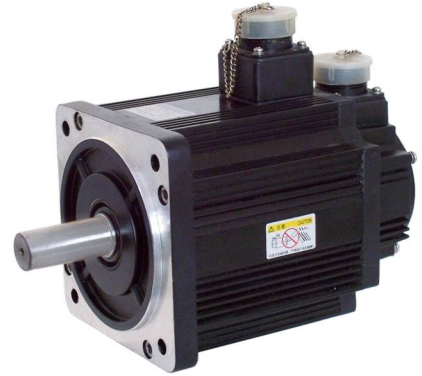# DA98B AC SERVO DRIVE UNIT

DA98B is an enhanced and upgraded product based on the DA98 AC servo drive unit; its capacity is improved and the function is added when the high reliability and good adaptability of the DA98 are reserved simultaneously.

l   The Max. position command pulse frequency improves to 1MHz; the servo motor encoder resolution increases to 5000; the command speed and position accuracy are enhanced, and the speed wave is reduced; the CNC matched with 0.1µm command accuracy can be carried out the µm level control accuracy.

l   It achieves the speed feedforward control and enhances the dynamic response character and reduces the follow error.

l   It improves the brake current and shortens the brake time. It can be connected the external brake resistance for the high-speed start/stop and the requirement of the big inertial load.

l   It is added the position feedback output electronic gear function, which adapts the different requirements of the position feedback equivalent for the controller.

l   It offers the special software of the integration homotaxial control function; the homotaxial cycle movement can be finished without the instruction control unit. The DA98B AC servo control equipment with the integration homotaxial control function has been gained Right of the Chinese Patent.

DA98B AC servo drive equipment is an economical CNC machine, which can be improved the accuracy and efficiency; it is the best choice to enhance the grading of the product.

Technical Specification

kW The rated power of the matched servo motor (kW)	0.5 1.2	1.5 2.3	2.3 3.9
mm × × Contour dimension (mm) (Width×Height×deepth)	90×240×177.5	110×240×177.5	125×240×177.5
Main power	AC220V 85% 110% 50/60Hz Three phases AC220V 85% 110% 50/60Hz		
Power control	AC220V 85% 110% 50/60Hz Single phase AC220V 85% 110% 50/60Hz		
Speed ratio	5000 1		
Speed fluctuation ratio	±0.03%		
Speed frequency response	200Hz		
Positioning accuracy	±0.018° 5000 1 ±0.018° (One pulse of an incremental encoder corresponds to the 5000 cables)		
Working	2 Manual, JOG, Internal speed, External speed, Position and Null (Two working modes are added when the integration homotaxial function is performed: homotaxial control, homotaxial program)		
Internal speed mode	4 There are four kinds of speed can be set by parameters of which the operation speed is selected by the input signal.		
External speed	2 10V +10V 0V +10V		

mode	Two external speed commands: 10V +10V analog voltage command speed and direction; 0V +10V analog voltage command speed of which the operation direction is selected by the input signal.
Position mode	+ CCW /CW A/B 1MHz $\dfrac{1}{32767}$ 32767 Position command mode: pulse + direction; CCW pulse/CW pulse; A/B two phases orthogonal pulse. The Max. pulse frequency: 1MHz Position command electronic gear ratio: $\dfrac{1}{32767}$ 32767
Position feedback input	A/B/Z/U/V/W 5000 The incremental encoder installed on the servo motor is regarded as position feedback input, A/B/Z/U/V/W differential signal, and the encoder resolution is 5000 cables.
Position feedback output	A/B/Z 1 $\dfrac{1}{32}$ Outputting the A/B/Z differential signal based upon the servo motor encoder input signal, which is regarded as position feedback output; the electronic gear ratio between the position feedback output and servo motor encoder input can be set to 1 $\dfrac{1}{32}$.
Input signal	/ 1 / 2 CCW CW 10 10 input points: Servo enabling; Alarm clear; Positive forbiddance; Negative forbiddance; Zero speed clamping; Error counter clear / Speed selection 1; Command pulse forbiddance / Speed selection 2; CCW torque limit; CW torque limit; Current input
Output signal	/ Z 7 7 output points: Servo already; Servo alarm; Position arrival / Speed arrival; Brake release; Zero speed output; General output; Z pulse feedback output.
Protective function	It owns some protections, such as overvoltage, undervoltage, overcurrent, overload, overload, position error, brake abnormal and encoder abnormal.

Operation and display	4 6　LED Four keys; the operations can be performed, such as manual, JOG and parameter modification, write and backup; 6-digit LED; The information can be displayed, such as speed, current position, command pulse accumulation, position error, motor torque, motor current, rotor absolute position and input/output signal state.
Brake mode	Dynamic-brake, in-board brake resistance, and the external brake resistance can be selected.