N



DATE	111118
REVISION	3
CONTAINED	2
SHEET	1
APPROVED	AL
CREATED BY	Stb
Diplomat 6-8kW SP	
230V 1N	
Circuit diagram	
DRAWING NO. 086L0059	
= VP	
+ A	

Wiring Diagram

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* Note 1

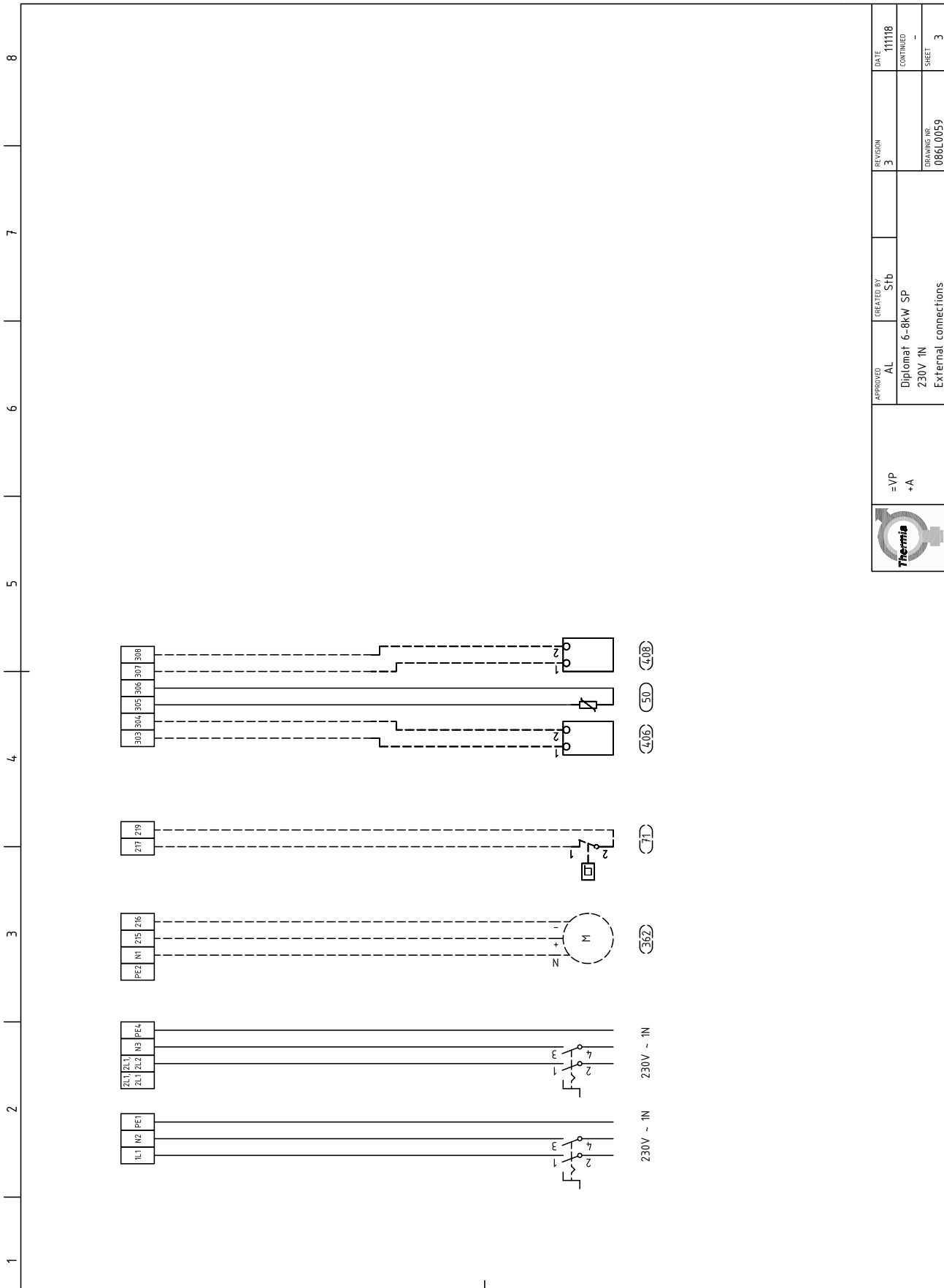
* Note 2
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APPROVED	AL	CREATED BY	Sfb	DATE	111118
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				DRAWING NR.	086L0059
				SHEET	2



= VP
 + A

Diplomat 6-8kW SP
 230V 1N
 Circuit diagram

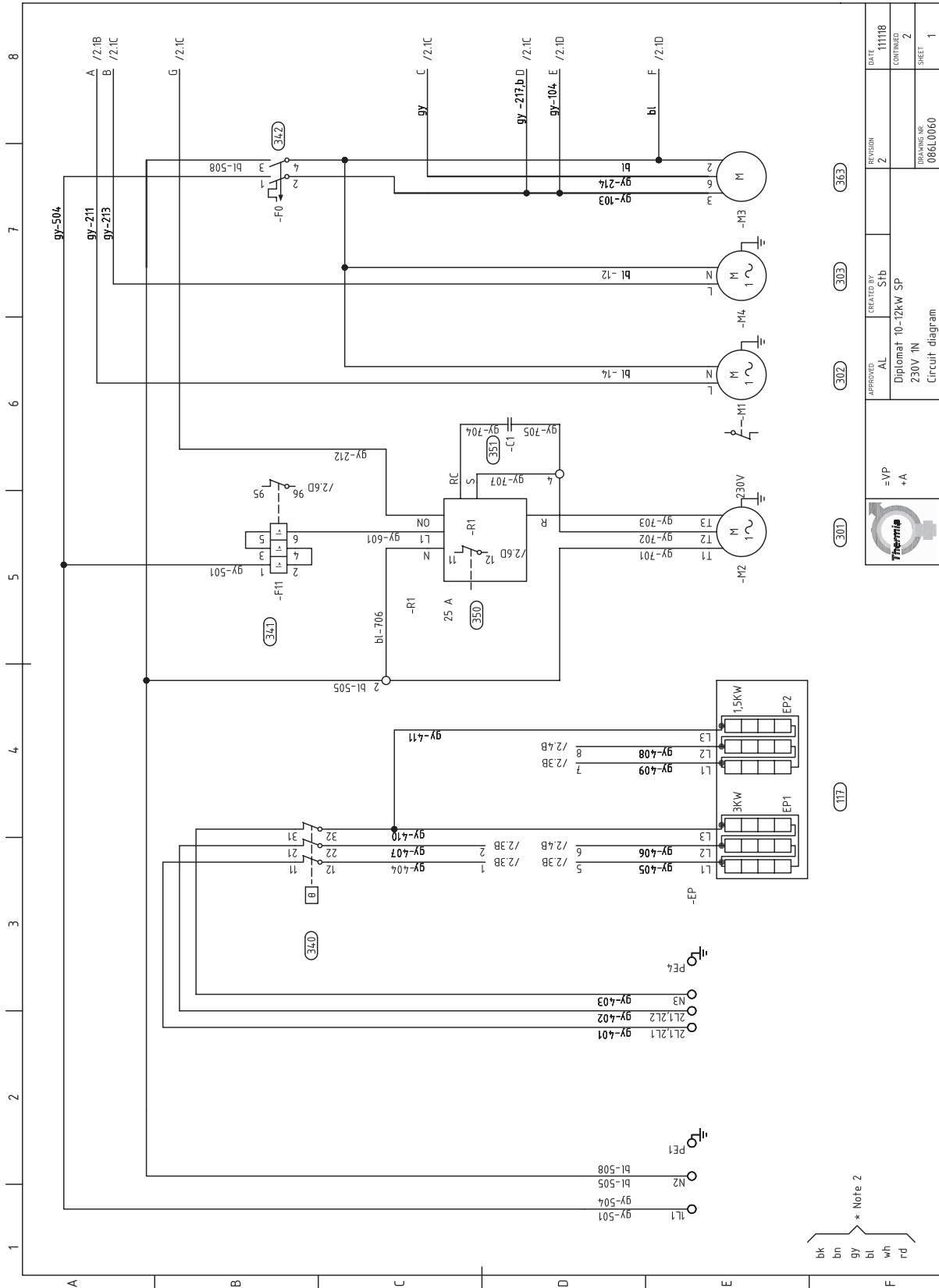


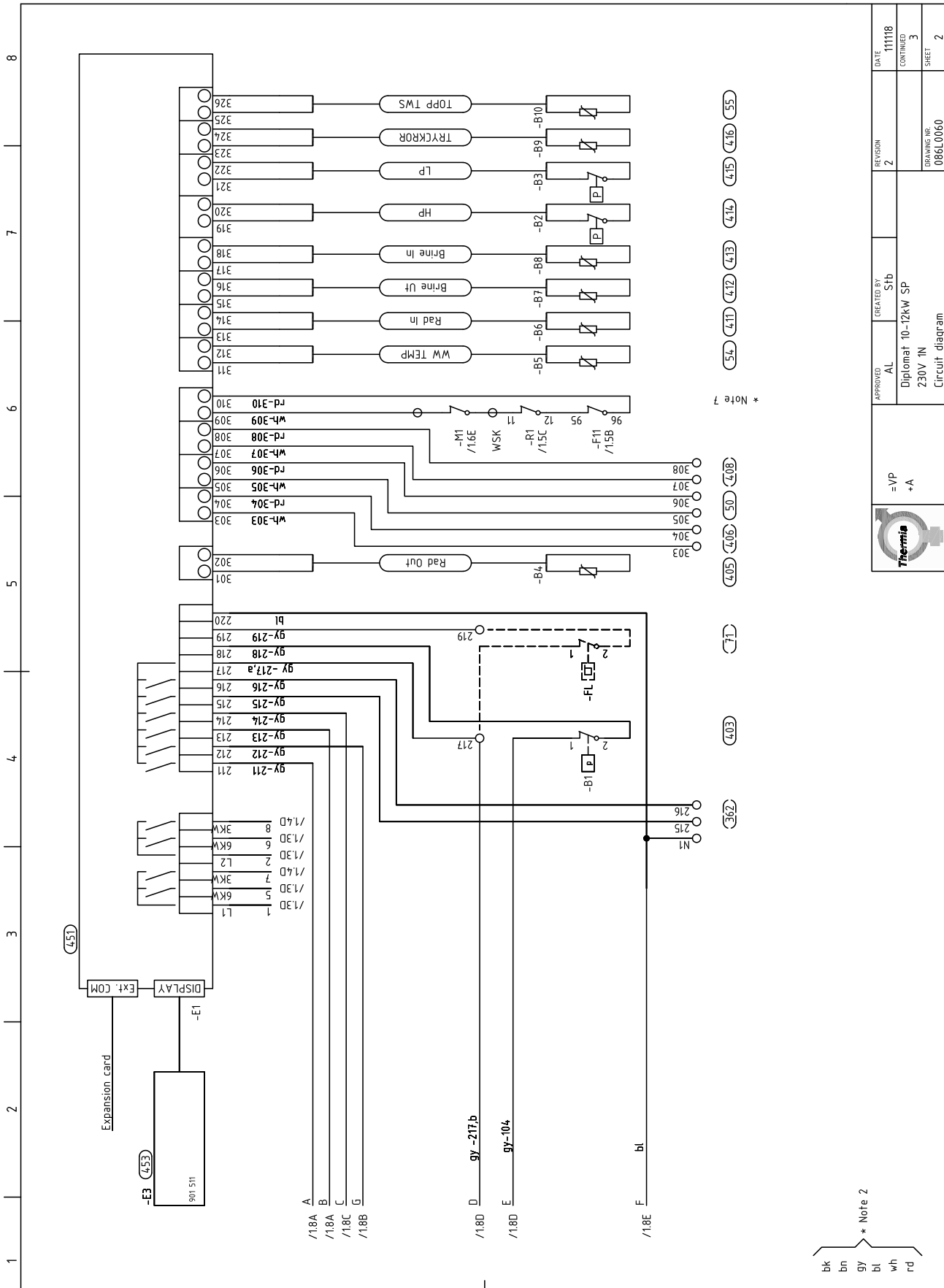
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		Diplomat 6-8kW SP 230V 1N External connections		DRAWING NR.	SHEET
				086L0059	3

Wiring Diagram

Diplomat

2.2 Diplomat 10-12kW 230V 1N



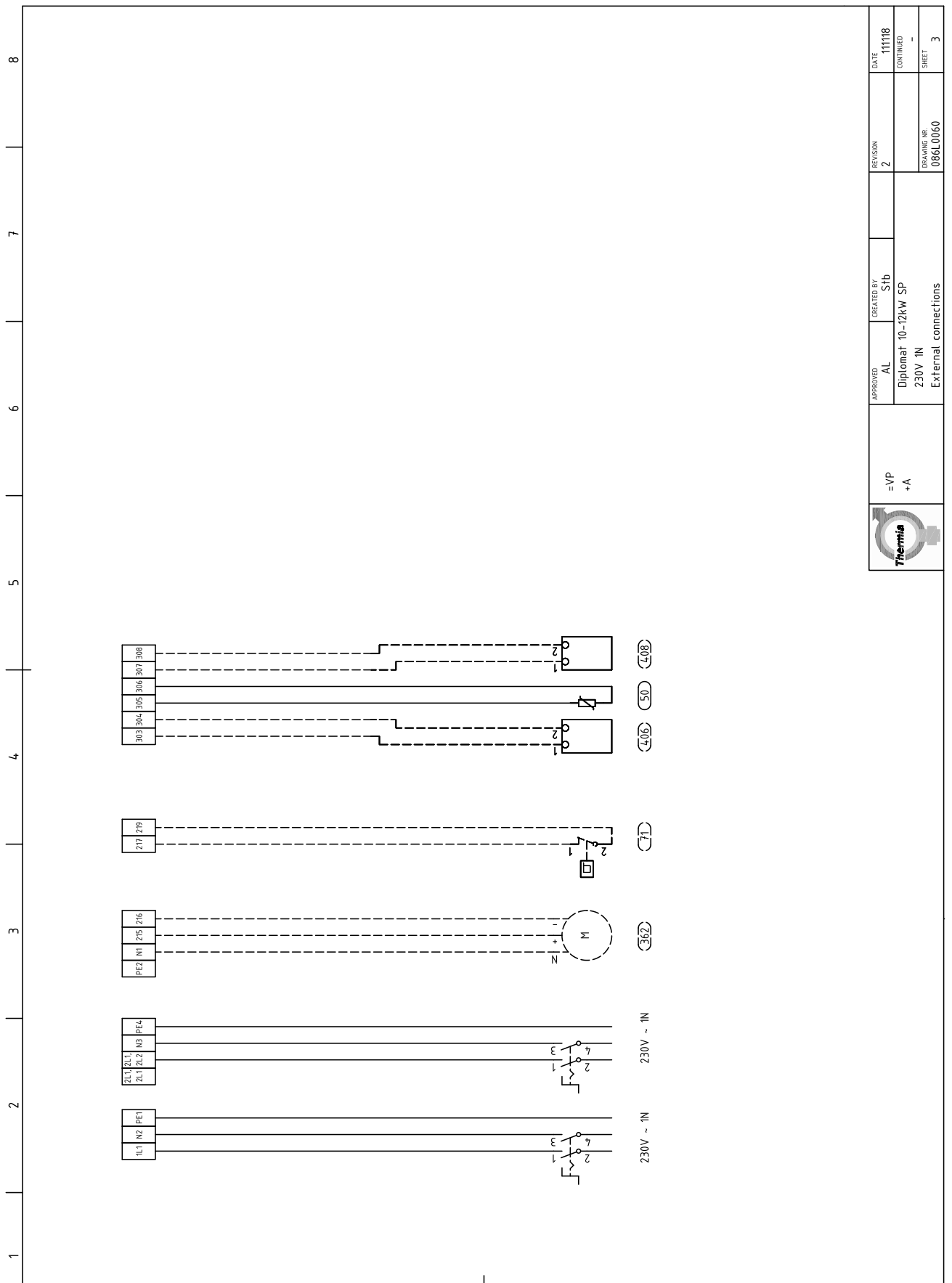


* Note 7

* Note 2

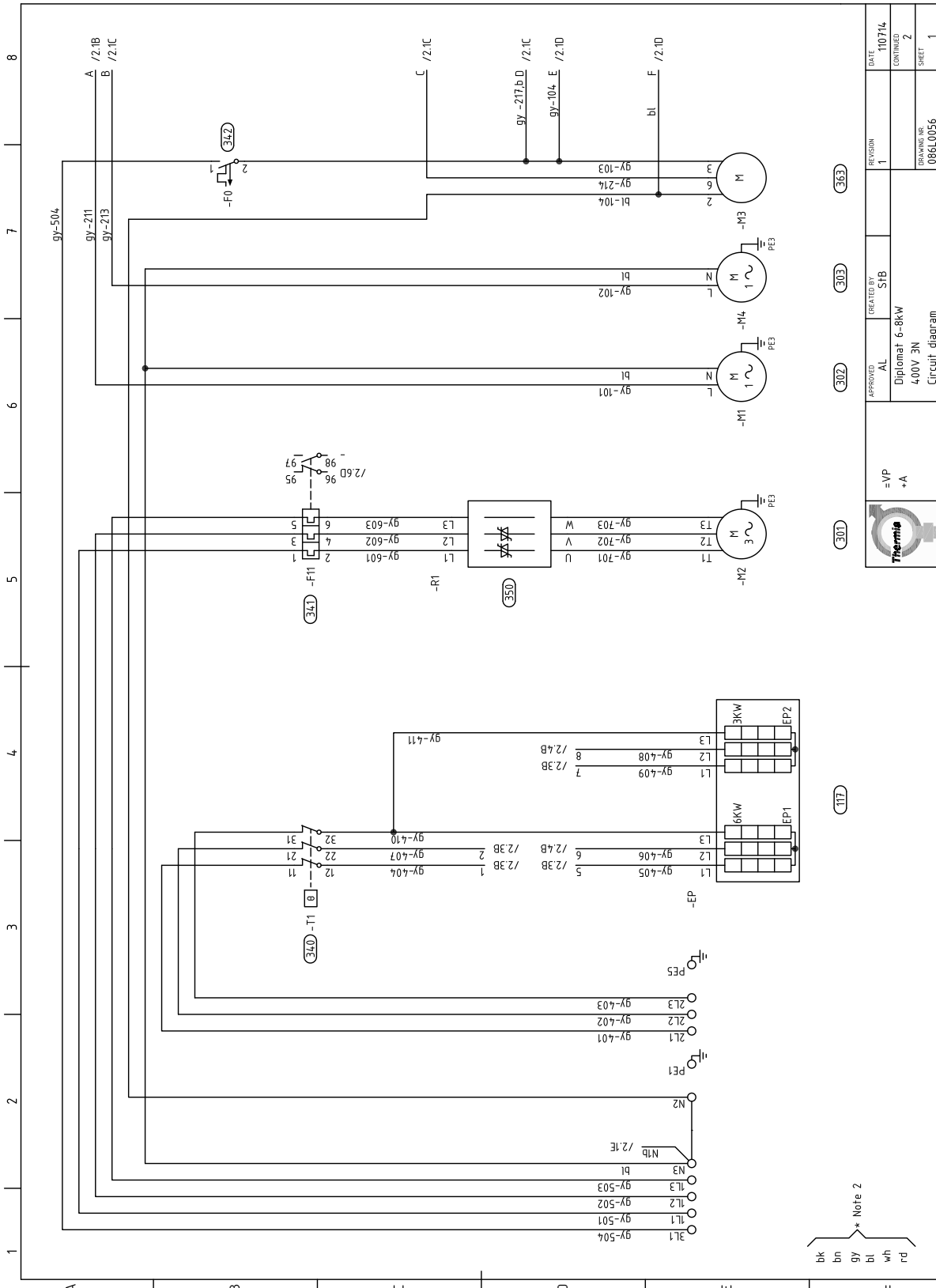
bk
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230V IN			Circuit diagram		SHEET		
					3		
					2		



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					DRAWING NR: 086L0060
Diplomat 10-12kW SP 230V 1N External connections				SHEET: 3	SHEET: 3

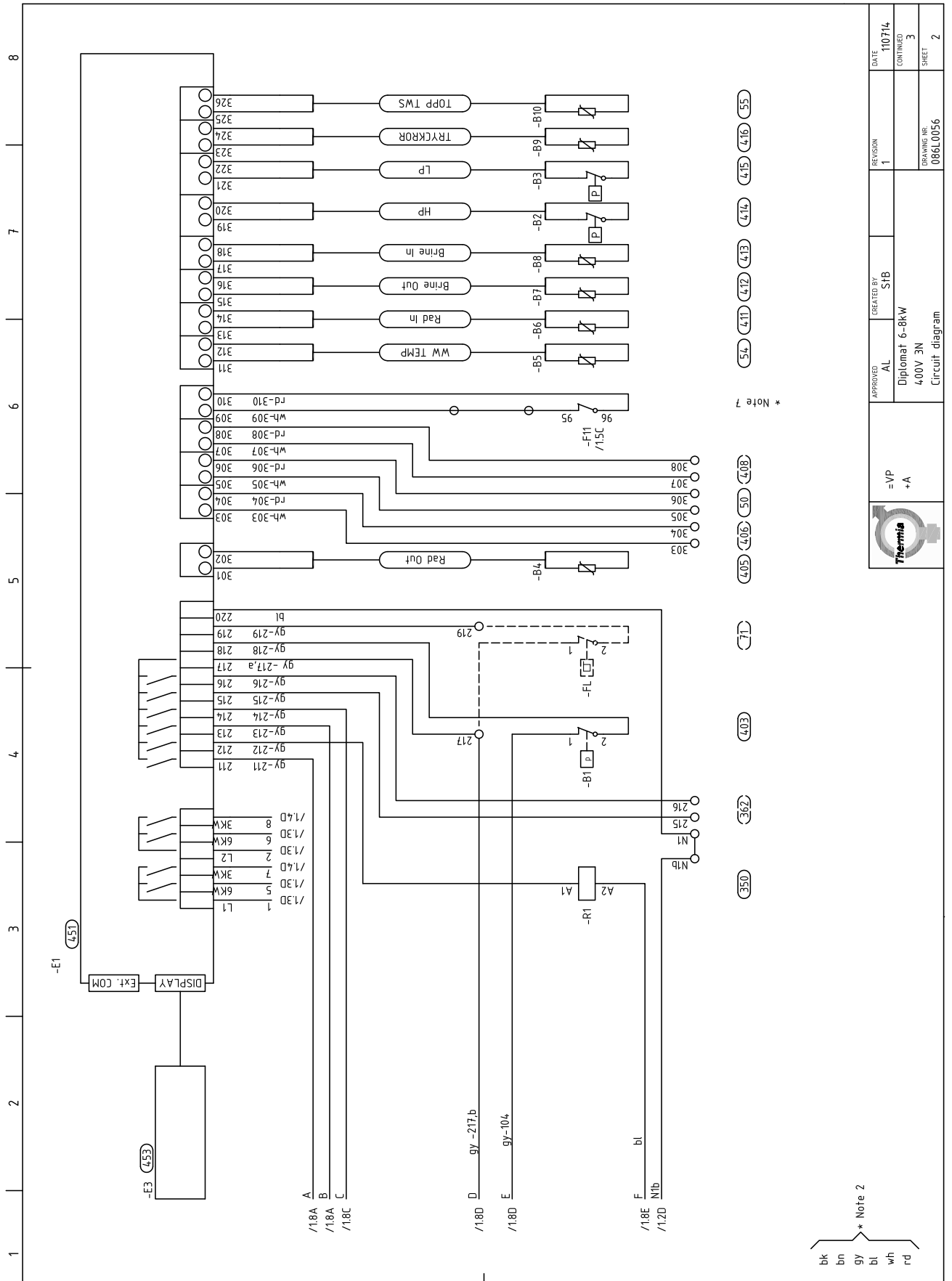
2.3 Diplomat 6-8kW 400V 3N



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REVISION	1
CREATED BY	STB
APPROVED	AL
Diplomat 6-8kW 400V 3N Circuit diagram	
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DRAWING NO. 086L0056	

Wiring Diagram

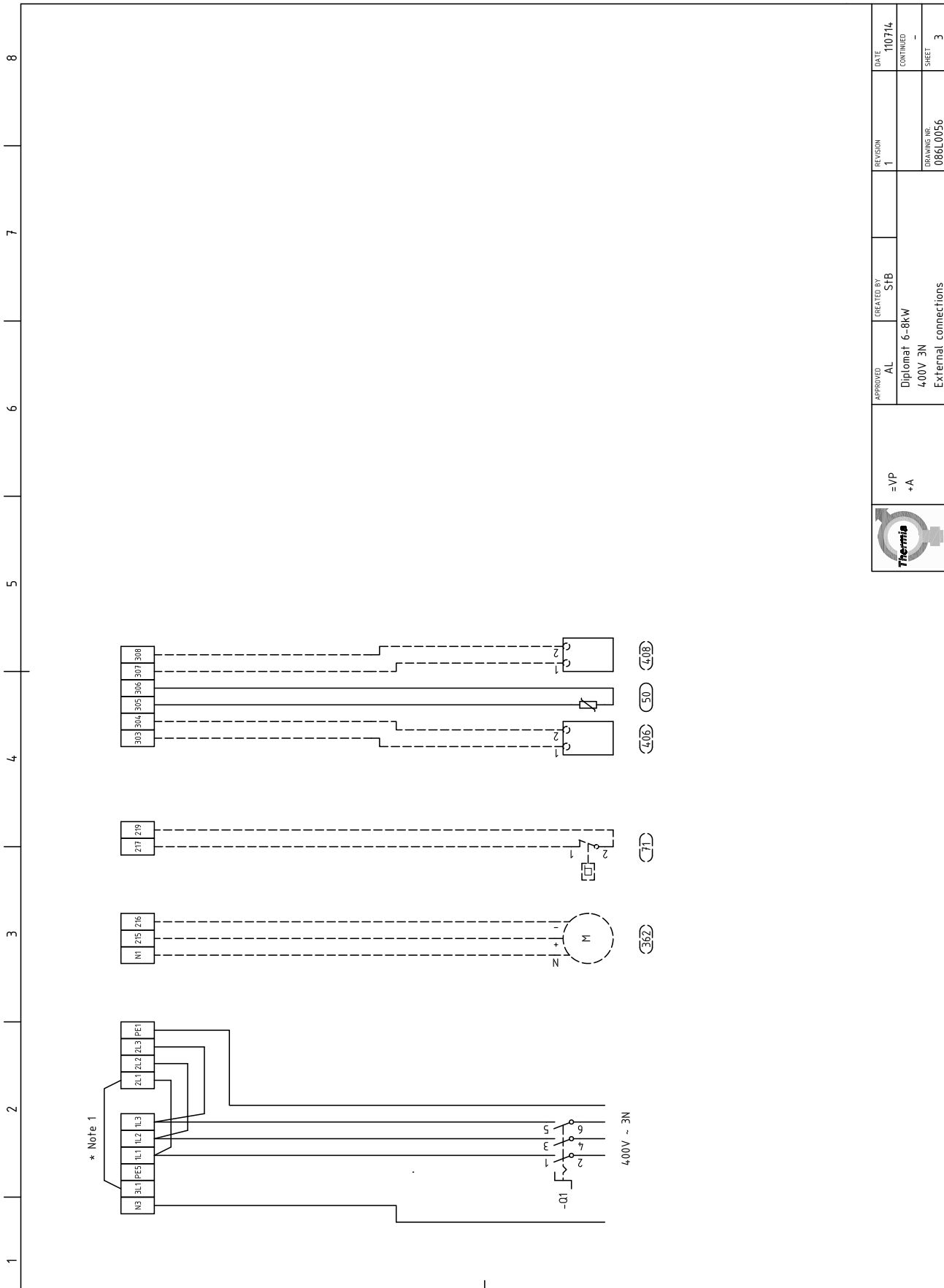
Diplomat



* Note 7

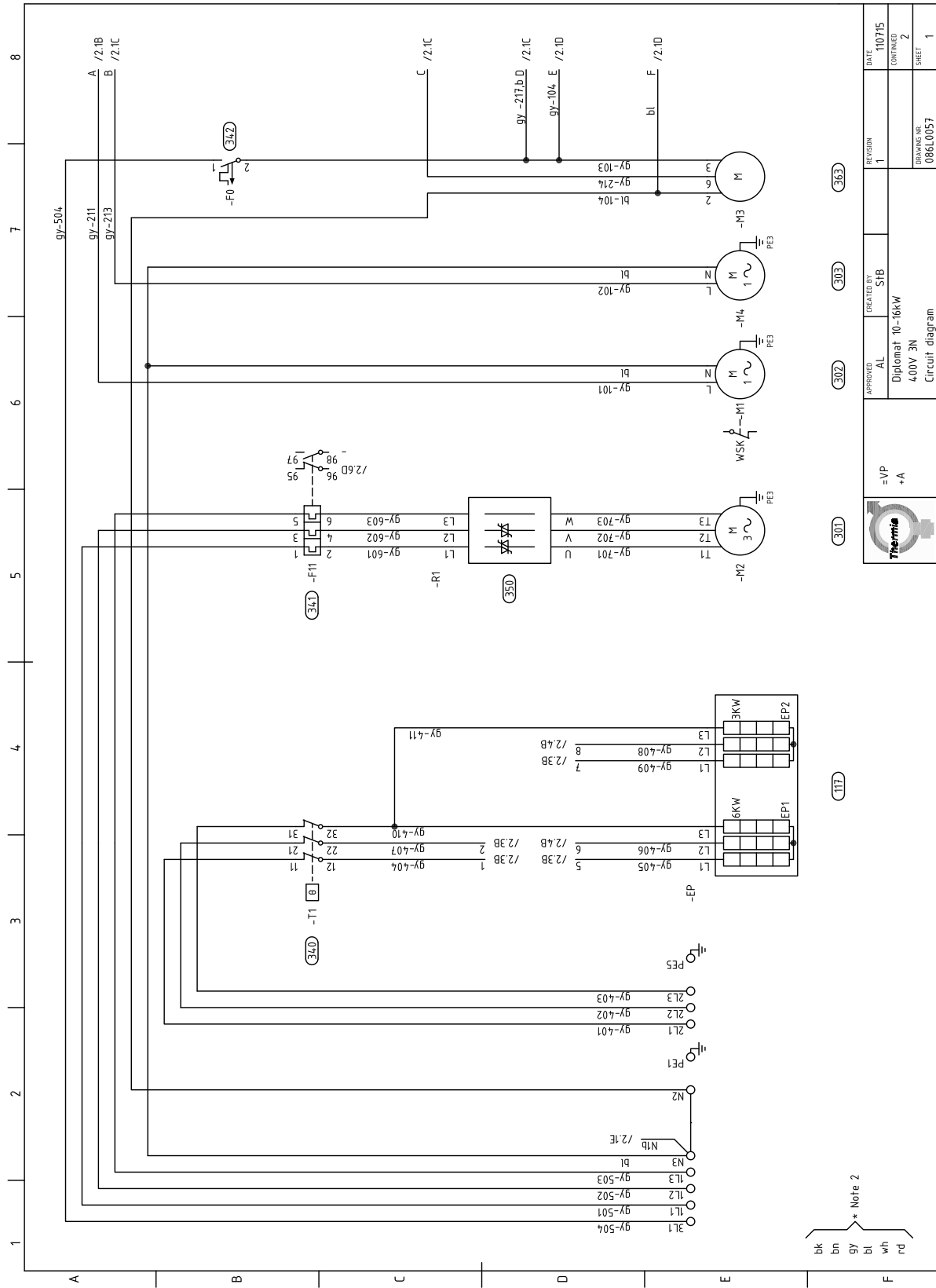
* Note 2
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REVISION	1
APPROVED	AL
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4,00V 3N	
Circuit diagram	
DRAWING NR.	086L0056
SHEET	3
SHEET	2



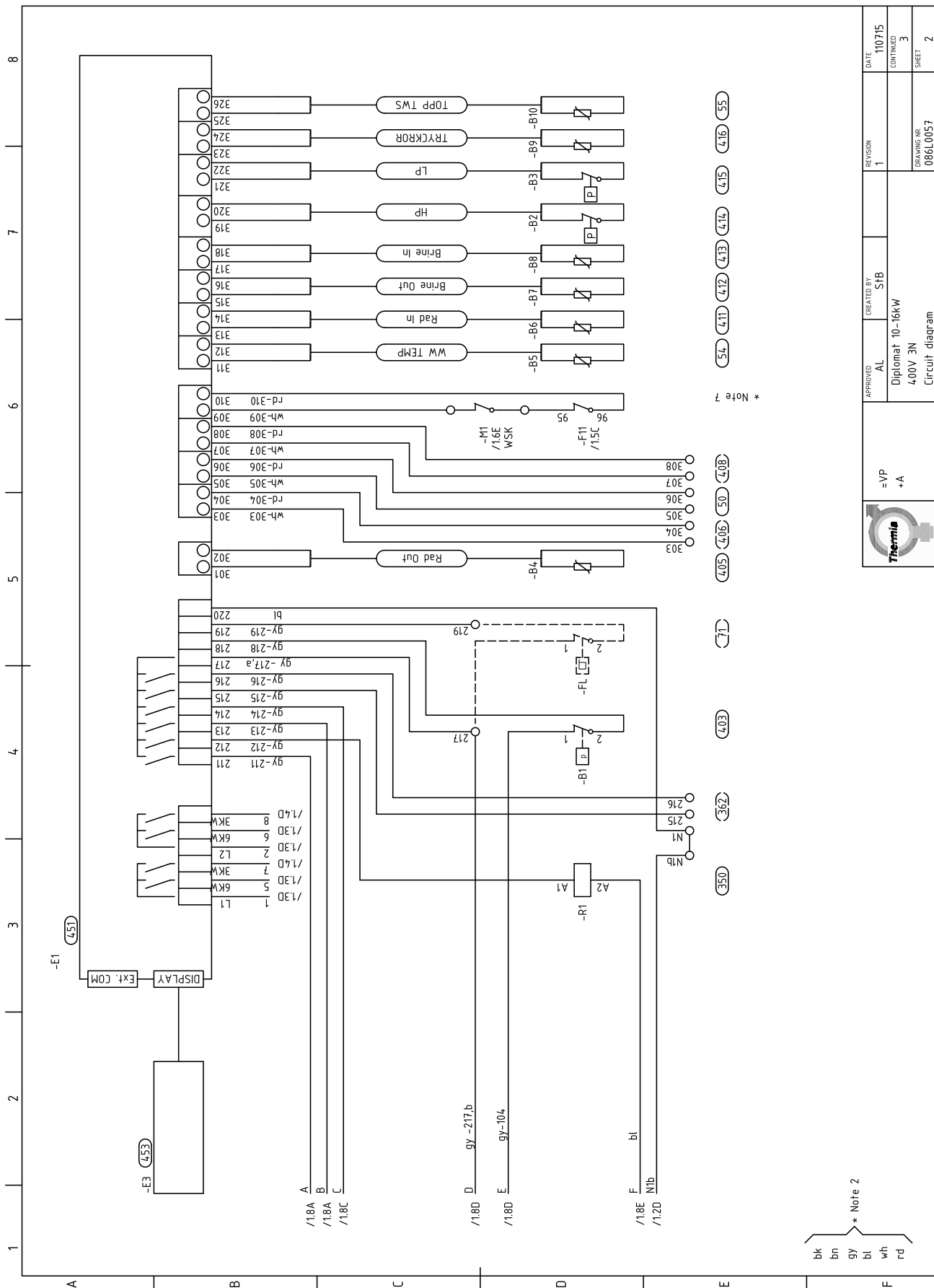
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				SHEET 3	

2.4 Diplomat 10-16kW 400V 3N



DATE	10715
REVISION	1
CONTINUED	2
SHEET	1
APPROVED	AL
CREATED BY	SIB
PROJECT	Diplomat 10-16kW
DESCRIPTION	400V 3N
REVISION NO.	1086L0057
DATE	10715
REVISION	1
CONTINUED	2
SHEET	1

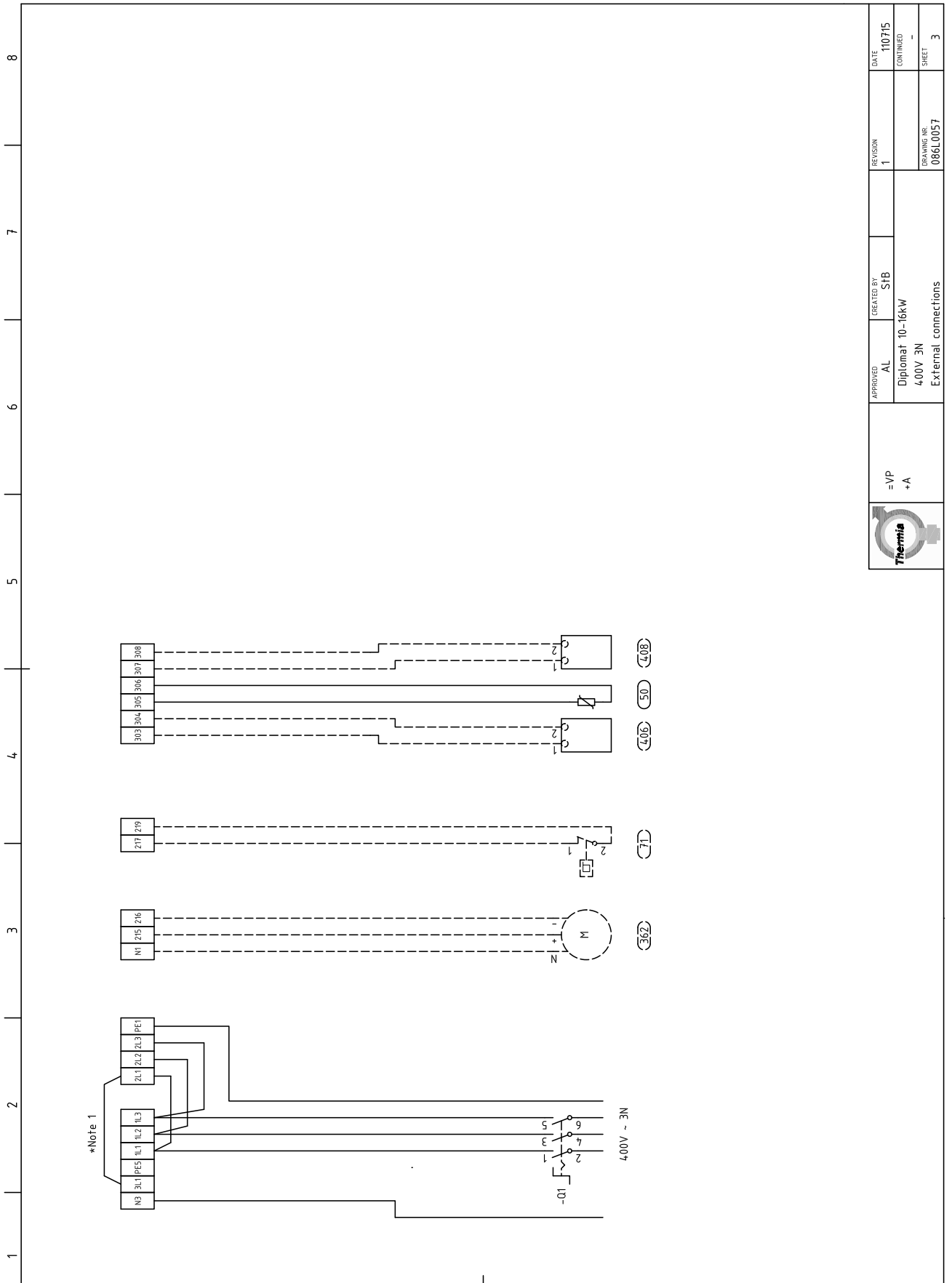
VP	+A		
Thermia logo			
301	302	303	363
117			




DATE	110715
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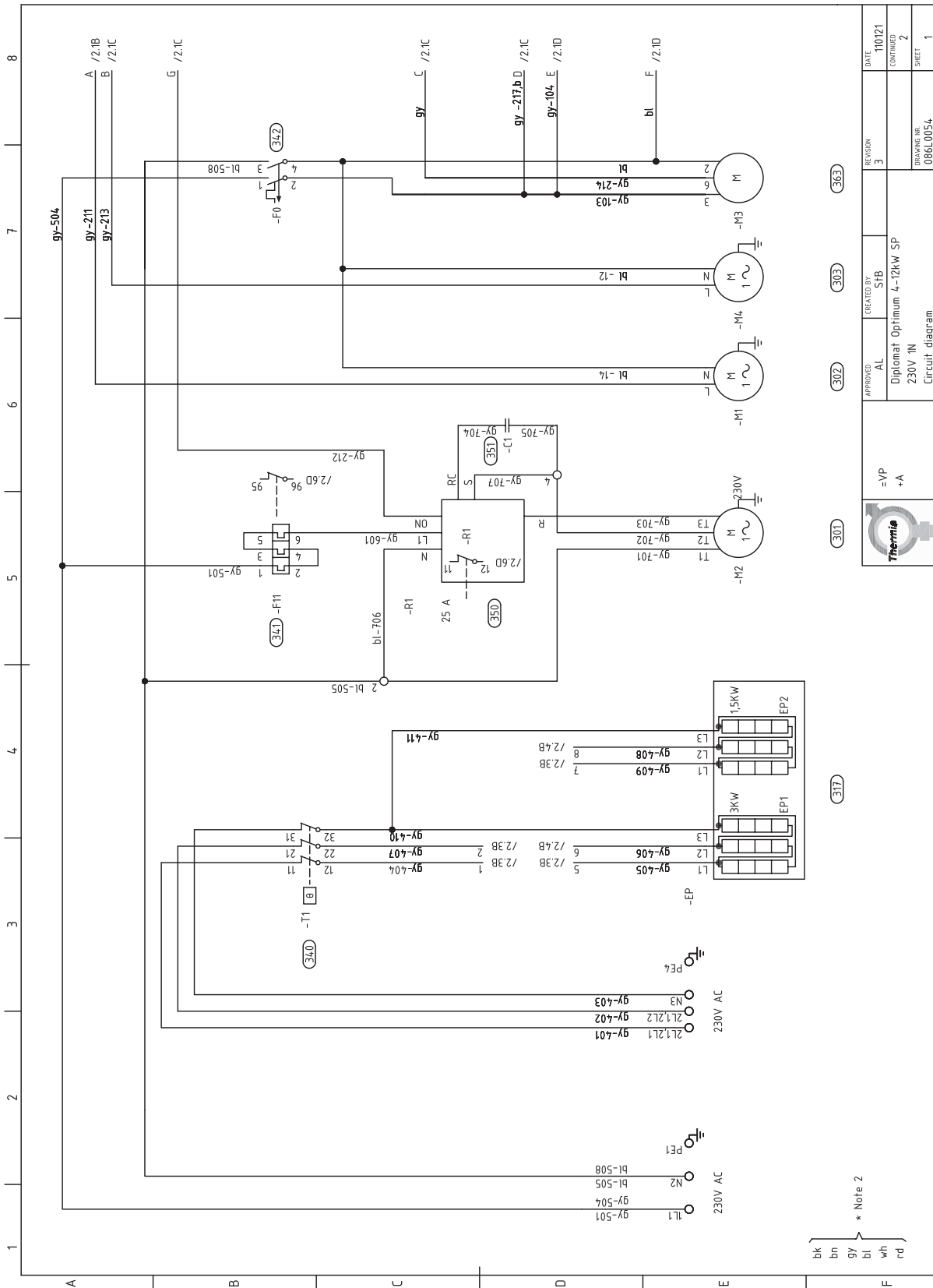
Wiring Diagram

Diplomat



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		DRAWING NR.	SHEET
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2.5 Diplomat Optimum 4-12kW 230V 1N

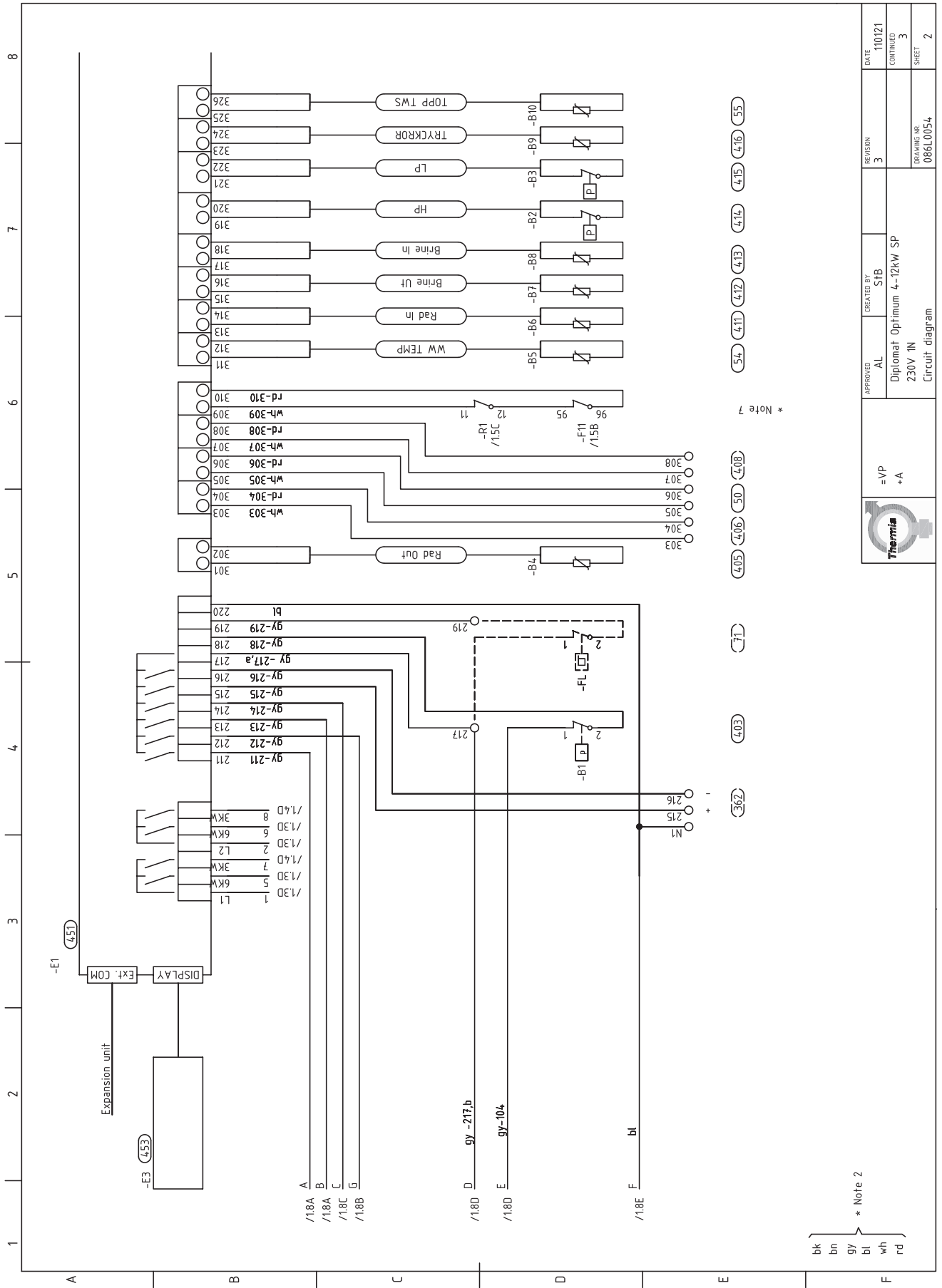


APPROVED	AL	CREATED BY	S1B	REVISION	3	DATE	110121
						CONTINUED	2
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Diplomat Optimum 4-12kW SP 230V 1N Circuit diagram				DRAWING NR. 086L0054			

=VP +A		301		302		303		303	
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Wiring Diagram

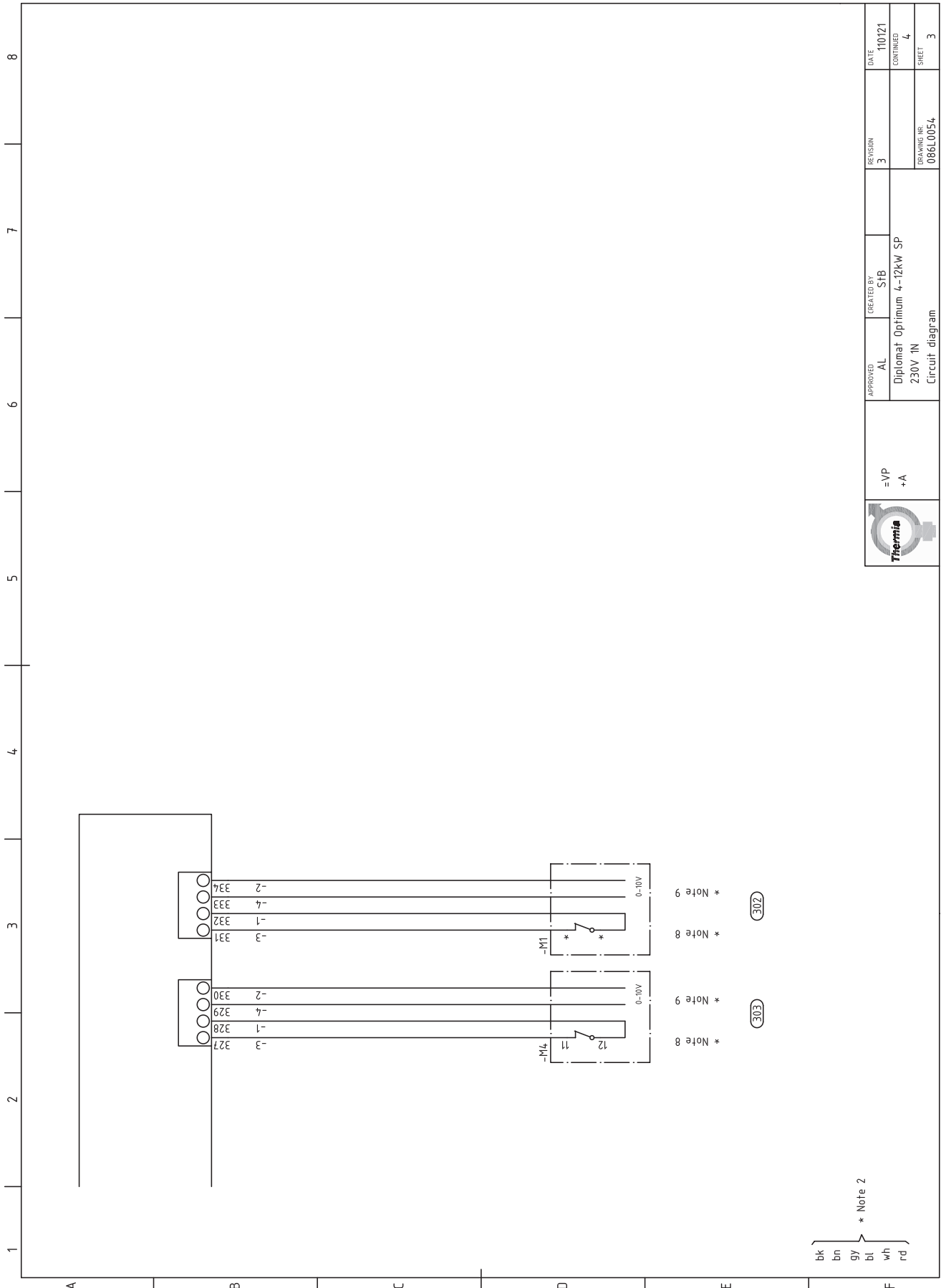
Diplomat



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CONTINUED	3
SHEET	2
REVISION	3
CREATED BY	SFB
APPROVED	AL
Diplomat Optimum 4-12kW SP	
230V 1N	
Circuit diagram	
DRAWING NR. 0861.0054	

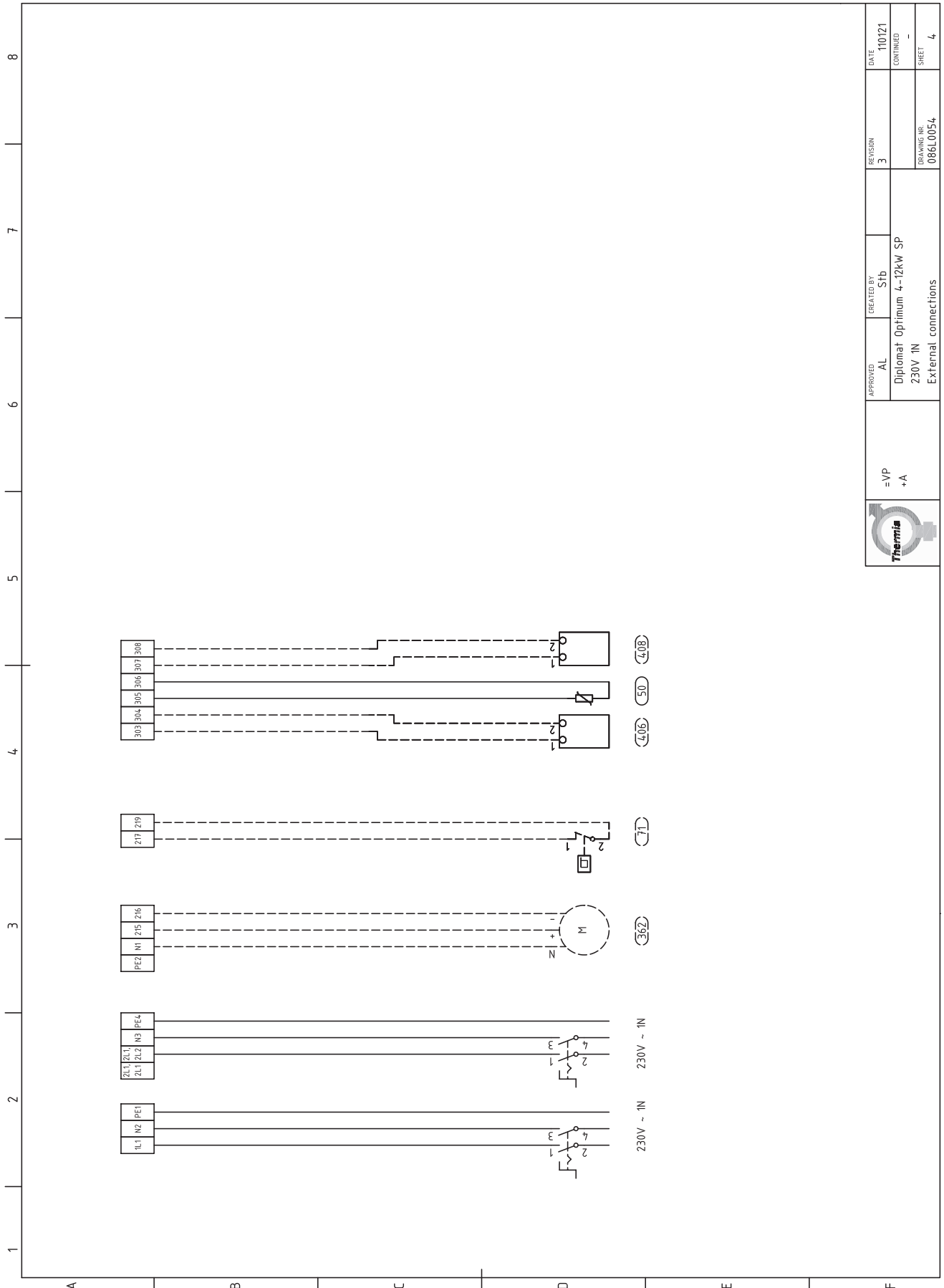
* Note 1

* Note 2



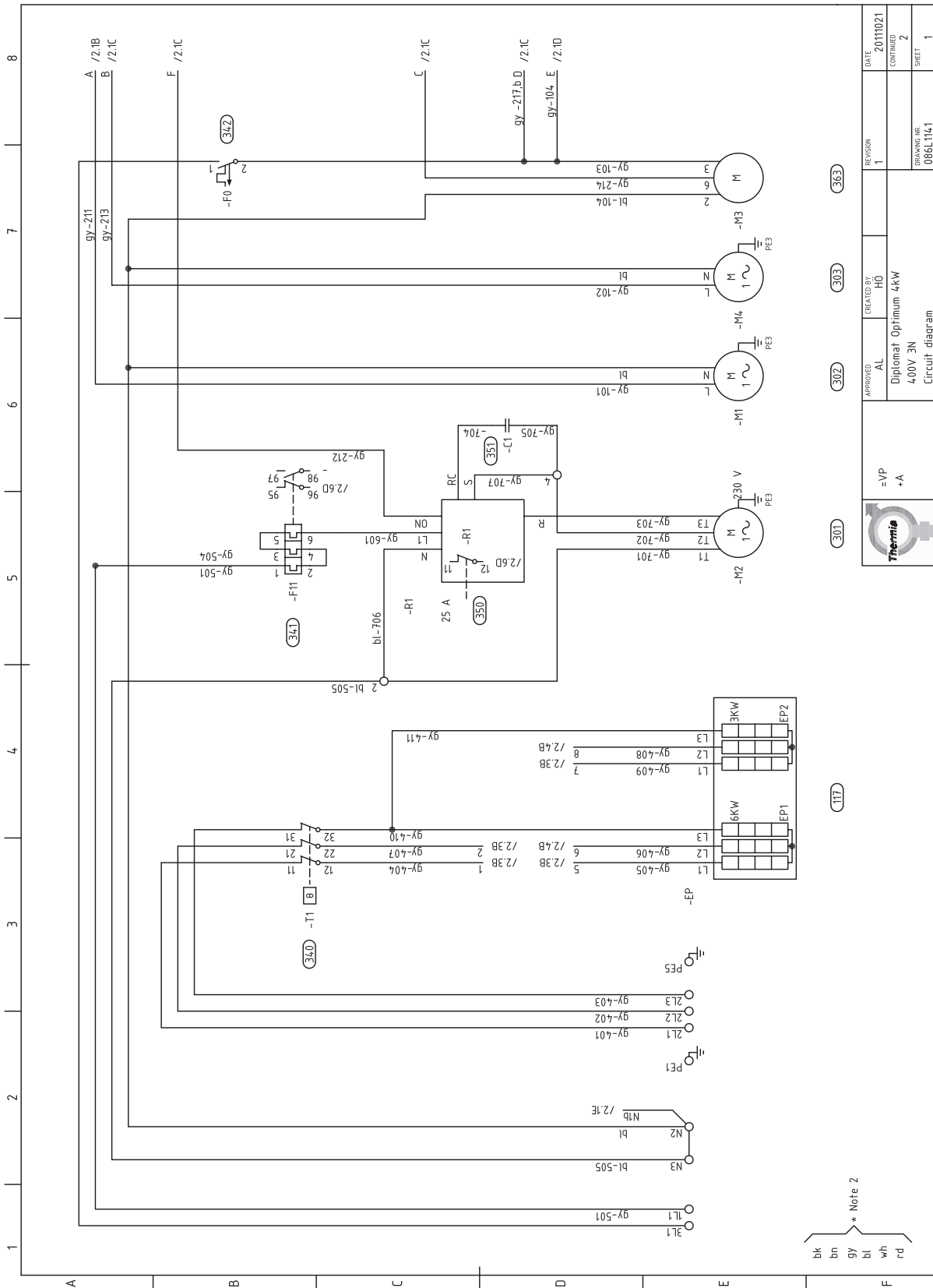
Wiring Diagram

Diplomat



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		230V 1N		DRAWING NR.	0861.0054
		External connections		SHEET	4

2.6 Diplomat Optimum 4kW 400V 3N



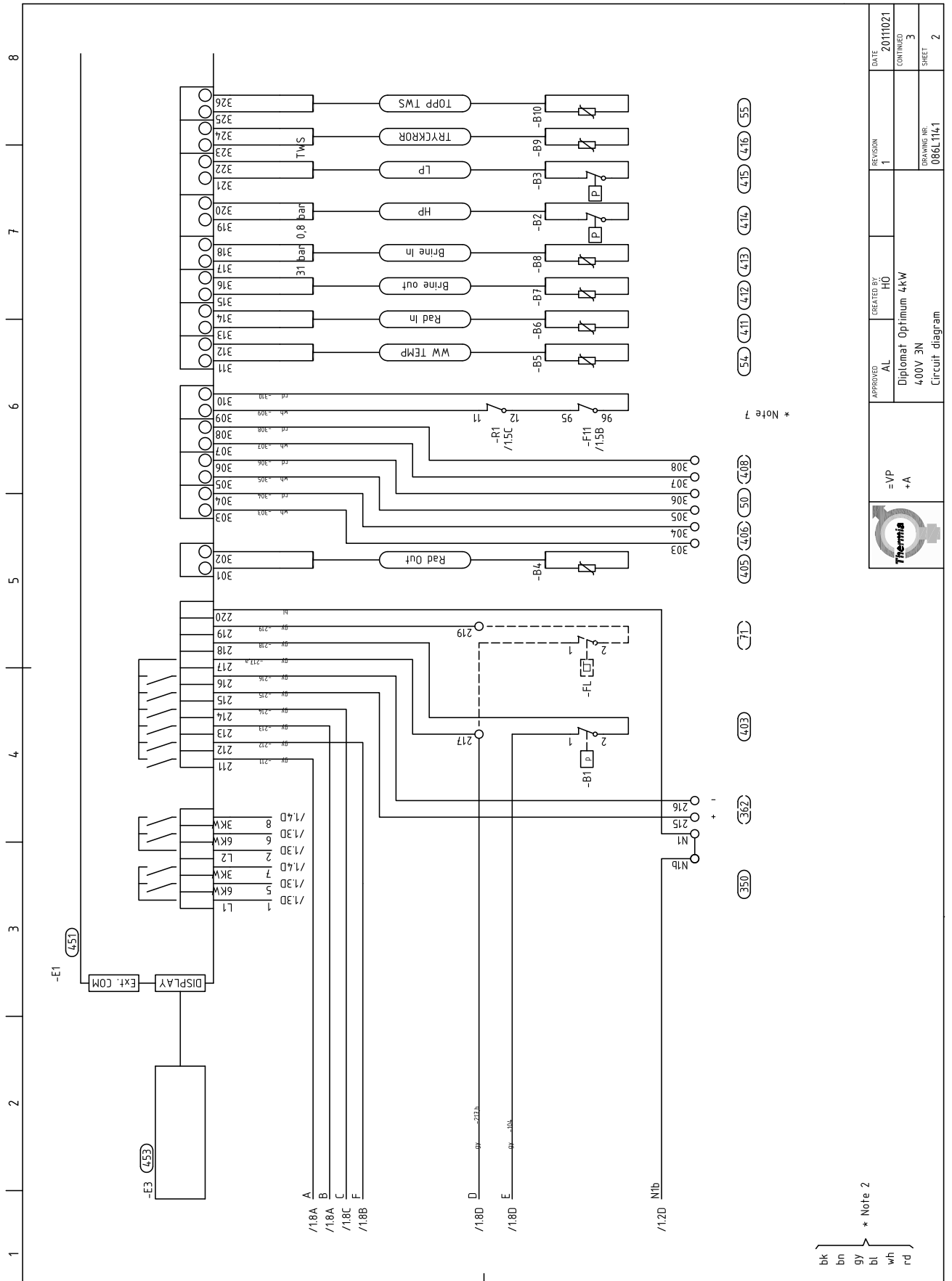
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* Note 2

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Diplomat Optimum 4kW 400V 3N Circuit diagram				CONTINUED	2		
				DRAWING NR.	086L1141		
				SHEET	1		

Wiring Diagram

Diplomat



* Note 2
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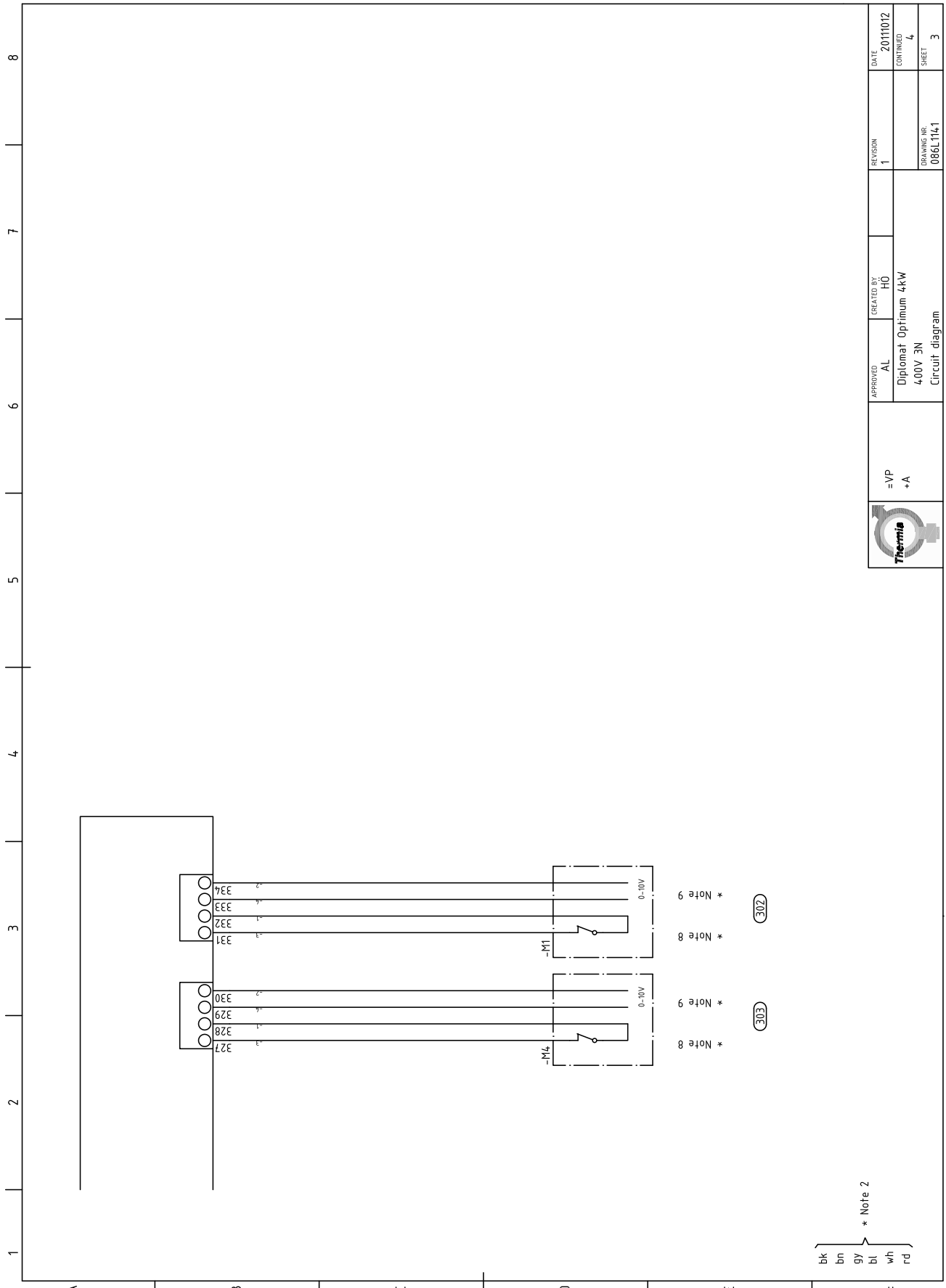
* Note 1

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				SHEET	2

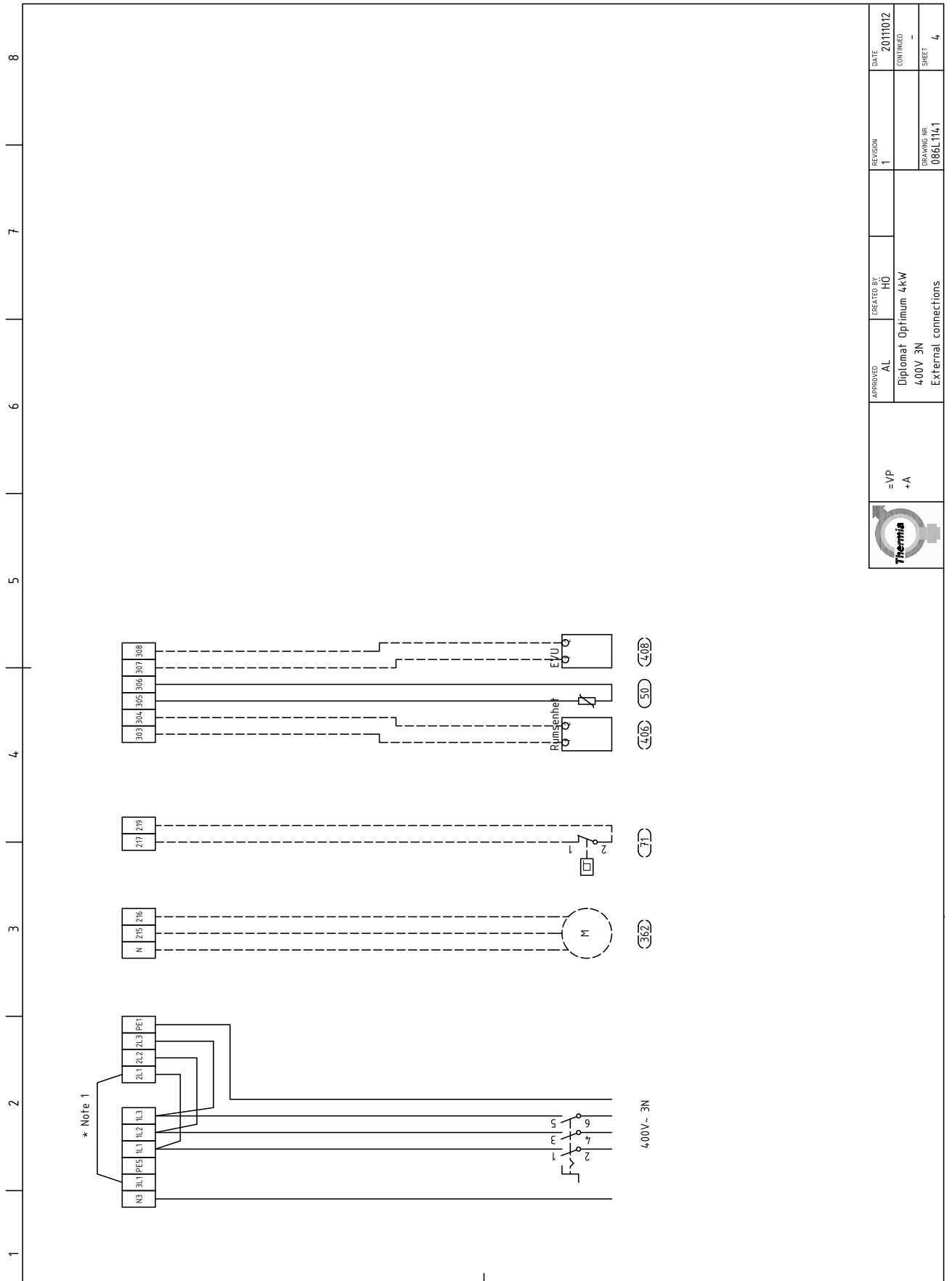


= VP
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Diplomat Optimum 4kW
 400V 3N
 Circuit diagram

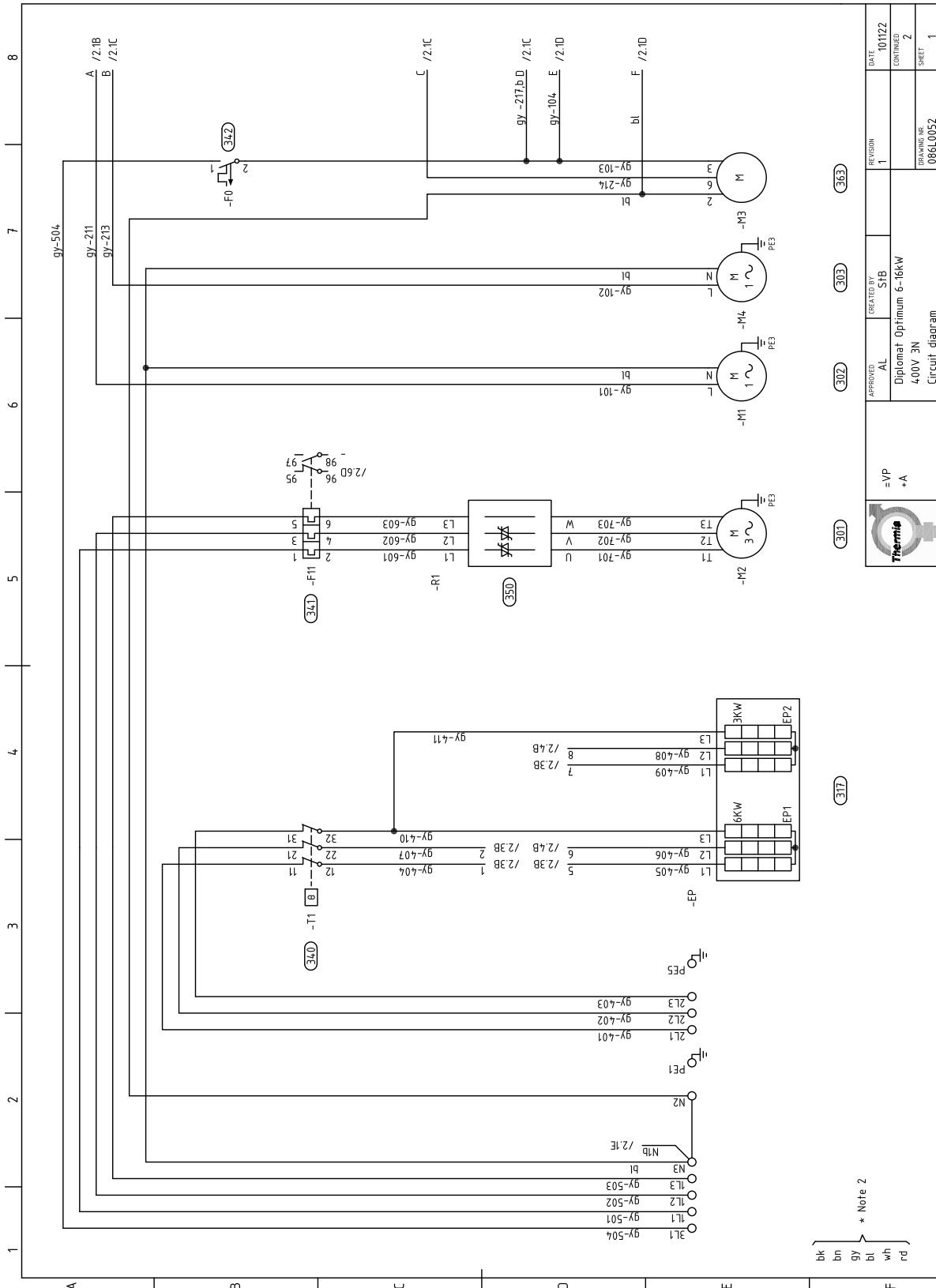


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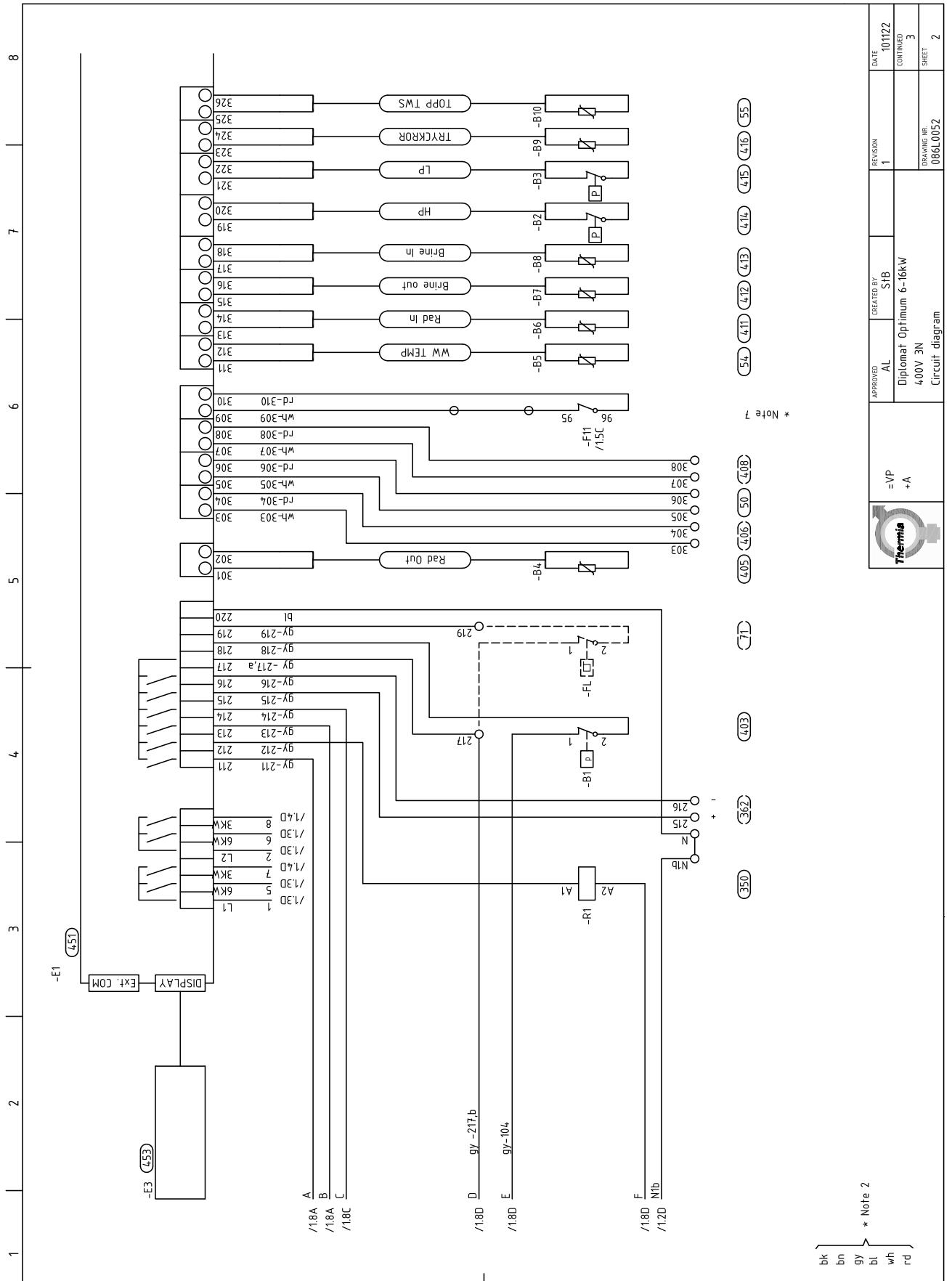
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		External connections		DRAWING NR.	SHEET
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2.7 Diplomat Optimum 6-16kW 400V 3N



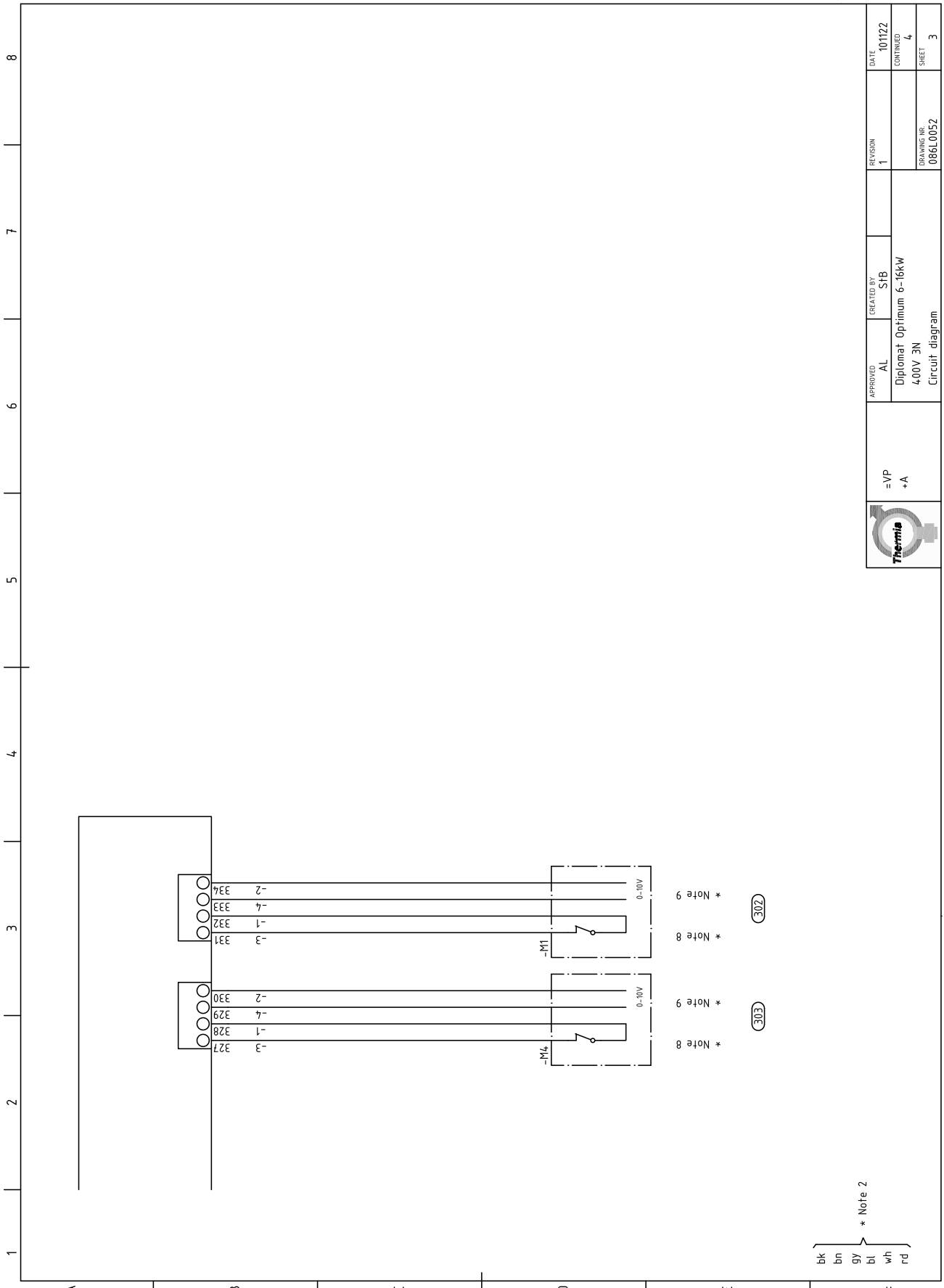
Wiring Diagram

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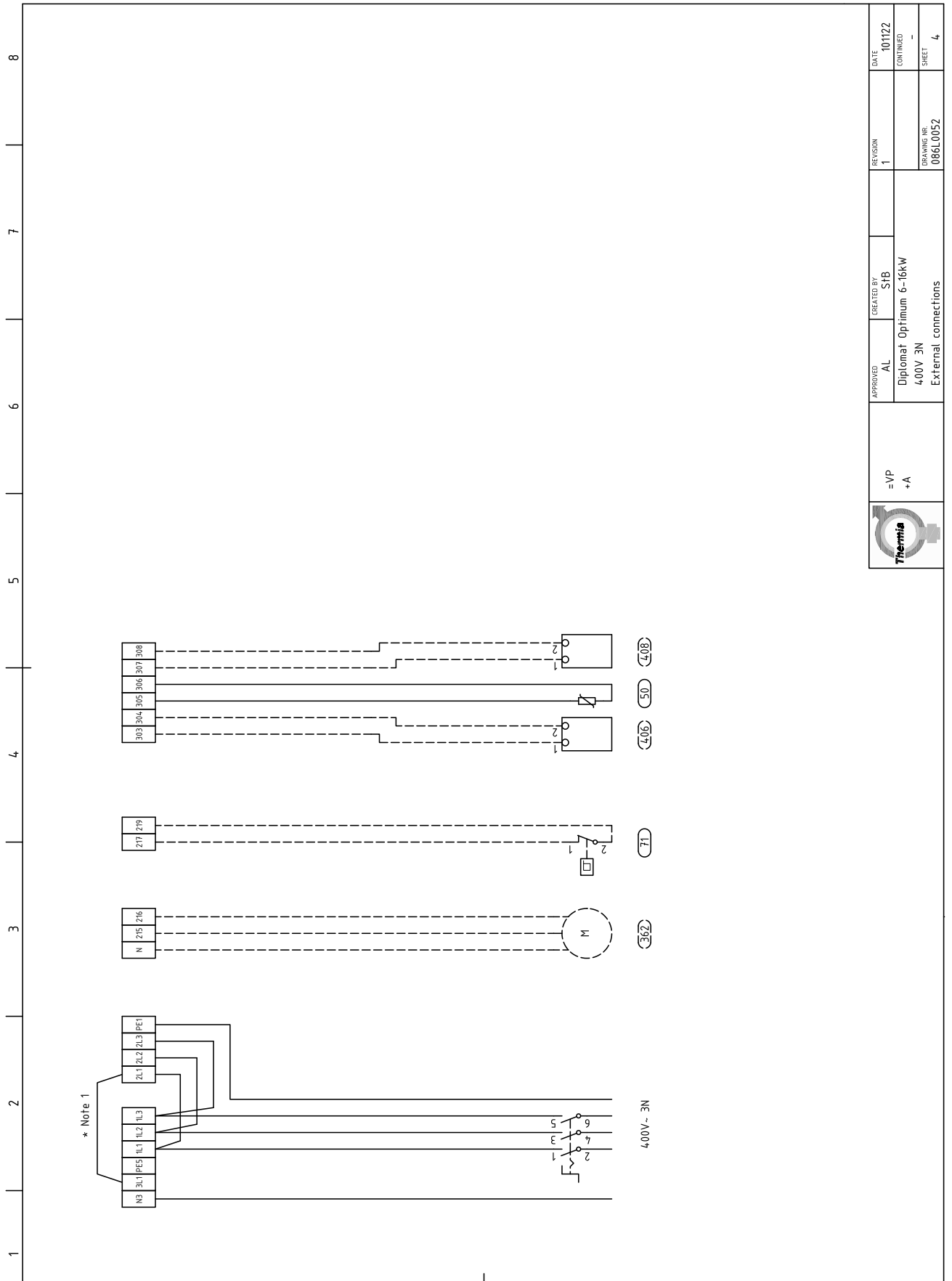


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REVISION	1
APPROVED	AL
CREATED BY	SFB
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400V 3N	
Circuit diagram	
DRAWING NR.	086L0052
SHEET	2

* Note 2
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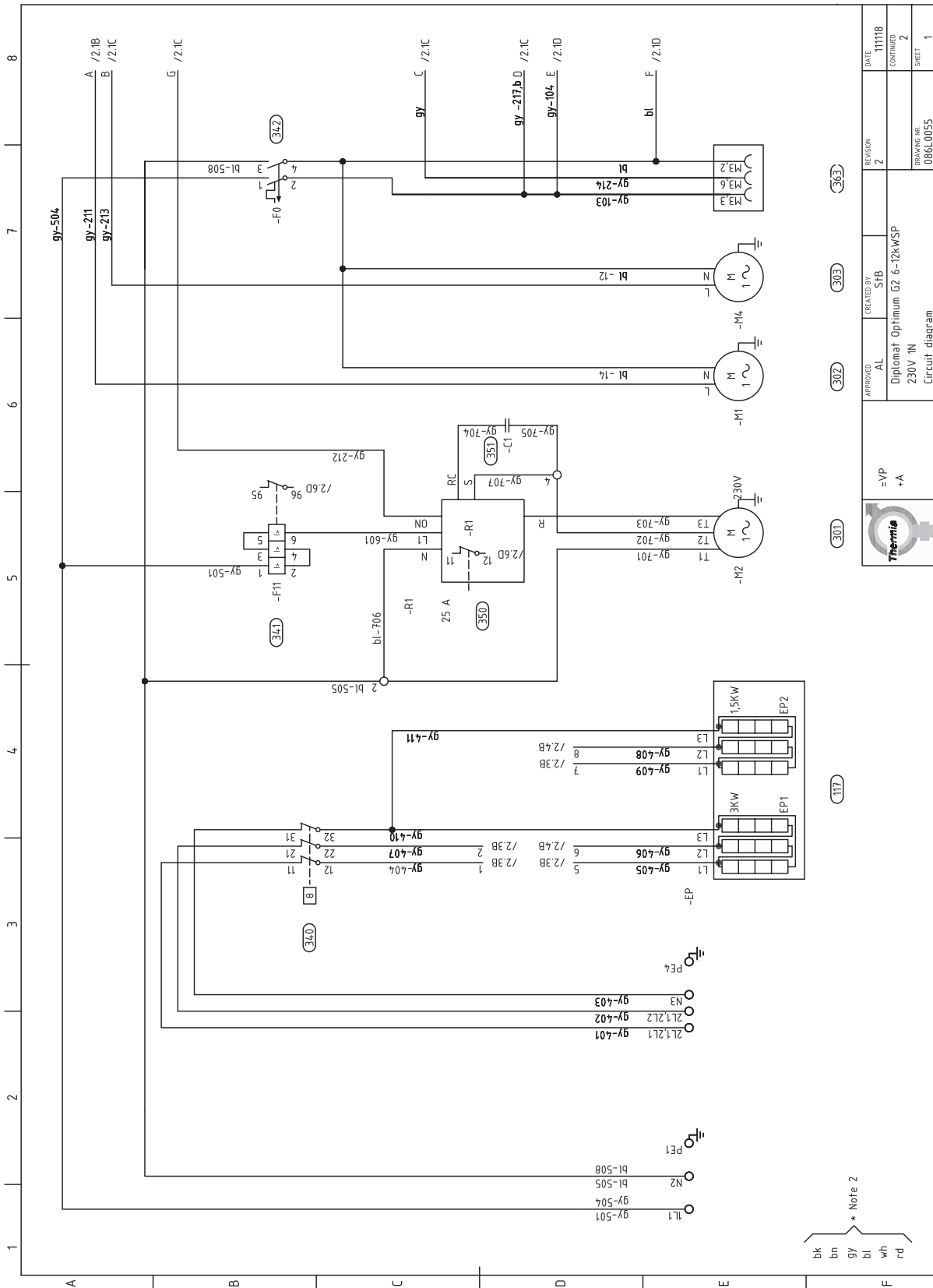


1 2 3 4 5 6 7 8

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					10/122
					CONTINUED
					SHEET
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DIPLOMAT OPTIMUM 6-16kW 400V 3N External connections					DRAWING NR: 086L0052

2.8 Diplomat Optimum G2 6-12kW 230V 1N

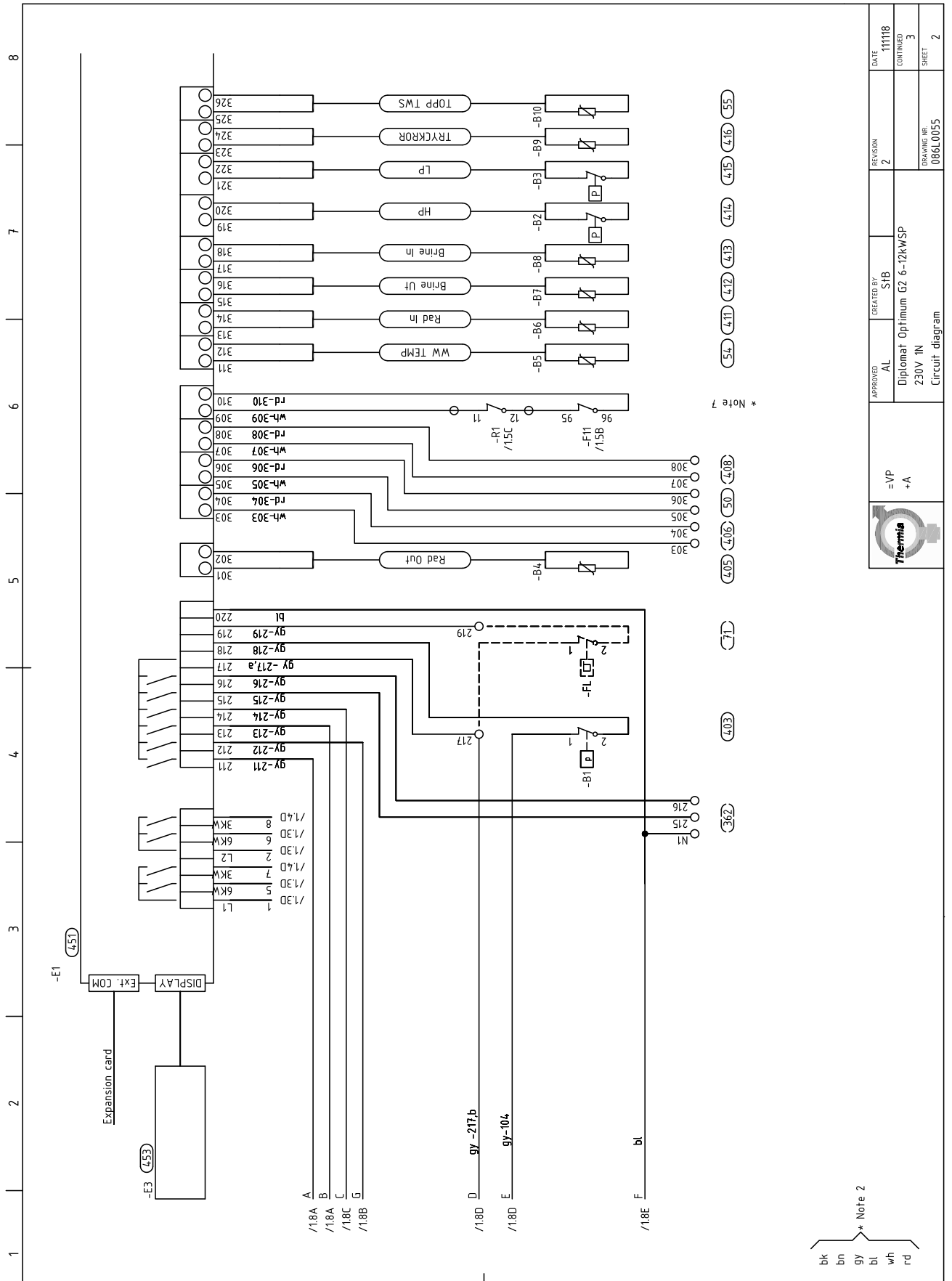


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230V 1N				DRAWING NR.	086L0055		
Circuit diagram				SHEET	1		

	=VP +A
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Wiring Diagram

Diplomat



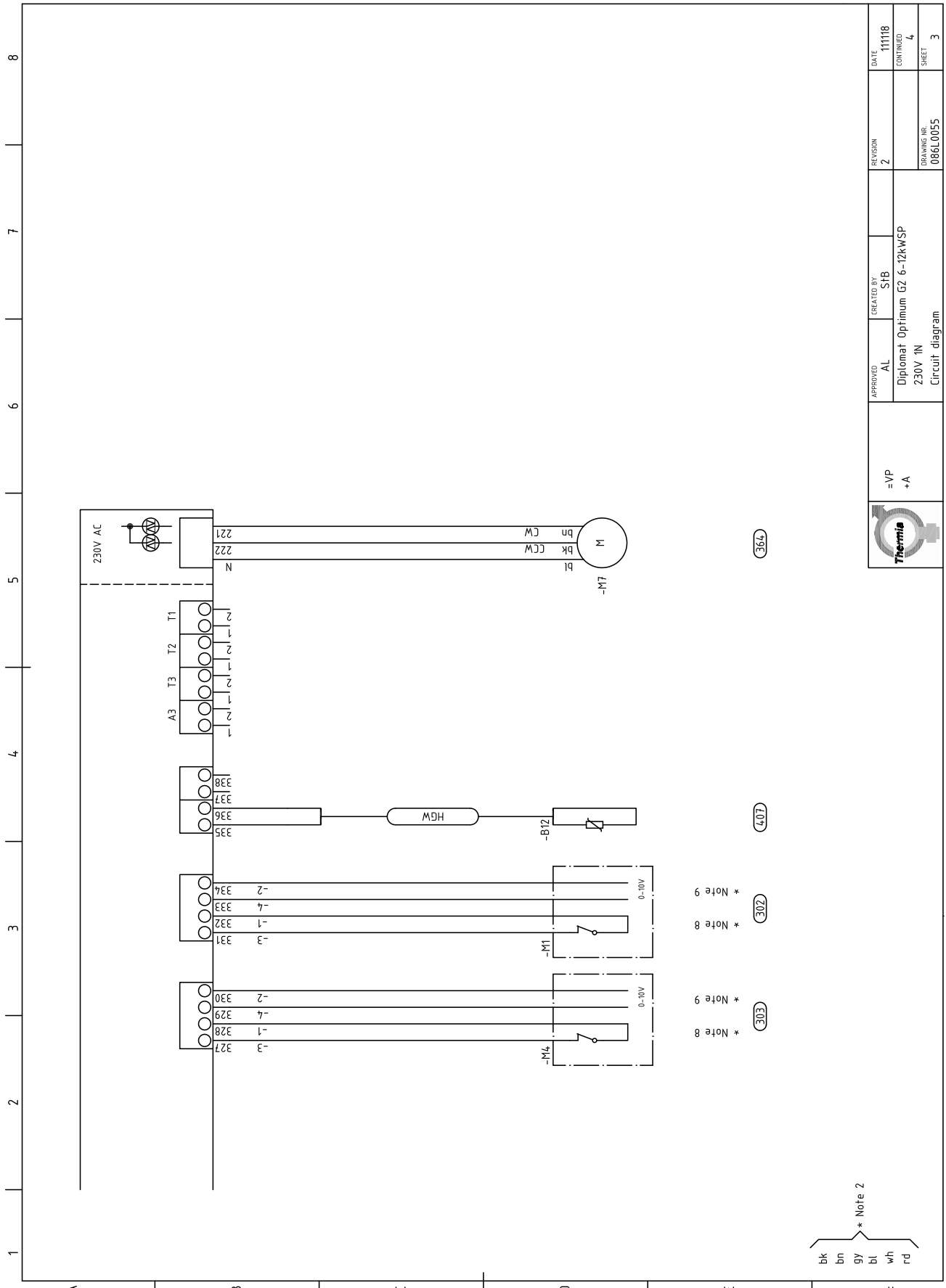
* Note 2
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* Note 1

APPROVED	AL	CREATED BY	SFB	REVISION	2	DATE	111118
Diplomat Optimum G2 6-12kWSP						CONTINUED	3
230V 1N						DRAWING NR.	086L0055
Circuit diagram						SHEET	2

Wiring Diagram

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* Note 2

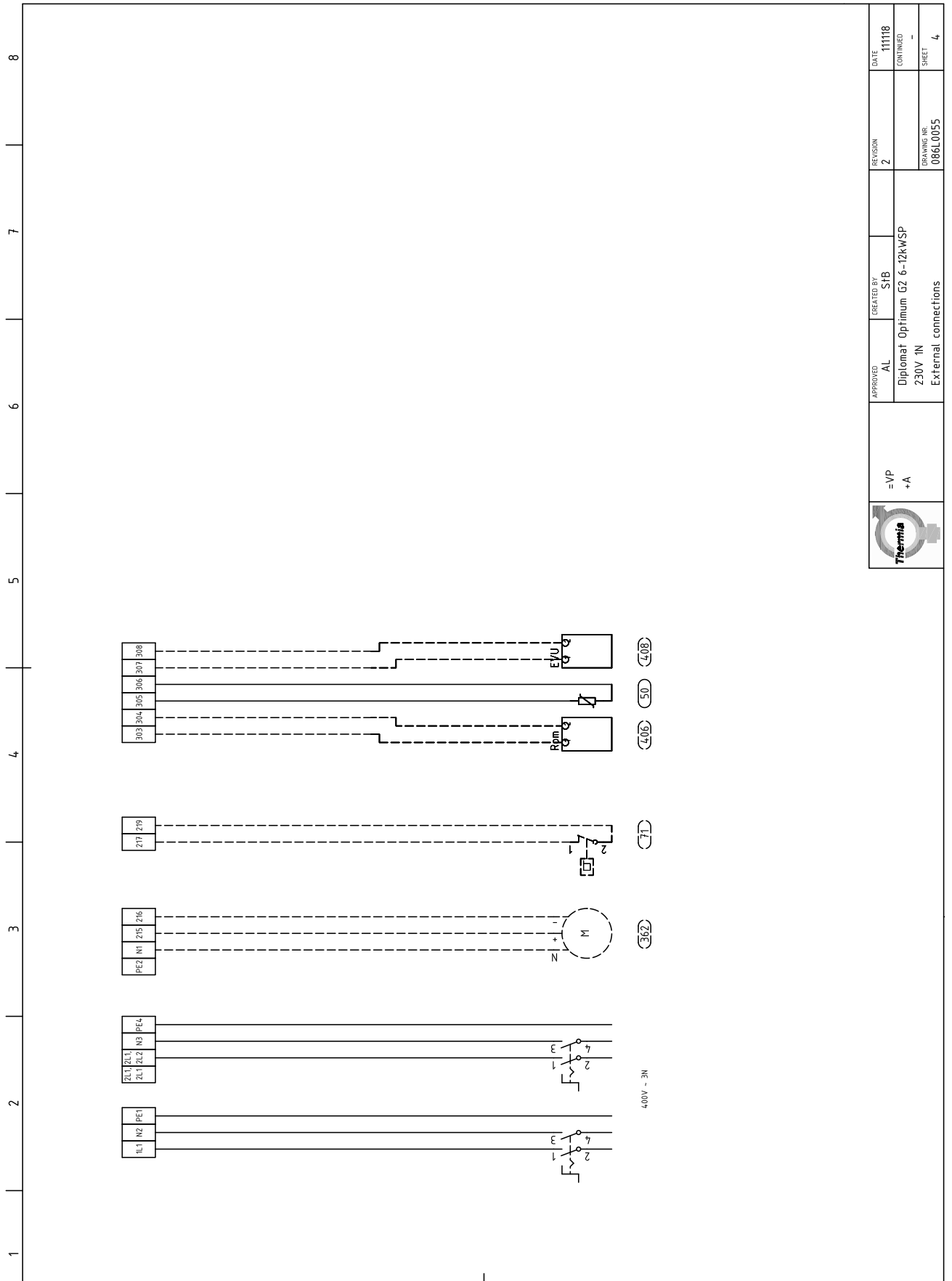
303 * Note 8 * Note 9

302 * Note 8 * Note 9

307

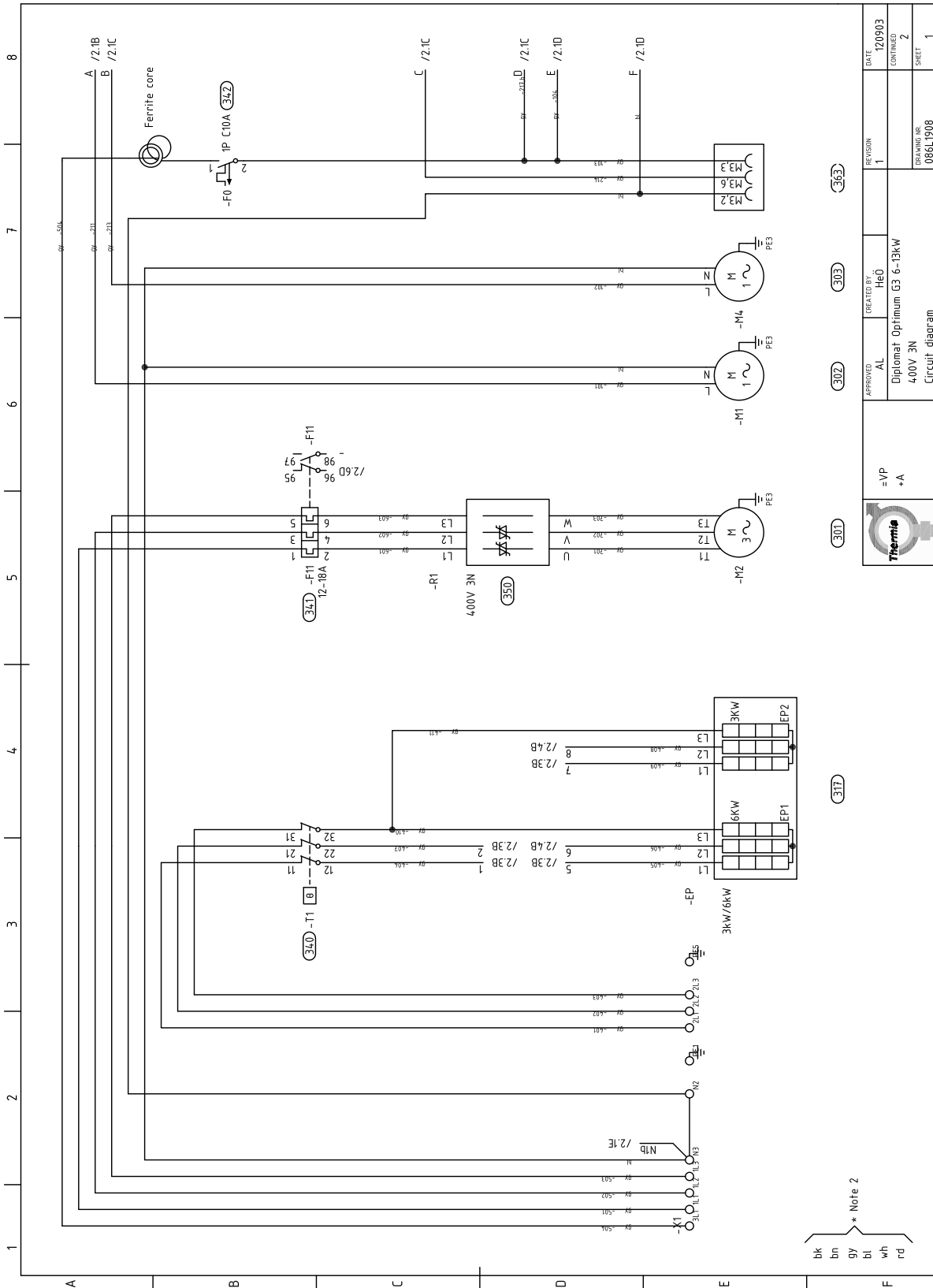
362

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		086L0055	4	3



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Diplomat Optimum G2 6-12kWSP 230V 1N External connections					CONTINUED
					DRAWING NR. 086L0055
					SHEET 4

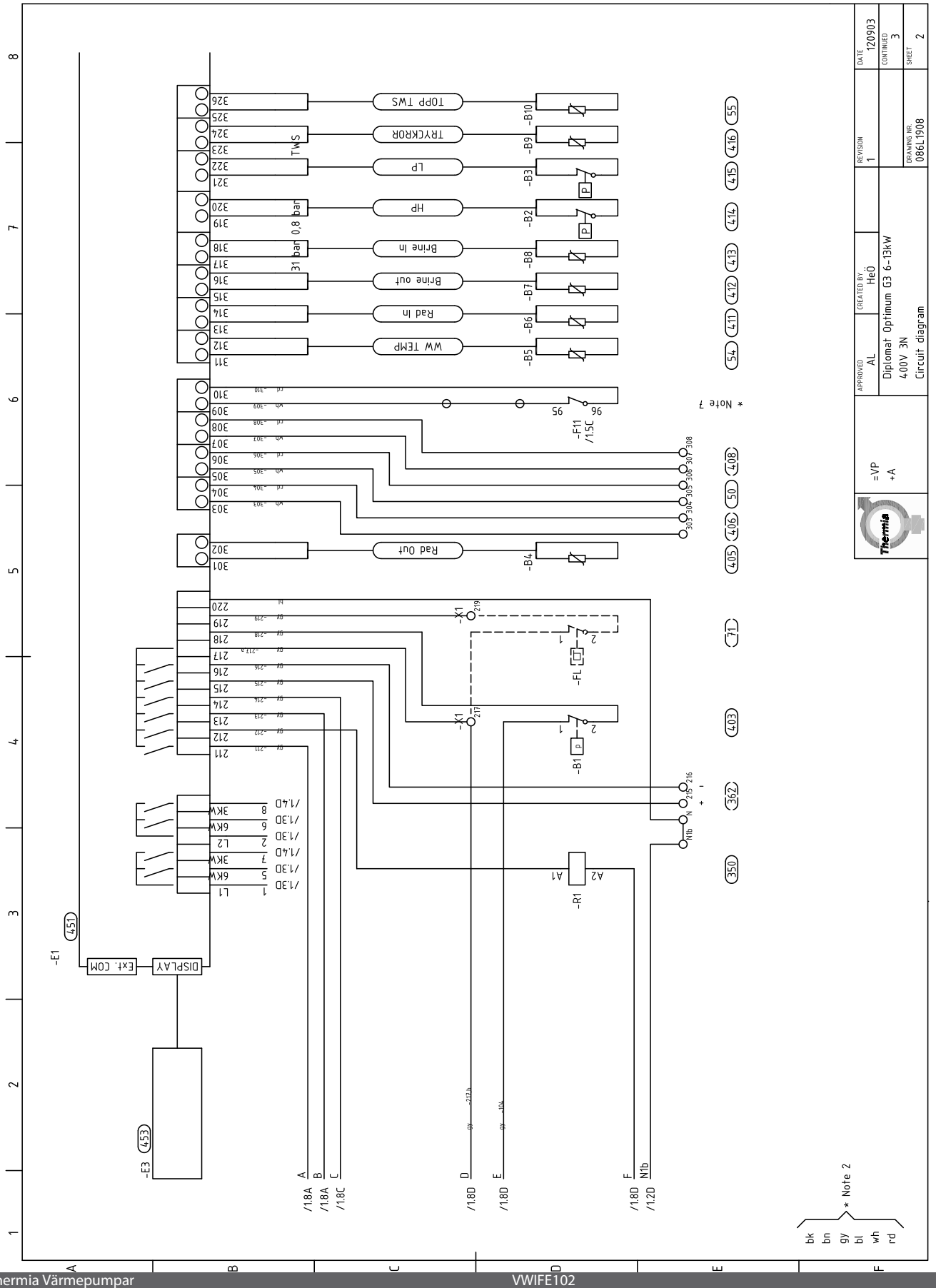
2.9 Diplomat Optimum G3 6-13kW 400V 3N



DATE	120903
CONTINUED	2
SHEET	1
REVISION	1
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= VP + A	
DRAWING NO.	086L1908

Wiring Diagram

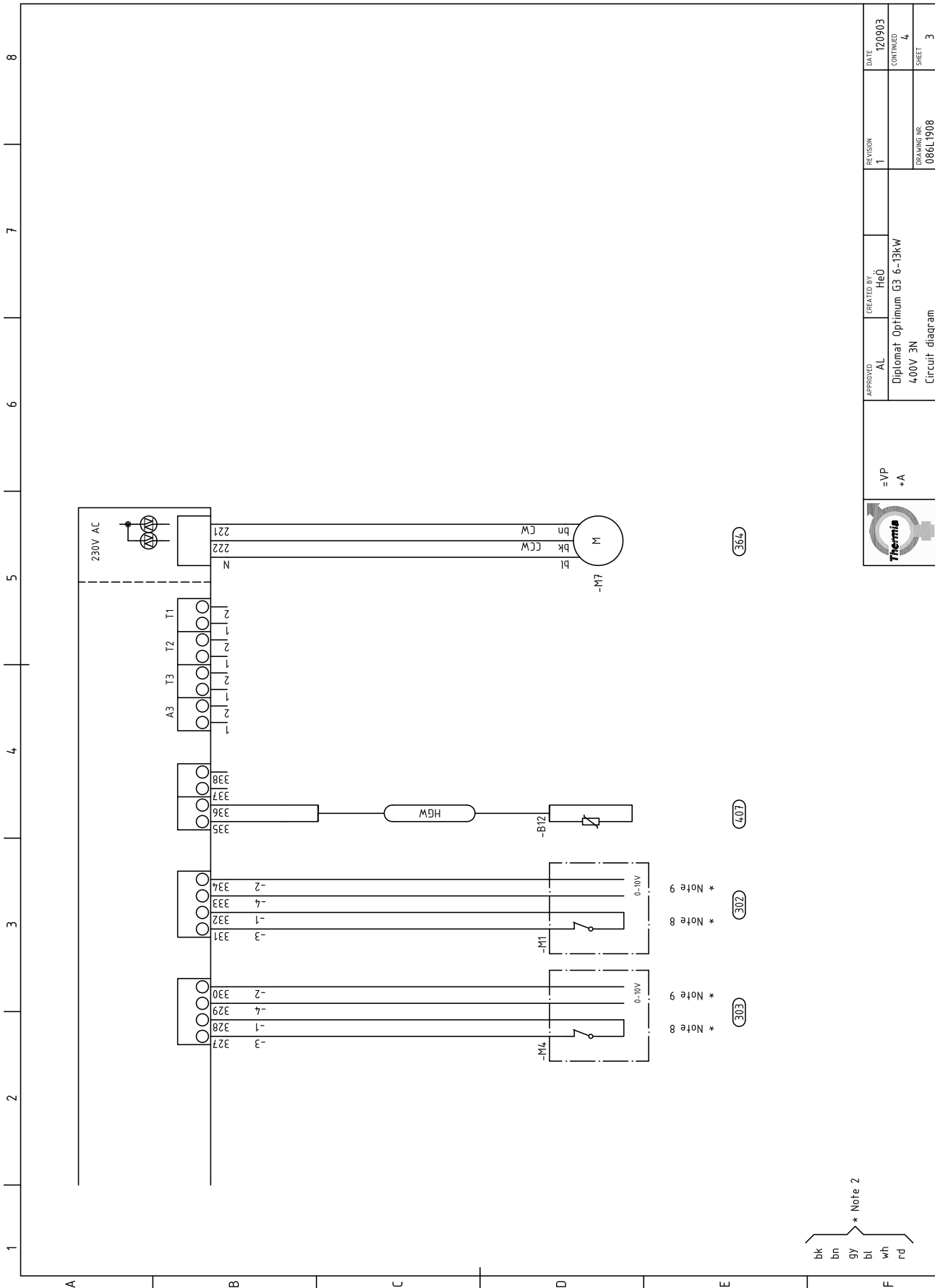
Diplomat



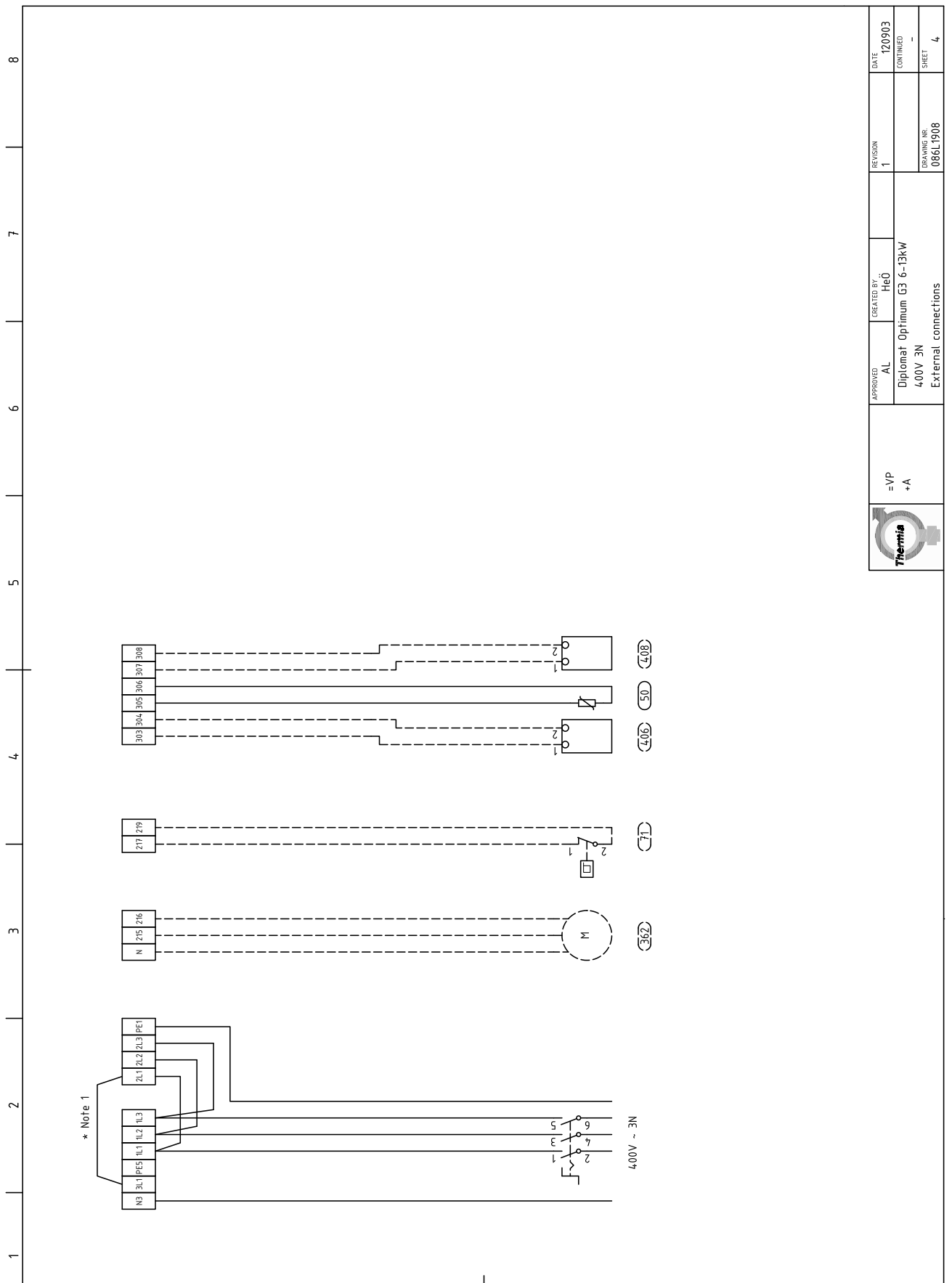
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Circuit diagram		SHEET: 2
DRAWING NR: 086L1908		

Wiring Diagram

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APPROVED	AL	CREATED BY	HeO	REVISION	1	DATE	120903
Diplomat Optimum G3 6-13kW			DRAWING NR.		086L1908	CONTINUED	4
400V 3N			Circuit diagram			SHEET	3



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					1	120903
					DRAWING NR.	SHEET
					086L1908	4





Wiring Diagram

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Internet: www.thermia.com

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