

Installation Identity and Scope

Honeywell FC-UGAI01 is a SIL2-rated single-channel galvanically isolated analog-input barrier adaptor for the CC-UGIA0 universal safety I/O assembly. It supports 4-20 mA and HART field signals with three-way isolation.

INSTALLATION IDENTITY	REQUIRED VALUE
Complete model	FC-UGAI01
Manufacturer	Honeywell
Hardware type	Universal Safety analog-input barrier adaptor
System family	Universal Marshalling Solution for Safety
Official source	Version 2.0, March 2021; section 4.12

CONTROLLED ENGINEERING COPY

Install FC-UGAI01 only in the documented CC-UGIA0 position and confirm the field, safe-area and 24 V DC connections. Prove loop current, HART communication and open-wire fault transparency before returning the channel to service.

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FC-UGAI01

Pre-Installation Plan

NO.	REQUIRED ACTION
1	Verify the complete FC-UGAI01 marking before insertion.
2	Use only the documented CC-UGIA0 universal safety I/O assembly.
3	Confirm the hazardous-area and safe-area terminal sides before wiring.
4	Observe the documented 24 V DC feed path and polarity.
5	Keep the disconnect and fuse lever in the approved state during work.

Matched Hardware

CONTROL ITEM	REQUIRED RECORD
Identity	FC-UGAI01
Physical interface	CC-UGIA0 universal safety I/O assembly
Companion check	4-20 mA/HART field transmitter
Configuration	Documented 24 V DC feed and fuse path
Functional proof	Safety-loop diagnostic and proof-test record

RELEASE HOLD POINT

Do not disturb the installed device until the exact marking, connections, companion hardware and configured function are documented.

Wiring and Interface Checks

CHECK	MODEL-SPECIFIC REQUIREMENT
Identity	Confirm FC-UGAI01 and CC-UGIA0 position.
Field side	Record A+, B- and common terminal assignment.
Safe side	Record DB37 channel pins and receiving input.
Supply	Verify the through-FTA 24 V DC feed and fuse lever.
Loop scale	Inject controlled current values across the operating range.
HART	Confirm device communication through the barrier.
Fault test	Open the field loop and confirm fault transparency.
Release	Restore the approved safety-loop configuration and archive results.

CONFIGURATION BOUNDARY

Install FC-UGAI01 only in the documented CC-UGIA0 position and confirm the field, safe-area and 24 V DC connections. Prove loop current, HART communication and open-wire fault transparency before returning the channel to service.

Expected Technical Values

PARAMETER	VALUE
Channel count	Single channel
Safety rating	SIL2
Signal type	4-20 mA with HART
Isolation	Three-way galvanic isolation

Commissioning and Acceptance

TEST	ACCEPTANCE CONDITION
Identity	FC-UGAI01 and CC-UGIA0 match
Signal	4-20 mA scaling verified
Diagnostics	HART and open-wire behavior verified
Safety proof	Channel test accepted

Technical Questions to Resolve

QUESTION	ENGINEERING ANSWER
What signal standard is supported by FC-UGAI01?	It supports a 4-20 mA analog input and HART communication.
What safety rating is documented for FC-UGAI01?	Honeywell specifies SIL2 for the single-channel barrier adaptor.
Which universal safety I/O assembly accepts FC-UGAI01?	The official specification pairs it with CC-UGIA0.
How many galvanic-isolation paths are provided by FC-UGAI01?	The module provides three-way isolation.

Source, Related Products and Release

MODEL	APTER POWER PAGE
Honeywell 51196653-100	Open product page
Honeywell 51196694-350	Open product page
Honeywell 51196694-350-u1	Open product page
Honeywell 51198685-100-sps5710-2-lf	Open product page
Honeywell 51198947-100	Open product page
Honeywell 51199932-200-51199932-200-rp	Open product page
Honeywell 51199942-300	Open product page
Honeywell 51202329-732	Open product page

MANUFACTURER SOURCE RECORD

Universal Marshalling Solution for Safety Systems Specification
Version 2.0, March 2021; section 4.12

Controlled Release Summary

RELEASE ITEM	REQUIRED EVIDENCE
Identity	FC-UGAI01 recorded
Interface	Connections and companion hardware verified
Configuration	Installed values agree with approved record
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