

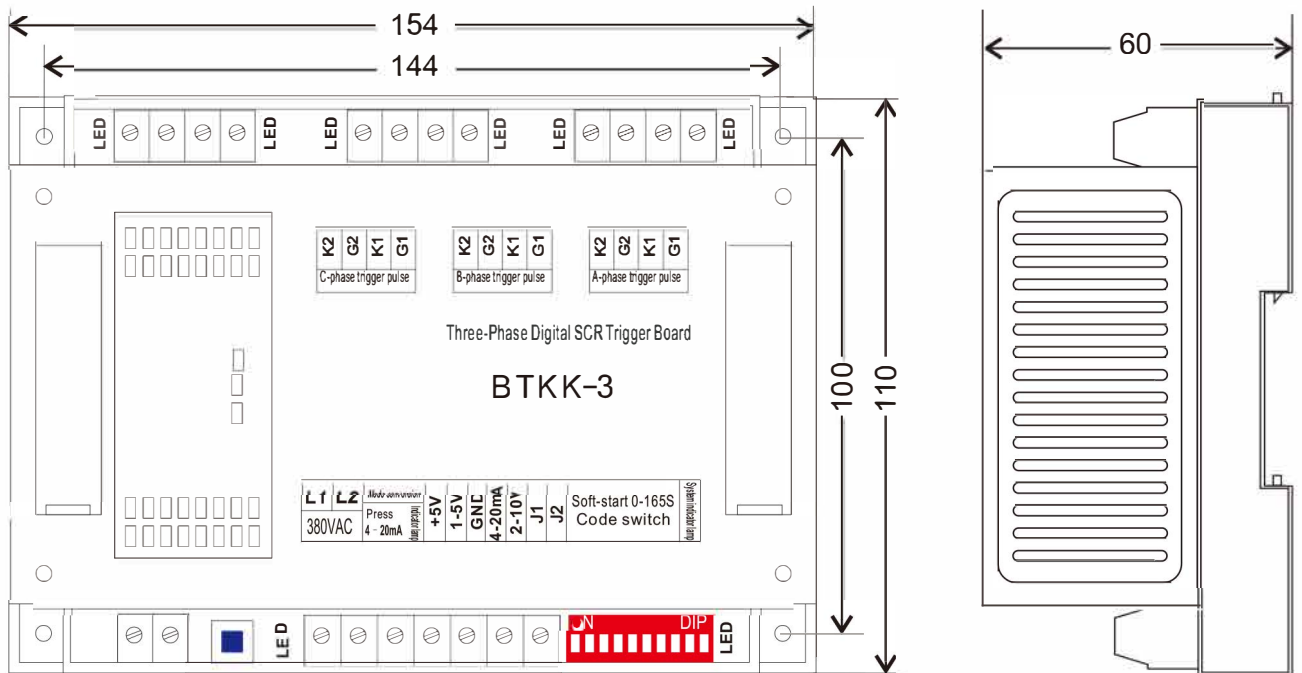
ÜÇ FAZ TRİSTÖR ANALOG KONTROL KARTI

BTKK-3 Three-phase SCR trigger adopts military level PCB, it's made by import single chip microcomputer (hereinafter refer to SCM), which used for triggering SCR and realize the function of regulating voltage. Our product not only has many advantages involve high degree of output linearization, low output starting control point and realize step-less regulation to load voltage, but also has wide range of application such as primary side voltage regulation of transformer, welder, temperature control, light regulation, battery charging, excitation, electroplate, electrolysis, water treatment, three-phase motor soft-start device, etc.

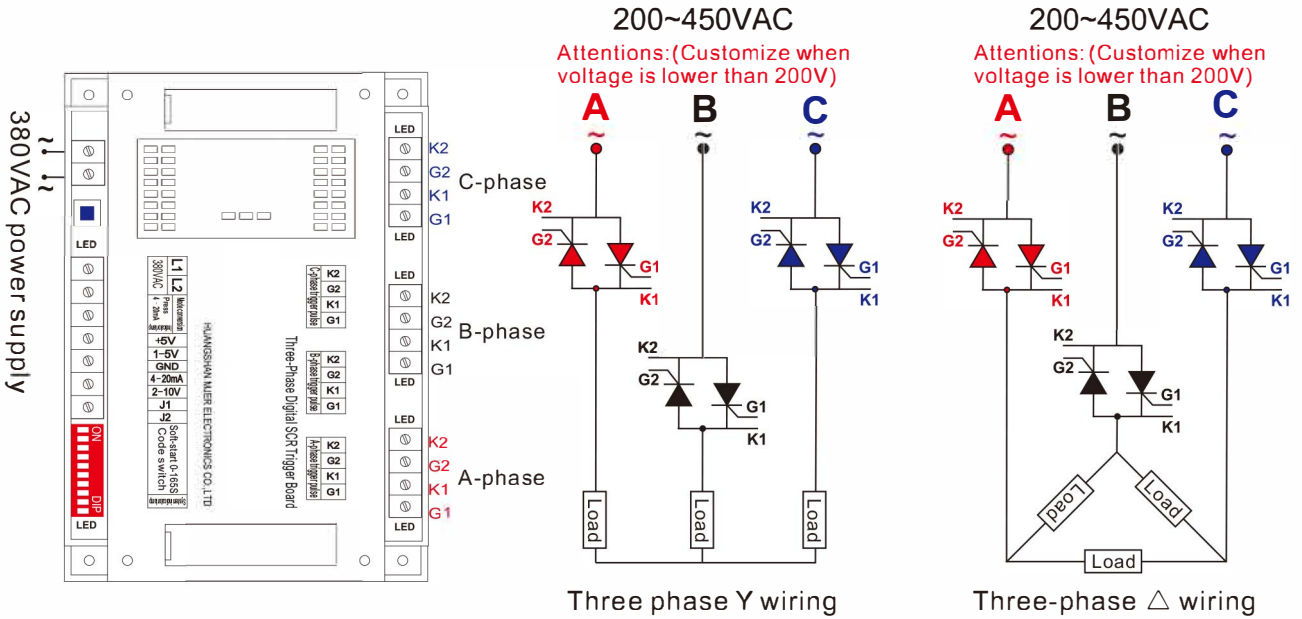
1. Product performance parameters

- ▶ The wave shape of trigger has good symmetry, control precision $\leq 5\%$, high degree of linearization, stable operation.
- ▶ High triggering power, it could trigger the thyristor within 3000A directly.
- ▶ Various kinds of control signals, potentiometer (10K), DC1-5V, DC2-10V, DC4-20mA.
- ▶ We have designed the function of soft-start for our product, power on and soft-start could protect SCR and loads from impacting. Setting delay time to 0-165S, you can choose it at random.
- ▶ Unique design, no limits of three-phase sequence, simple for wiring, easy for maintenance.
- ▶ The main circuits and control circuits are completely isolated, safe and reliable.
- ▶ Coating with three-layer of protective paints and one-layer of transparency protective film, excellent performance on moisture proof, dust proof and anti-corrosive.
- ▶ We have designed locking and triggering pulse functions under the condition of accident or failure to trigger, such as locking pulse during machine get started, which could make SCR of main circuits completely under off state.

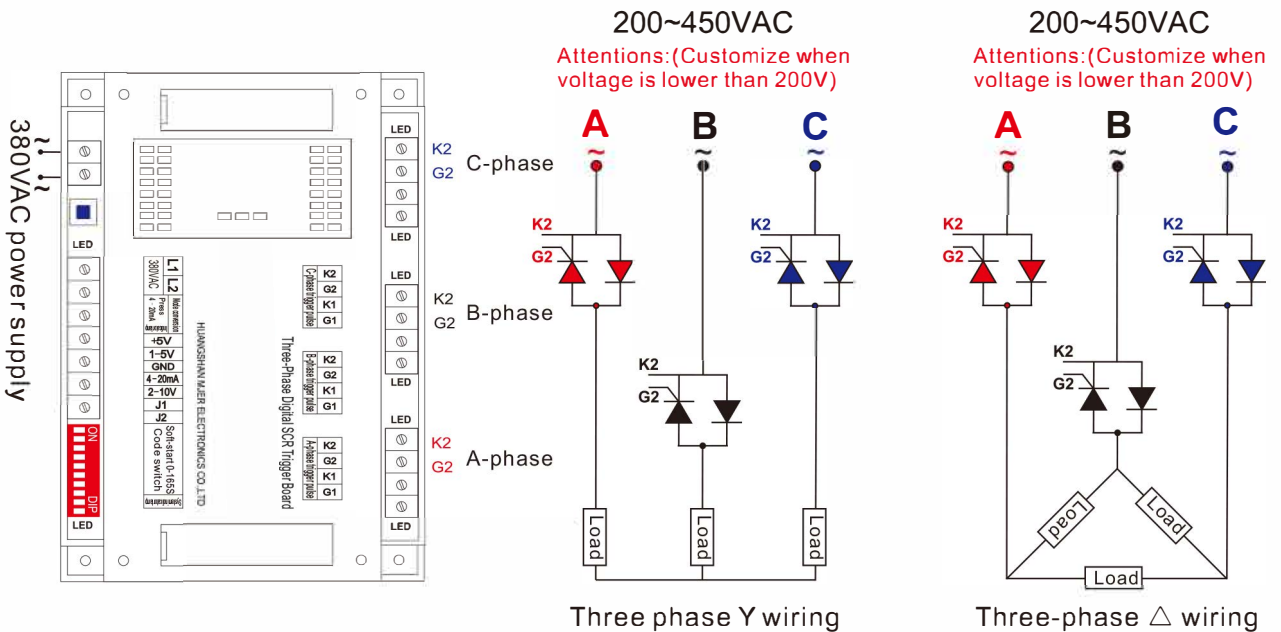
2. Installation dimension (mm)



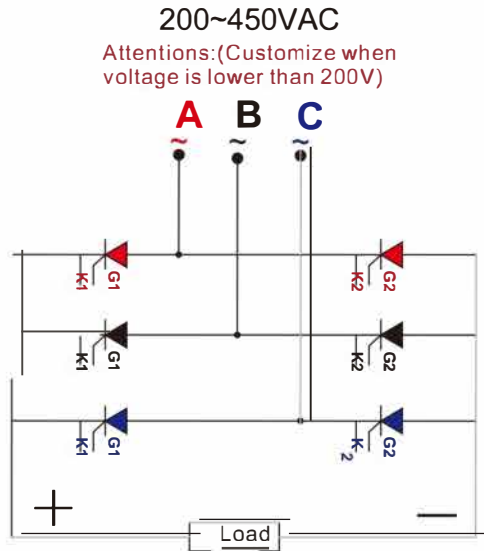
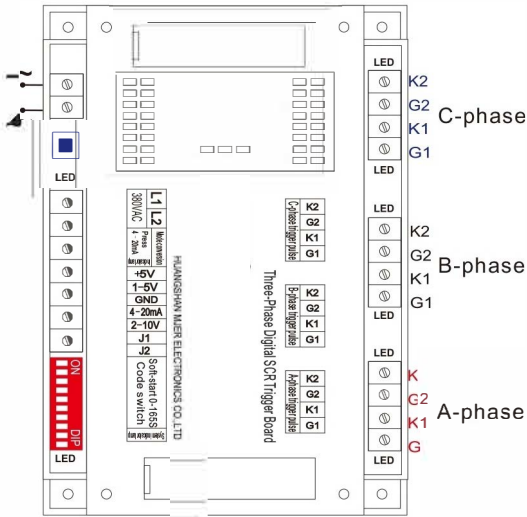
3. Three-phase AC phase shifting and voltage regulation wiring



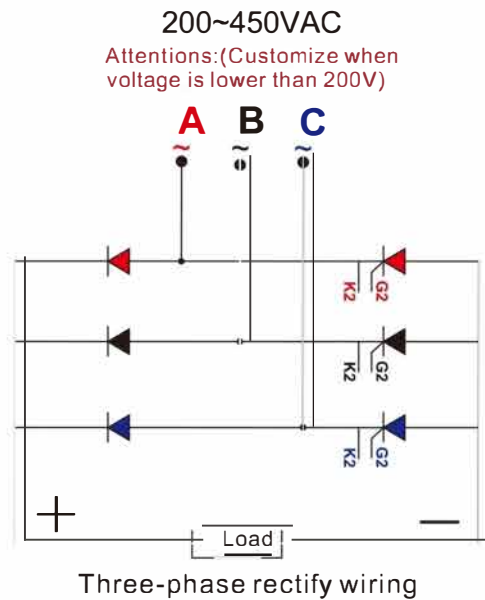
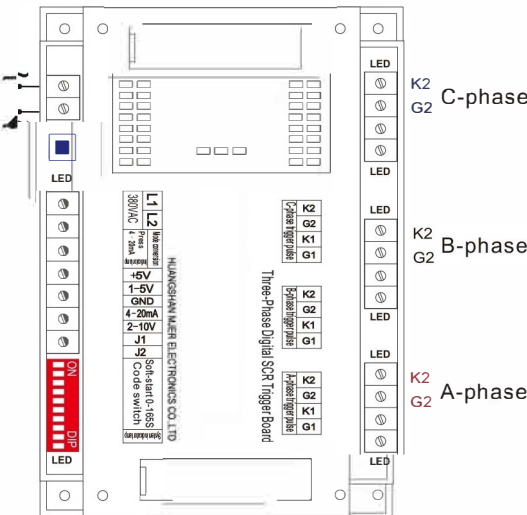
4. Three-phase semi-controlled AC phase shifting and voltage regulation wiring



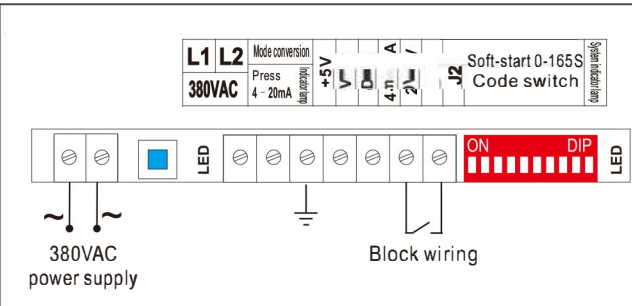
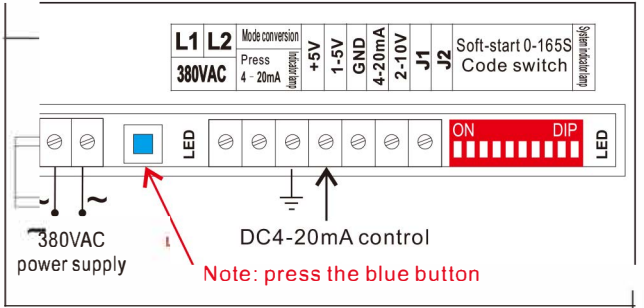
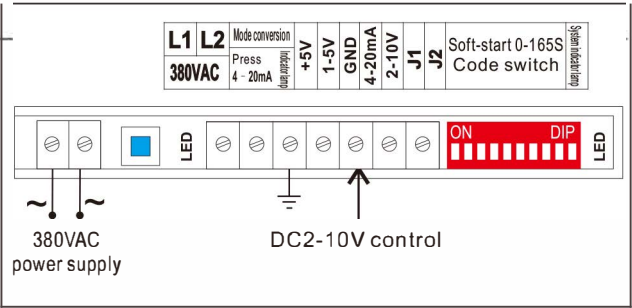
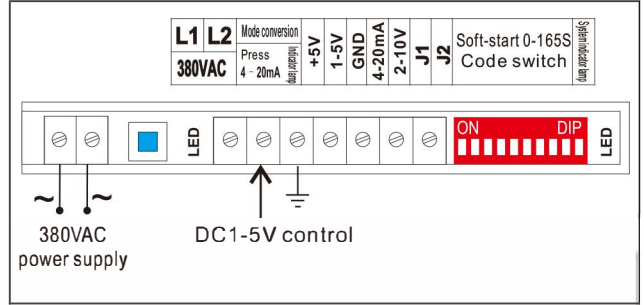
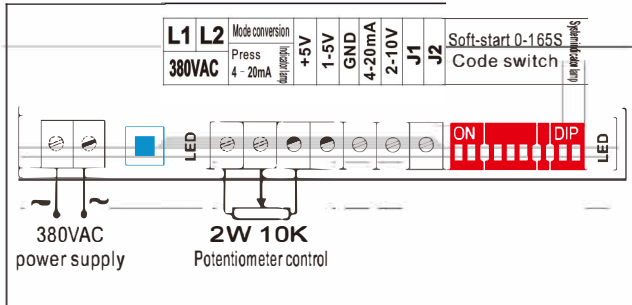
5. Three-phase rectify phase shifting and voltage regulation wiring



6. Three-phase semi-controlled rectify phase shifting and voltage regulation wiring



7. Control terminals wiring diagram



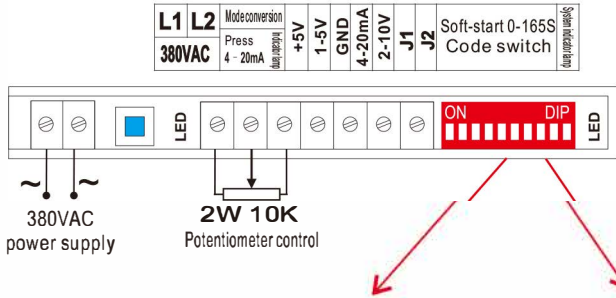
Blocking pulse descriptions

Turning on J1 and J2 terminals, the block pulse will output, main circuits will turn-off; turning off J1 and J2 terminals, the main circuits will turn-on, if you don't want to use this function, keep J1 and J2 terminals suspension. The J1 and J2 terminals apply to manual control, or you can use automatic control which has combined relay normal open contact to control system.

8. Troubleshooting

1. System indicator lamp can't light on, may cause by no power supply or chips out of service.
2. System indicator lamp can light on, SCR has no output. Ensure it has connected to load, there will be no output if you not connecting to load.
3. System indicator lamp can light on, use analog signal (1-5v, 2-10v, 4-20mA), the output is not adjustable. Ensure it has connected to load, there will be no output if you not connecting to load. You can use 10K potentiometer to conduct manual control regulation, load connecting to 100W-200W bulb and conduct test.

9. Soft-start code switch setting



When setting code switch to ON, it's valid. ● means valid. In following code digit figure, the red number means second. The black number is corresponding to coder 1-10bit, delivery setting of soft-start is 5S.

	1	2	3	4	5	6	7	8	9	10
1								●		●
2						●				●
3						●		●		●
4				●						●
5				●				●		●
6				●		●				●
7				●		●		●		●
8		●								●
9		●						●		●
10							●		●	
11							●	●	●	●
12						●	●		●	●
13						●	●	●	●	●
14				●			●		●	●
15				●			●	●	●	●
16				●		●	●		●	●
17				●		●	●	●	●	●
18		●					●		●	●
19		●					●	●	●	●
20					●				●	
21					●			●	●	●
22					●	●			●	●
23					●	●		●	●	●
24				●	●				●	●
25				●	●			●	●	●
26				●	●	●			●	●
27				●	●	●		●	●	●
28		●				●			●	●
29		●				●		●	●	●

	1	2	3	4	5	6	7	8	9	10
30					●		●		●	
31					●		●	●	●	●
32					●	●	●		●	●
33					●	●	●	●	●	●
34				●	●		●		●	●
35				●	●		●	●	●	●
36				●	●	●	●		●	●
37				●	●	●	●	●	●	●
38		●			●		●		●	●
39		●			●		●	●	●	●
40			●						●	
41			●					●	●	●
45			●	●				●	●	●
50			●				●		●	
60			●		●				●	
70			●		●		●		●	
80	●								●	
90	●						●		●	
100	●				●				●	
110	●				●		●		●	
120	●		●						●	
130	●		●				●		●	
140	●		●		●				●	
150	●		●		●		●		●	
160	●	●	●		●	●	●		●	●
165	●	●	●	●	●	●	●	●	●	●

As there are too much time setting parameters, we have omitted some in the table, please contact technical department of our company for detailed information.