ICS Triplex T8243

01 / Trace the auxiliary supply first

1 Locate its protection

Identify the 24 V source and the 500 mA F-rated fuse near that source. Trace positive and return conductors to CON3 pins 1 and 6 before reconnecting the interface.

2 Separate supply measurements

Compare interface supply with the actual DC output bus. They serve different functions, so one voltage being present does not demonstrate that the other circuit is healthy.

Positive supply	CON3 pin 1
Supply return	CON3 pin 6
Protected source	Specified fuse and verified source identity

Combined DC indication

An open DC contact can represent either DCFAIL or over-temperature protection. The contact alone does not identify which input caused the alarm.

02 / Map every alarm pair

1 Follow the pack numbering

Match each physical pack position to its AC and DC monitoring variables. Record intentional links for empty positions and preserve alarms for occupied slots.

2 Inspect shared contact nodes

Trace the adjacent terminal pairs rather than assuming isolated two-wire circuits. Compare the field wiring and controller input topology with the approved drawing before test.

DC pack 1 / 2 / 3	Pairs 2–3 / 3–4 / 4–5
AC pack 1 / 2 / 3	Pairs 9–10 / 8–9 / 7–8
Empty positions	Only specified contacts intentionally linked

Supply-loss interpretation

All relays depend on the Power Port supply. Several open contacts with a live DC bus can indicate interface-supply or common wiring loss rather than simultaneous pack failures.

03 / Restore interface identity

1 Secure the D-sub connection

Inspect the mating interfaces and jack screws. Verify that CON1 connects to the shelf and CON2 serves the intended extension path without damaged or displaced contacts.

2 Set the shelf address

Record J1/J2 before replacement and compare all shelves in the controller group. Each shelf requires its own combination; restore the approved startup procedure after connection.

Shelf 1	J1 fitted; J2 fitted
Shelf 2	J1 fitted; J2 removed
Shelf 3	J1 removed; J2 fitted
Shelf 4	J1 removed; J2 removed

Empty pack positions

Link only the specified contacts for intentionally unoccupied positions. Bridging a contact from an installed faulty pack suppresses a required diagnostic path.

04 / Exercise fault paths individually

1 Prove contact interpretation

Under the approved process state, exercise an authorized pack fault and confirm that the corresponding system alarm changes. Check both the electrical contact and controller interpretation.

2 Test a common-cause condition

Verify the planned response to interface supply loss separately from an individual pack fault. Record whether the monitoring system distinguishes that shared cause and whether recovery is correctly recognized.

Individual fault	Expected pack and alarm category
Interface-power loss	Expected shared diagnostic response
Recovery	Healthy baseline restored without masking faults

Fan-fault limitation

The fault table distinguishes a locked fan rotor from an actual over-temperature trip. An amber indication does not necessarily mean the DC alarm contact has opened.

05 / Review limits before release

1 Check the monitoring load

Confirm the external alarm circuit remains within the relay load limits and uses appropriate protection for its actual load type. A resistive rating is not blanket permission for an inductive load.

2 Close the configuration record

Retain supply source, contact map, address jumpers and test outcomes. Remove temporary bridges and confirm that only designed empty-slot links remain.

Circuit acceptance	Contact load and protection reviewed
Configuration acceptance	Address and pack mapping retained
Final state	No unintended bypasses; all required alarms operational

Other automation product references

Foxboro FBM232 P0926GW

Honeywell 900B08-0202

Honeywell CC-PCNT02 51454551-275

Separate references; no replacement or compatibility is implied.