

Model 3471-A1C
24-bit Isolated Input Gate

INSTRUCTION MANUAL

February, 1987

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*** Special Option ***

Model 3471-S001

March 1981

Model 3471-S001

Special Option

Model 3471-S001

The 3471-S001 is a 3471-A1C with the following specifications:

1. Will perform in a 50 Gauss field.
2. Used with a 24VDC inputs with 25 mA to 50 mA input current.

10 March 1981

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*** Special Option ***

Model 3471-S002

April 1981

Model 3471-S002

*** Special Option ***

Model 3471-S002

The 3471-S002 is a 3471-A1C with a .1 msec filter.

28 April 1981

*** Special Option ***

Model 3471-S006

24-Bit Isolated Input Gate

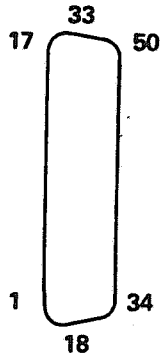
June 1983

Model 3471-S006

*******SPECIAL OPTION*******

24-Bit Isolated Input Gate with 24VDC Sense

The Model 3471-S006 is a Model 3471-A1C with a 50-pin "D" connector on the front panel. The pinouts of the Model 3471-S006 are on the following gold sheet.



FACE VIEW

Pin/Wire List

50 PIN 'D'

PIN NO.

17	9A
16	8B
15	8A
14	7B
13	7A
12	6B
11	6A
10	5B
9	5A
8	4B
7	4A
6	3B
5	3A
4	2B
3	2A
2	Input Signal 1B
1	Input Signal 1A

PIN NO.

33	17A
32	16B
31	16A
30	15B
29	15A
28	14B
27	14A
26	13B
25	13A
24	12B
23	12A
22	11B
21	11A
20	10B
19	10A
18	9B

PIN NO.

50	---
49	---
48	24B
47	24A
46	23B
45	23A
44	22B
43	22A
42	21B
41	21A
40	20B
39	20A
38	19B
37	19A
36	18B
35	18A
34	17B

24-bit Isolated Input Gate

Provides optical isolation with 12 V dc to 120 V ac options

3471

Features

- 24-bit voltage sense
- Optical isolation
- 120 VAC input
- 12, 24, and 48 VDC input available
- 100 millisecond filter
- Versatile multipurpose input

Typical Applications

- Contact sense
- Data input
- Level detectors
- Alarms
- Manual switch entry
- Pressure switches
- Auxiliary contacts

General Description *(Product specifications and descriptions in this document subject to change without notice.)*

The 3471 is a single-width CAMAC module providing 24 individually isolated contact sense circuits. The sense circuit detects the presence or absence of voltage at its terminals and is suitable for sensing such remote process contact closures as limit switches, machine tool relay contacts, pressure switches, manual switches, and mercury-wetted contacts. Four voltage options are available: 12 VDC, 24 VDC, 48 VDC, and 120 VAC.

Input isolation is achieved by using LED/phototransistor optical isolators. Each circuit is a floating two-wire circuit with common-mode voltage isolation greater than 500 volts. Each option has 24 circuits with identical input voltage ratings, and the switching threshold is approximately one half the rated input voltage. Each input circuit draws between five and ten milliamperes.

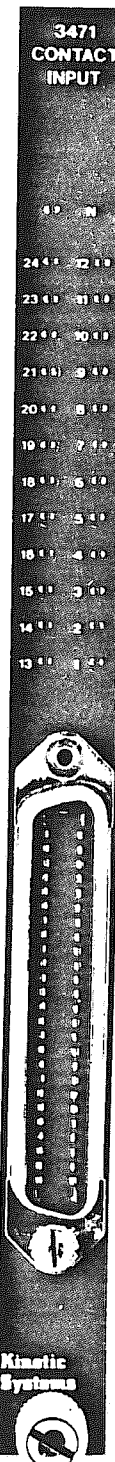
The logic convention is such that a contact closure (input voltage present) is interpreted as a logical "1".

Each input is conditioned by filtering after the optical isolator. The filter time constant is 100 milliseconds. Other time constant options are available by special order.

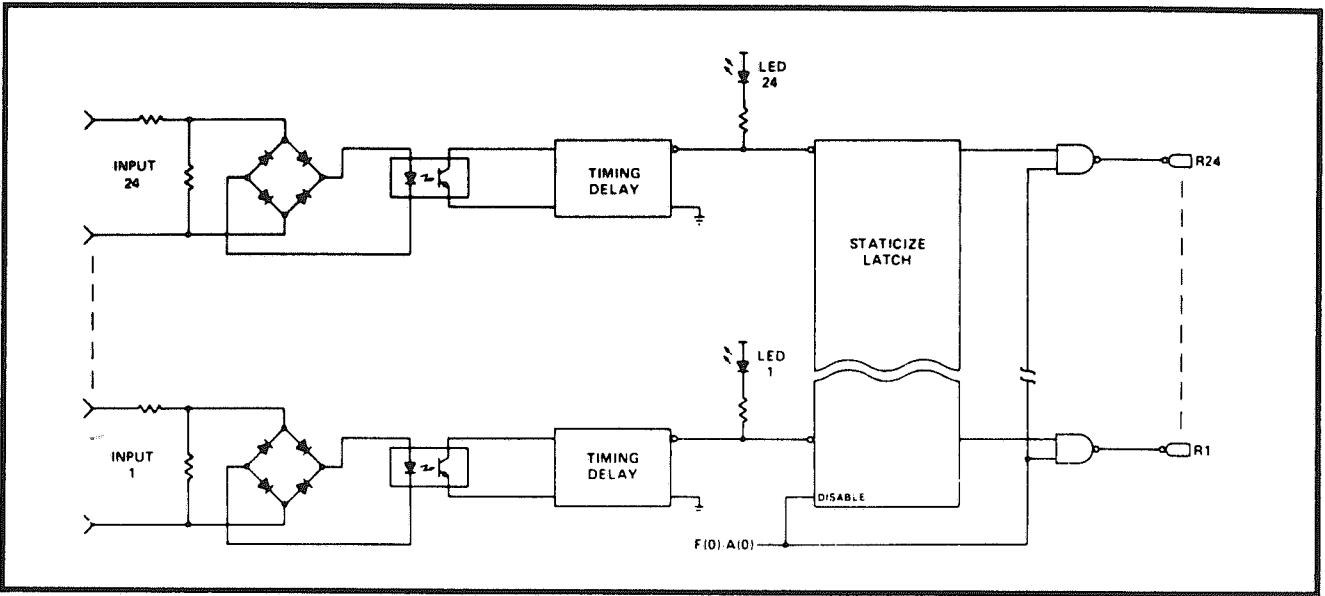
Function Codes

Command	Q	Action
F(0):A(0) RD1	1	Reads the current state of the inputs.
F(1):A(15) RD2	1	Reads the module identifying number (3471 = 6617 ₈).

Note: X = 1 for all valid addressed commands.



Simplified Block Diagram



Power Requirements

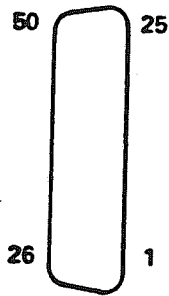
+6 volts: 450 mA

Ordering Information

- Model 3471-A1A** Isolated Input Gate, 120 Vac, 24 bits, 50S Amphenol Ribbon connector
- Model 3471-A1B** Isolated Input Gate, 48 Vdc, 24 bits, 50S Amphenol Ribbon connector
- Model 3471-A1C** Isolated Input Gate, 24 Vdc, 24 bits, 50S Amphenol Ribbon connector
- Model 3471-A1D** Isolated Input Gate, 12 Vdc, 24 bits, 50S Amphenol Ribbon connector
- Model 3471-A1E** Isolated Input Gate, contact input, 24 bits, 50S Amphenol Ribbon connector

Related Products

- Model 5950-Z1A** Mating Connector
- Model 1850-A1D** Rack Termination Panel



FACE VIEW

Socket/Wire List

50 SOCKET RIBBON CONN.

SOCKET NO.

50	
49	Input Signal 24B
48	23B
47	22B
46	21B
45	20B
44	19B
43	18B
42	17B
41	16B
40	15B
39	14B
38	13B
37	12B
36	11B
35	10B
34	9B
33	8B
32	7B
31	6B
30	5B
29	4B
28	3B
27	2B
26	1B

SOCKET NO.

25	
24	Input Signal 24A
23	23A
22	22A
21	21A
20	20A
19	19A
18	18A
17	17A
16	16A
15	15A
14	14A
13	13A
12	12A
11	11A
10	10A
9	9A
8	8A
7	7A
6	6A
5	5A
4	4A
3	3A
2	2A
1	1A

50 CONDUCTOR

(26 Pair)

EXTERNAL CABLE COLOR CODE

Conn. No.	Pair	Color
26	1	W-BI
1		BI-W
27	2	W-O
2		O-W
28	3	W-G
3		G-W
29	4	W-Br
4		Br-W
30	5	W-SI
5		SI-W
31	6	R-BI
6		BI-R
32	7	R-O
7		O-R
33	8	R-G
8		G-R
34	9	R-Br
9		Br-R
35	10	R-SI
10		SI-R
36	11	Bk-BI
11		BI-Bk
37	12	Bk-O
12		O-Bk

38	13	Bk-G
13		G-Bk
39	14	Bk-Br
14		Br-Bk
40	15	Bk-SI
15		SI-Bk
41	16	Y-BI
16		BI-Y
42	17	Y-O
17		O-Y
43	18	Y-G
18		G-Y
44	19	Y-Br
19		Br-Y
45	20	Y-SI
20		SI-Y
46	21	V-BI
21		BI-V
47	22	V-O
22		O-V
48	23	V-G
23		G-V
49	24	V-Br
24		Br-V
50	25	V-SI
25		SI-V

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2. Obtain a Return Authorization (RA) Number.
3. Initiate a purchase order for the estimated repair charge if the product is out of warranty.
4. Include a description of the problem and your technical contact person with the product.
5. Ship the product prepaid with the RA Number marked on the outside of the package to:

KineticSystems Company, LLC
Repair Service Center
900 North State Street
Lockport, IL 60441

Telephone: (815) 838-0005
Facsimile: (815) 838-4424
Email: tech-serv@kscorp.com