FIELD WORKFLOW

Honeywell FS-TSFIRE-1624

Fire Detector Input FTA

Honeywell FS-TSFIRE-1624 interfaces sixteen 24 VDC fire-detector channels with Safety Manager SAI-1620m analog input hardware while providing line monitoring and a global detector-reset function.

Release-gate sequence

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

Before work starts

- Confirm the FS-TSFIRE-1624 type number and all sixteen loop assignments.
- Record detector type, polarity, end-of-line location and normal measured state.
- Identify the SICC-0001/Lx cable and assigned SAI-1620m module or redundant pair.
- Prepare a loop-by-loop fire, open, short and reset acceptance plan.
- Isolate the external 24 VDC detector supply and prove terminals A and B de-energized.
- Measure field-wire resistance and verify conductor size before reconnection.

Field record essentials

MODEL ID

Record FS-TSFIRE-1624 exactly.

SYSTEM

Honeywell Safety Manager fire and gas input

SETTINGS

Preserve the verified installed configuration.

TEST BASIS

Define static and functional acceptance evidence.

Pre-installation verification

CHECK 01

Confirm the FS-TSFIRE-1624 type number and all sixteen loop assignments.

CHECK 02

Record detector type, polarity, end-of-line location and normal measured state.

CHECK 03

Identify the SICC-0001/Lx cable and assigned SAI-1620m module or redundant pair.

CHECK 04

Prepare a loop-by-loop fire, open, short and reset acceptance plan.

CHECK 05

Isolate the external 24 VDC detector supply and prove terminals A and B de-energized.

CHECK 06

Measure field-wire resistance and verify conductor size before reconnection.

Interface inventory

- Detector connection: Sixteen 24 V fire-detector or manual-call-point channels
- Safety Manager link: SICC-0001/Lx cable to one SAI-1620m or a redundant pair
- Reset circuit: 17-39 VDC relay input; 8.5 mA typical at 24 VDC
- Field terminals: 48 screw terminals; maximum 2.5 mm2 / AWG 14 conductor

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. Capture the FS-TSFIRE-1624 label, DIN-rail position and terminal schedule.
2. Place the fire and gas function in the approved maintenance or inhibited state.
3. Label common supply, reset relay, ground and all forty-eight field terminals.
4. Disconnect the external 24 VDC supply and prove zero energy at the FTA.
5. Remove the SICC-0001/Lx cable and field wiring without altering loop identity.
6. Mount the replacement on TS32 or TS35 rail and inspect secure engagement.
7. Reconnect with seven-millimeter strip length and 0.5 Nm terminal torque.
8. Restore power under control and confirm normal supervision before functional tests.

Commissioning and acceptance

GATE 1

Measure the external supply and confirm it remains within the 24 VDC tolerance.

GATE 2

Verify normal loop voltage with the installed 4.7 kOhm end-of-line resistor.

GATE 3

Operate each detector or call point and confirm the corresponding Safety Manager input.

GATE 4

Open each selected loop and confirm the intended line-fault diagnostic.

GATE 5

Short each selected loop under an approved method and observe fault handling.

GATE 6

Energize global reset and verify detector supply removal and recovery.

GATE 7

Check redundant SAI-1620m paths where the installed architecture uses a pair.

GATE 8

Archive all sixteen channel results, reset behavior and final system status.

Fault-response checks

- All channels absent: verify external 24 VDC, common return and SICC cable connection.
- Single channel open: inspect its terminal pair, field conductor and end-of-line resistor.
- Unexpected alarm current: compare detector behavior with the 680 Ohm channel resistance.
- Reset ineffective: confirm 17-39 VDC relay drive and the common reset wiring.
- Intermittent supervision: measure field-wire resistance and inspect loose screw terminals.
- SAI indication mismatch: compare FTA channel numbering with the system interconnection map.

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 Safety Manager Hardware Reference EP-SM.MAN.6284, section 15.27

SOURCE 2

Honeywell FS-TSFIRE-1624 technical data, connections and application pages

Related products

Verified related products on ApterPower

Honeywell FS-TPSU-2430 V1.1
Safety-system portfolio reference
View Honeywell FS-TPSU-2430 V1.1

Honeywell FS-PDC-MB24-1P
Safety-system portfolio reference
View Honeywell FS-PDC-MB24-1P

Honeywell FC-DCOM-232/485
Safety-system portfolio reference
View Honeywell FC-DCOM-232/485

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

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Share the exact FS-TSFIRE-1624 nameplate, application and required quantity for a model-specific quotation.