FIELD WORKFLOW

Honeywell 51401052-100

SPC Circuit Board

Honeywell 51401052-100 is the Smart Peripheral Controller circuit board that provides the SCSI controller function in a TDC 3000 History Module.

Release-gate sequence

1. IDENTIFY
2. ISOLATE
3. INSTALL
4. STATIC CHECK
5. FUNCTION TEST
6. ACCEPT

Before work starts

- Confirm the complete Honeywell 51401052-100 identity before isolation.
- Record Board function: Smart Peripheral Controller, Part number: 51401052-100, System application: TDC 3000 History Module.
- Photograph the cabinet position, connector orientation and all terminal identifiers.
- Capture the active configuration, channel assignments, alarm limits and dependent control functions.
- Place affected process equipment in the approved safe or manual condition.
- Prepare calibrated test equipment appropriate to the documented signal or interface type.

Field record essentials

MODEL ID

Record 51401052-100 exactly.

SYSTEM

i

SETTINGS

Preserve the verified installed configuration.

TEST BASIS

Define static and functional acceptance evidence.

Pre-installation verification

CHECK 01

Confirm the complete Honeywell 51401052-100 identity before isolation.

CHECK 02

Record Board function: Smart Peripheral Controller, Part number: 51401052-100, System application: TDC 3000 History Module.

CHECK 03

Photograph the cabinet position, connector orientation and all terminal identifiers.

CHECK 04

Capture the active configuration, channel assignments, alarm limits and dependent control functions.

CHECK 05

Place affected process equipment in the approved safe or manual condition.

CHECK 06

Prepare calibrated test equipment appropriate to the documented signal or interface type.

Interface inventory

- Module side: History Module backpanel position
- Drive side: SCSI path to WREN or WDA storage
- I/O side: SPC I/O or SPC II I/O companion board
- Configuration side: TS1 address pinning and factory-set TS2 revision pinning

Hold point

Do not continue if the complete model, field-circuit identity, stored settings, protective functions or safe isolation state cannot be verified. Preserve existing wiring records and escalate the exact unresolved item.

Installation sequence

1. Match the replacement label to Honeywell 51401052-100 and the approved site bill of material.
2. Review the recorded wiring, channel map and connector orientation before disturbing conductors.
3. Isolate hazardous energy and prove the required electrical condition at the work point.
4. Apply grounded ESD controls while handling the electronic assembly.
5. Label and remove connectors or conductors without changing their established order.
6. Inspect terminals, pins, coating, guides and mounting hardware for damage or contamination.
7. Seat and secure the assembly without forcing connectors; restore wiring to the recorded positions.
8. Re-energize under an approved procedure and review hardware, channel and communication diagnostics.

Commissioning and acceptance

GATE 1

Verify the installed identity remains Honeywell 51401052-100 after energization.

GATE 2

Compare all restored channel or interface assignments with the approved engineering record.

GATE 3

Confirm correct hardware recognition, interface continuity and healthy status before returning the connected system to service.

GATE 4

Check alarm, diagnostic and fault responses without defeating any required protective function.

GATE 5

Confirm unaffected channels and neighboring assemblies continue to operate normally.

GATE 6

Review connector temperature, unusual odor, noise and visible indicators during the controlled test.

GATE 7

Record calibrated readings, software indications, status events and corrective actions.

GATE 8

Obtain the required operations or engineering acceptance before releasing the equipment.

Fault-response checks

- A recognition or communication fault requires checks of seating, connector condition, address or switch settings and dependent cabling.
- Intermittent behavior: inspect terminal torque, connector seating, shielding and vibration exposure.
- Wrong point response: reconcile the physical terminal, channel map and controller database.
- Persistent diagnostic: compare the as-left condition with the captured pre-maintenance baseline.
- Neighboring faults: inspect shared power, common connectors and card-file or backplane interfaces.
- Repeat failure: stop substitution and escalate the exact identity, evidence and test record for engineering review.

Acceptance boundary

Release only after the normal state, commanded state, principal fault state and recovery behavior have all been observed at the field device, module and control-system indication.

Reference and handover

SOURCE 1 Honeywell History Module Service, December 2002, pages 30, 169, 176, 237-238 and 303

Related products

Verified related products on ApterPower

Honeywell 8C-PAOHA1 51454469-275
Series 8 output reference
View Honeywell 8C-PAOHA1 51454469-275

Honeywell CC-PAOX01 51405039-275
Series C analog-output reference
View Honeywell CC-PAOX01 51405039-275

Honeywell FS-TSFIRE-1624
Safety-system termination reference
View Honeywell FS-TSFIRE-1624

CONFIGURATION
Final settings and mappings archived

WIRING
Terminal and conductor labels reconciled

TEST RECORD
Measured results and fault tests retained

OPERATIONS
Normal indication and response briefed

Contact Apter Power

PHONE +86 180 3023 5313
EMAIL sales13@apterpower.com
WEBSITE www.apterpower.com

Share the exact 51401052-100 nameplate, application and required quantity for a model-specific quotation.