

# Bill Of Materials

## 11 Capacitors

Quantity	References	Value	Description
10	C1-C8,C10-C11	0.47u	CAP CER .9.47uF 50V 10% SMD 1206
1	C9	0.47u	CAP CER .1uF 50V 10% SMD 1206

Sub-totals:

## 17 Resistors

Quantity	References	Value	Description
1	R1	330	0.1W, 1%, SMD1206
5	R2-R6	820	0.1W, 1%, SMD1206
6	R7-R12	1K	0.1W, 1%, SMD1206
1	R13	4K7	0.1W, 1%, SMD1206
1	R14	22K	0.1W, 1%, SMD1206
3	R15-R17	6K8	Through Hole Resistor, 6.8 kohm, 3 W, ± 5%,

Sub-totals:

## 11 Integrated Circuits

Quantity	References	Value	Description
2	U1-U2	LM193	Dual, General Purpose, Differential Comparator
2	U3-U4	74HC74	Dual Positive-Edge-Triggered D-Type Flip-Flops With Clear And Preset
3	U6-U8	ACS755XCB-050	Fully Integrated, Hall Effect-Based Linear Current Sensor with High Voltage Isolation and a Low-Resistance Current Conductor.
1	U9	IRM-02-5	AC/DC PCB Mount Power Supply 1 Output, 2 W, 5 V, 400 mA
3	U5.1-U5.3	60A 3P+N UZO	Residual Current Circuit Breakers 63A 30mA 3P+N

Sub-totals:

## 1 Transistors

Quantity	References	Value	Description
1	Q1	BC337	Silicon NPN Low Power High Frequency Bipolar Transistor (625mW, 150eC)

Sub-totals:

## 9 Diodes

Quantity	References	Value	Description
6	D1-D2,D4,D7-D9	1N4148	Si - 75.0V, 0.300A, 4.00ns in DO35 package
3	D3,D5-D6	LED-RED	LED5MM

Sub-totals:

## 18 Miscellaneous

Quantity	References	Value	Description
1	FU1	0.1A	Fuse 5x20mm
6	L1-L6	230	Panel lamp with LEDs 230VAC 22mm IP65 red
3	RL1-RL3	G6E-134P	RELAY, SIGNAL, SPDT, 3A, 250VAC,
1	SW1	SS-10-16NP-LE	Rotary Switch, Through Hole, 6 Position, 1 Pole
1	SW2	SPST Push Button	SPST Push Button
6	X1-X6	TBLOCK-M4	PCB Mount Barrier Terminal Block, 12.7 mm, 1 Row, 4 Ways, 20 AWG, 8 AWG, 50 A

Sub-totals: