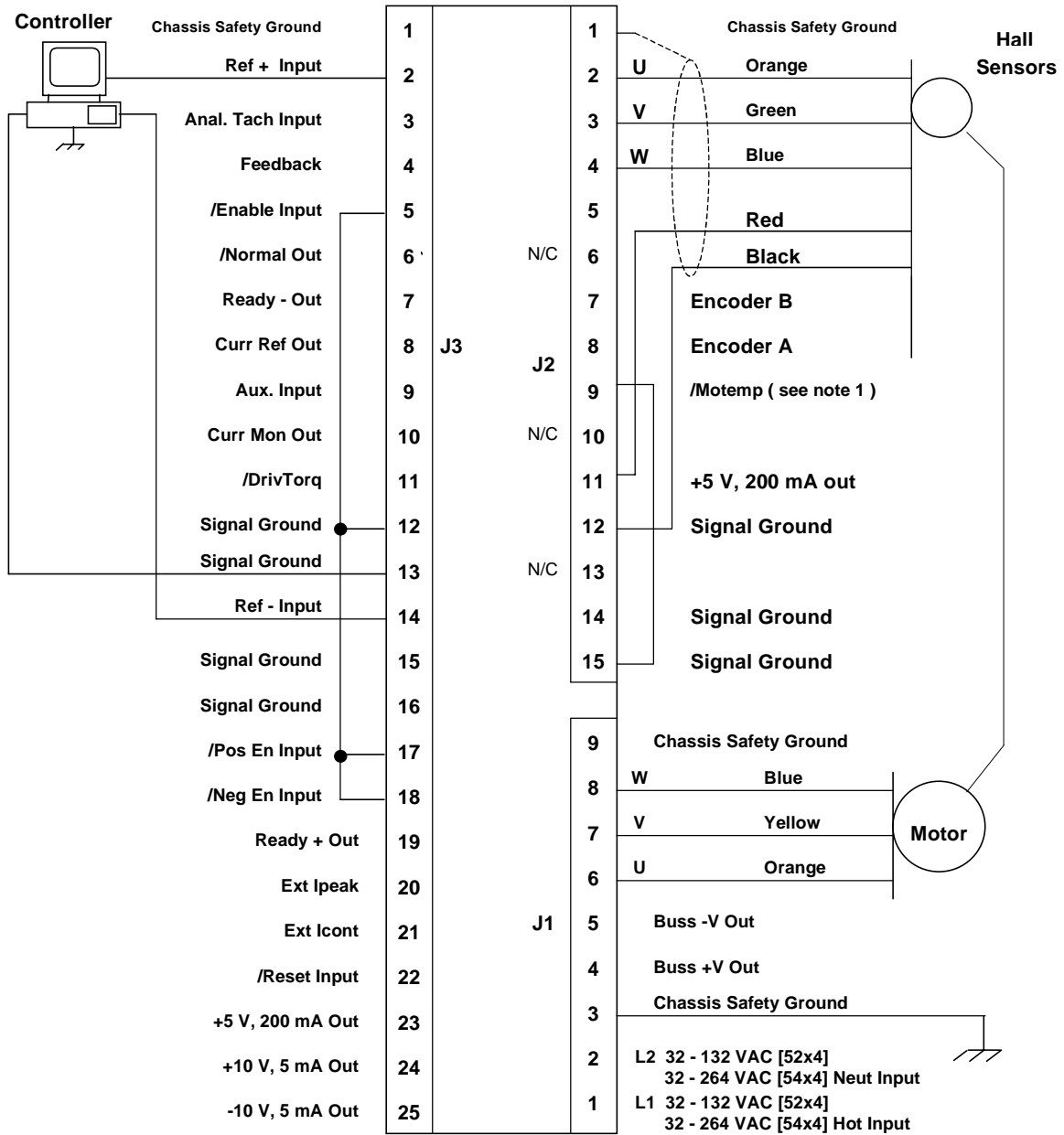


Motor Aveox 14xx Series motors

Amplifier Any member of 5xx4AC family

Wiring



- Note 1] Connect a 22 AWG wire between /MOTEMP [J2-9] and GROUND [J2-15] . There must be a connection for Amplifier to enable properly.
- 2] Hall Sensors/Encoder require ≈ mA total power.

Amplifier Any member of 5xx4AC family

Set Up	All values other than listed below are standard.
Header "B"	5 Position Header
CH25, CH24	Low Pass filter frequency capacitors
CH23	Velocity Mode top speed capacitor
RH22	Feedback resistor
RH21	Soft start resistor
Header "A":	20 Position Header
RH20, CH18, CH16	Loop Compensation components, tune for motor's inductance/resistance
RH17	Peak Time resistor
RH15	Peak Current resistor
RH14	Continuous Current resistor
CH13	With RH12, Preamp Rolloff capacitor
RH12	With RH3, Preamp DC Gain resistor
RH11	Aux. Input Gain resistor
RH10	Drive Torque Gain resistor
RH9	BALANCE Pot Range resistor
CH8, RH7	Tachometer Input Lead components
RH6	Tachometer input Gain resistor
CH5, RH4	Reference Input Lead components
RH3	Reference Input Gain resistor
CH2, RH1	Integrator components
Dipswitch Settings:	
S1 On	Torque mode [Integrator Off]
S2, S3 Off/On	Sets unit for Torque Mode
S4 Off	Active Low Enable
Jumper Settings:	
JP1A 1-2	
JP1B 2-3	
Potentiometer Settings	
R5 REF GAIN	Fully CW unless too fast, then CCW for desired speed. [kΩ +/-2% from Component Header J1-2 to Ground]
R4 TACH GAIN	Fully CCW
R3 LOOP GAIN	Adjust CW with step input for oscillation, then back two turns [S2 On]. [kΩ +/-2% from Component Header J1-13 to Ground]
R2 INTEG FREQ	Adjust CW with step input for <10% overshoot or desired stiffness [S2 Off]. [kΩ +/-2% from Component Header J2-2 to Ground]
R1 BALANCE	Set for zero rotation with REF leads shorted

2] With J3-11 (/DrivTorq) pulled Low, dipswitch and potentiometer settings do not matter. Unit is in Torque mode.

4] Maximum speed of ≈ rpm with Vref equals ≈ VDC at FEEDBACK [J2-4] or period of ≈ μs at F/V Test Point [Trap Board TP6] or a hall period of ≈ μs at any hall signal.