

USER AND SERVICE MANUAL

PETH-40B3



Low Noise Power Supply for Laboratory Use $\pm 15\text{V}$, 1000mA

Design: **ETH** Quantumoptics, frank@phys.ethz.ch

Manufactured by ELL

Printed in _____ (write your location here)

24.08.2017

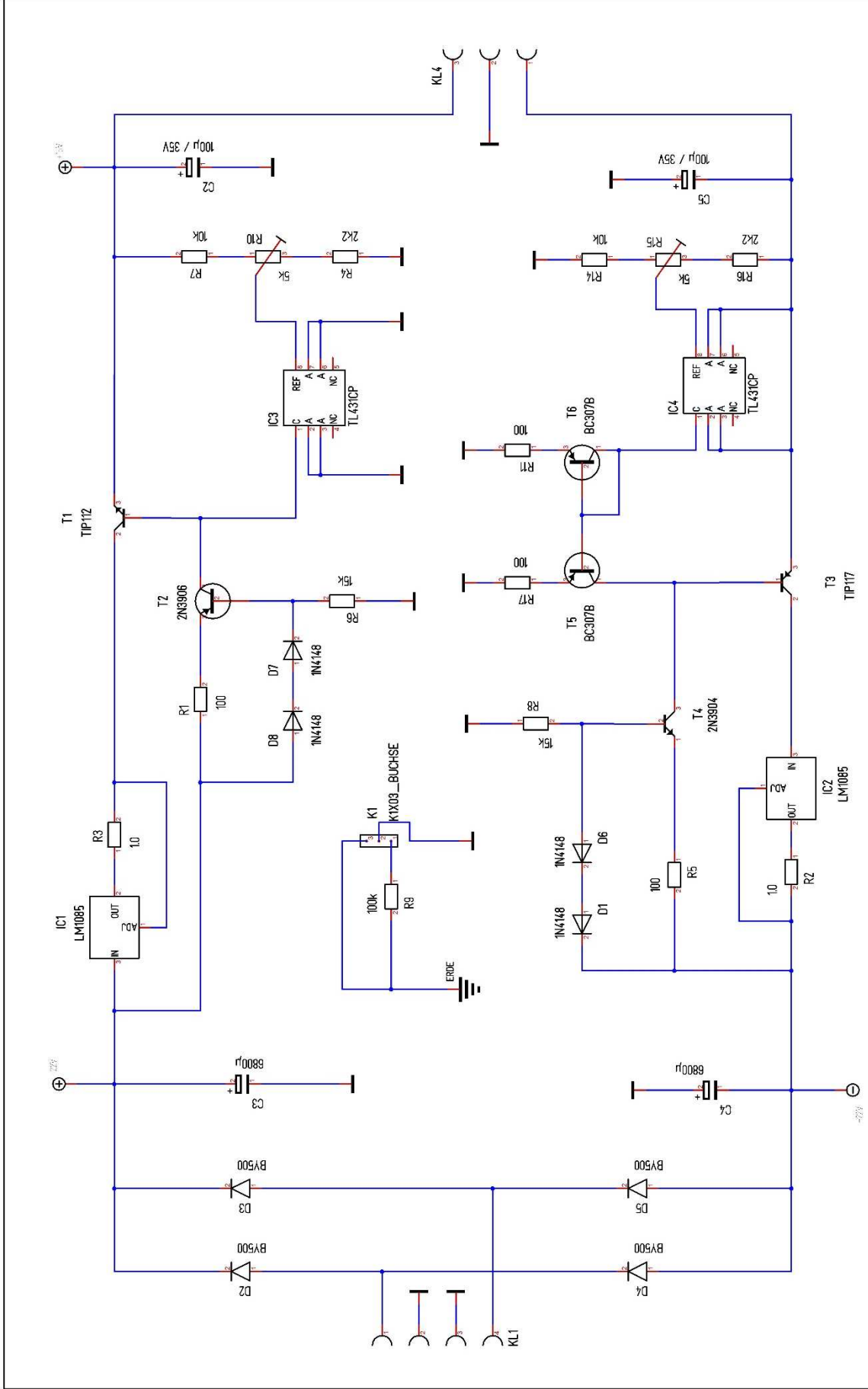
SAFETY WARNINGS

This device is cooled by convection. If you install it in a cabinet, make sure that the air circulation is sufficient.

This device is operated with 230 V. Make sure all three lines are properly connected.

Replace fuse only with exact the same type. If fuse is black contact manufacturer.

If it seems that normal operation is not occurring, you must disconnect this device from the mains. Contact manufacturer for inspection.

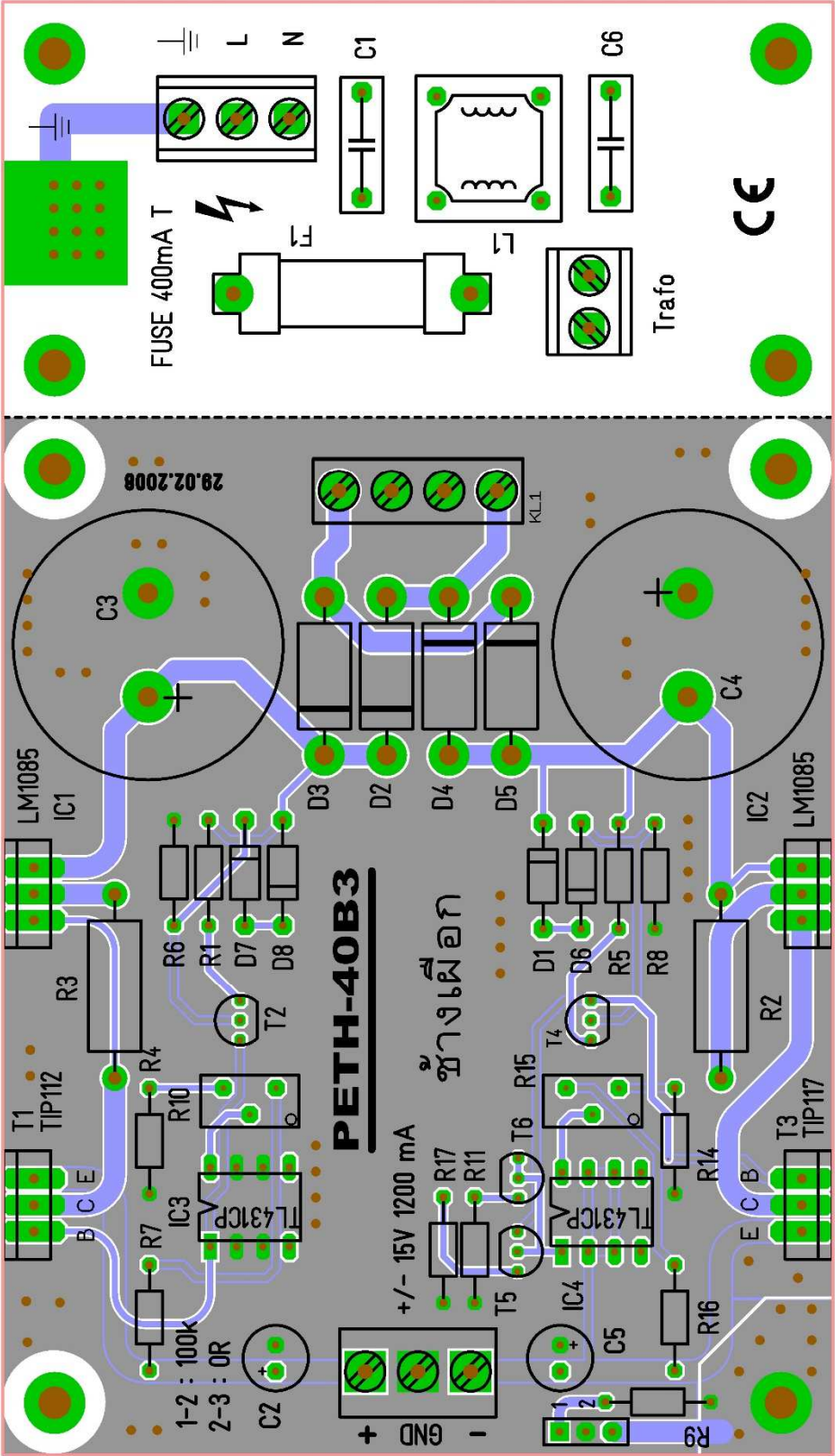


Maassstab 136.00% Alexander C. Frank Blatt : unbenannt

Änderung 24.08.17 08:53

Ausgabe 24.08.17 10:54

Datent PETH-4083.T3001



BOM

Pos	Name	Wert	Lieferant	Best.-Nr.:
1	C1	10nF/275V	distrelec	821268
2	C2	100μ / 35V	B10	30377.4
3	C3	6800μ / 35V	distrelec	802034
4	C4	6800μ / 35V	distrelec	802034
5	C5	100μ / 35V	B10	30377.4
6	C6	10nF/275V	distrelec	821268
7	D1	1N4148	B10	30002.2
8	D2	BY500	distrelec	170-00-025
9	D3	BY500	distrelec	170-00-025
10	D4	BY500	distrelec	170-00-025
11	D5	BY500	distrelec	170-00-025
12	D6	1N4148	B10	30002.2
13	D7	1N4148	B10	30002.2
14	D8	1N4148	B10	30002.2
15	F1	400 mA T	B10	30073.11
16		Halterung	distrelec	271134
17		Deckel	distrelec	271138
18		IC-Sockel	B10	30059.2
19		IC-Sockel	B10	30059.2
20	IC1	LM1085/LM1086	distrelec	640710
21	IC2	LM1085/LM1086	distrelec	640710
22	IC3	TL431CP	distrelec	649263
23	IC4	TL431CP	distrelec	649263
24	K1	KLEMME 3POL	B10	30436.2
25	KL1	KLEMME 4POL	nicht	bestücken
26	KL3	KLEMME 2POL	B10	30436.1
27	KL4	KLEMME 3POL	B10	30436.2
28	KL5	KLEMME3POL	B10	30436.2

29	L1	RN102-0.6/02	distrelec	351517
30	R1	100	B10	30379.48
31	R2	1.0	B10	30384.1
32	R3	1.0	B10	30384.1
33	R4	2k2	B10	30380.33
34	R5	100	B10	30379.48
35	R6	15k	B10	30381.4
36	R7	10k	B10	30380.49
37	R8	15k	B10	30381.4
38	R9	100k	B10	30381.24
39	R10	5k	farnell	64Y-502
40	R11	100	B10	30379.48
41	R14	10k	B10	30380.49
42	R15	5k	farnell	64Y-502
43	R16	2k2	B10	30380.33
44	R17	100	B10	30379.48
45	T1	TIP112	Reichelt	TIP 112
46	T2	2N3906	B10	30007.9
47	T3	TIP117	Reichelt	TIP 117
48	T4	2N3904	B10	30007.4
49	T5	BC307B	B10	30007.9
50	T6	BC307B	B10	30007.9
51		Montageprofil	B10	50x100x240
52		Platine	Jack ?	PETH-40B3
53	4 Stück	Isolierscheibe	B10	30050.2
54	Trafo 1	Ringkerntrafo	Reichelt	RKT 5015/5018
55	diverse	Schrauben	B10	-

NOTES

This device is designed to teach electronics by example. There are other ways (smaller BOM :-) to construct a linear Power Supply.

The GND (secondary) mayst be

- disconnected from EARTH (no jumper)
- connected via 100 k Ω (jumper left side)
- or connected via a short (jumper right side).

