Power supply negative
Power supply positive
(6 to 36 V)

Motor lead
Motor lead

Encoder GND
Encdoer 5V
Encoder channel B
Encoder channel A

GND
Logic supply 5V
Error signal
Reset pin
Motion controller step pin
Motion controller direction pin

To USB converter GND
To USB converter 5V
To USB converter TX
To USB converter RX

The USB serial converter is only required to tune the PID parameters and updating the firmware. Do not connect the USB converter 5V pins if the logic supply 5V is present.

The error signal is an open drain output (the pin goes low to signal an error). You can use a pull up resistor when connecting it to your system. You can connect it to the rest of the Reset pins to trigger a system wide stop when an error occurs.

The Reset pin can be connected to an E-stop button and the rest of the Error pins to generate a system wide stop. A low level on this pin causes a reset.