ALPHA6500 Series Special AC Drive for Veneer Lathe

Feature

The ALPHA6500 series special AC drive for veneer lathe adopts integrated control solution to meet the application demands. It is characterized by quick start, uniform cutting, strong environmental adaptability, rich fault-protection and operation-monitoring functions, and more.

Technical Characteristics

- Wide input voltage fluctuation range is ±20%.
- Unique vector control algorithm
- Dynamic control of torque and current gives quick response to load change.
- Output 150% high start torque at 0.1Hz.
- Veneer lathing parameters can be set, modified, and checked on line.
- Automatically adjust the feed rate according to thecutter position.
  - Automatically calculate the cutter position by collecting signals from electronic caliper and encoder; calculate the feed rate in real time
  - Up to 20 types of customized curve
  - Passed EMC testing; stable and reliable performance
  - Conformal coating protection for electronics; strengthen the environment adaptability
  - Special keypad easy for parameter modifying and machine start/stop
  - Multiple programmableinput/output terminals; digital input compatible with various active, passive,source, and drain terminals

Applications

The special AC drive for veneer lathe can be applied in the wood processing industry.

Specification

Technical Specifications of ALPHA6500

Item	Specification
Power Range	380V ±20% single phase : from 2.2 to 7.5kW
Rated Input Voltage and Frequency	380V three phases : 50/60Hz

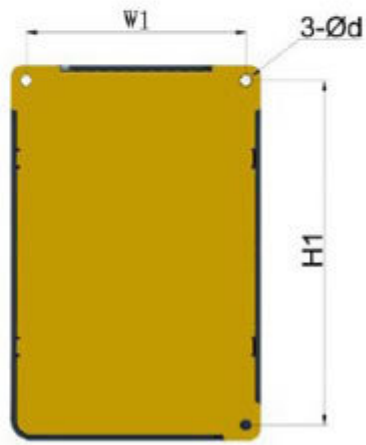
AllowableInputVoltageRange	380V three phases : from 304 to 456V, Voltage unbalance rate of less than 3%, Frequency fluctuation of below ±5%
Rated Output Voltage	From 0 to rated input voltage
Max. Overload Current	G model: 150% for 45 seconds, 180% for 5 seconds
Control Method	V/F control
Frequency Range	From 0.00 to 650.00Hz (from 32R2GB to 3004GB) From 0.00 to 400.00Hz (from 35R5GB to 37R5GB)
Frequency Accuracy	Digital command ± 0.01 ％ (from-10℃ to +40℃) Simulation command ± 0.01 ％ (25℃ ±10℃)
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
Torque Boost	Automatic or manual operation (from 0.1 to 30.0%)
Acceleration-Deceleration Modes	Straight line, or user-defined S curve
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 Characteristic	Four fixed V/F characteristics are selectable, and any V/F characteristic can be preset. The V/F control with PG is attainable.
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, and more
Ambient Temperature	From-10℃ to +40℃
Humidity	From 5 to 95% RH (No condensation)
Storage Temperature	From-40℃ to +70℃
Service Place	Indoor (without any corrosive gas)
Installation Site	The altitude is at most1,000m. There is not any dust, corrosive gas, or direct solar radiation.
Vibration	Less than5.9m/s^2 (0.6g)
Protection Rating	IP20
Cooling Method	Natural cooling or forced air cooling

Selection Guide

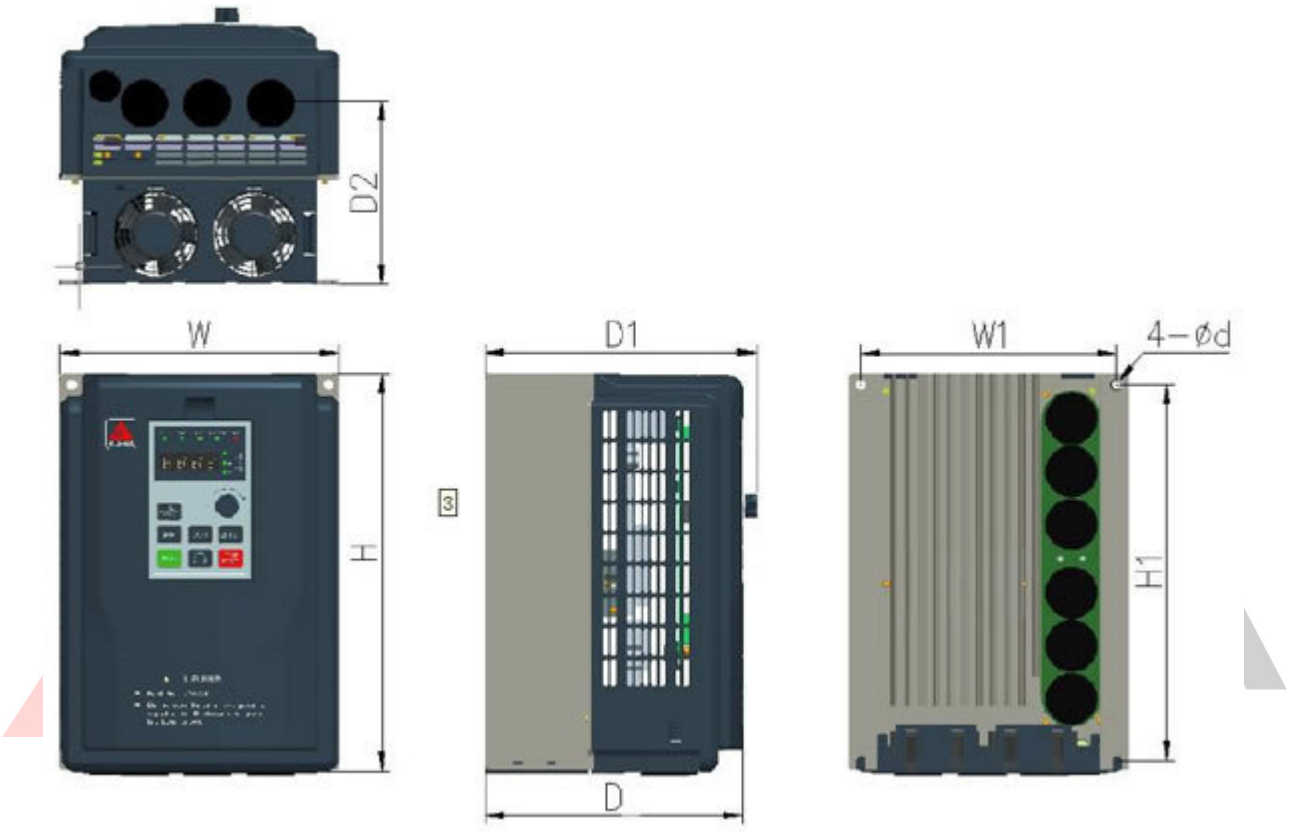
ALPHA6500 Selection Table

Voltage Classes	Model	Motor Power (kW)	Rated Output Current (A)
380V Three Phases	6500-32R2GB	2.2	6
	6500-3004GB	4	9
	6500-35R5GB	5.5	13
	6500-37R5GB	7.5	17

Overall Dimension of ALPHA6500 Series Special AC Drivefor Veneer Lathe



Specifications	H	H1	W	W1	D	D1	D2	D3	d
6500-32R2GB	180	169	115	105	150	158	85	120	4.5
6500-3004GB	195	173	130	108	157	167	100	130	5.5



Specifications	H	H1	W	W1	D	D1	D2	d
6500-35R5GB	270	255	190	175	176	186	122	7
6500-37R5GB								