Allen-Bradley 1769-IM12

01 Isolate the AC field circuits

Identify every AC source connected to the input group and establish the approved isolated maintenance condition. Verify the field-circuit labels and module address before disconnecting mains-level input wiring.

Identify all AC sources feeding the common group and verify the maintenance isolation using the approved site procedure. Keep the field-circuit identification with the module position so a separate source is not overlooked.

Record to retain	Isolate the AC field circuits
Circuit or system boundary	Compact I/O

02 Inspect bank placement

Check the power-supply distance and backplane-current allocation. Secure the bus connection and the mechanical mounting with power isolated.

Compare the module location with the Compact I/O power-supply distance requirement. Inspect bus connectors and retained mounting features before restoring the field wiring and the associated control supply.

Record to retain	Inspect bank placement
Circuit or system boundary	Compact I/O

03 Verify voltage and frequency

Measure the intended AC source under controlled conditions. Confirm compatibility with the operating range before connecting field contacts.

Measure the field circuit under its actual operating condition and confirm that both voltage and frequency suit the input. Do not infer compatibility solely from a nominal mains label elsewhere in the cabinet.

Record to retain	Verify voltage and frequency
Circuit or system boundary	Compact I/O

04 Test open and closed states

Check each real field circuit for valid ON and OFF conditions, including leakage through connected suppression components. Leave all NC terminals unused.

Operate the field contact through both states and compare terminal voltage, input indication and program bit. Investigate residual off-state voltage before changing the application to compensate for an input that remains asserted.

Record to retain	Test open and closed states
Circuit or system boundary	Compact I/O

05 Confirm sequence timing

Exercise both transitions through the controller program. Restore protections and retain the acceptance result for the complete AC sensing circuit.

Observe the complete sequence through both transitions, including input delay and program execution. Record whether the intended event remains valid at the application destination before enabling the dependent interlock or sequence.

Technical basis: Rockwell Automation Compact I/O Modules Specifications, 1769-TD006H-EN-P.

Related product navigation

Allen-Bradley 1769-L19ER-BB1B

Allen-Bradley 1769-L33ERM

These are related references, not confirmed substitutes or an automatically approved assembly.