

## BILL OF MATERIALS Ver 1.6

Item	Quantity	Reference	Part / Value	Voltage / Watt	Foot-Print	Manufacturer	Manufacturer Code	RS Code	More Info
1	1	COUT1	470uF 25V Irms 1A ESR=170mohm	25V Electrolytic	Radial			315-0574	height 16mm
2	1	C1	2.2uF	16 V Ceramic	SMD/ 0805				
3	1	C43	2.2nF	16 V Ceramic	SMD/ 0805				
4	1	C2	47nF	630 V Polyester	with Terminal				
5	2	C3,C12	1nF	16 V Ceramic	SMD/ 0805				
6	20	C4,C5,C6,C7,C8,C13,C14,C15,C16,C17,C31, C35,C38,C46,C53,C54,C55,C56,C57,C62	100nF	16 V Ceramic	SMD/ 0805				
7	6	C9,C11,C18,C20,C39,C63	10nF	16 V Ceramic	SMD/ 0805				
8	1	C21	2.2nF 400V	400V Ceramic					
9	2	C22,C23	10nF 400V X2	400V				441-9616	
10	1	C24	47uF 400V	400V Electrolytic	Radial			434-0330	
11	1	C25	220pF 400V	400V Ceramic				#####	
12	1	C26	10uF 50V	Electrolytic	Radial				
13	2	C27,C28	47nF	16 Vceramic	SMD/0805				
14	2	C29,C34	4.7u CERCAP	16 Vceramic	SMD/ 0805				
15	1	C32	4.7u 10V	10V Tantalum	SMD			533-9126	
16	1	C33	220nF	16 V Ceramic	SMD/0805				
17	1	C41	100uF 10V	10V Tantalum	SMD			464-7877	
18	1	C45	100pF	16 V Ceramic	SMD/0805				
19	3	C47,C58,C59	10pF	16 V Ceramic	SMD/0805				
20	2	C60,C61	22pF	16 V Ceramic	SMD/0805				
19A	2	C64,C65	100nF	16 V Ceramic	SMD/0805				
21	22	C30,C36,C37,C40,C42,C44,J10,L2 R1,R4,R69,R46,R49,R51,R53,R55,R57,R59, R65,R69,R91,U7,	NOT ASSEMBLY						NOT ASSEMBLY
22	2	D2,D7	LED -LGR971		SMD/0805			654-5773	
23	3	D1,D6,D11	LL1N4148		SMD				
24	1	D12	1N4007		with Terminal				
25	1	D13	STPS1H100A		SMB	ST			
26	1	D14	STTH1L06A		SMB	ST			
27	2	D15,D16	BAT46W		SOT/23	ST			
28	1	D17	12V ZENER 0.5W		SMD				
29	1	D18	BAT54AW/SOT		SOT/23	ST			
30	1	D19	BAT54J		SMD				
31	1	D22	Rectangular LED 2x5	Green	with Terminal			171,6807	
32	1	D23	Rectangular LED 2x5	Yellow	with Terminal			171-6784	
31A	1	D24	STPS140U		SMB	ST			
33	1	F1	FUSE 0.5A		with Terminal			226-0591	
34	1	J1	Ampmode-10pin					461-663	
35	1	J6	male connector 90 gradi 20Pin					461-691	
36	2	J5-J7	Female double STRIP Line 8 Pin						

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37	1	J14	Male double STRIP Line 4 Pin						
38	1	J15	Female double STRIP Line 4 Pin <b>Low Profile</b>			KONTEK		230-4950	
39	6	J3,J17,,J18,J19,JP3,JP4	Male single STRIP Line 2 Pin						
40	1	J16	Female Single STRIP Line 2 Pin <b>Low Profile</b>			KONTEK		230-4938	
41	1	LS1	Buzzer					511-7670	
42	1	L1	10mH	Filter inductor				489-0245	
43	1	L3	33uH 1.3A		SMD	COILCRAFT	LPS6235-333ML		
44	1	Q1	Triac T2035H	With Terminal	TO220	ST			NOT ASSEMBLY
45	2	Q2-Q3	2STR1215		SOT/23	ST			
46	1	RT1	NTC 16 Ohm	With Terminal				216-1393	
47	6	R3,R5,R14,R16,R30,R32,	1k 1/8W 10%	1/8W 10%	SMD/0805				
48	1	R2	22R 1/8W 10%	1/8W 10%	SMD/0805				
49	2	R4,R55	47K 1/8W 10%	1/8W 10%	SMD/0805				
50	9	R6,R7,R8,R9,R95,R96,R97,R101, R103	4K7 1/8W 10%	1/8W 10%	SMD/0805				
51	3	R10,R26,R54,	560	1/8W 10%	SMD/0805				
52	3	R11,R12,R13	2k4 1/8W 10%	1/8W 10%	SMD/0805				
53	2	R15,R68	6.8 1/8W 1%	1/8W 1%	SMD/0805				
54	2	R17,R33	2M 1/8W 10%	1/8W 10%	SMD/0805				
55	1	R18	475 1/8W 1%	1/8W 1%	SMD/0805				
56	3	R19,R20,R21	261K 1/4W 1%	1/8W 1%	Axial with terminal				
57	2	R22,R38	43K 1/8W 10%	1/8W 10%	SMD/0805				
58	2	R23,R39	100 1/8W 1%	1/8W 1%	SMD/0805				
59	1	R42	470K 1W 10%	1W 10%	Axial with terminal				
60	2	R43,R52	10R 1/8W 10%	1/8W 10%	SMD/0805				
61	5	R44,R66,R67,R105,R111	0R 1/8W 10%	1/8W 10%	SMD/0805				
62	1	R45	4R7 1/8W 10%	1/8W 10%	SMD/0805				
63	1	R47	47R 1/8W 10%	1/8W 10%	SMD/0805				
64	1	R48	6K8 1/8W 10%	1/8W 10%	SMD/0805				
65	1	R50	33K 1/8W 10%	1/8W 10%	SMD/0805				
66	3	R58,R102,R104	330 1/8W 10%	1/8W 10%	SMD/0805				
67	1	R56	27K 1/8W 10%	1/8W 10%	SMD/0805				
68	11	R60,R87,R88,R89,R90,R92,R93, R94,R109, R106, R107	10K 1/8W 10%	1/8W 10%	SMD/0805				
69	1	R61	560K 1/8W 10%	1/8W 10%	SMD/0805				
70	5	R62,R63,R65,R110	100K 1/8W 10%	1/8W 10%	SMD/0805				
70	1	R31	100 1/8W 10%	1/8W 10%	SMD/0805				
71	1	R64	150K 1/8W 10%	1/8W 10%	SMD/0805				
72	1	R98	1k5 1/8W 10%	1/8W 10%	SMD/0805				
73	1	R108	1M 1/8W 10%	1/8W 10%	SMD/0805				
74	11	SW1,SW2,SW3,SW4,SW5,SW6,SW7,SW8,S W9,SW10,SW12	Male Strip Line 3 pins						
75	3	SW11,S1,S2	Vertical reset push button			DISTRELEK	200862		5 mm button

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76	2	T1,T2	Current Transformer		with Terminal	VAC	4622-X503		
77	1	T3	Output Transformer		with Terminal	MAGNETCA	1155-0002		
78	2	U4,U5	STPM01		TTSOP20	ST			
79	1	U6	VIPER12A		DIP8	ST			
80	1	U9	STS4DNF30L		SO8	ST			
81	1	U8	PM6680		VFQFPN-32 5X5	ST			
82	1	U11	STLM75M2E		SO8	ST			
83	1	U12	STM32F103RBT6		LQFP-64 10X10	ST			
84	1	J8, J9	SPZB260ADP		with Terminal	ST			
85	1	Y1	SMD 32.768Khz Crystal		SMD			244-2018	
86	1	Y2	8 Mhz HC49/4H Crystal	Low Profile	with Terminal			226-1724	
87	1	K1	Relay 16A 12Volt	Low Profile		OMRON		365-0535	