Model 3471-A1E

24-bit Isolated Input Gate

INSTRUCTION MANUAL

February, 1987

**** SPECIAL OPTION ****

Model   3471-S005

November 1982

Model 3471-S005

The 3471-S005 is a 3471-A1E with an input filter time constant of 30

milliseconds, +0%, -10%.

Special Option

Model 3471-S010

24-bit Isolated Input Gate

October, 1987

Model 3471-S010

The Model 3471-S010 is the same as the Model 3471-AlE except it has been modified with a one millisecond time filter.

October, 1987
MLH:rem(3000 Ser. 12)

24-bit Isolated Input Gate

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

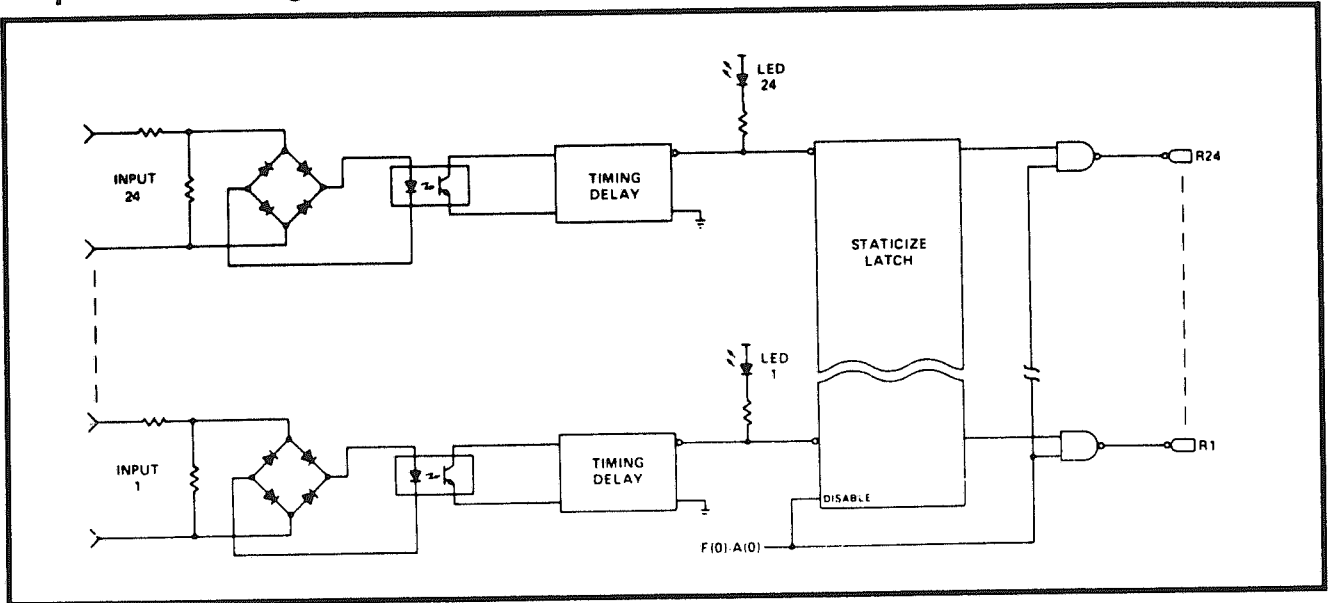| Command		Q	Action
F(0)·A(0)	RD1	1	Reads the current state of the inputs.
F(1)·A(15)	RD2	1	Reads the module identifying number (3471 = 6617_8).
Note: X = 1 for all valid addressed commands.			
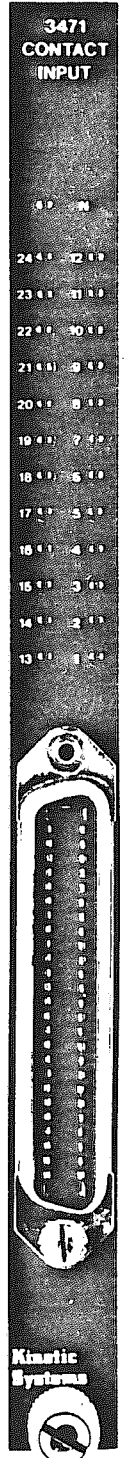
Simplified Block Diagram

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
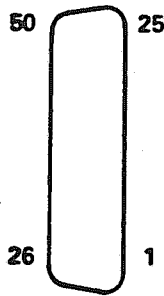
Model 3471   **50**   **25**   **Socket/Wire List**

50 SOCKET RIBBON CONN.

26   **1**

FACE VIEW

<u>**SOCKET NO.**</u>   <u>**SOCKET NO.**</u>

Socket		Socket	
50		**25**	
49	Input Signal 24B	**24**	Input Signal 24A
48	23B	**23**	23A
47	22B	**22**	22A
46	21B	**21**	21A
45	20B	**20**	20A
44	19B	**19**	19A
43	18B	**18**	18A
42	17B	**17**	17A
41	16B	**16**	16A
40	15B	**15**	15A
39	14B	**14**	14A
38	13B	**13**	13A
37	12B	**12**	12A
36	11B	**11**	11A
35	10B	**10**	10A
34	9B	**9**	9A
33	8B	**8**	8A
32	7B	**7**	7A
31	6B	**6**	6A
30	5B	**5**	5A
29	4B	**4**	4A
28	3B	**3**	3A
27	2B	**2**	2A
26	1B	**1**	1A

50 CONDUCTOR

(26 Pair)

EXTERNAL CABLE COLOR CODE

Conn. No.	Pair	Color
26	1	W-Bl
1		Bl-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-Sl
5		Sl-W
31	6	R-Bl
6		Bl-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-Sl
10		Sl-R
36	11	Bk-Bl
11		Bl-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-Sl
15		Sl-Bk
41	16	Y-Bl
16		Bl-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-Sl
20		Sl-Y
46	21	V-Bl
21		Bl-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-Sl
25		Sl-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:

<div align="center">

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

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