

FnIO M – Series :

M1808

M1808(8 Points, AC Input Terminal, 120Vac)

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History

REV.	PAGES	REMARKS	DATE	Editor
Preliminary		Preliminary	Oct. 16, 2019	BS, HA
1.01		Image, UL Spec, Torque, Hotswap Function	2020/04/21	CW SEO
1.02		Vibration specification, Product certification changed	2020/04/27	CW SEO
1.03	10~13	Added M-Series caution	2020/05/07	CW SEO
1.04		Remove Description pages of Hot Swap Function, Use in Hazardous Envirnmnts and Caution(Before using the unit)	2020/12/08	SJ LIM
1.05	5	Power dissipation changed	2021/04/13	BS, HA
1.06	4	Environment Specification Update	2021/11/16	EC KIM
1.07	4	Certificate Update	2023/06/02	CW SEO

1. Environment Specification

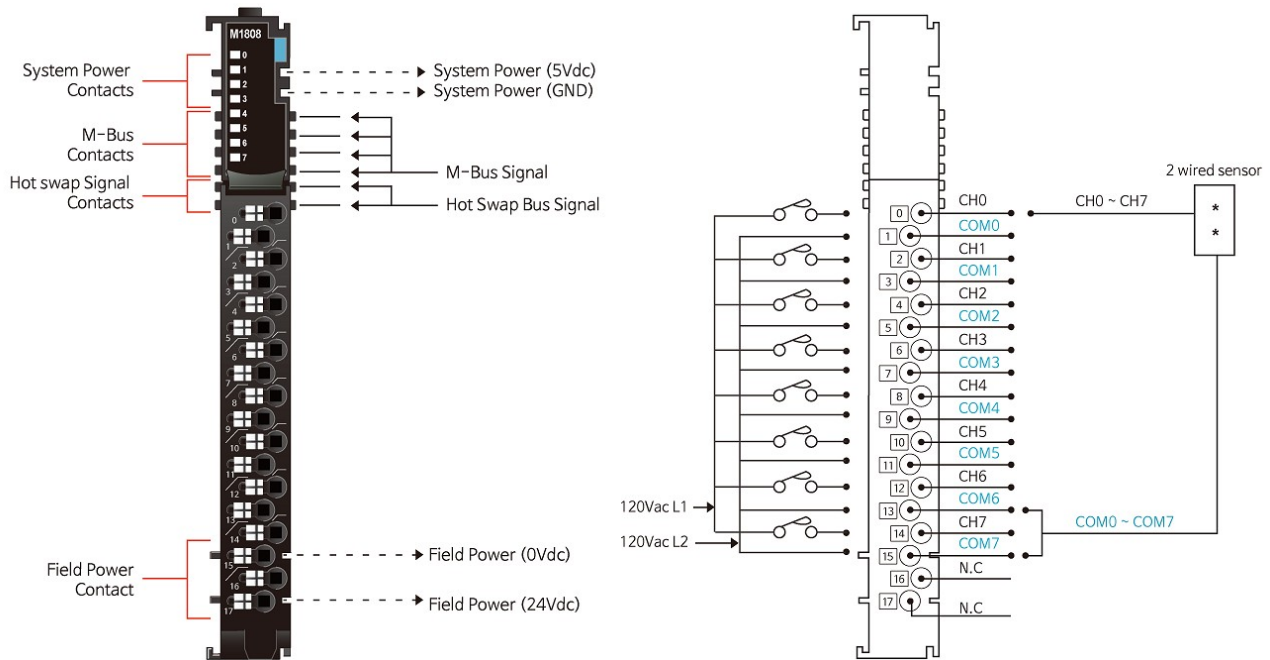
Environmental specification	
Operating Temperature	-25℃~60℃
UL Temperature	-25℃~60℃
Storage Temperature	-40℃~85℃
Relative Humidity	5% ~ 90% non-condensing
Mounting	DIN rail
General specification	
Shock Operating	IEC 60068-2-27
Vibration Resistance	IEC 60068-2-6, 4g
Industrial Emissions	EN 61000-6-4/A11 : 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. M1808 (8 Points, AC Input Terminal, 120Vac)

2.1. M1808 Specification

Items	Specification
Input Specification	
Inputs Per Module	8 Points type
Indicators	8 Green input state
ON-state Voltage	120Vac nominal Min. 85Vac to Max. 132Vac
ON-state Current	7.5mA maximum/point @120Vac
Maximum OFF-state Voltage	45Vac maximum
Input Delay Time	
- Operate Time (OFF to ON)	23ms @ 120Vac
- Release Time (ON to OFF)	123ms @ 120Vac
Nominal Input Impedance	17.5K Ω typical
Frequency Range	60Hz
Common Type	1Common per point(Total 8 Commons)
General Specification	
Power Dissipation	Max. 30mA @ 5.0Vdc
Isolation	I/O to Logic : Photocoupler isolation
Field Power	Field Power passes through to the next module.(AC Power Not used)
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. M1808 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. M1808 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

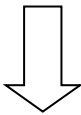
2.3.2. Channel Status LED

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