# BK<sub>2</sub>

#### CONTROL TRANSFORMERS

### **OPERATION INSTRUCTION**

Standard: J/BT5555



Before installing and using this product, please read this manual carefully and pay more attention to safety.

## BK2 series control transformers

#### 1.General

BK2 series control transformers are the earliest electric products we develope, we use imported materials and rigorous design, as well as have excellent performance, reliable work, wide applicability and so on. The series tansformers are of a vertical installation mode and can work for a long time under the rated capacity. It is also widely used as a control power for general electrical appliances in machine tools and mechanical equipment as well as indicator power supply for local lighting in line with the standard: JRT55555

#### 2. Product specifications and installation dimensions.

BK2 series				
rated capacity	rated input voltage (V)	rated output voltage (V)	Outline dimension	Mounting dimension
25VA		6 (6.3) 12 24 36	80×70×90	56×48
50VA	1		80×72×90	56×50
100VA			98×85×108	84×65
150VA	]		105×86×110	76×77
200VA			105×105×115	85×87
250VA			105×115×110	85×95
300VA	220		115×110×115	90×90
400VA	(361)		135×125×140	110×97
500VA	380	110	135×130×140	110×103
700VA	(399)	127 220 (380)	152×110×150	120×90
1000VA	] ` ´		152×142×165	120×120
1500VA			175×170×195	130×120
2000VA	]		205×215×230	170×130
3000VA	]		205×240×130	170×150
4000VA	]		235×265×260	195×175
5000VA			235×280×260	195×190

Note:The direction of "L" (the length) is the direction of terminal

#### 3.Application environment

This transformer works in the following conditions:

- 1. altitude is not more than 2500M:
- 2. environmental air pollution degree: -25-40 degrees
- 3.Relative air humidity: The max average relative humidity in the most humid month is 90%:
  - 4. Where's no volient vibration and air vibration:
- 5.Where's no risk of explosion, and there's no medium to erode the metal or destroy the insulating gas and conductive dust;
  - 6. Where's no invasion of rain or snow.

#### 4. Installation instructions:

- 1. Open the box, take out instructions, other spare parts and the machine.
- Fix the transformer reliably in a Ventilated and cool place, to prevent it from vibration and erosion.
- 3. Before using, you must test the circuit, whether the grid voltage is the presetd input voltage. The allowed deviation value is ±5%. If much more than this range, you should consider to add regulated power supply, to ensure the transformer can work reliably.
- 4. Chose the appropriate size wire, connect them according to marks. After confirm the partial load without error, you can set up the circuit, the transformer can work properly. Wire size choices:

rated input or output current	wire (copper)cross section (mm²)	
≤5	0.75	
>5-10	1.00	
>10-16	1.50	
>16-25	2.50	
>25-32	4.00	
>32-45	6.00	

rated input or output current	wire (copper)cross section (mm²)	
>45-63	10.00	
>63-80	16.00	
>80-110	25.00	
>110-130	35.00	
>130-170	50.00	
>170-220	70.00	
>220-270	95.00	

#### 5. matters needing attention:

1,you should estimate the total capacity of the electrical equipments you need first before you purchase and choose transformer with according capacity to ensure that the transformer won't be burn out when it instantaneously starts

2, the transformer is produced and designed strictly in accordance with the relevant national standards when you use a double winding, multiple control voltage (i.e. tap type), the capacity of transformer like BK2, will reduce respectively according to the highest primary voltage ratio and the highest seconary voltage ratio. It means that the current should not exceed the maximum value of the calculated value. As for the transformer with different winding power you should strictly control the every different winding power, so as not to burn out the transformer. Winding structure and properties are shown in 5 to 4 pages.

3,you should carefully check whether the data listed on the nameplate is in accordance with your requirements or not before installation then install after comfiming nothing wrong.

4, it is normal that the transformer core and coil will heat (but

Temperature is not more than 80 degrees) after electrifying, if the temperature rises more than 80 even it smoks, you should cut off the power switch, recheck capacity of your electric equipments and adjust it.

5, in the transport, you should avoid collision as far as possible, do not make it be affected with damp. When you use, you pay attention to the maintenance, in order to ensure the service life of the transformer.

### winding structure and characteristics of control trnasformer

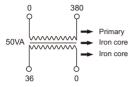


Figure 1 Independent winding

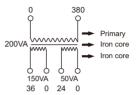


Figure 2 Separate winding

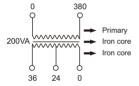


Figure 3 Compound winding

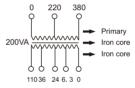


Figure 4 Continuous winding with middle tap



# CERTIFICAT

Product Model: BK2 Standard: J/BT5555

Inspector : CNC 001

Production date: Printed on the product

or package.

This product is qualified according

to the delivery inspection

## **CNC ELECTRIC**

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