
FnIO M – Series

M7641/M7241

M7641 (Field Power Distribution 5Vdc, 24Vdc, 48Vdc, 110Vac, 220Vac, ID Type)

M7241 (Field Power Distribution 5Vdc, 24Vdc, 48Vdc, 110Vac, 220Vac, None Type)

Specification

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History

REV.	PAGES	REMARKS	DATE	Editor
1.00			2022/1208	CW SEO
1.01	4	Certificate Update	2023/06/07	CW SEO

Specification

1. Environment Specification

Environmental Specification	
Operation Temperature	-25°C~60°C
UL Temperature	-25°C~60°C
Storage Temperature	-40°C~85°C
Relative Humidity	5% ~ 90% Non-condensing
Mounting	DIN Rail
General Specification	
Shock Operating	IEC 60068-2-27
Vibration Resistance	Based on IEC 60068-2-6 DNVGL-CG-0039 : Vibration Class B, 4g
Industrial Emissions	EN61000-6-4/All : 2011
Industrial Immunity	EN 61000-6-2 : 2005
Installation Position	Vertical and horizontal installation is available.
Product Certifications	UL, ATEX, CE, UKCA M7241 : ABS, BV, CCS, DNV, KR, LR

Specification

2. M7x41(Field Power Distribution)

2.1. M7x41 Specification

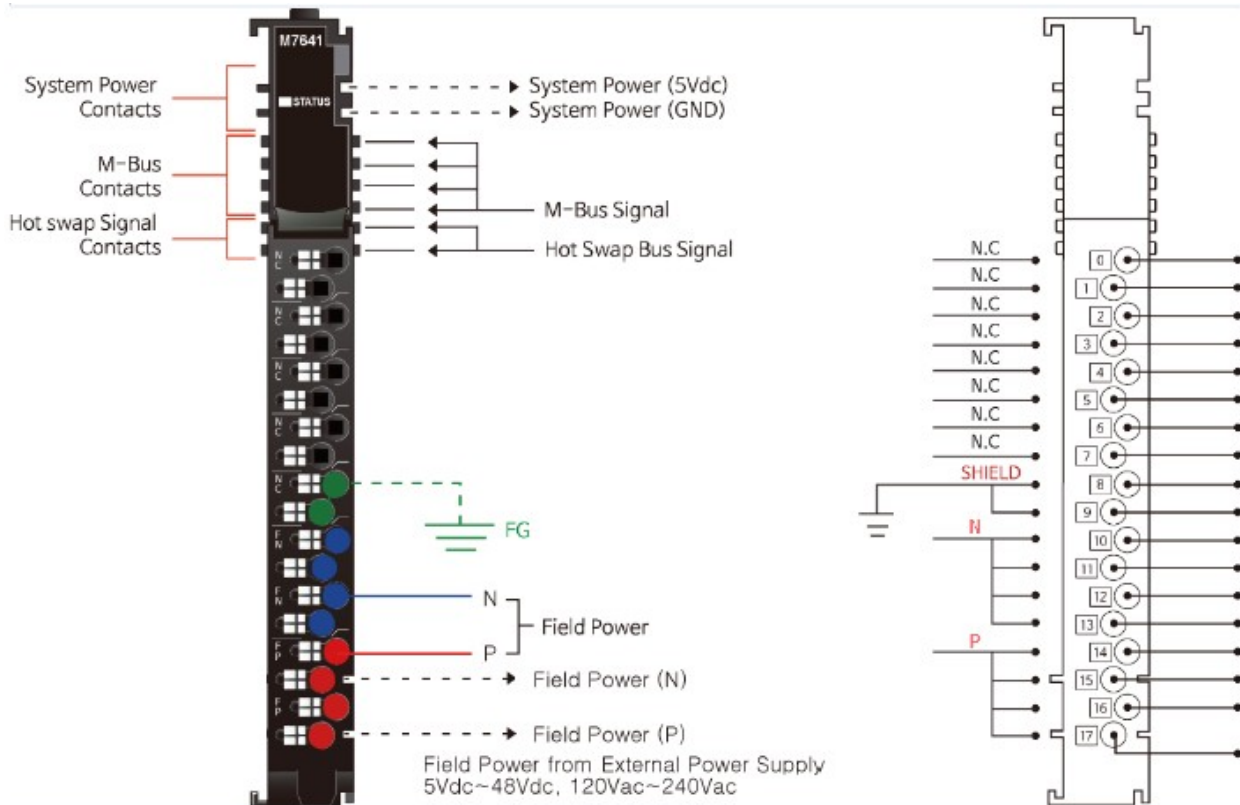
Items	Specification
Input Specification	
UL field power	Supply voltage : 24Vdc nominal, Class 2
Field power voltage	24Vdc nominal
Field power contacts current	Max. 10A Operating temperature -25°C~50°C : Max. 10A 50°C~60°C : Max. 9A
Indicator	1 Green Internal Bus Status
General specification	
System power dissipation	Max. 30mA @ 5Vdc (M7641 Only)
Single Wiring	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'

* Class 2, adjacent to voltage rating (30Vmax)

Specification

2.2. M7x41 Wiring Diagram

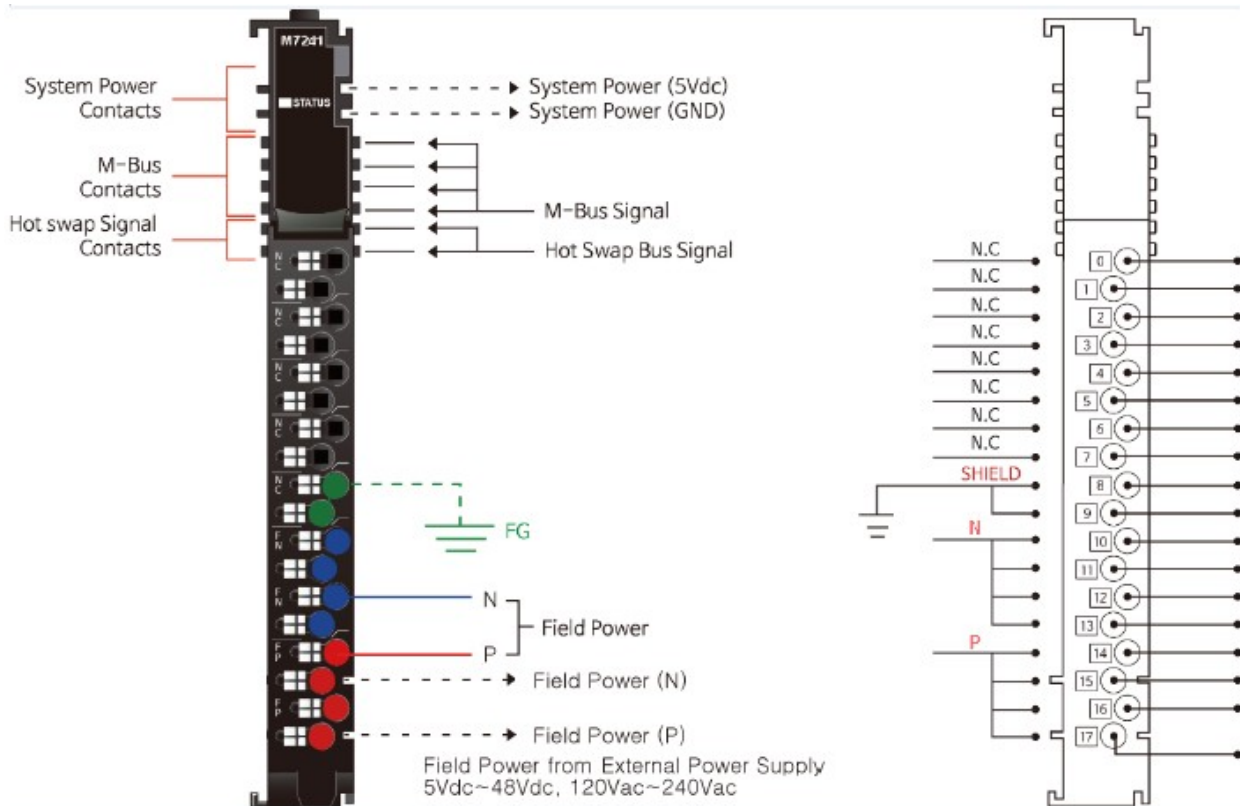
2.2.1. M7641 Wiring Diagram(ID Type)



Pin No.	Signal Description	Series No	Through Air	Over Surface	CTI
0	N.C	RTB18C	1.5mm	1.5mm	175≤CTI≤400
1	N.C	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	N.C				
3	N.C				
4	N.C				
5	N.C				
6	N.C				
7	N.C				
8	F.G				
9	F.G				
10	Field Power, Arbitrary (N)				
11	Field Power, Arbitrary (N)				
12	Field Power, Arbitrary (N)				
13	Field Power, Arbitrary (N)				
14	Field Power, Arbitrary (P)				
15	Field Power, Arbitrary (P)				
16	Field Power, Arbitrary (P)				
17	Field Power, Arbitrary (P)				

Specification

2.2.2. M7241 Wiring Diagram(Non ID Type)



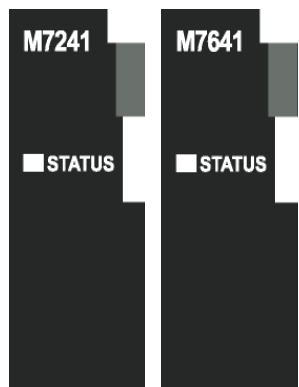
Pin No.	Signal Description
0	N.C
1	N.C
2	N.C
3	N.C
4	N.C
5	N.C
6	N.C
7	N.C
8	F.G
9	F.G
10	Field Power, Arbitrary (N)
11	Field Power, Arbitrary (N)
12	Field Power, Arbitrary (N)
13	Field Power, Arbitrary (N)
14	Field Power, Arbitrary (P)
15	Field Power, Arbitrary (P)
16	Field Power, Arbitrary (P)
17	Field Power, Arbitrary (P)

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. M7x41 LED Indicator

2.3.1. LED Indicator



LED No.	LED Function / Description	LED Color
Status	Internal Bus Status	Green

2.3.2. Status LED

Status	LED	To indicate
Normal signal.	Green	The unit is operating in normal condition. (After normal initialization of MBUS communication, this LED maintains ON status.)
Absence of network adapter	Off	Network adapter is not connected to this module.

2.4. Example

