

FnIO M – Series :

M1908

M1908(8 Points, AC Input Terminal, 240Vac)

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History

REV.	PAGES	REMARKS	DATE	Editor
Preliminary		Preliminary	Aug. 30, 2019	BS, HA
1.01		Image, UL Spec, Torque, Hotswap Function	20/04/21	CW SEO
1.02		Vibration specification, Product certification changed	20/04/27	CW SEO
1.03	10~13	Added M-Series caution	20/05/07	CW SEO
1.04	8	Remove Hot Swap Function pages	20/12/07	SJ LIM
1.05	4	Environment Specification Update	21/11/16	EC KIM
1.06	4	Certificate Update	23/06/02	CW SEO

1. Environment Specification

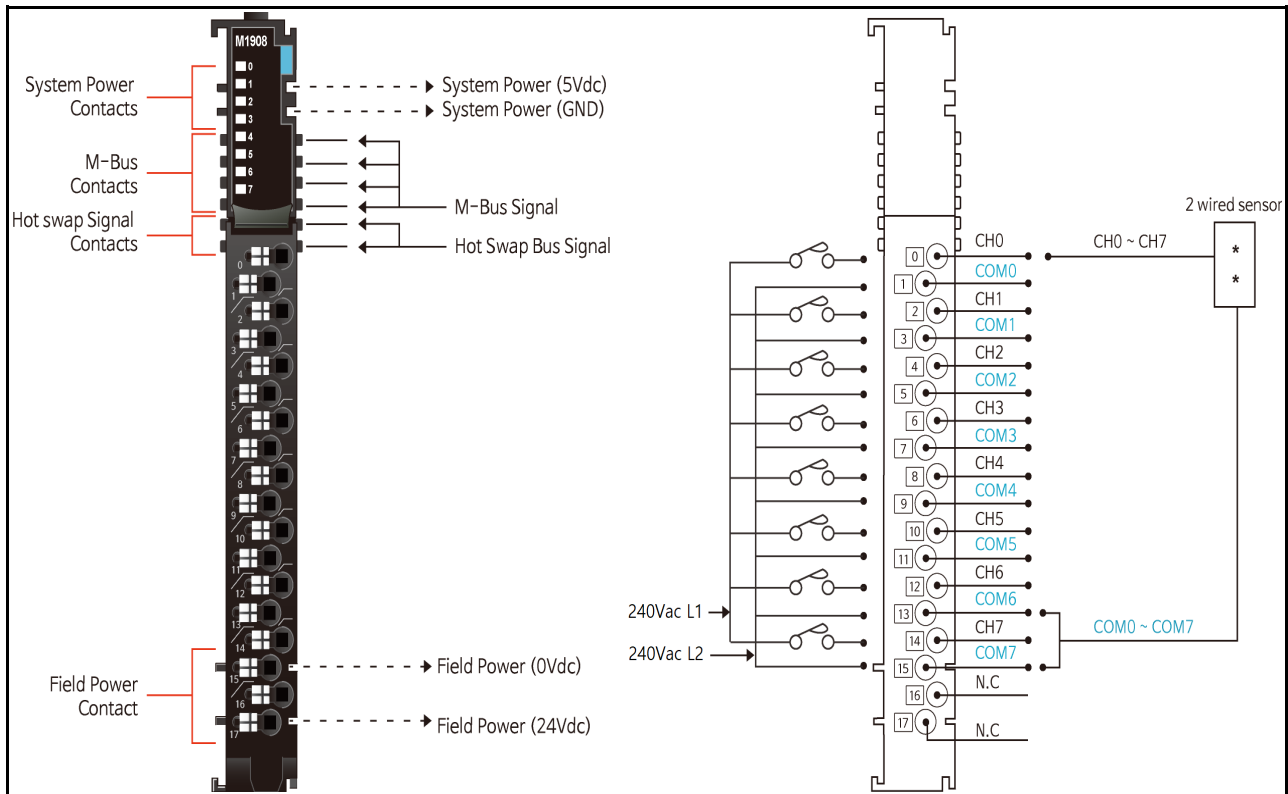
Environmental specification	
Operating Temperature	-25℃~60℃
UL Temperature	-25℃~60℃
Storage Temperature	-40℃~85℃
Relative Humidity	5% ~ 90% non-condensing
Mounting	DIN rail
General specification	
Shock Operating	IEC 60068-2-27
Vibration Resistance	IEC 60068-2-6, 4g
Industrial Emissions	EN 61000-6-4/A11 : 2011
Industrial Immunity	EN 61000-6-2 : 2019
Installation Position	Vertical and horizontal installation is available.
Protection type	IP20
Product Certifications	UL, CE, UKCA, LVD, ABS, BV, CCS, DNV, KR, LR

2. M1908 (8 Points, AC Input Terminal, 240Vac)

2.1. M1908 Specification

Items	Specification
Input Specification	
Inputs Per Module	8 Points Sink type
Indicators	8 Green input state
ON-state Voltage	240Vac nominal Min. 170Vac ~ Max. 264Vac
ON-state Current	10mA maximum/point @ 240Vac
Minimum OFF-state Voltage	Max. 115Vac
Input Delay Time	
- Operate Time (OFF to ON)	23ms @ 120Vac
- Release Time (ON to OFF)	123ms @ 120Vac
Nominal Input Impedance	26.5 K Ω Typical
Frequency Range	60Hz
Common Type	1 Common per point (Total 8 Commons)
General Specification	
Power Dissipation	Max. 30mA @ 5Vdc
Isolation	I/O to Logic : Photocoupler isolation
UL Field Power	Supply voltage : 24Vdc nominal, Class 2
Field Power	Field Power passes through to the next module.
Single Wire	0.205mm ² - 1.3mm ² (24-16 AWG)
Torque	0.8Nm(7 lb-in)
Weight	72g
Module Size	12mm x 110mm x 75mm
Hot Swap	Possible
Environment Condition	Refer to '1. Environment Specification'

2.2. M1908 Wiring Diagram



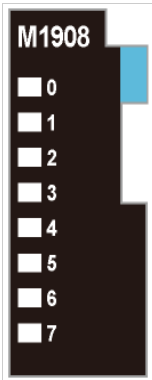
Pin No.	Signal Description
0	Input Channel 0
1	Input Channel Common (L2/N)
2	Input Channel 1
3	Input Channel Common (L2/N)
4	Input Channel 2
5	Input Channel Common (L2/N)
6	Input Channel 3
7	Input Channel Common (L2/N)
8	Input Channel 4
9	Input Channel Common (L2/N)
10	Input Channel 5
11	Input Channel Common (L2/N)
12	Input Channel 6
13	Input Channel Common (L2/N)
14	Input Channel 7
15	Input Channel Common (L2/N)
16	N.C
17	N.C

Series No	Through Air	Over Surface	CTI
RTB18C	1.5mm	1.5mm	175≤CTI≤400

Spacings : The following minimum spacing in inches (millimeters) shall be maintained between uninsulated live parts of opposite polarity; and between an uninsulated live part and a grounded Part including any mounting surface or exposed metal part.

2.3. M1908 LED Indicator

2.3.1. LED Indicator



LED No.	LED Function / Description	LED Color
0	Input Channel Status 0	Green
1	Input Channel Status 1	Green
2	Input Channel Status 2	Green
3	Input Channel Status 3	Green
4	Input Channel Status 4	Green
5	Input Channel Status 5	Green
6	Input Channel Status 6	Green
7	Input Channel Status 7	Green

2.3.2. Ch

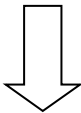
annel Status LED

Status	LED	To indicate
Not Signal	OFF	Normal Operation
On Signal	Green	Normal Operation

2.4. Mapping Data into the Image Table

- Input Module Data

D7	D6	D5	D4	D3	D2	D1	D0
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● Input Image Value

Bit No	Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
Byte0	D7	D6	D5	D4	D3	D2	D1	D0