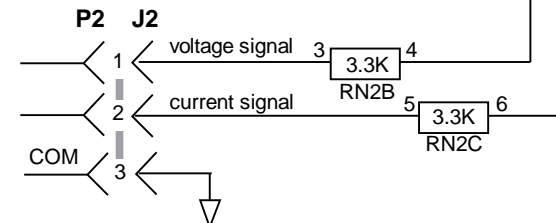
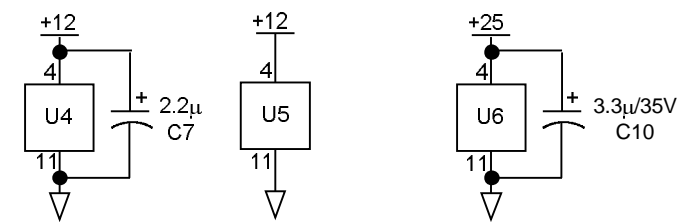
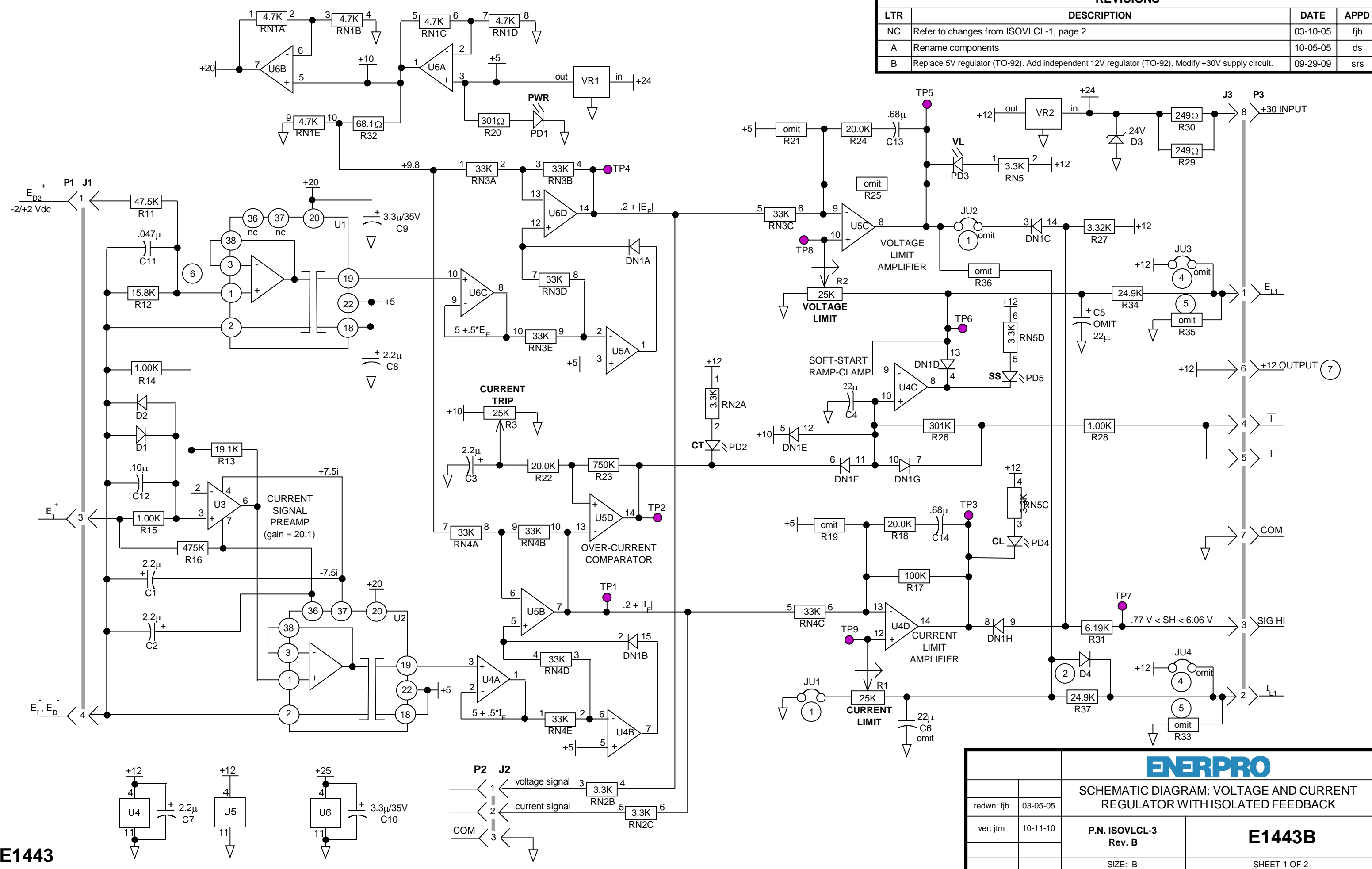


REVISIONS

LTR	DESCRIPTION	DATE	APPD
NC	Refer to changes from ISOVLCL-1, page 2	03-10-05	fjb
A	Rename components	10-05-05	ds
B	Replace 5V regulator (TO-92). Add independent 12V regulator (TO-92). Modify +30V supply circuit.	09-29-09	srs



ENERPRO	
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PART	DESCRIPTION	STOCK NUMBER
U1-U2	AD202KN	I1AD202KN
U3	OP20GZ	I1OP177FPZ
U4-U6	LM34074P	I134074P
VR1	LM78L05	T2VLM78L05
VR2	LM78L12	T2VLM78L12
DN1	MAD1109P	D1MAD1108P
D1-D2	1N914B	D1N914B
D3	1N5359B(24V)	D1N5359B
D4	1N914B	D1N914B
PD1	555-2204(grn)	DIL5502204R
PD2,PD5	550-2404(red)	DIL5502404R
PD3-PD4	5381H3IDI(amb)	DIL5381H3
RN1	10R-2-472	R1S10I472
RN2	8R-2-332	R1S08I332
RN3	10R-2-473	R1S10I333
RN4	10R-2-473	R1S10I333
RN5	6R-2-332	R1S06I332
R1-R3	93P-25K	R1P93P253
R11	RN60 - 47.5K	R1F4752
R12	RN60 - 15.8K	R1F1582
R13	RN60 - 19.1K	R1F1912
R14	RN60 - 1.00K	R1F1001
R15	RN60 - 1.00K	R1F1001
R16	RN60 - 475K	R1F4753
R17	RN60 - 100K	R1F1003
R18	RN60 - 20.0K	R1F2002
R19	RN60 - omit	
R20	RN60 - 301Ω	R1F3010
R21	RN60 - omit	
R22	RN60 - 20.0K	R1F2002
R23	RN60 -750K	R1F7503
R24	RN60 -20.0K	R1F2002
R25	RN60 - omit	
R26	RN60 - 301K	R1F3013
R27	RN60 - 3.32K	R1F3321
R28	RN60 - 1.00K	R1F1001
R29	RN60 - 249Ω	R1F2490
R30	RN60 - 249Ω	R1F2490
R31	RN60 - 6.19K	R1F6191
R32	RN60 - 68.1Ω	R1F6812
R33	RN60 - omit	
R34	RN60-24.9K	R1F2492
R35	RN60 - omit	
R36	RN60 - omit	
R37	RN60 - 24.9K	R1F2492
C1-C3	ECSF16E2R2	C1TN016225
C4	ECSF16E22	C1TN016226
C5-C6	ECSF16E22	(omit)
C7-C8	ECSF16E2R2	C1TN016225
C9-C10	ECSF35E3R3	C1TN035335

PART	DESCRIPTION	STOCK NUMBER
C11	MKS3-.047μ	C1FL100473
C12	MKS3-.10μ	C1FL100104
C13	MKS3-.68μ	C1FL063684
C14	MKS3-.68μ	C1FL063684
JU1-JU4	W1J02	J.200x.250 W1J02
J1	1-350944-0	C2MNLRPH04
P1	350779-0	C2MNLPLG04
J2	2-350943-0	C2MNLRPH03
P2	350766-1	C2MNLPLG03
J3	640584-2	C2MNLRPH08
P3	640582-1	C2MNLPLG08

NOTES

- For parallel voltage and current regulation loops, install JU2 and R32, omit R35 and DN4. Apply voltage command to J3-1 and current command to J3-2.
- For outer voltage regulation loop and inner current regulation loop, omit JU2 and R32, install R35 and D4. Apply voltage command to J3-1 and apply current limit reference to J3-2. The current reference source must be current sinking with impedance of less than 5 kohm.
- To use the ISOVLCL-3 board as a slave current regulator with its current command taken from the current signal at J2-1 of the master current regulator ISOVLCL-3 board:
 - On the slave regulator board:
 - Remove R32, JU1 and C6,
 - Remove CLA proportional gain resistor R17,
 - Set the voltage command pot to 100%.
 - On the master regulator board:
 - Configure parallel voltage and current regulation loops by installing JU2 and R34 and removing R33 and D4.
 - Set the voltage command pot to the desired voltage (with the current command pot set to 100%) or set the current command pot to the desired current(with the voltage command pot set to the desired voltage).
- Install JU3 and JU4 for on-board voltage and current commands.
- Install 249 ohm burden resistors R23 and R33 when applying 4-20 mA voltage or current command signals.
- Select R12 and the external attenuator resistor to get 1.5 Vdc voltage feedback signal at the junction of R11 and R12.
- Revision B of the ISOVLCL-3 features a dedicated, on-board 12V supply powered from the +30V input on J3-8. Earlier revisions of the ISOVLCL-3 required an external 12V supply. To avoid potential equipment damage, ensure that the 12V output at J3-6 is not connected to an external 12V supply (such as the aux supply from an Enerpro firing board).

		ENERPRO	
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