

FC-SAO-022M

FC-SAO-022M Safe Analog Output Module

FC-SAO-022M Safe Analog Output Module

PRODUCT SNAPSHOT

BRAND
Honeywell

FAMILY
Honeywell Safety Manager

PART
FC-SAO-022M

DOCUMENT STATUS
Controlled engineering copy

APTER POWER

WHATSAPP / PHONE

+86 180 3023 5313

WEBSITE

www.apterpower.com



PRODUCT OVERVIEW

Honeywell FC-SAO-022M provides safe generation and monitoring of two analog current-output channels in a documented Honeywell Safety Manager installation.



Output range: 0(4)-20 mA



Allowed load: Resistive or capacitive



D/A conversion: 12-bit per output channel



Output verification: A/D readback per channel

RELATED APTER POWER PAGES

1

Honeywell FC-FANWR-24R

2

Honeywell 51401496-100

3

Honeywell 51401642-150

4

Honeywell 621-2200RC

5

Honeywell 8C-PAOH51 51454355-175

6

Honeywell 8C-TAIMA1 51307171-175

7

Honeywell 8C-TAOXA1 51307135-175

8

Honeywell 8C-TDILA1 51307141-175

9

Honeywell C7061F2001

SYSTEM COMPONENTS

DOCUMENTED COMPONENT	ROLE IN SYSTEM
Proximity probe	Matched extension cable
Proximitior Sensor	AISI 4140 target

ENGINEERING CONTEXT

The component remains matched to its installed host, interface hardware and engineering configuration. Commissioning restores that architecture and verifies the intended function under controlled conditions.

TECHNICAL DATA

PARAMETER	VALUE	PARAMETER	VALUE
Product type	Safe analog output module	D/A conversion	12-bit per output channel
Model	FC-SAO-022M	Output verification	A/D readback per channel
Channels	2	Secondary de-energizing	Provided for each channel
Output range	0(4)-20 mA	Execution	Conformally coated FC version
Allowed load	Resistive or capacitive	Redundant analog output	Supported by the documented Safety Manager release

RELATED PRODUCT PAGES

1 Honeywell FC-FANWR-24R

2 Honeywell 51401496-100

3 Honeywell 51401642-150

4 Honeywell 621-2200RC

5 Honeywell 8C-PAOH51 51454355-175

6 Honeywell 8C-TAIMA1 51307171-175

7 Honeywell 8C-TAOXA1 51307135-175

8 Honeywell 8C-TDILA1 51307141-175

9 Honeywell C7061F2001

TECHNICAL NOTE

Install FC-SAO-022M only in its documented Honeywell Safety Manager position. Preserve the exact interfaces, wiring and configuration, then verify diagnostics and safe generation and monitoring of two analog current-output channels under controlled conditions.

APPLICATIONS & PRECAUTIONS

COMMON APPLICATIONS

FC-SAO-022M Safe Analog Output Module

Provides safe generation and monitoring of two analog current-output channels in the approved Honeywell

Installed-system maintenance

Preserves the documented slot, termination, wiring and configuration during replacement.

Controlled commissioning

Restores power and signals in the approved sequence and reviews diagnostics.

Acceptance verification

Confirms the intended channel, network or safety function before release.

PRODUCT PRECAUTIONS

1

Confirm the complete FC-SAO-022M identity on the hardware and maintenance record.

2

Place the affected Honeywell Safety Manager process in the approved maintenance state.

3

Record the installed position, connectors, terminals, wiring and configuration before removal.

4

Isolate all documented power and field energy and apply ESD controls where required.

5

Inspect the replacement identity, revision, interfaces and mating hardware before installation.

6

Restore every conductor, cable, power path and configuration value to the approved record.

7

Review host, module, channel or network diagnostics after controlled energization.

8

Perform a controlled test that proves safe generation and monitoring of two analog current-output channels

RELATED APTER POWER PAGES

1

Honeywell FC-FANWR-24R

2

Honeywell 51401496-100

3

Honeywell 51401642-150

4

Honeywell 621-2200RC

5

Honeywell 8C-PAOH51 51454355-175

6

Honeywell 8C-TAIMA1 51307171-175

7

Honeywell 8C-TAOXA1 51307135-175

8

Honeywell 8C-TDILA1 51307141-175

9

Honeywell C7061F2001

ENGINEER FAQ

Q1 How many current outputs are provided by FC-SAO-022M?

The module provides two safe analog output channels.

Q2 Which ranges can FC-SAO-022M deliver?

Each channel supports 0-20 mA or 4-20 mA operation.

Q3 What load types may be connected to FC-SAO-022M?

Use resistive or capacitive loads; inductive loads are not permitted.

Q4 How does FC-SAO-022M check the commanded current?

An A/D converter reads back each channel's output value.

Q5 Which converter resolution is used by FC-SAO-022M?

Each output channel uses a 12-bit D/A converter.

Q6 Can FC-SAO-022M force an output to de-energize independently of the application value?

Yes. Each channel has a secondary de-energizing path.

Q7 What does the FC prefix identify on FC-SAO-022M?

It identifies the conformally coated Safety Manager execution.

Q8 What functional test is required for FC-SAO-022M?

Apply controlled current commands, confirm readback and de-energizing behavior, and review diagnostics on both channels.

RELATED APTER POWER PAGES

1 Honeywell FC-FANWR-24R

2 Honeywell 51401496-100

3 Honeywell 51401642-150

4 Honeywell 621-2200RC

5 Honeywell 8C-PAOH51 51454355-175

6 Honeywell 8C-TAIMA1 51307171-175

7 Honeywell 8C-TAOXA1 51307135-175

8 Honeywell 8C-TDILA1 51307141-175

9 Honeywell C7061F2001

SOURCE Honeywell Safety Manager Hardware Reference EP-SM.MAN.6284 | Honeywell manufacturer publication

+86 180 3023 5313 | sales13@apterpower.com | www.apterpower.com