

## Three-phase synchronous transformer

Sync signal and power supply voltage.



### Product application

- Power industry
- Petroleum industry
- Military engineering
- Chemical industry

### Product advantage

- Good stability
- Low noise
- High precision
- Small idle current

### Product features

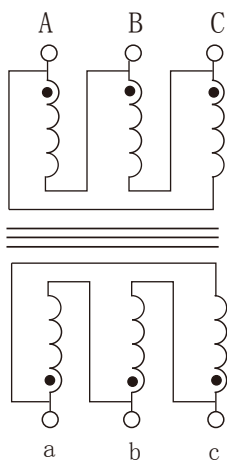
- Single crystal copper enameled wire
- High quality iron core - H18/0.35 (annealing)
- PBT engineering plastics, environmental protection, flame retardant, 120 degree of deformation
- Vacuum sealing, high temperature of 100 °C / 6 hours aging, life 20 years, high electric strength
- Reasonable structure, convenient installation, low noise, strong earthquake, airtight moistureproof

Typical technical index:

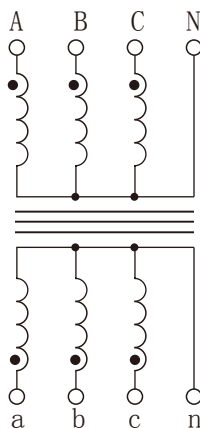
- Material of core——Silicon steel sheet
- Heat insulation level: B (130 ℃)
- Working temperature——-30℃ ~ +40℃
- Frequency range——50Hz ~ 60Hz
- Flame retardant properties: UL94-V0
- Formal test: Primary/secondary 3.5KVmax AC/1min 5mA (The normal use is not recommended for destructive testing samples)
- Factory test: primary/secondary 3.5KVmax AC/1s 5mA

Technical indicators and electrical parameters							Remarks
Primary input voltage	110	220	380	400	660	V	Voltage fluctuation range ±20%
Secondary output voltage	24/36/110/220/380					V	Other voltage output can be customized
Power	45			30		VA	Max power
Voltage regulation	≤25					%	Reference value
Temperature rise	≤30					℃	Reference value
Connection	①		②		③		Common connection can be customized other connection
Pri/sec strength connection	3.5					KV	At least 5~7 times the input voltage
Weight	927					g	For reference only

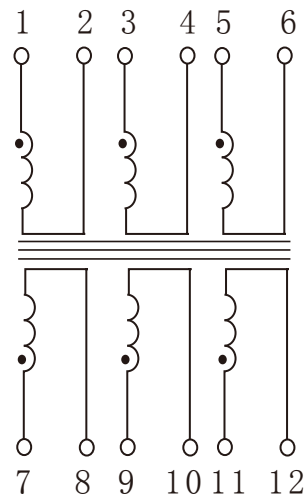
Common connection :(orange input terminal/green output terminal)



①Triangular connection



②Star connection



③Independent winding

Line voltage/phase voltage

\*Order format: y connection/model + power input voltage (phase voltage/line voltage) \* 3 + output voltage (phase voltage/line voltage) \* 3

Example: Y connection STB45T 45VA/400V (line) \*3/110V (line) \*3  
 Triangulation/model + power + input voltage \*3+ output voltage \*3

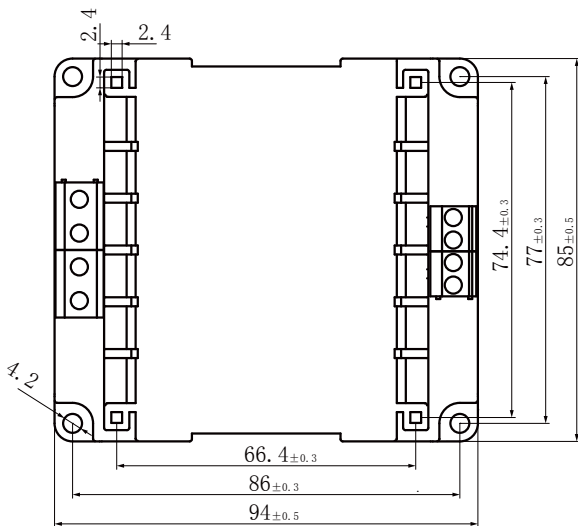
Example: Delta connection STB45T 45VA/400V\*3/110V\*3

\*Other connections can be customized Hybrid connection/model + power + input voltage \*3+ output voltage \*3

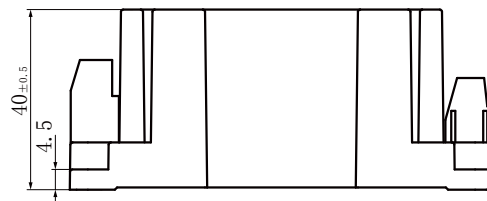
Example: Y/Delta connection STB45T 45VA/400V (line) \*3/110V\*3

\*Y connection need labeling phase voltage/line voltage; Triangular and independent windings need not be labeled

Outline size: (in:mm)



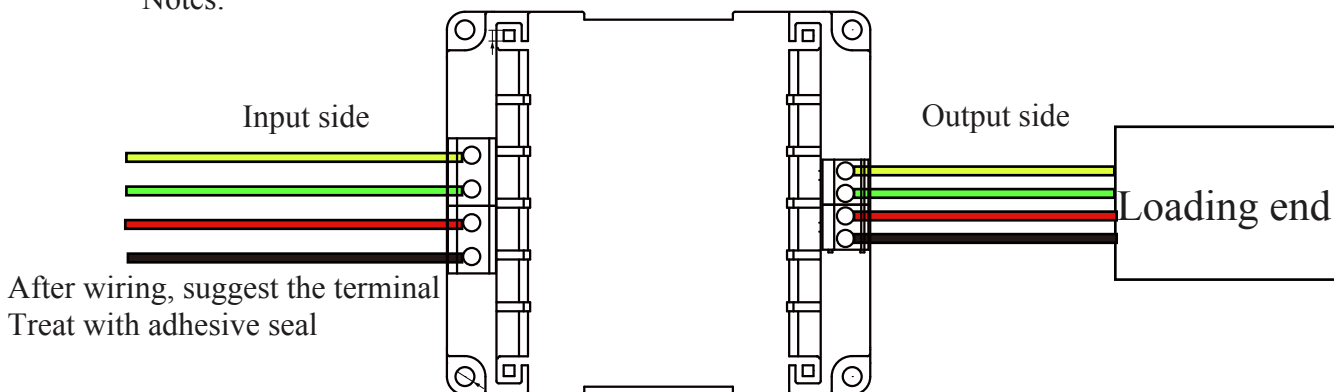
Front view

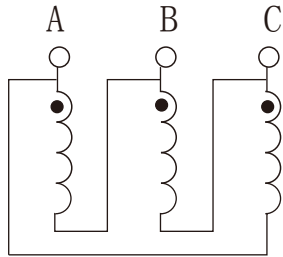


Side view

\*Make 6 terminals on each side of the independent winding

Notes:





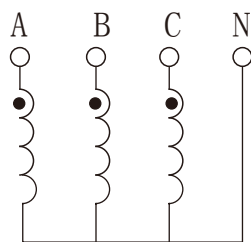
Triangular-connected three-phase voltage, line voltage is 380V,

So the phase voltage is 380V.

Triangle connection: connect the power supply or load of each phase end to end,

And each connected point is drawn out as the three phase lines of the three-phase electricity.

Corner joint



Star connection of three-phase voltage and line voltage is 380 v,

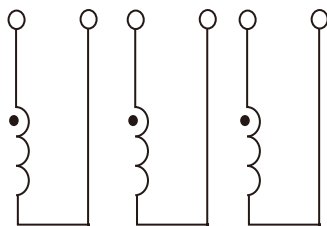
So the phase voltage is 220V.

Star connection: connect the ends of the three windings of the three-phase power supply together.

It becomes a common point N.

Three terminal lines are drawn from the beginning A, B and C as input

Y connection



Three independent coils

External short sub

Delta connection

$I_{line} = \sqrt{3} \times I_{phase}$ ,  $U_{line} = U_{phase}$ ,

$P_{phase} = I_{phase} \times U_{phase}$ ,

$P = 3P_{phase} = \sqrt{3} \times I_{line} \times U_{phase} = \sqrt{3} \times I_{line} \times U_{line}$

Y connection

$I_{line} = I_{phase}$ ,  $U_{line} = \sqrt{3} \times U_{phase}$ ,

$P_{phase} = U_{phase} \times I_{phase}$ ,

$P = 3P_{phase} = \sqrt{3} \times U_{line} \times I_{phase} = \sqrt{3} \times U_{line} \times I_{line}$ ;