# Making connections to VSD-A documentation Ver. 1



#### Introduction

The purpose of this document is to help choosing correct connectors and making robust wiring to VSD-A drive.

## Signal connectors

VSD-A has several pin headers with 0.1" pin pitch (2.54 mm). These pin headers are best mated to IDC connectors that can be attached to a standard ribbon cable without making solder connections. IDC connectors are available in most electronic component distributors.



Illustration 1: IDC connectors with 0.1" (2.54 mm) pin spacing

## Interfacing motor & encoder

VSD-A ships with a small bare PCB that can be used to assemble an interface board for motor/encoder wiring. It is suggested to equip PCB with 7x2 pin IDC connector or pin header and a spring loaded connector with 0.1" pitch. Spring loaded connectors are manufacturer by Phoenix Contact.

Spring loaded connector can be used to connect stripped wire ends to connector without soldering or other tools.

Interface PCB has places also for 0.2" pitch power terminals to allow motor power wiring thru PCB if desired. Motor power wiring can be done straight to drive as well.

Interface PCB's are supplied with newly shipped drives. If you have purchased drives before 2008, you can request interface PCB's by contacting us.

Please note that adapter PCB **Rev 1** has error in connector printing. Encoder index channel inputs read **I+** and **Z-** while they should read **Z+** and **Z-**.

**H+** and **H-** are home switch inputs. Index and home switch are optional and not required to operate drive.

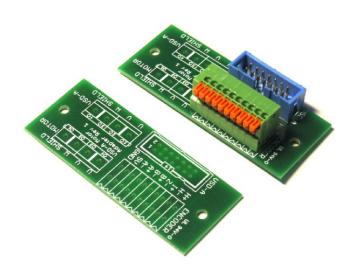


Illustration 2: VSD-A motor adapter PCB and PCB with connectors



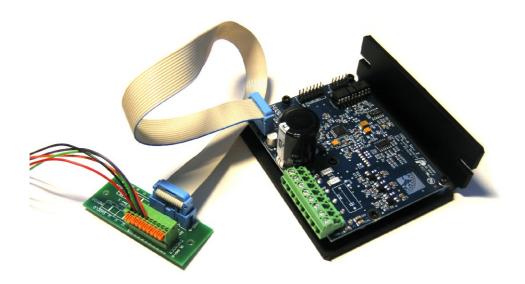


Illustration 3: VSD-A connected to motor adapter board. Encoder wires are inserted in spring loaded connector.

### **Power connections**

VSD-A comes with modular power connector that can ease wiring work. It is recommended to remove connector during screw tightening since pressing screw driver hard against drive can lead to damaged surface mount components on drive (caused by PCB bending under screw driver force).

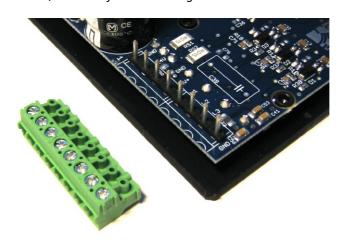


Illustration 4: Modular (removable) power connector