

## ALPHA6200 Series Special AC Drive for Textile Machinery



## Feature

ALPHA6200 series special AC drive for textile machinery is independently developed by ALPHA Company. ALPHA 6210/6210S jet loom special drive realizes adjustment of motor rotation speed only by varying the output frequency, thus no longer needs belts switching or any change on equipment. The production efficiency can be increased by over 15%.

## Technical Characteristics

- Step-less speed regulation, easily and efficiently solve the difficulty of speed regulating on textile machinery
- Save accessories and manpower for belt-changing and adjusting, highly raise production efficiency
- Unique super start control speeds up the start and eliminates the original star-delta transformation device, saving the cost.
- Self-contained JOG function makes jet loom jog operation faster and easier.
- Self-contained MODBUS communication protocol can directly communicate with the control system of jet loom thus eliminates the problem of complicated wiring.
- Easy operation and maintenance which can be done by common workers.
- Save energy by 5%-15% at low rotational speed.

## Applications

The special AC drive is commonly used in textile machinery, air-jet looms, and more.

## Specification

### Technical Specifications of ALPHA6200/6200S/6200V

Item	Specifications
Power Range	380V $\pm$ 20% three phases : 18.5kW
Rated Input Voltage and Frequency	220V three phases : 50/60Hz
Allowable Input Voltage Range	380V three phases : from 304 to 456V, Voltage unbalance rate of less than 3%, Frequency fluctuation of below $\pm$ 5%
Rated Output Voltage	From 0 to rated input voltage
Max. Overload Current	G model: 150% for one minute, 180% for 20 seconds P model: 120% for one minute, 150% for one second
Control Method	V/F control, Open loop vector control, Close loop vector control
Frequency Range	From 0.00 to 650.00Hz (from S21R5GB to 3004GB) From 0.00 to 400.00Hz (from 35R5GB/37R5PB to 3500G)
Frequency Accuracy	Digital command $\pm$ 0.01 % (from -10 $^{\circ}$ C to +40 $^{\circ}$ C ) Simulation command $\pm$ 0.01 % (25 $^{\circ}$ C $\pm$ 10 $^{\circ}$ C )
Preset Frequency Resolution	Digital command 0.01Hz Simulation command 1/1000 of the maximum frequency
Output Frequency Resolution	0.01Hz
Preset Frequency Signal	From 0 to 10V, from 0 to 20mA
Acceleration-Deceleration Time	From 0.1 to 3600 seconds (The acceleration and deceleration time are set individually.)
Braking Torque	The additional braking resistance reaches up to 125%.
Voltage-Frequency Characteristics	There are 4 fixed V/F characteristics for option, and any V/F characteristic can be preset. The V/F control with PG is provided.
Protective Functions	Over-voltage, under-voltage, current limit, over-current, overload, electronic thermal relay, overheating, over-voltage stall, load short circuit, grounding, under-voltage protection, input phase loss, output phase loss, short circuit to ground, interphase short circuit, motor overload protection, etc
Ambient Temperature	From -10 $^{\circ}$ C to +40 $^{\circ}$ C
Humidity	From 5 to 95% RH (No condensation)
Storage Temperature	From -40 $^{\circ}$ C to +70 $^{\circ}$ C
Service Place	Indoor (without any corrosive gas)
Installation Site	The altitude is at most 1,000m. There is not any dust, corrosive gas, or direct solar radiation.
Vibration	Less than 5.9m/s <sup>2</sup> (0.6g)

Protection Rating	IP20
Cooling Method	Natural cooling or forced air cooling

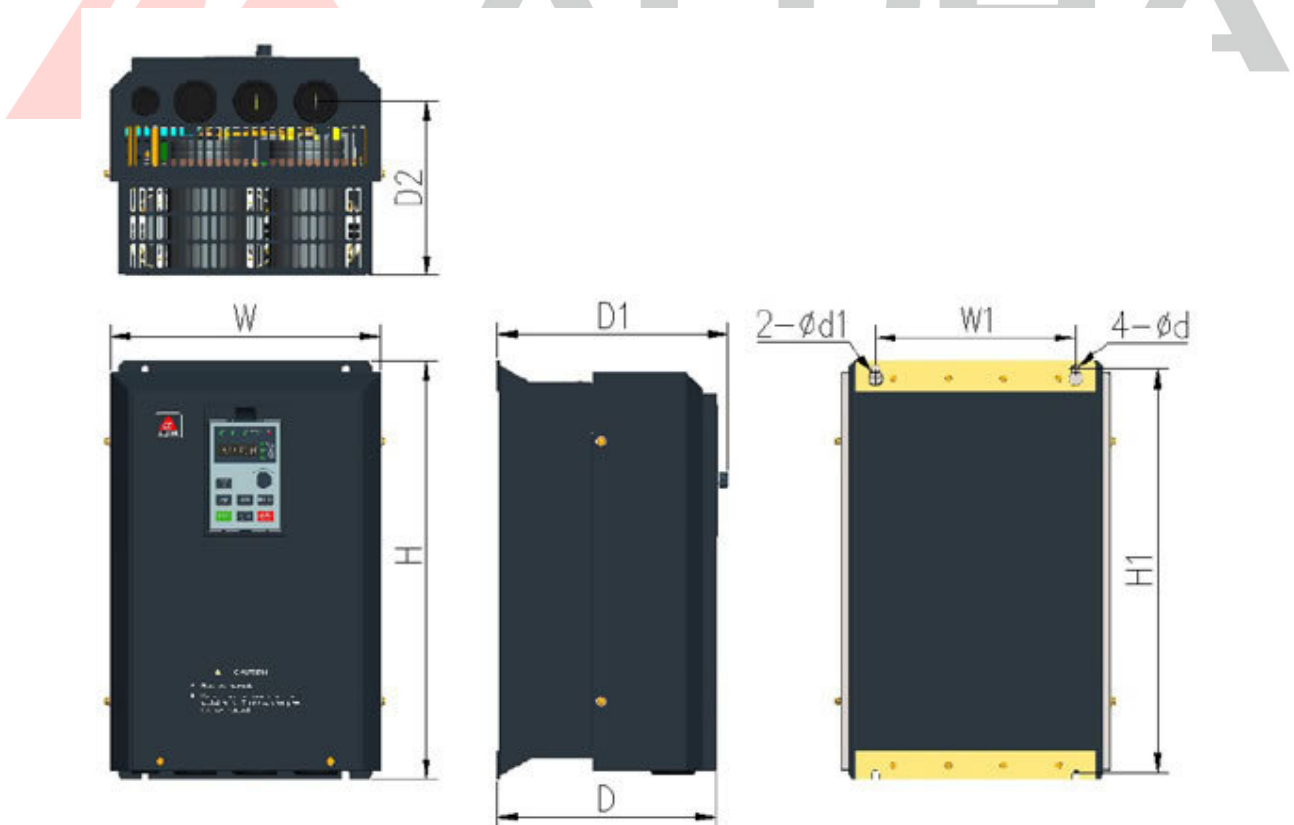
## Selection Guide

### ALPHA6200/6200S/6200V Selection Table

Voltage Classes	Model (Flux Vector)	Model (Open Loop Vector Control)	Model (CloseLoopVector Control)	Motor Power (kW)	Rated Current (A)
380V Three Phases	6200-3018G/3022P	6200S-3018G/3022P	6200V-3018G/3022P	18.5/22	37/45

### Overall Dimension of ALPHA6200 Series Special AC Drive for Textile Machinery

**Note:** The ALPHA6200, ALPHA6200S and ALPHA6200V products of the same power have the same overall dimensions.



Model	H	H1	W	W1	D	D1	D2	d	d 1
6200-3018G/3022P	420	405	270	200	218	230	175	7	14
6200-3022G									

