



# SYSTEMS

Engineering Associates, Inc.

## Converting B25A20 to AB30A200 (HSL-WISVCUP Servo Cupfeed)

The AMC AB30A200 Servo Amplifier is a direct replacement for the obsolete AMC B25A20 Amplifier. To install an AB30A200 in place of a B25A20 perform the following:

- 1) Disconnect and remove B25A20 from PS300W-96V power supply of HSL-WISVCUP package.
- 2) Mount AB30A200 to PS300W-96V. The AB30A200 mounts to the same mounting holes on the PS300W-96V that the B25A20 mounted to.
- 3) Connect the servo motor and power supply wires to the AB30A200 as follows:
  - S motor lead of servo motor (wire #1S1) to AB30A200 P2 connector "A" screw terminal
  - R motor lead of servo motor (wire #1S2) to AB30A200 P2 connector "B" screw terminal
  - T motor lead of servo motor (wire #1S3) to AB30A200 P2 connector "C" screw terminal
  - "-" lead of PS300W-96V (wire #1R2) to AB30A200 P2 connector "GND" screw terminal
  - "+" lead of PS300W-96V (wire #1R1) to AB30A200 P2 connector "HV" screw terminal

These connections are the same as they were with the B25A20

- 4) Connect 16-pin molex connector of servo command cable from S4520-RDC to 16-pin P1 molex connector of AB30A200. This connector mates to the AB30A200 just as it did with the B25A20.
- 5) The 5-pin P3 molex connector of the AB30A200 is not used, nothing connects to this.
- 6) The AB30A200 is shipped from the factory with the dip switches and potentiometers already set as required, so once the AB30A200 is mounted and wired it should be ready to run. No other changes are required to replace the B25A20 with the AB30A200

For reference, the following is the required dip switch settings of the AB30A200 in order to function as the B25A20 does:

### SW1 Dip Switch

SW1-1: Off  
SW1-2: Off  
SW1-3: Off  
SW1-4: On  
SW1-5: Off  
SW1-6: Off  
SW1-7: Off  
SW1-8: On  
SW1-9: Off  
SW1-10: On

### SW3 Dip Switch

SW3-1: On  
SW3-2: On  
SW3-3: On  
SW3-4: On  
SW3-5: On  
SW3-6: On  
SW3-7: On  
SW3-8: Off  
SW3-9: Off  
SW3-10: Off

### SW4 Dip Switch

SW4-1: Off  
SW4-2: Off  
SW4-3: Off  
SW4-4: Off  
SW4-5: Off  
SW4-6: Off  
SW4-7: Off  
SW4-8: Off  
SW4-9: Off  
SW4-10: Off

The potentiometers of the AB30A200 are set as follows:

- P1 (Loop Gain): Fully counter-clockwise
- P2 (Current Limit): Fully clockwise
- P3 (Reference In): Fully clockwise
- P4 (Offset): Leave as is

As previously stated, the dip switches and potentiometers are preset at the factory as shown above, so it is not necessary to change these. These settings are provided as a reference only.