Allen-Bradley 1769-IQ32T

01 Record grouped field wiring

Identify the field circuits served by each input common and label the terminated connections. Retain the input address map and Compact I/O assembly order before disconnecting the terminal arrangement.

Mark each of the four common groups on the terminal schedule and compare it with the connector assignment. Retain field-supply references alongside channel numbers so a replacement does not silently join separate circuits.

Record to retain	Record grouped field wiring
Circuit or system boundary	Compact I/O

02 Check Compact I/O placement

Verify power-supply distance and available bus current. Inspect bus engagement and retaining hardware with the assembly safely isolated.

Check the physical module position against the Compact I/O supply arrangement before energization. Inspect connector seating and expansion-bus engagement separately from field wiring, since both affect acceptance of the assembly.

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

03 Validate input-state margins

Test real ON and OFF conditions at the connector. Include sensor leakage and supply variation in the acceptance check.

Measure the actual on-state and off-state voltages at the module terminals using the connected sensor circuit. Resolve marginal levels or leakage before changing input inversion or other application logic.

Record to retain	Validate input-state margins
Circuit or system boundary	Compact I/O

04 Exercise filter response

Apply representative pulses and contact transitions. Confirm the selected filtering suppresses unwanted chatter without rejecting valid events.

Apply a controlled transition representative of the shortest required event and observe the mapped input. Retain the selected filtering only after confirming that intended transitions remain detectable in the operating task.

Record to retain	Exercise filter response
Circuit or system boundary	Compact I/O

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05 Reconcile all input addresses

Walk through all four groups and compare field state with program indication. Remove test connections and retain the final group map.

Verify every mapped input address against its physical terminal, including channels in each common group. Remove test jumpers and record the normal process state before releasing dependent logic.

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

Related product navigation

Allen-Bradley 1769-IF8

Allen-Bradley 1769-OF8C

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