Terminal Block Labels											
Bottom Terminal Block						**Top Terminal Block**					
1746-OB32 1746-OV32		**1746-IV32**		**1746-IB32**		**1746-OB32 1746-OV32**		**1746-IV32**		**1746-IB32**	
SLC	**PLC**	**SLC**	**PLC**	**SLC**	**PLC**	**SLC**	**PLC**	**SLC**	**PLC**	**SLC**	**PLC**
+V1	+V1	+V1	+V1	CM1	CM1	+V2	+V2	+V3	+V3	CM3	CM3
+V1	+V1	+V1	+V1	CM1	CM1	+V2	+V2	+V3	+V3	CM3	CM3
0	0	0	0	0	0	16	0	16	0	16	0
1	1	1	1	1	1	17	1	17	1	17	1
2	2	2	2	2	2	18	2	18	2	18	2
3	3	3	3	3	3	19	3	19	3	19	3
4	4	4	4	4	4	20	4	20	4	20	4
5	5	5	5	5	5	21	5	21	5	21	5
6	6	6	6	6	6	22	6	22	6	22	6
7	7	7	7	7	7	23	7	23	7	23	7
8	10	8	10	8	10	24	10	24	10	24	10
9	11	9	11	9	11	25	11	25	11	25	11
10	12	10	12	10	12	26	12	26	12	26	12
11	13	11	13	11	13	27	13	27	13	27	13
12	14	12	14	12	14	28	14	28	14	28	14
13	15	13	15	13	15	29	15	29	15	29	15
14	16	14	16	14	16	30	16	30	16	30	16
15	17	15	17	15	17	31	17	31	17	31	17
CM1	CM1	+V2	+V2	CM2	CM2	CM2	CM2	+V4	+V4	CM4	CM4
CM1	CM1	+V2	+V2	CM2	CM2	CM2	CM2	+V4	+V4	CM4	CM4

The stick-on labels of the 1492 Interface Module are abbreviated as follows: +V1 = V dc 1, +V2 = V dc 2, CM1 = Com 1, etc.

Refer to page 11 for information on wiring 32-point I/O modules and how control devices interface with 32-point I/O modules.

TIP

If you decide to build your cable using another 1746-N3 to terminate the cable at the 1492 Interface Module end, wire it in the following manner: Pin 1 to Pin 1, Pin 2 to Pin 2, Pin 3 to Pin 3, etc.

Assembling the Wire Contacts

1. Strip the wire insulation as shown in Figure 1. Crimp pins can accept 22 to 26 AWG wire.

2. Insert the wire up to the wire stop as shown in Figure 2.

3. Crimp with DDK crimp tool 357J-5538. Equivalent Amp part numbers are: pin - #87666-2, connector - #102387-9, and crimp tool - #90418-1.

TIP Pins and connectors from different manufacturers cannot be assembled together. For example, Amp pins cannot be used with a DDK connector.

If a crimp tool is not available, use the following crimping procedure:

a. Crimp the wire barrel around the wire using small needle nose pliers.

b. Crimp the insulation barrel around the wire insulation using small needle nose pliers.

c. Solder wire and wire barrel together using rosin core (60% tin/ 40% lead) solder and soldering pencil.

4. Insert the wire contact into the socket as shown in Figure 3 and 4. Check to make sure that the tang, shown as "A" in Figure 4, is properly latched by lightly pulling on the wire.

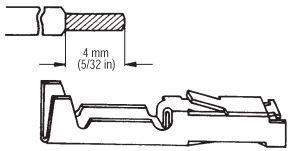


Figure 1

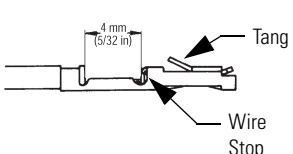


Figure 2

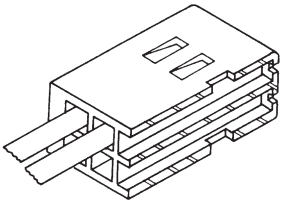


Figure 3

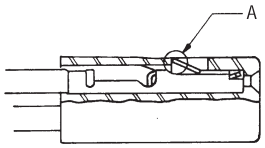
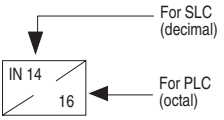


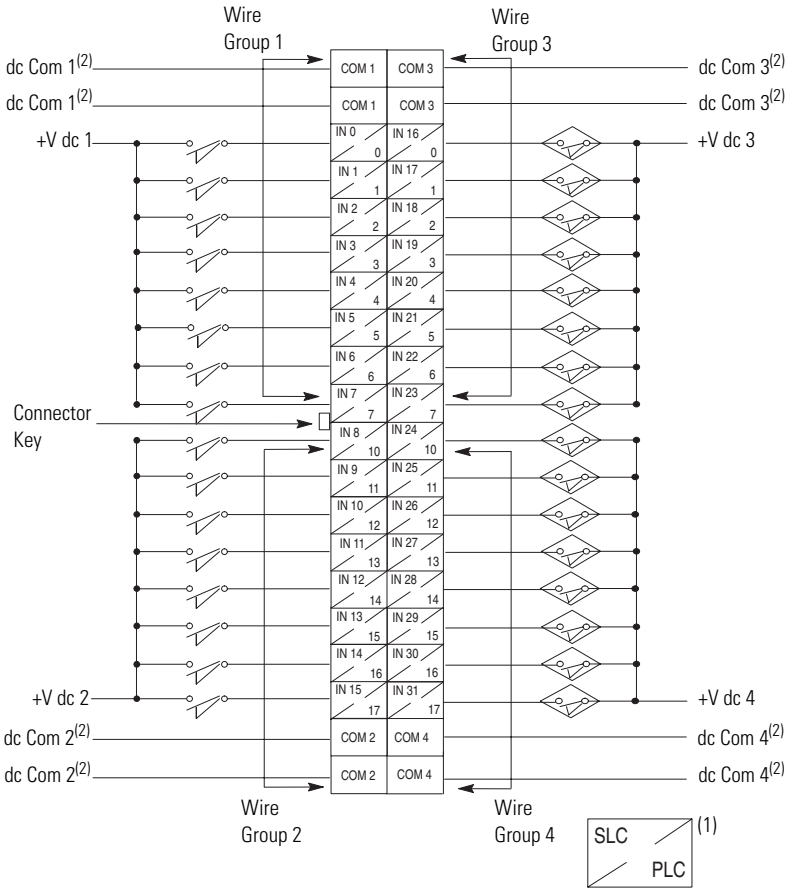
Figure 4

Wiring Diagrams

In this document, the wiring diagrams include both decimal and octal numbers. To wire your module when used in an SLC system, use the decimal numbers. To wire your module when used in a PLC system, use the octal numbers.



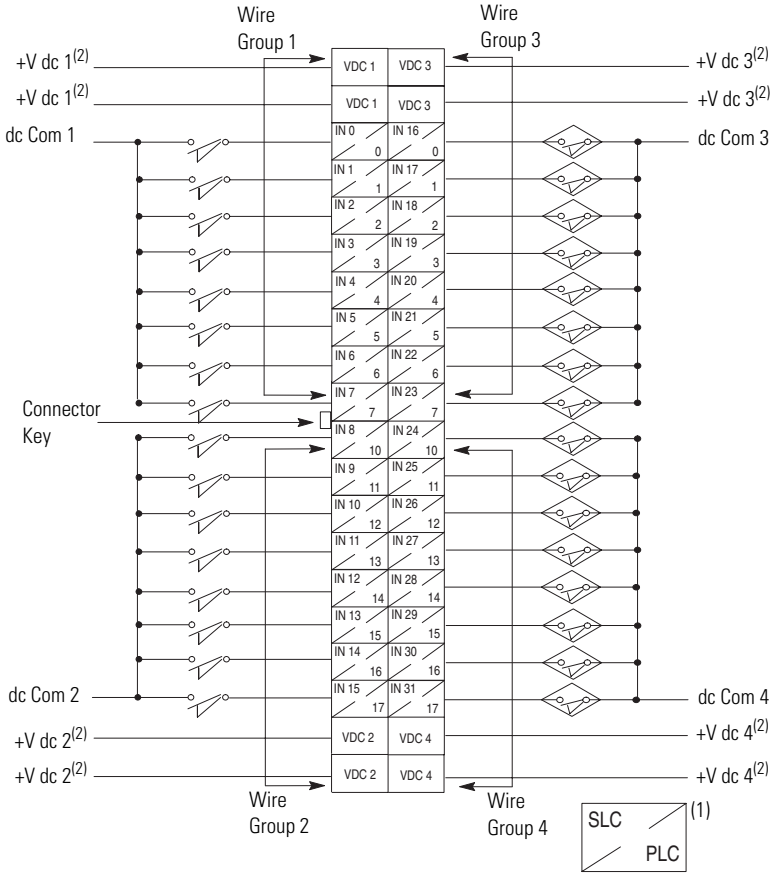
Input Module 1746-IB32 (24V dc Sinking)



(1) See decimal and octal coding information at the top of the page.

(2) The dc Com pins on the 1746-IB32 input module are isolated between the four groups and the two com pins in each group are connected internally. To maintain group isolation provided by 32-point I/O modules, use a 1492 terminal block that provides group isolation. Consult 1492 documentation or your Allen-Bradley Sales Office for additional information.

Input Module 1746-IV32 (24V dc Sourcing)

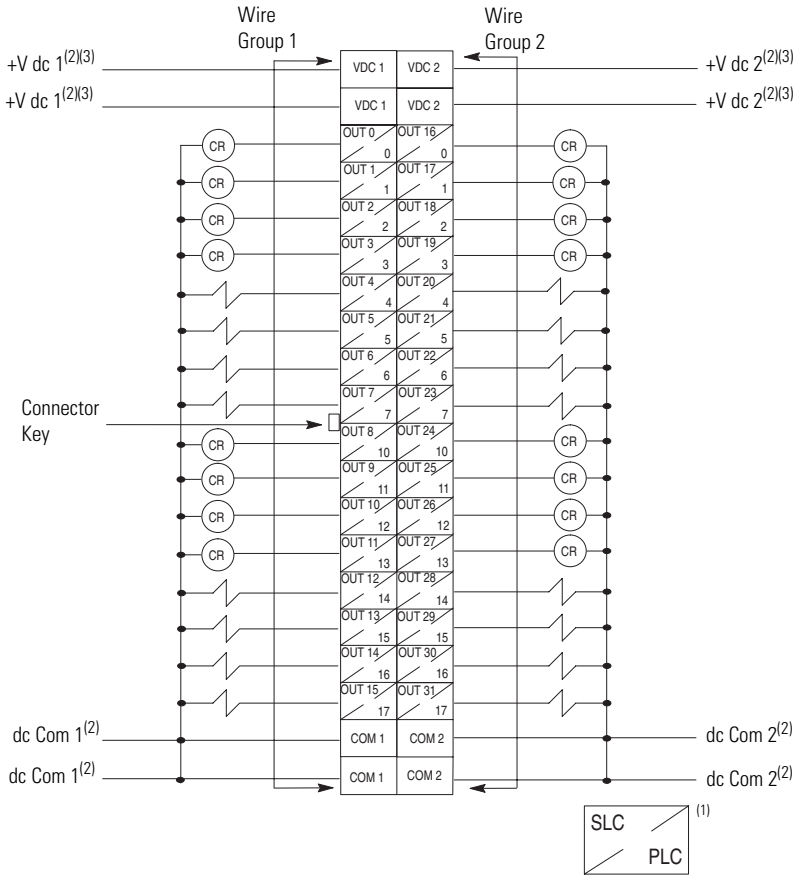


(1) See decimal and octal coding information on page 16.

(2) The V dc pins on the 1746-IV32 input module are isolated between the four groups and the two V dc pins in each group are connected internally. To maintain group isolation provided by 32-point I/O modules, use a 1492 terminal block that provides group isolation. Consult 1492 documentation or your Allen-Bradley Sales Office for additional information.

Output Module (1746-OB32 and 1746-OB32E)

1746-OB32
5 to 50V dc Transistor Output Sourcing
1746-OB32E
10 to 30V dc Electronically Protected Sourcing

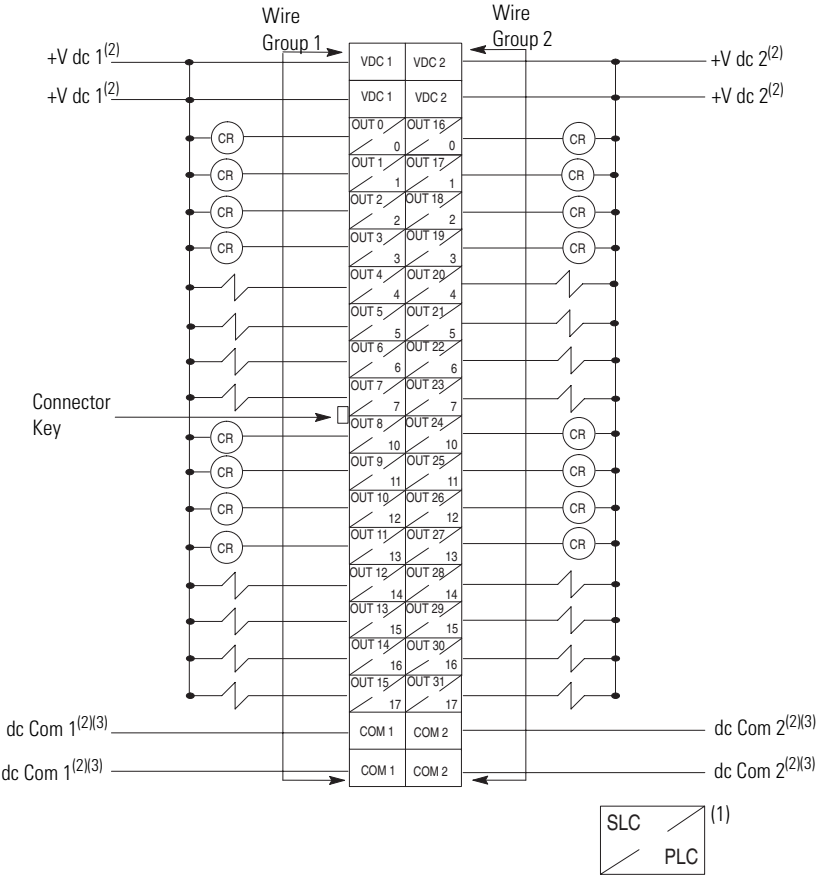


(1) See decimal and octal coding information on page 16.

(2) The V dc and dc Com pins on the 1746-OB32 and 1746-OB32E output module are isolated between the two groups and the two V dc and two dc Com pins in each group are connected internally.

(3) Both V dc pins must be connected to the dc power source if current for a common group is expected to exceed 2 amps. To maintain group isolation provided by 32-point I/O modules, use a 1492 terminal block that provides group isolation. Consult 1492 documentation or your Allen-Bradley Sales Office for additional information.

Output Module 1746-OV32 (5 to 50V dc Transistor Output Sinking)



(1) See decimal and octal coding information on page 16.

(2) The V dc and dc Com pins on the 1746-OV32 output module are isolated between the two groups and the two V dc and two dc Com pins in each group are connected internally.

(3) Both dc Com pins must be connected to the dc power source if current for a common group is expected to exceed 2 amps. To maintain group isolation provided by 32-point I/O modules, use a 1492 terminal block that provides group isolation. Consult 1492 documentation or your Allen-Bradley Sales Office for additional information.