

## *Wiring SEL-2400, SEL-2200, and SEL-700 Series Devices*

Jerry Hein and Sally Mei

### **INTRODUCTION**

The SEL-2400 series, SEL-2200 series, SEL-700 series, and other SEL devices provide a variety of input and output (I/O) options that are designed to withstand harsh physical and electrical environments. These products provide flexible analog and digital I/O as well as current transformer (CT) and potential transformer (PT) inputs via standard cards and optional cards.

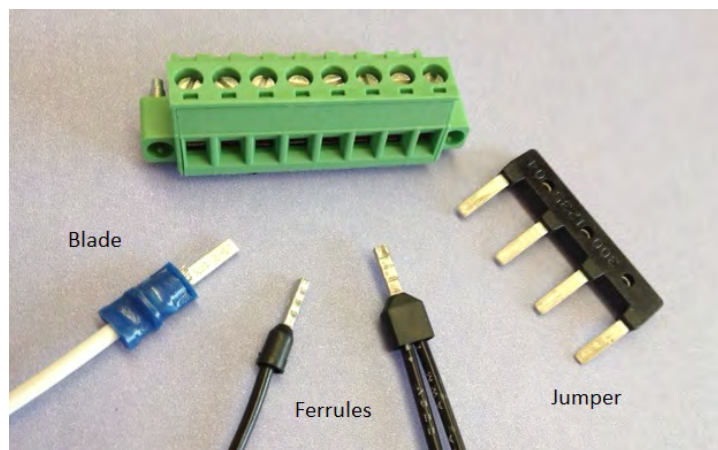
### **PROBLEM**

These devices use euro-style connectors with small pitch, which is ideal for maximizing I/O density. However, the small pitch leads to several problems: fitting large or multiple wires into a single terminal, the bird-caging effect of stranded wires, and bulky wire bundles.

### **SEL SOLUTION**

SEL recommends the use of insulated ferrules for termination to the euro-style pluggable connectors. The use of ferrules keeps the wire strands contained, provides strain relief where the wire exits the connector, and is more compact than alternate crimp terminals. SEL offers four- and six-position comb jumpers for the .200" pitch connectors as well as three- and five-position comb jumpers for the .300" pitch connectors. The comb jumpers preclude the use of most wire jumpers with two-wire crimps.

Blade terminals are also available for those who prefer using conventional crimp tools. Ring terminals are recommended for terminal block terminations.



**Figure 1 Terminal Styles**

SEL has made kits available, each containing 100 terminals, as listed in Table 1. The ferrules can be crimped with standard hand tools such as the CRIMPFOX 10S, which works for all the ferrules listed. The ring and blade terminals can be crimped with conventional crimp tools. Jumper kits are also listed.

**Table 1 Terminal Kits**

<b>Order #</b>	<b>Terminal Style</b>	<b>Wire Size</b>	<b>Color</b>
915900363	Ferrule	18 AWG	Red
915900364	Ferrule	16 AWG	Black
915900365	Ferrule	14 AWG	Yellow
915900366	Ferrule (Dual)	16 AWG (2)	Black
915900368	Blade	14-16 AWG	Blue
915900369	Blade	18-22 AWG	Red
915900370	#6 Ring	10-12 AWG	Yellow
915900371	#6 Ring	14-16 AWG	Blue
915900372	#6 Ring	18-22 AWG	Red
915900241	Jumper, 4P, .200" (100)	–	–
915900242	Jumper, 6P, .200" (100)	–	–
915900530	Jumper, 3P, .300" (100)	–	–
915900531	Jumper, 5P, .300" (100)	–	–
915900236	Jumper Kit for SEL-2410 series	–	–
915900237	Jumper Kit for SEL-2440	–	–
915900238	Jumper Kit for SEL-2523	–	–
915900239	Jumper Kit for SEL-2533/SEL-700 series	–	–
915900240	Jumper Kit for SEL-2240	–	–

