

SECTION 5 - DELTAMAX WIRING

5.1 DIGITAL I/O

The system requirements will determine the definition of the 16 digital inputs and 8 digital outputs. There are two options for the physical wiring of the I/O circuitry. A discrete cable with flying leads labeled (C-719YYY) may be used or a cable (C-716006) which connects to a DINT-300 interface module. The DINT-300 provides terminal blocks for each I/O and for the 24vdc I/O power supply, the configuration of the terminals is shown in **Figure 5.1**.

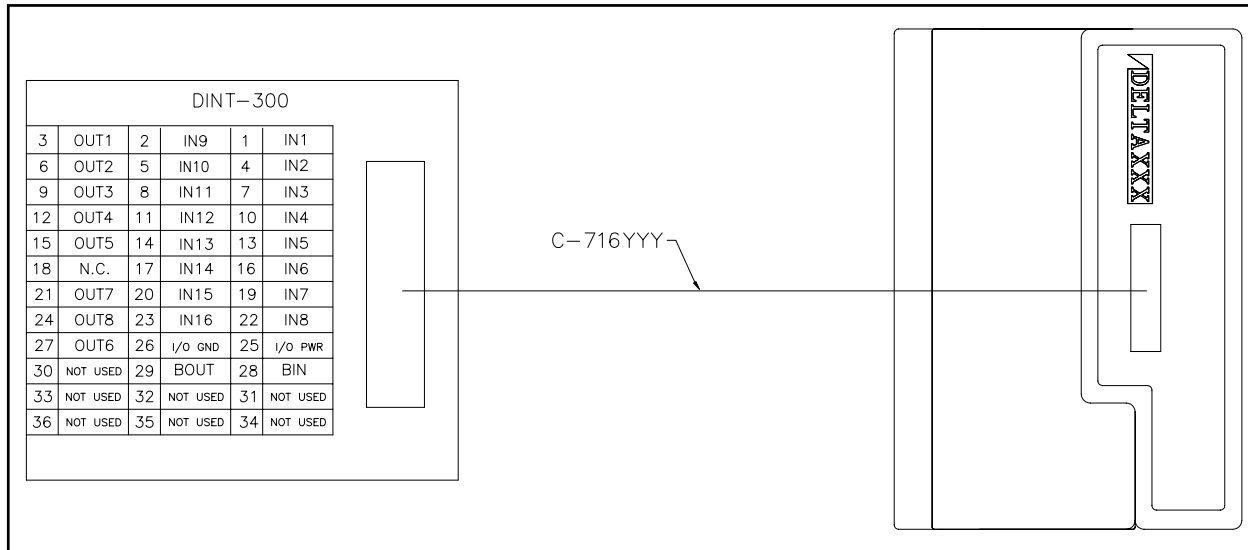


Figure 5.1 - Digital I/O

The I/O has two available configurations. The standard configuration has sinking outputs and inputs and the optional configuration has sourcing outputs and inputs. All are shown in **Figure 5.2**.

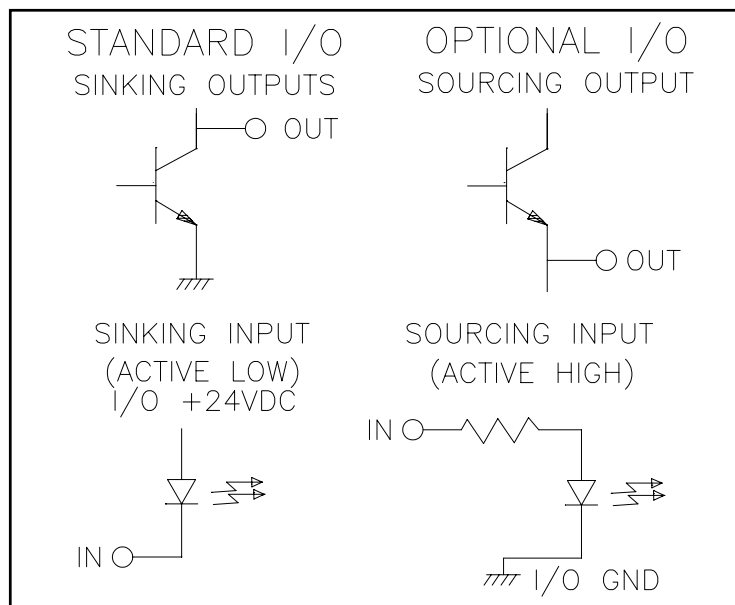


Figure 5.2 - Input & Output Configurations

5.2 ANALOG I/O

There are two single-ended analog inputs and one analog output. All of which have an operating range of 0 - 5 vdc. A reference voltage of 5vdc has also been provided. The analog I/O pinouts are shown in **Figure 5.3**.

WARNING

Double check all wiring connections. Make sure all are proper and secure. Improper connections may result in system malfunctions.

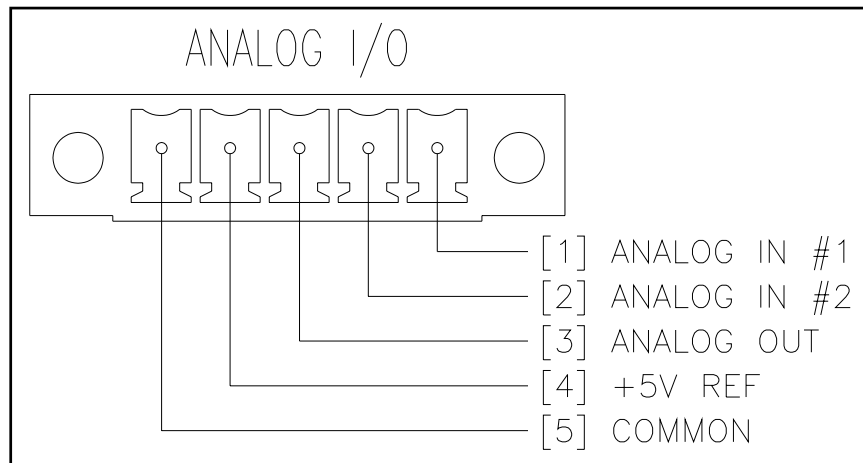


Figure 5.3 - Analog I/O

5.3 PORT 1 & PORT 2

The ports are used for communication and use RJ-11 connectors to interface to respective devices. The port 1 & port 2 pinouts are shown in **Figure 5.4**.

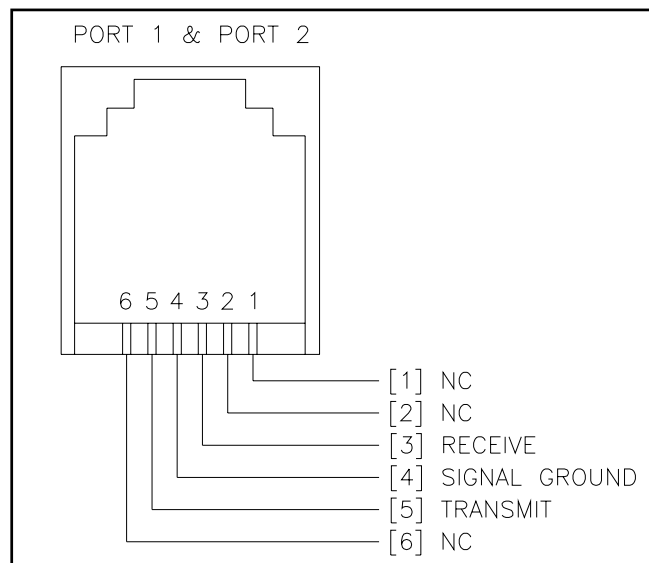


Figure 5.4 - Port 1 & Port 2

5.4 DEVICENET/CAN BUS (optional)

The Devicenet/Can Bus pinouts are shown in **Figure 5.5**.

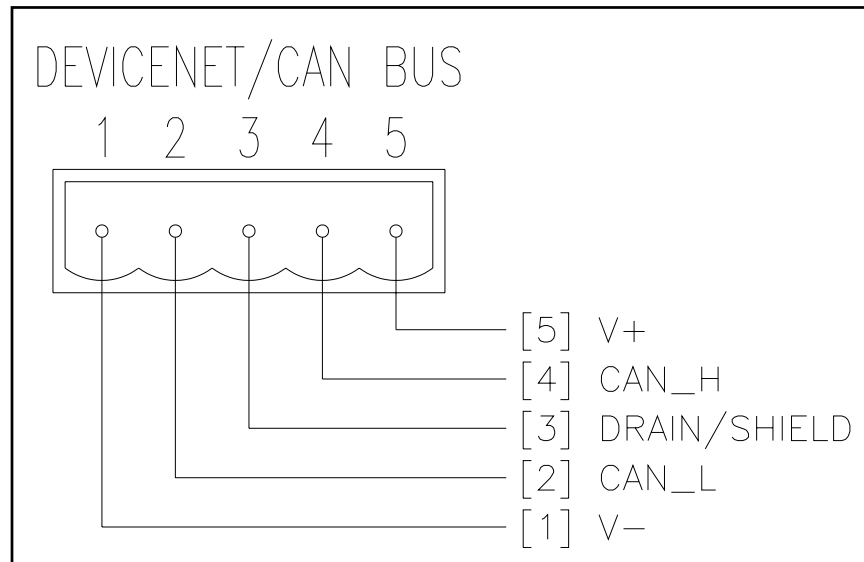


Figure 5.5 - DeviceNet/CAN Bus

5.5 MONITOR OUTPUT

This two-pin connector provides a ± 3 vdc output for monitoring torque or speed. The monitor output pinouts are shown in **Figure 5.6**.

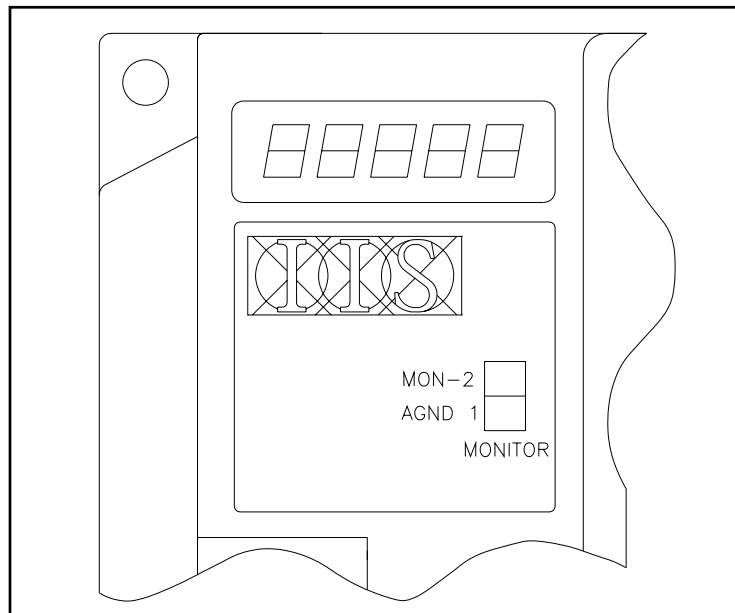


Figure 5.6 - Monitor Output

5.6 FEEDBACK INTERFACE

For usage of cables refer to [Appendix B - CABLES AND ACCESSORIES](#).

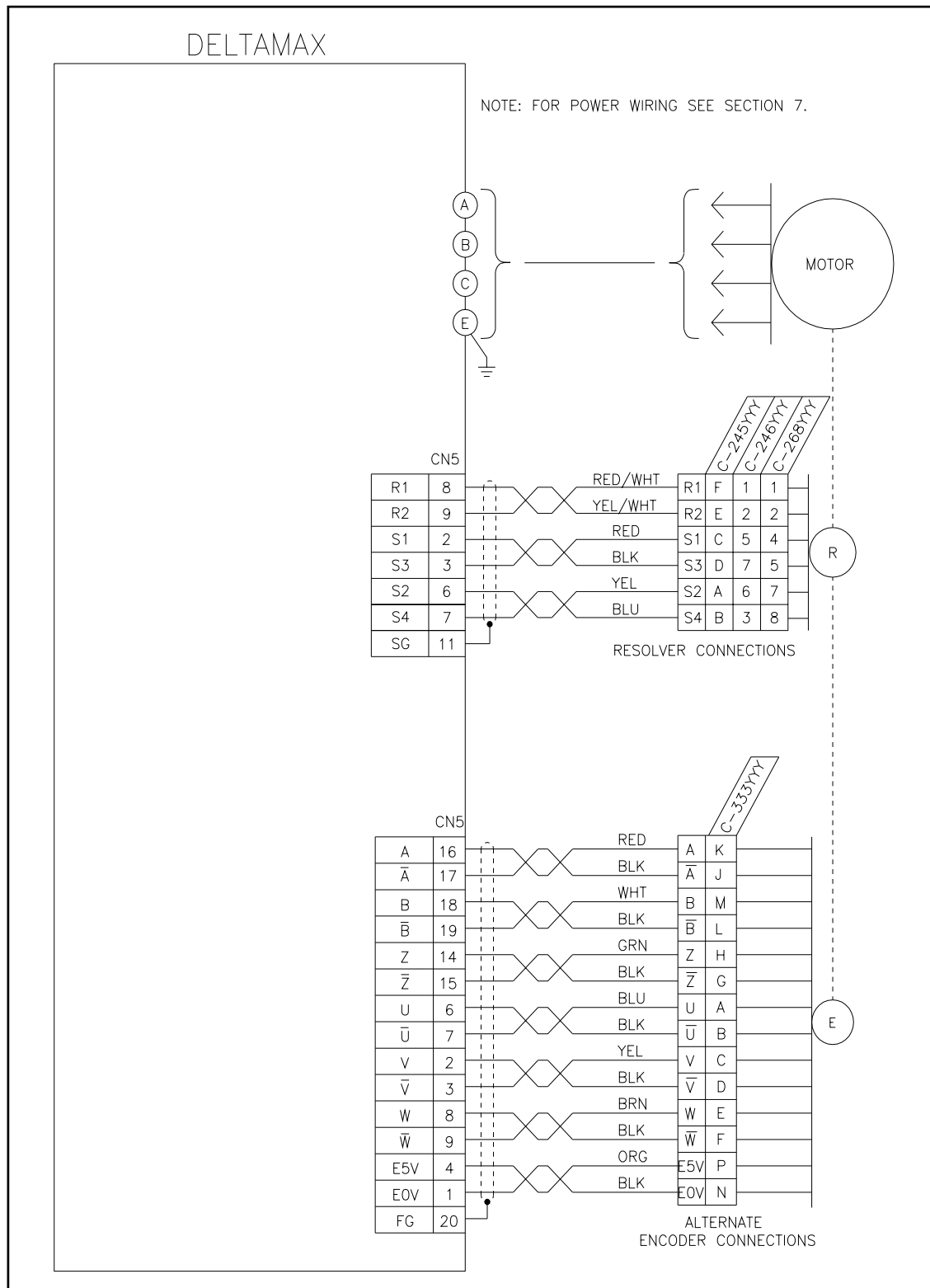


Figure 5.7 - Feedback Interface

5.7 ABSOLUTE RESOLVER/ENCODER INTERFACE

The resolver/encoder cable connects the resolver and micro power encoder in the motor to the DeltaMax controller. The resolver provides the absolute position with the main power applied and the micro power encoder tracks the position of the motor shaft with the main power off.

The battery pack supplies 3.6 V to the micro power encoder when the main power is off. The battery life is 5 years. If the battery is replaced with power on the absolute position will be maintained. If the battery is disconnected with power off the absolute position will be lost and an AL-36 will occur.

The battery pack and resolver/encoder wiring are shown in **Figure 5.8**.

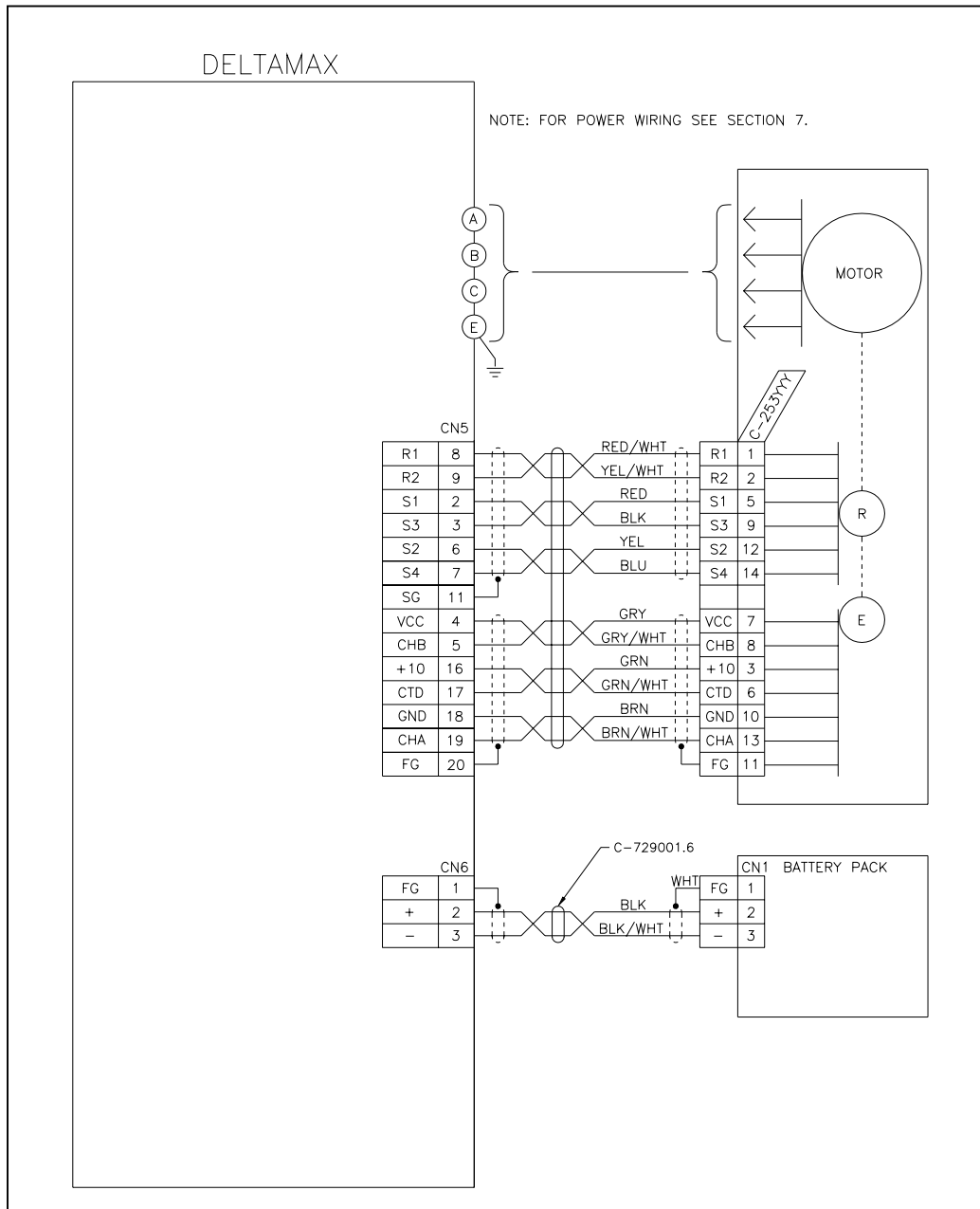


Figure 5.8 - Battery Pack and Resolver/Encoder Wiring

5.8 ABSOLUTE ENCODER INTERFACE

The micro power encoder tracks the position of the motor shaft with the main power off or on the battery pack supplies 3.6 V to the micro power encoder when the main power is off. The battery life is 5 years. If the battery is replaced with power on the absolute position will be maintained. If the battery is disconnected with power off the absolute position will be lost and an AL-36 will occur.

The battery pack and encoder wiring are shown in **Figure 5.9**.

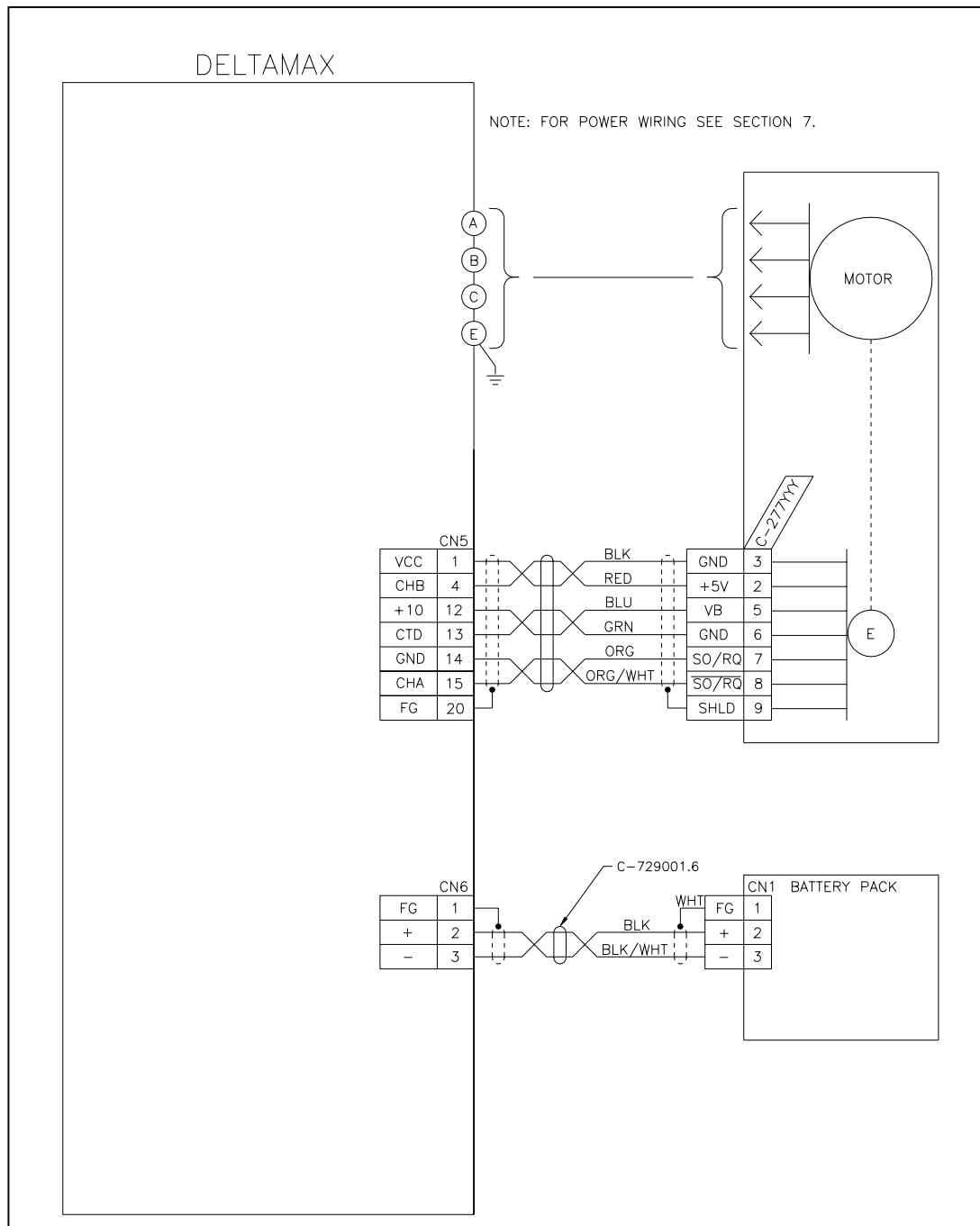


Figure 5.9 - Battery Pack and Encoder Wiring