



Name	Value/Reference
<b>ACIN</b>	(1=neutral, 2=hot)
<b>C1</b>	1200uF
<b>C2</b>	330nF
<b>C3</b>	100nF
<b>C4</b>	470uF
<b>C5</b>	100nF
<b>C6</b>	100nF
<b>C7</b>	22pF
<b>C8</b>	22pF
<b>C9</b>	1uF
<b>C10</b>	1uF
<b>C11</b>	10uF
<b>C12</b>	220uF
<b>D1</b>	bridge rectifier
<b>D2</b>	led
<b>D3</b>	led
<b>D4</b>	led
<b>MOTOR</b>	(1=phase motor up, 2=neutral, 3=phase motor down)
<b>OK1</b>	MOC3021M
<b>OK2</b>	MOC3021M
<b>OUT1</b>	automatic valve (optional)
<b>OUT2</b>	automatic valve (optional)
<b>Q1</b>	IRLD014 (or similar) (optional)
<b>R1</b>	1k $\Omega$
<b>R2</b>	10k $\Omega$
<b>R3</b>	10k $\Omega$
<b>R4</b>	68 $\Omega$
<b>R5</b>	1.5k $\Omega$
<b>R6</b>	1.5k $\Omega$
<b>R7</b>	10k $\Omega$ (optional)
<b>R8</b>	1k $\Omega$ (optional)
<b>R9</b>	100 $\Omega$



Name	Value/Reference
R10	100Ω
R11	10kΩ
R12	10kΩ
R13	10kΩ
R14	220Ω
SNUBBER	100Ω+100nF
SNUBBER1	100Ω+100nF
T1	TIC225S
T2	TIC225S
U1	ATMEGA328P
U2	7805
U3	display pin header
U4	1FP45 (ac filter9)
U5	transformer (220V to 9V 12VA)
U6	sensor terminal (1=Vcc, 2=LM35 output, 3= Gnd, 4=Reed relay out, 5=Gnd for reed relay)
U7	1FP45 (ac filter9)
U8	Up button (1=button output, 2=Gnd)
U9	Mode button (1=button output, 2=Gnd)
U10	Down button (1=button output, 2=Gnd)
U11	Relay (optional)
U12	7805 (optional)
Y1	16MHz (HC49)