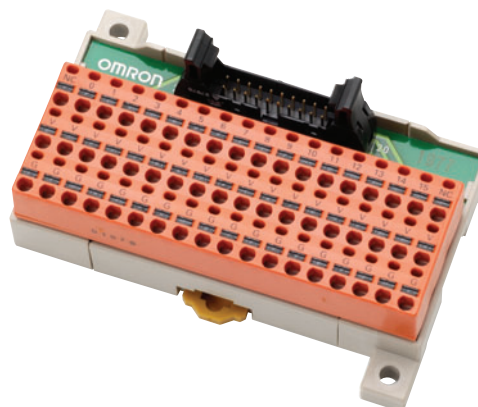


Accelerate Reductions in Factory Wiring and Labor with Screwless Terminals.

- Clamp terminals eliminate the need to tighten screws.
- Just insert the ferrule to complete one-touch wiring.



Ordering Information

Connector-Terminal Block Conversion Units

Number of input/outputs	Number of contacts	I/O	Common Terminals	Model	Mounted Connector model	Cable Connector model
20	20	Inputs and Outputs	NO	XW2F-20G7	XG4A-2031	XG4M-2030-T
40	40			XW2F-40G7	XG4A-4031	XG4M-4030-T
16	20	Inputs	YES	XW2F-20G7-IN16	XG4A-2031	XG4M-2030-T
32	40			XW2F-40G7-IN32	XG4A-4031	XG4M-4030-T
16	20	Outputs	YES	XW2F-20G7-OUT16	XG4A-2031	XG4M-2030-T
32	40			XW2F-40G7-OUT32	XG4A-4031	XG4M-4030-T

Accessories (Order Separately)

Connecting Cables for Connector-Terminal Block Conversion Units

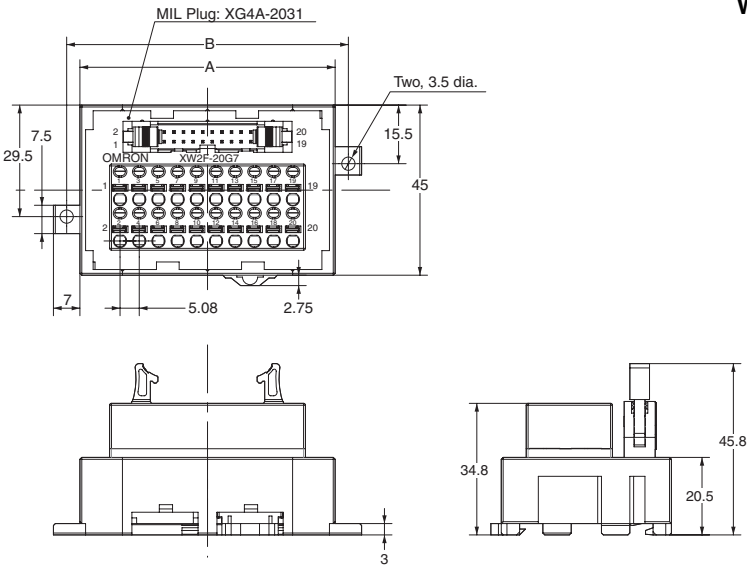
Refer to the *XW2Z datasheet*.

Ratings and Specifications

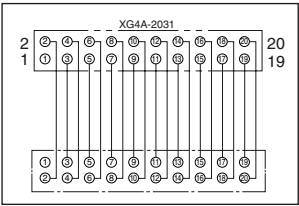
Rated current		1 A/point, 4 A/common
Rated voltage		24 VDC
Insulation resistance		100 MΩ min. (at 500 VDC)
Dielectric strength		500 VAC for 1 min
Ambient operating temperature		−10 to 55°C
Applicable wires	Applicable wire sizes	AWG24 to AWG14 (core cross-sectional area: 0.21 to 2.08 mm ²) Outer diameter of insulation must be 3.6 mm max.
	Stripped length	AWG24 to 16: 9 to 11 mm, AWG14: 10.5 to 11.5 mm

Dimensions

XW2F-20G7



Wiring Diagram



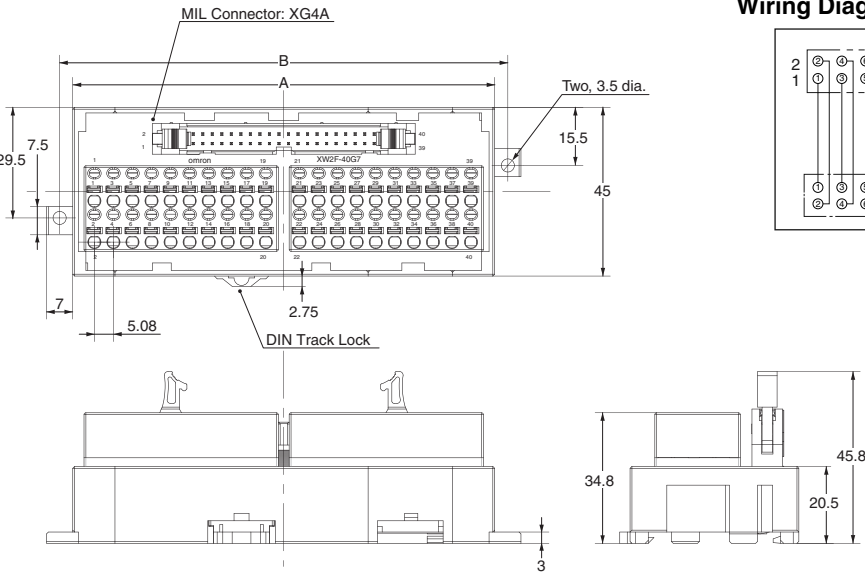
Dimensions

Model	Number of contacts	Dimension A (mm)	Dimension B (mm)
XW2F-20G7	20	67.5	74.5

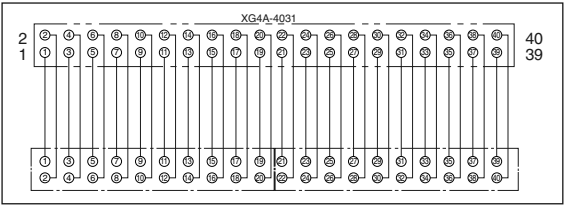
Input and Output Terminal Block XW2F-20G7

Sinle Row	1	3	5	7	9	11	13	15	17	19
Double Row	2	4	6	8	10	12	14	16	18	20

XW2F-40G7



Wiring Diagram



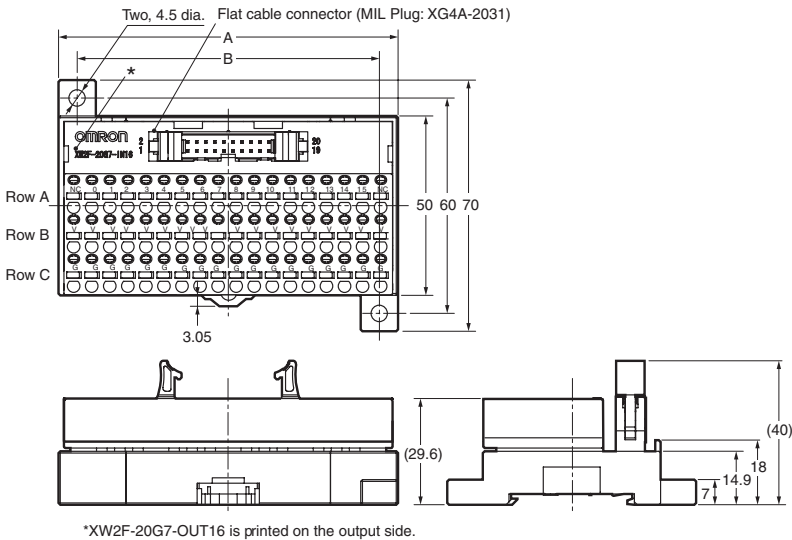
Dimensions

Model	Number of contacts	Dimension A (mm)	Dimension B (mm)
XW2F-40G7	40	112.5	119.5

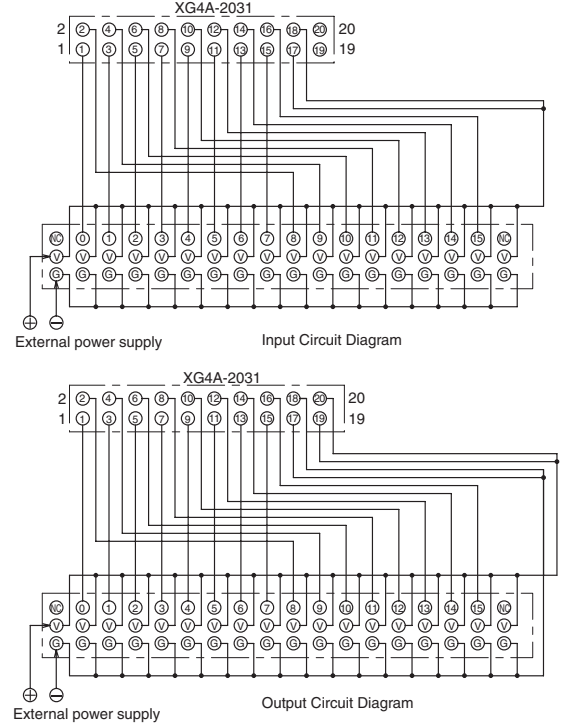
Input and Output Terminal Block XW2F-40G7

Sinle Row	1	3	5	7	9	11	13	15	17	19	21	23	25	27	29	31	33	35	37	39
Double Row	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40

XW2F-20G7-IN16, XW2F-20G7-OUT16



Wiring Diagram



Dimensions			
Model	Number of contacts	Dimension A (mm)	Dimension B (mm)
XW2F-20G7-IN16 XW2F-20G7-OUT16	20	95.5	85

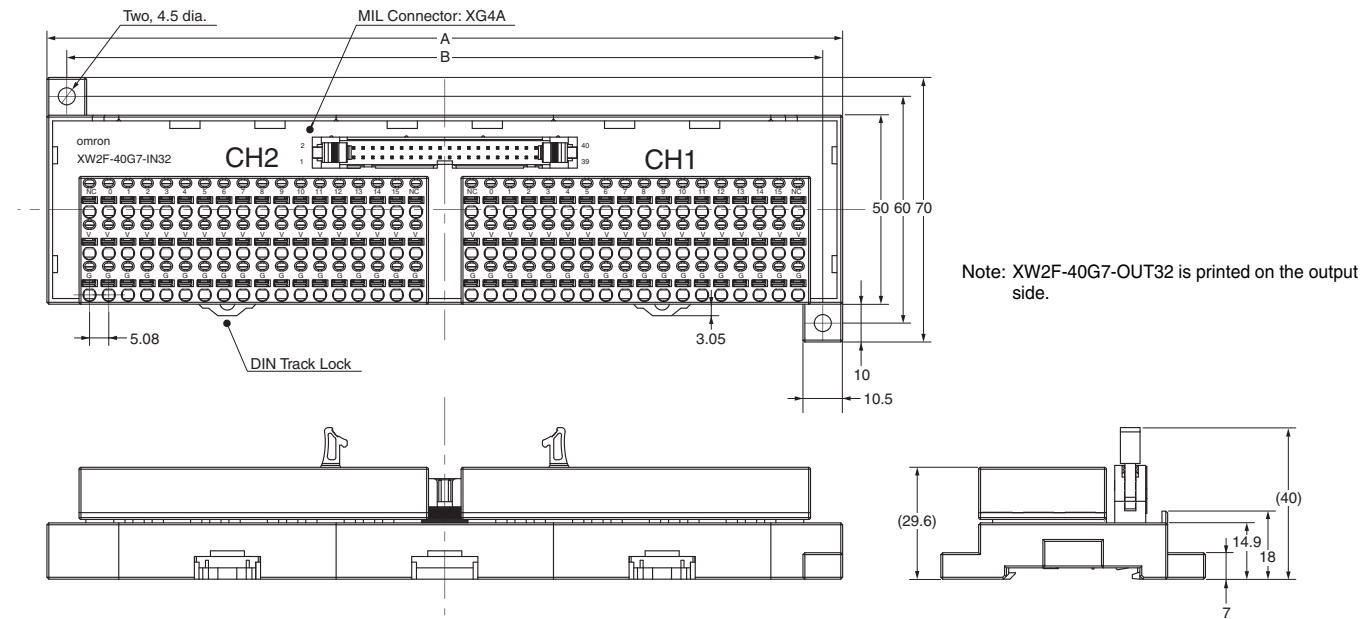
Input Terminal Block XW2F-20G7-IN16 (Orange)

Row A	NC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	NC
Row B	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Row C	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

Output Terminal Block XW2F-20G7-OUT16 (Yellow)

Row A	NC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	NC
Row B	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Row C	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

XW2F-40G7



Wiring Diagram

Input Terminal Block XW2F-40G7-IN32 (Orange)		
Connector side	Terminal Block side	
MIL Connector	CH1	CH2
1	–	NC
2	–	NC
3	–	V
4	–	V
5	–	15
6	–	7
7	–	14
8	–	6
9	–	13
10	–	5
11	–	12
12	–	4
13	–	11
14	–	3
15	–	10
16	–	2
17	–	9
18	–	1
19	–	8
20	–	0
21	NC	–
22	NC	–
23	V	–
24	V	–
25	15	–
26	7	–
27	14	–
28	6	–
29	13	–
30	5	–
31	12	–
32	4	–
33	11	–
34	3	–
35	10	–
36	2	–
37	9	–
38	1	–
39	8	–
40	0	–

Output Terminal Block XW2F-40G7-OUT32 (Yellow)		
Connector side	Terminal Block side	
MIL Connector	CH1	CH2
1	–	V
2	–	V
3	–	G
4	–	G
5	–	15
6	–	7
7	–	14
8	–	6
9	–	13
10	–	5
11	–	12
12	–	4
13	–	11
14	–	3
15	–	10
16	–	2
17	–	9
18	–	1
19	–	8
20	–	0
21	V	–
22	V	–
23	G	–
24	G	–
25	15	–
26	7	–
27	14	–
28	6	–
29	13	–
30	5	–
31	12	–
32	4	–
33	11	–
34	3	–
35	10	–
36	2	–
37	9	–
38	1	–
39	8	–
40	0	–

Dimensions

Model	Number of contacts	Dimension A (mm)	Dimension B (mm)
XW2F-40G7-IN32 XW2F-40G7-OUT32	40	210.5	200

Input Terminal Block XW2F-40G7-IN32 (Orange)

Single Row	CH2	NC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	NC
	CH1	NC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	NC
Double Row	CH2	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
	CH1	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Triple Row	CH2	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
	CH1	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

Output Terminal Block XW2F-40G7OUT32 (Yellow)

Single Row	CH2	NC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	NC
	CH1	NC	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	NC
Double Row	CH2	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
	CH1	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
Triple Row	CH2	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
	CH1	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G

Safety Precautions

Precautions for Correct Use

● Wiring Precautions

- Do not perform wiring work, remove connectors, or connect connectors while power is being supplied. Electric shock or damage to the device may result.
- Double-check all wiring before turning ON the power supply.
- After wiring, confirm that the cable is connected.
- After wiring, route the cable so that force is not applied directly to the connections.
- Insert only one wire in each wire insertion opening. It may not be possible to remove the wires if more than one wire is inserted.
- Do not apply a current higher than the rated value. Be sure to check the rated current, which depends on the model of the cable.

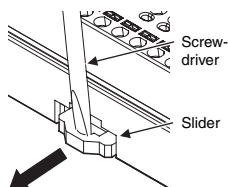
● Wires for Terminal Blocks

- Do not damage the cores when stripping the insulation from them.
- Always twist stranded wires together before connecting them.
- Do not presolder wires. It may not be possible to connect them or remove them.

● Mounting to and Removing from DIN Track

- When mounting the Unit to a DIN Track, release the lock on the slider, mount the Unit to DIN Track, and then lock the slider back in place.
- After locking the slider, confirm that the Unit is actually locked on the DIN Track.
- When removing the Unit from a DIN Track, insert a screwdriver into the slider, release the lock, and remove the Unit from the DIN Track.
- Always secure the Unit(s) on the DIN Track by mounting End Plates on either end. The following products are sold separately.

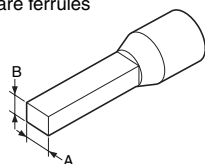
DIN Track	PFP-50N PFP-100N
DIN Track	PFP-M



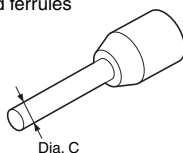
● Applicable Ferrules

- Use ferrules of the lengths and thicknesses specified below. If other lengths or thicknesses are used, connection may not be possible or it may not be possible to insert or remove the posts.

Square ferrules



Round ferrules



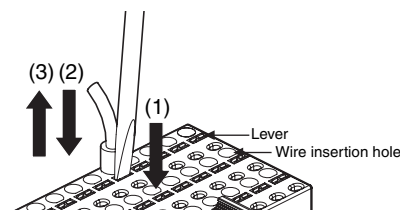
Square ferrules	Dimension A	1.0 to 2.3	The cross-sectional area after crimping must be 4.8 mm ² or less
	Dimension B	0.8 to 2.65	
Round ferrules	Dimension C	0.8 to 2.3 dia.	

● Recommended Ferrules and Crimp Tools

Type of ferrule	Manufacturer	Size	Ferrule model	Recommended crimp tool
Square ferrules	Phoenix Contact	AWG24	AI0.25-8YE	UD6 ZA3
		AWG22	AI0.34-8TQ	
		AWG20	AI0.5-10WH AI0.5-8WH	
		AWG18	AI0.75-10GY AI0.75-8GY	
		AWG16	AI1.5-10BK	
	Nihon Wieldermuller	AWG24	H0.25/12	PZ6 roto
		AWG22	H0.34/12	
		AWG20	H0.5/16 H0.5/14	
		AWG18	H0.75/16 H0.75/14	
		AWG16	H1.5/16	
Round ferrules	Nichifu	AWG22	TGV TC-1.25-11T TGN TC-1.25-11T	NH11 NH21 NH65
		AWG20		
		AWG18		
		AWG16		

● Wiring Terminal Blocks

- Insert wires as follows:
Stranded wires: Press in on the lever with a flat-blade screwdriver (1). Insert the wire (2).
- Solid wires or ferrules: Insert the wire/post to the back of the wire insertion opening. (The lever does not need to be used.)
- Remove the wire using the following procedure. (This procedure can be used for twisted wire, solid wire, or ferrules.) Press in on the lever with a flat-blade screwdriver (1). Remove the wire (3).



- To operate the lever, use a flat-blade screwdriver with a fixed thickness from the tip to the base of the screwdriver, as specified below.

Side	Front	Dimension D	0.3 to 0.8
		Dimension E	2.9 to 3.6

OMRON provides the following flat-blade screwdrivers for use in operating the lever.

Recommended Flat-blade Screwdrivers

Model
XW4Z-00B
XW4Z-00C

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2012.7

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