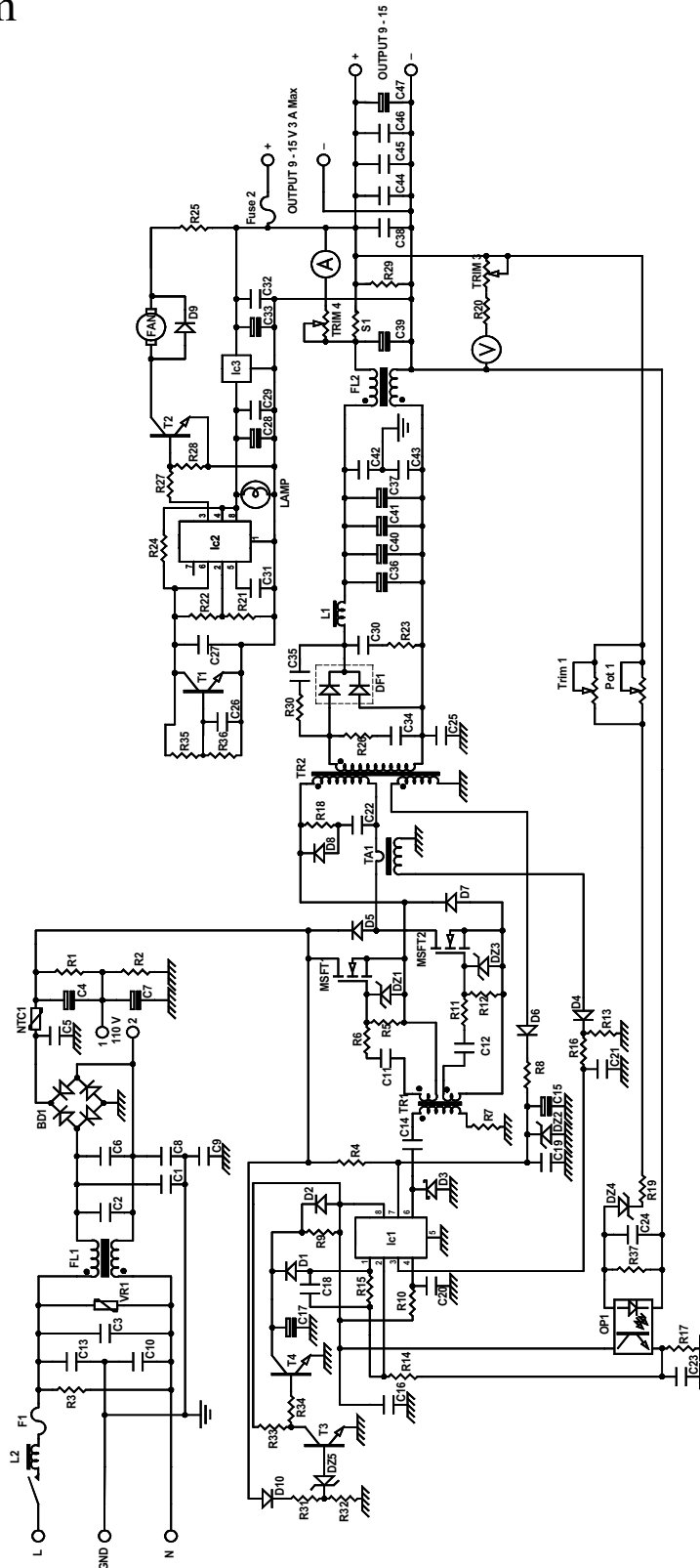


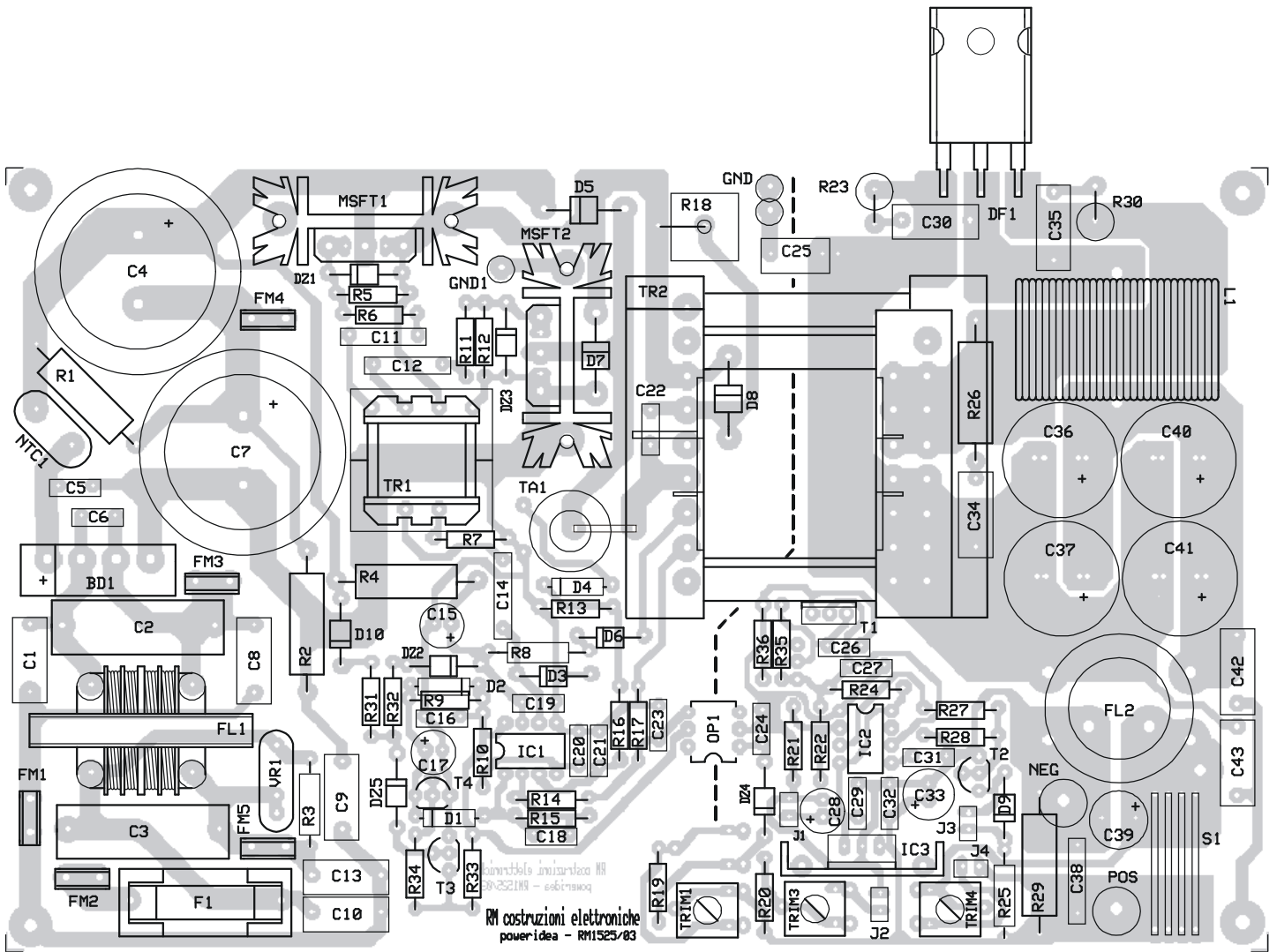


Mod. SPS 30-S Power supply

Schematic diagram

Version 2.00





List of components

C 1	=	2,2 nF	250 V~ Y	
C 2	=	220 nF	275 V~ X2	
C 3	=	470 nF	275 V~ X2	
C 4	=	680 µF	200 V	
C 5	=	4,7 nF	1000 V	Ceramic
C 6	=	4,7 nF	1000 V	Ceramic
C 7	=	680 µF	200 V	
C 8	=	2,2 nF	250 V~ Y	
C 9	=	4,7 nF	250 V~ Y	
C 10	=	2,2 nF	250 V~ Y	
C 11	=	220 nF	100 V	Polyester
C 12	=	220 nF	100 V	Polyester
C 13	=	2,2 nF	250 V~ Y	
C 14	=	1,0 µF	100 V	Polyester
C 15	=	47 µF	50 V	
C 16	=	100 nF	63 V	Polyester
C 17	=	33 µF	25 V	
C 18	=	33 nF	63 V	Polyester
C 19	=	100 nF	63 V	Polyester

C 20	=	2,2 nF	63 V	Polyester
C 21	=	470 pF	50 V	Ceramic
C 22	=	1,0 nF	1000 V	Ceramic
C 23	=	10 nF	63 V	Polyester
C 24	=	10 nF	63 V	Polyester
C 25	=	10 nF	630 V	Polyester
C 26	=	1,0 µF	63 V	Multilayer
C 27	=	1,0 µF	63 V	Multilayer
C 28	=	10 µF	50 V	
C 29	=	100 nF	63 V	Polyester
C 30	=	2,2 nF	1000 V	Polyester
C 31	=	10 nF	63 V	Polyester
C 32	=	100 nF	63 V	Polyester
C 33	=	100 µF	25 V	
C 34	=	2,2 nF	1000 V	Polyester
C 35	=	10 nF	630 V	Polyester
C 36	=	2200 µF	25 V	105°C
C 37	=	2200 µF	25 V	105°C
C 38	=	1,0 µF	100 V	Polyester
C 39	=	470 µF	25 V	105°C

C ₄₀ =	2200 µF	25 V	105°C	Pot ₁ =	4,7 KΩ
C ₄₁ =	2200 µF	25 V	105°C	S ₁ =	4 x Resistive wire φ 1,0 mm x 20 mm
C ₄₂ =	1,0 µF	100 V	Polyester	D ₁ =	1N 4148
C ₄₃ =	1,0 µF	100 V	Polyester	D ₂ =	1N 4148
C ₄₄ =	1,0 nF	50 V	Ceramic	D ₃ =	BAT 49
C ₄₅ =	47 nF	50 V	Ceramic	D ₄ =	1N 4148
C ₄₆ =	1,0 µF	50 V	Multilayer	D ₅ =	BY 399
C ₄₇ =	470 µF	35 V	105 °C	D ₆ =	BYV 26 E/1000
R ₁ =	56 KΩ	3 W		D ₇ =	BY 399
R ₂ =	56 KΩ	3 W		D ₈ =	BYV 26 E/1000
R ₃ =	470 KΩ	½ W		D ₉ =	1N4007
R ₄ =	100 KΩ	3 W		D ₁₀ =	1N4007
R ₅ =	1,0 KΩ	¼ W		DF ₁ =	BYW99P-200
R ₆ =	15 Ω	¼ W		DZ ₁ =	15 V 1,3 W
R ₇ =	10 Ω	¼ W		DZ ₂ =	20 V 1,3 W
R ₈ =	10 Ω	1 W		DZ ₃ =	15 V 1,3 W
R ₉ =	220 KΩ	¼ W		DZ ₄ =	7,5 V ½ W
R ₁₀ =	8,2 KΩ	¼ W		DZ ₅ =	8,2 V 1,3 W
R ₁₁ =	15 Ω	¼ W		BD ₁ =	KBU 806
R ₁₂ =	1,0 KΩ	¼ W		T ₁ =	BD 179
R ₁₃ =	6,8 Ω	¼ W		T ₂ =	BC 337-25
R ₁₄ =	22 KΩ	¼ W		T ₃ =	BC 337-25
R ₁₅ =	680 KΩ	¼ W		T ₄ =	BC 337-25
R ₁₆ =	470 Ω	¼ W		MSFT ₁ =	IRFP 450
R ₁₇ =	2,2 KΩ	¼ W		MSFT ₂ =	IRFP 450
R ₁₈ =	15 KΩ	5 W		Ic ₁ =	UC 3844
R ₁₉ =	180 Ω	¼ W		Ic ₂ =	LM 555
R ₂₀ =	100 KΩ	¼ W		Ic ₃ =	LM 7808 CV
R ₂₁ =	100 KΩ	¼ W		OP ₁ =	4N25
R ₂₂ =	82 KΩ	¼ W		TA ₁ =	Toroid 10-50/1 cod. RM10
R ₂₃ =	10 Ω	3 W		TR ₁ =	EF20/37/32/32 cod. RM20 orr.
R ₂₄ =	15 KΩ	¼ W		TR ₂ =	ETD 44-RM 1525 cod. RM44
R ₂₅ =	10 Ω	½ W		FL ₁ =	6,8 mH 4A cod. RM30
R ₂₆ =	10 Ω	2 W		FL ₂ =	2 x 25 µH 30 A cod. RML
R ₂₇ =	4,7 KΩ	¼ W		L ₁ =	60 µH 30 A cod. RMTRI
R ₂₈ =	100 KΩ	¼ W		L ₂ =	20 mH cod. RMIND
R ₂₉ =	68 Ω	5 W		Fuse =	Fast 4 A (220 V) 6 A (110 V)
R ₃₀ =	10 Ω	3 W		Fan =	Fan 12V 60 x 60 mm
R ₃₁ =	330 KΩ	¼ W			
R ₃₂ =	27 KΩ	¼ W			
R ₃₃ =	8,2 KΩ	¼ W			
R ₃₄ =	1,0 KΩ	¼ W			
R ₃₅ =	100 KΩ	¼ W			
R ₃₆ =	8,2 KΩ	¼ W			
R ₃₇ =	2,2 KΩ	¼ W			
NTC ₁ =	10 Ω				
VR ₁ =	275 Vac				
Trim ₃ =	220 KΩ				
Trim ₄ =	4,7 KΩ				
Trim ₁ =	100 KΩ				