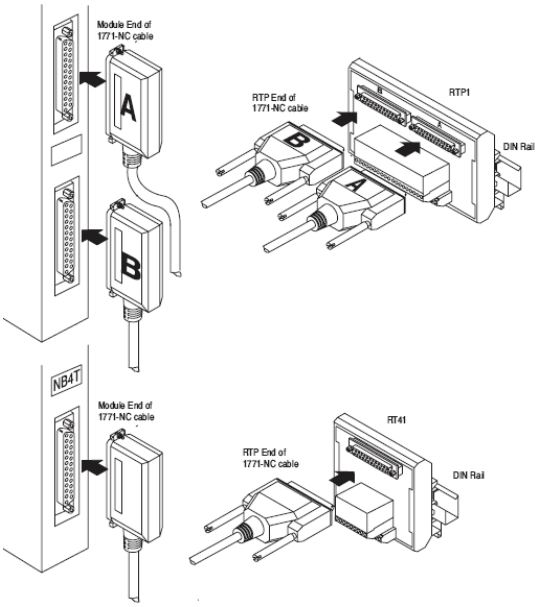
1771-N Series I/O to 1756 ControlLogix I/O (Cat 1492-CONACAB020N* and 1492-CONACAB050N*)

I. Description of the Existing 1771-N Series I/O Wiring System

The 1771-N Series High Resolution Isolated Analog I/O modules were designed to be used with 1771 Remote Termination Panels (RTPs) and connected by a 6ft or 15ft cable, as follows.
Catalog Number: 1771-NC6 (6 ft) or 1771-NC15 (15 ft) cables.
Variations of remote termination panels are used, depending on the type of module used. These are:

Catalog Number	Description
1771-RTP1	has cold junction compensation for thermocouples
1771-RTP3	incorporates resistors and fuses; used primarily for 4 - 20mA inputs when using ±5V inputs (Uses 5mm x 20mm fast acting 1/4A fuses such as Bussmann GMA-1/4, 250V / 250mA)
1771-RTP4	a general use block with straight-thru wiring that can be used for all applications except thermocouples
1771-RT41	a 4-channel block with cold junction compensation for thermocouples
1771-RT44	a general use 4-channel block with straight-thru wiring that can be used for all applications except thermocouples
RTP4 and RT44 can be used with thermocouples if a method of odd junction compensation is provided at the interface of thermocouple and copper wires within the system	

The remote termination panels are designed for mounting on standard DIN 1 or DIN 3 mounting rails.



Module	Channel 1	Channel 2	Channel 3	Channel 4	Channel 5	Channel 6	Channel 7	Channel 8
1771-NIS	4 - 20mA	4 - 20mA	4 - 20mA	4 - 20mA	4 - 20mA	4 - 20mA	4 - 20mA	4 - 20mA
1771-NIV	±5V (±20mA)	±5V (±20mA)	±5V (±20mA)	±5V (±20mA)	±5V (±20mA)	±5V (±20mA)	±5V (±20mA)	±5V (±20mA)
1771-NIV1	±10V	±10V	±10V	±10V	±10V	±10V	±10V	±10V
1771-NIVR	±5V (±20mA)	±5V (±20mA)	±5V (±20mA)	±5V (±20mA)	RTD	RTD	RTD	RTD
1771-NIVT	±5V (±20mA)	±5V (±20mA)	±5V (±20mA)	±5V (±20mA)	±100mV /TC	±100mV /TC	±100mV /TC	±100mV /TC
1771-NR	RTD	RTD	RTD	RTD	RTD	RTD	RTD	RTD
1771-NT1	±100mV /TC	±100mV /TC	±100mV /TC	±100mV /TC	±100mV /TC	±100mV /TC	±100mV /TC	±100mV /TC
1771-NT2	-5 /+55mV /TC	-5 /+55mV /TC	-5 /+55mV /TC	-5 /+55mV /TC	-5 /+55mV /TC	-5 /+55mV /TC	-5 /+55mV /TC	-5 /+55mV /TC
1771-NOC	0 - 25mA out	0 - 25mA out	0 - 25mA out	0 - 25mA out	0 - 25mA out	0 - 25mA out	0 - 25mA out	0 - 25mA out
1771-NOV	±10V out	±10V out	±10V out	±10V out	±10V out	±10V out	±10V out	±10V out

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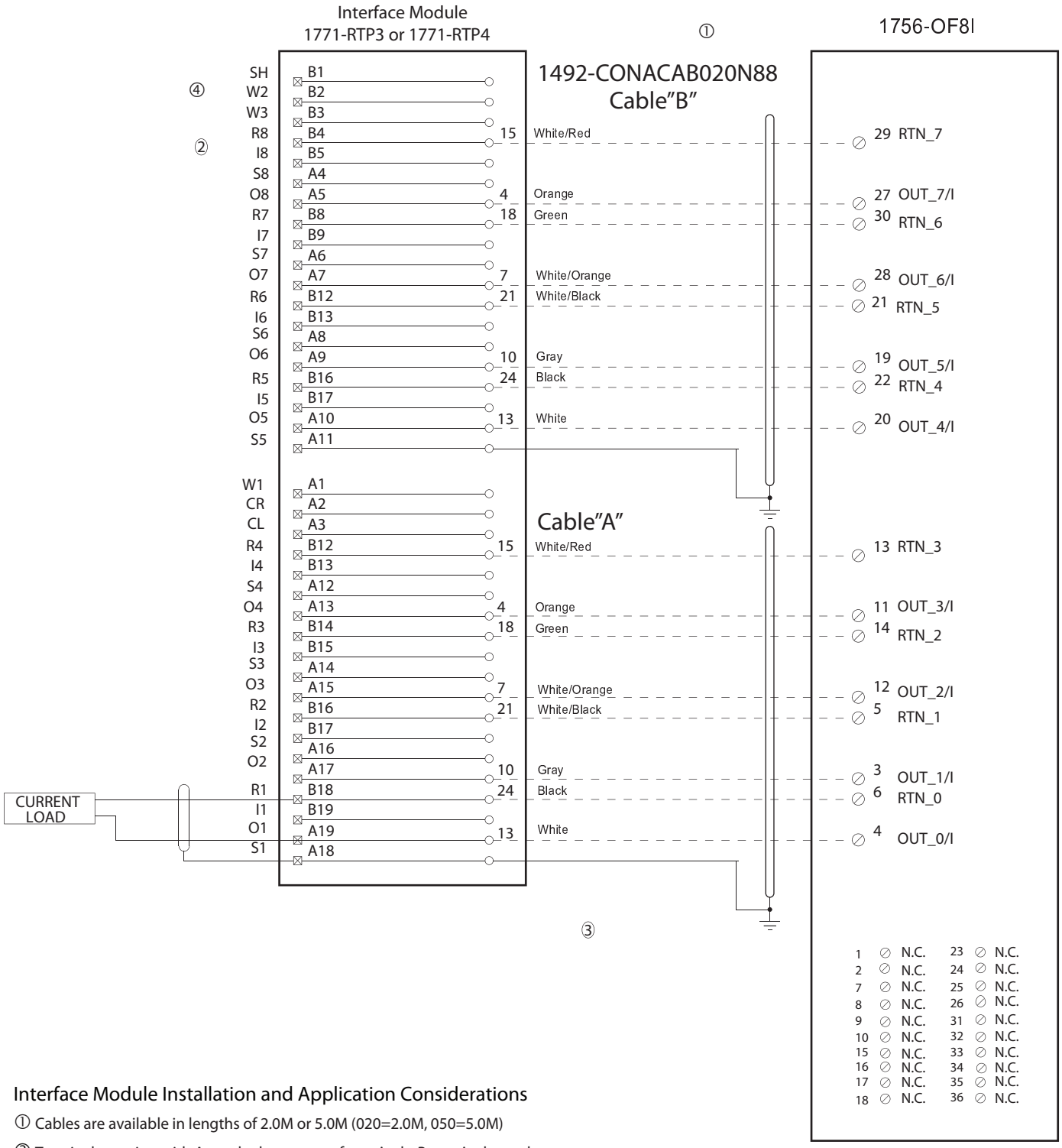
Conversion: 1771-NOC (1) To 1756-OF8I (1) (Current) Using Existing 1771-RTP3 or RTP4 Interface Module

WARNING There are several key application considerations and system specifications (bottom of drawing) when using these components (conversion module, cable and input module). Read and understand these considerations before installation.



Interface Module Installation and Application Considerations

① Cables are available in lengths of 2.0M or 5.0M (020=2.0M, 050=5.0M)

② Terminals starting with A are the lower row of terminals, B terminals are the upper row.

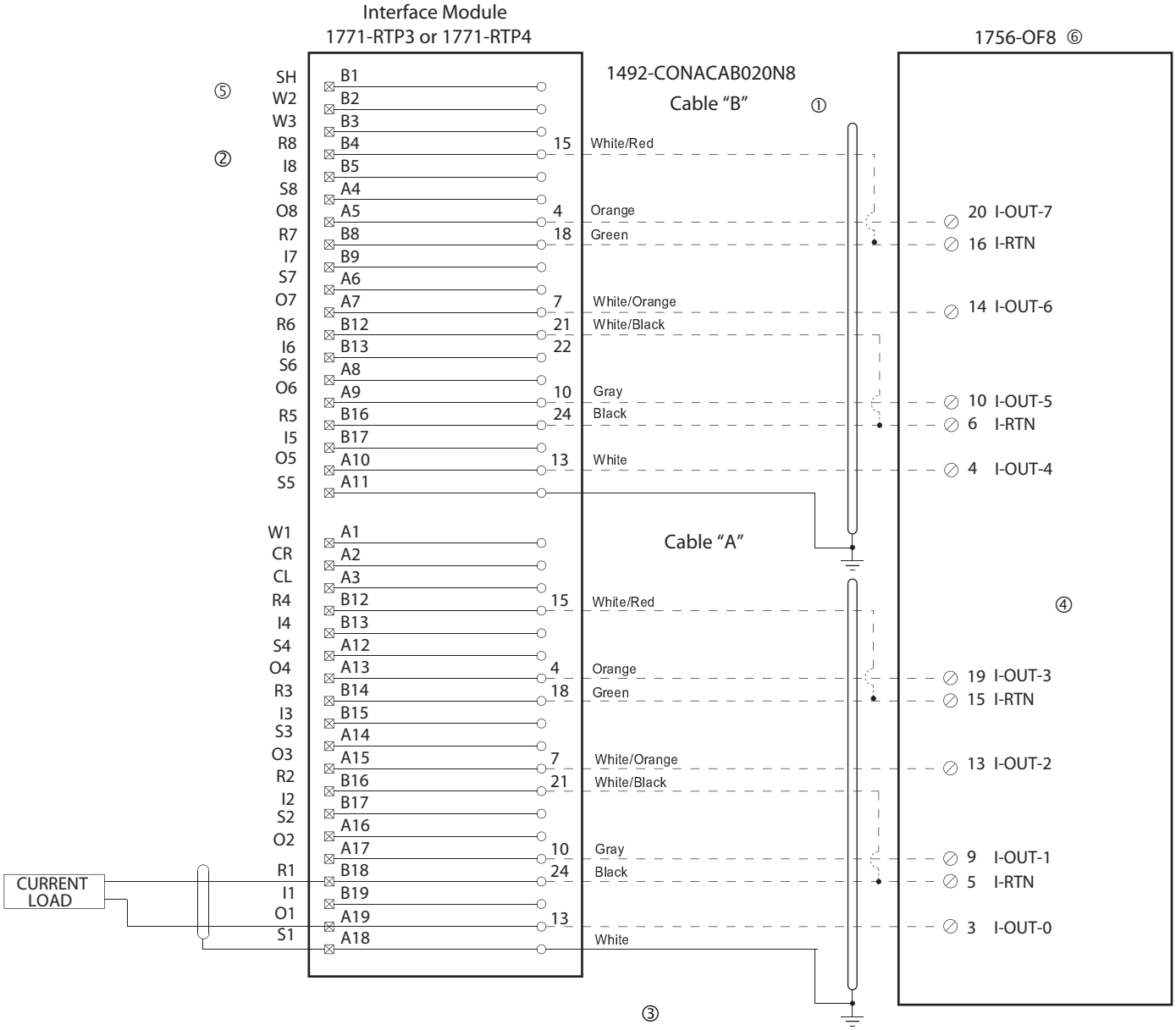
③ Follow your PLC Analog User Manual for proper shield grounding instructions.

④ Terminals w1, w2, w3, are spares used for field wire convenience. NOTE: This is only true for module RTP3 and RTP4. The Bul. 1492 cable does not connect to these terminals.

[Reference Doc: DIR 10002306650]

Conversion: 1771-NOC (1) To 1756-OF8 (1) (Current, Non-Isolated) Using Existing 1771-RTP3 or RTP4 Interface Module

WARNING There are several key application considerations and system specifications (bottom of drawing) when using these components (conversion module, cable and input module). Read and understand these considerations before installation.



Conversion Module Installation and Application Considerations

① Cables are available in lengths of 2.0M or 5.0M (020=2.0M, 050=5.0M)

② Terminals starting with A are the lower row of terminals, B terminals are the upper row.

③ Follow your PLC Analog User Manual for proper shield grounding instructions.

④ RTN terminals are internally connected on the 1756-OF8.

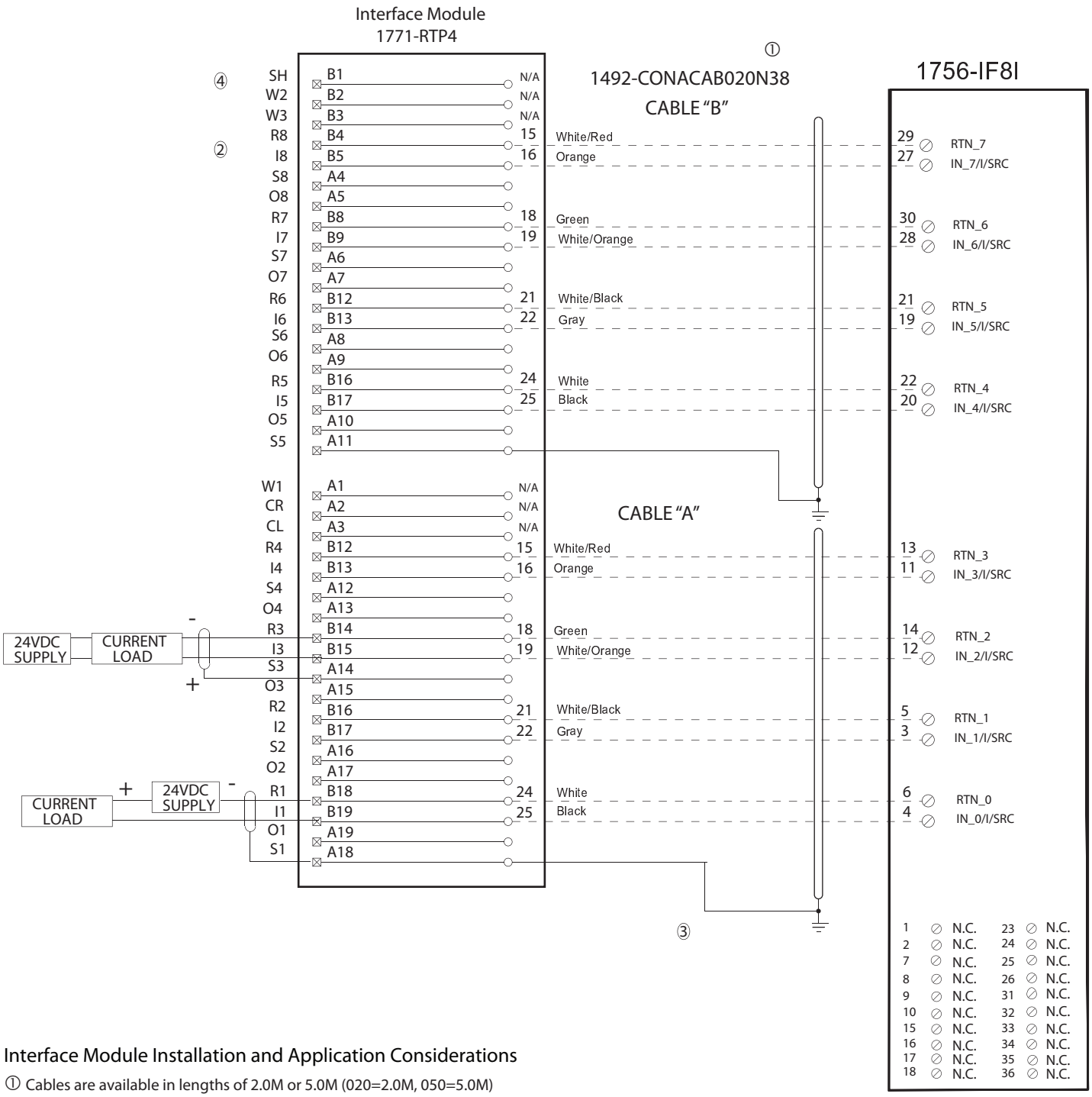
⑤ Terminals w1, w2, w3, are spares used for field wire convenience. NOTE: This is only true for module RTP3 and RTP4. The Bul. 1492 cable does not connect to these terminals.

⑥ The 1771-NOC module provides channel to channel isolation, the 1756-OF8 does not. A conversion from 1771-NOC to an isolated 1756-OF8I is available.

[Reference Doc: 41171-079]

Conversion: 1771-NIS (1) To 1756-IF8I (1) (Current) Using Existing 1771-RTP4 Interface Module

WARNING There are several key application considerations and system specifications (bottom of drawing) when using these components (conversion module, cable and input module). Read and understand these considerations before installation.



Interface Module Installation and Application Considerations

① Cables are available in lengths of 2.0M or 5.0M (020=2.0M, 050=5.0M)

② Terminals starting with A are the lower row of terminals, B terminals are the upper row.

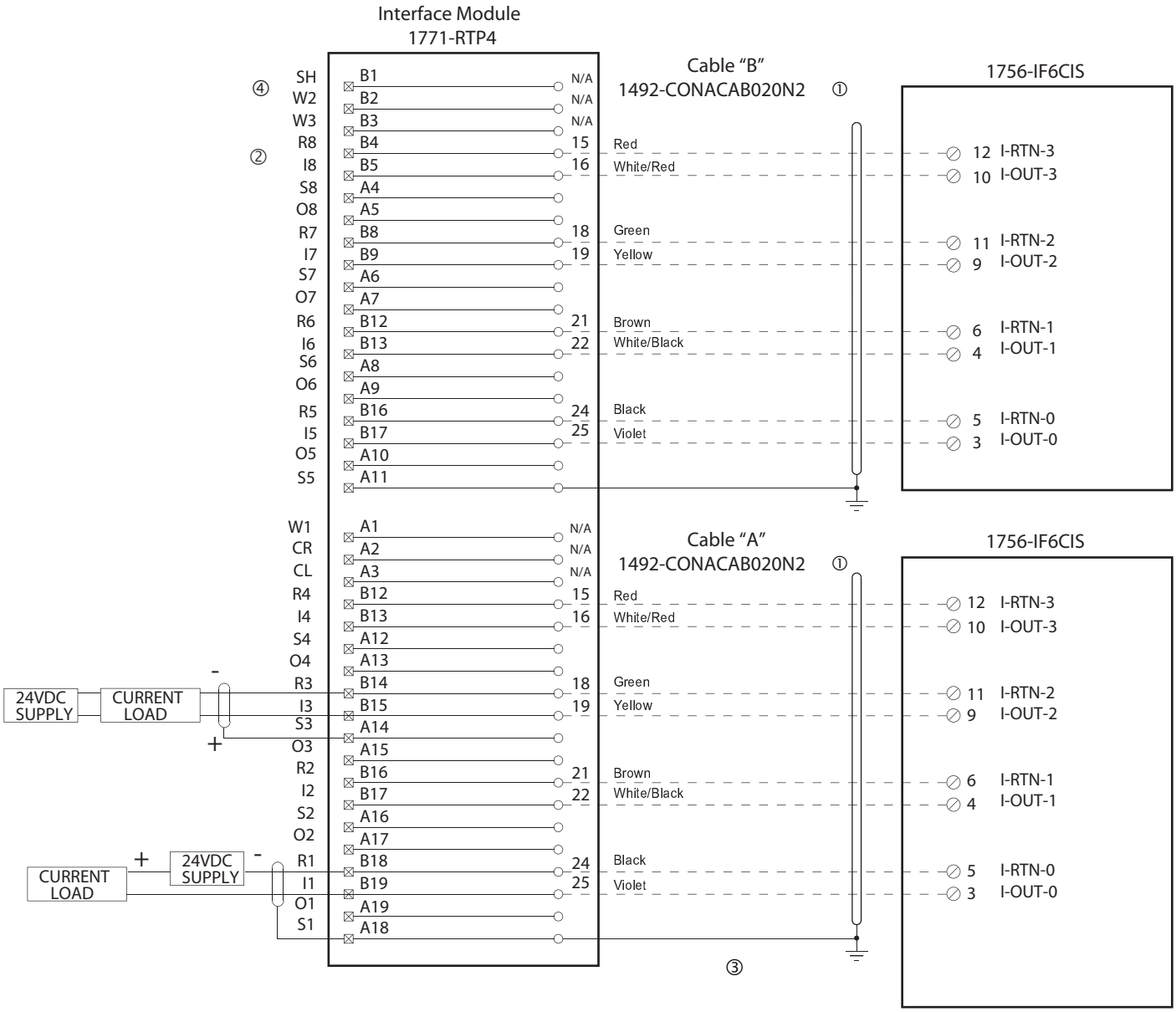
③ Follow your PLC Analog User Manual for proper shield grounding instructions.

④ Terminals w1, w2, w3, are spares used for field wire convenience. NOTE: This is only true for module RTP4. The Bul. 1492 cable does not connect to these terminals.

[Reference Doc: 10002306457]

Conversion: 1771-NIS (1) To 1756-IF6CIS (2) (Current) Using Existing 1771-RTP4 Interface Module

WARNING There are several key application considerations and system specifications (bottom of drawing) when using these components (conversion module, cable and input module). Read and understand these considerations before installation.



Conversion Module Installation and Application Considerations

① Cables are available in lengths of 2.0M or 5.0M (020=2.0M, 050=5.0M)

② Terminals starting with A are the lower row of terminals, B terminals are the upper row.

③ Follow your PLC Analog User Manual for proper shield grounding instructions.

④ Terminals w1, w2, w3, are spares used for field wire convenience. NOTE: This is only true for module RTP4. The Bul. 1492 cable does not connect to these terminals.

[Reference Doc: 41171-073]