

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

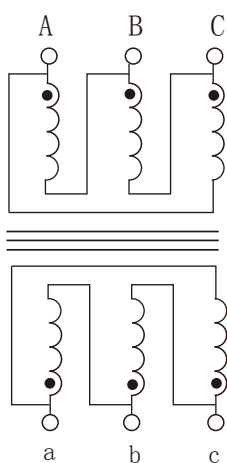
Typical technical index:

- 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)

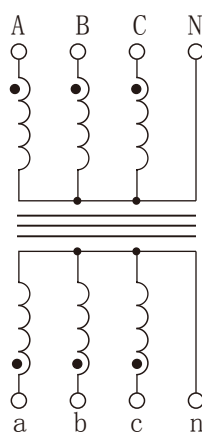
Factory test: primary/secondary 3.5KVmax AC/1s 5mA

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	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	655					g	For reference only

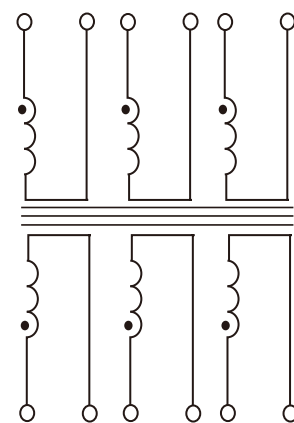
Common connection : (orange input terminal/green output terminal)



①Triangular connection



②Star connection



③Independent winding

Line voltage/phase voltage

* order format: star connection/model + power + input voltage (phase voltage/line voltage) *3+ output voltage (phase voltage/line voltage) *3

Example: Y connection STB6517Z 30VA/400V (line) *3/110V (line) *3

Delta connection/model + + power input voltage * 3 * 3 + output voltage

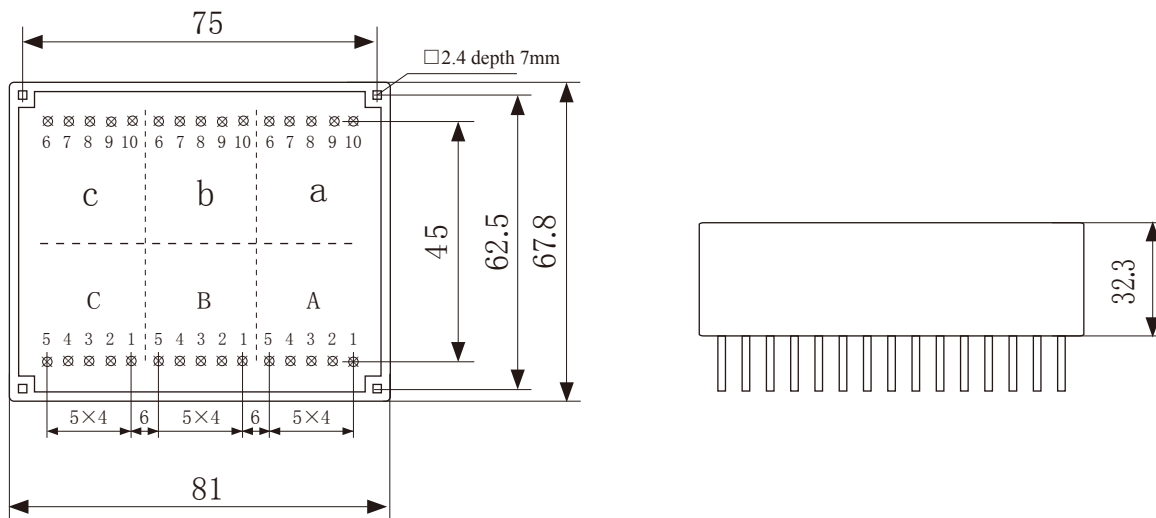
Example: Delta connection STB6517Z 30VA/400V*3/110V*3

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

Example: Y/Delta connection STB6517Z 30VA/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)



(pin out at designated foot position, no pin out at other foot positions)

Bottom view

Side view

①Delta connection feet by default

Input: A1
B1
C1

Output: a9
b9
c9

②Star connection feet by default

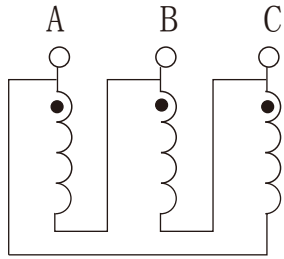
Input: A1
B1
C1
C5(Neutral N)

Output: a10
b10
c10
c6(Neutral n)

③Independent winding default pin position

Input: A1-A5
B1-B5
C1-C5

Output: a7-a9
b7-b9
c7-c9



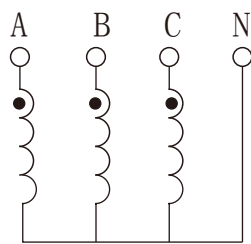
Triangular-connected three-phase voltage, line voltage is 380V,

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,

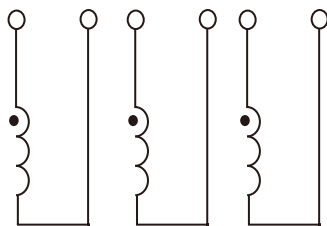
So the phase voltage is 220V.

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

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

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

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