Emerson IC694ALG223

01 Capture contiguous channel allocation

Record the enabled input count and its assigned application data area. Identify the current range and transmitter connection for each physical channel before applying test currents or changing channel configuration.

Compare the configured channel count with the first through last enabled physical inputs. Retain that mapping in the application record so a program index is not confused with an independently selectable hardware channel.

Record to retain	Capture contiguous channel allocation
Circuit or system boundary	PACSystems RX3i

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02 Check common references

Trace transmitter returns and external supply connections. Resolve unintended differences in field reference before injecting test current.

Measure the transmitter reference against the analog common before closing the loop. Resolve an unintended reference difference at the wiring level rather than offsetting the displayed process value.

Record to retain	Check common references
Circuit or system boundary	PACSystems RX3i

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03 Verify current endpoints

Use a suitable loop calibrator at low, midpoint and high values. Compare the raw input word with the expected engineering result for the selected range.

Inject the lower and upper selected loop currents and record their raw counts before applying engineering scaling. Verify intermediate points as well, since an endpoint-only check can miss a data-format or range-selection error.

Record to retain	Verify current endpoints
Circuit or system boundary	PACSystems RX3i

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04 Exercise under-range reporting

Test the enhanced-range interpretation when configured and verify alarm-status mapping. Keep process actions inhibited while intentionally applying abnormal signals.

Apply the authorized low-current test and observe the configured under-range indication and status data. Confirm that the application handles the measured value and the alarm state according to the selected range.

Record to retain	Exercise under-range reporting
Circuit or system boundary	PACSystems RX3i

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05 Restore filtered process operation

Confirm the retained low-pass response and controller scaling. Remove calibration equipment and verify the live transmitter returns to the correct channel.

Restore the normal transmitter and observe a controlled process change through the selected input filter. Record the resulting update behavior before returning dependent alarms or control functions to their normal operating state.

Technical basis: Emerson PACSystems RX3i System Manual, GFK-2314AG.

Related product navigation

- General Electric IC693MDL645
- General Electric IC693CPU311

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