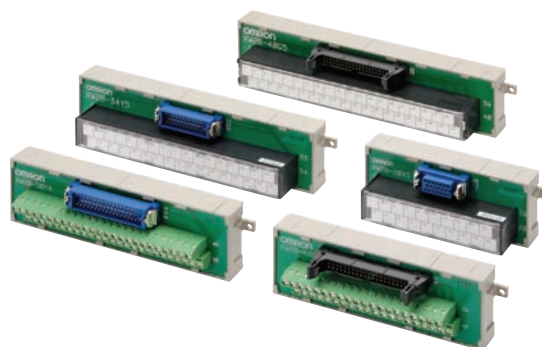


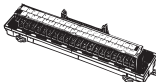
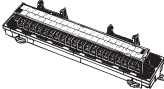
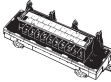
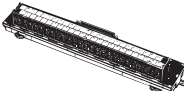
## Simplifies Connector and terminal block replacement, and requires less in-panel wiring.

- Mount to DIN Track or via screws.
- MIL Flat Cable Connectors and Multi-pole, Square Connectors are standard.
- Terminal blocks available with either M3 or M3.5 screws.
- Connecting Cables for Programmable Controllers available (sold separately).



## Ordering Information

### Connectors

| Type                         | Terminal Block                  | Connector                                   | No. of poles                                                                         | Appearance                                                                            | Model                                                                                 |
|------------------------------|---------------------------------|---------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Flat Cable                   | Terminal block with M3 screws   | Flat Cable Connectors<br>*1                 | 20                                                                                   |    | XW2B-20G4                                                                             |
|                              |                                 |                                             | 34                                                                                   |                                                                                       | XW2B-34G4                                                                             |
|                              |                                 |                                             | 40                                                                                   |                                                                                       | XW2B-40G4                                                                             |
|                              |                                 |                                             | 50                                                                                   |                                                                                       | XW2B-50G4                                                                             |
|                              |                                 |                                             | 60                                                                                   |                                                                                       | XW2B-60G4                                                                             |
|                              | Terminal block with M3.5 screws |                                             | 20                                                                                   |   | XW2B-20G5                                                                             |
|                              |                                 |                                             | 34                                                                                   |                                                                                       | XW2B-34G5                                                                             |
|                              |                                 |                                             | 40                                                                                   |                                                                                       | XW2B-40G5                                                                             |
|                              |                                 |                                             | 50                                                                                   |                                                                                       | XW2B-50G5                                                                             |
|                              |                                 |                                             | 60                                                                                   |                                                                                       | XW2B-60G5                                                                             |
| Twin-connector               | Terminal block with M3.5 screws | 40                                          |  | XW2B-40G5-T                                                                           |                                                                                       |
| Daisy Chain                  |                                 | 20                                          |                                                                                      |  | XW2B-20G5-D                                                                           |
| Multi-pole, Square Connector | Terminal block with M3 screws   | Multi-pole, Square Connector<br>Plugs<br>*2 | 20                                                                                   |                                                                                       |  |
|                              |                                 |                                             | 34                                                                                   | XW2B-34Y4                                                                             |                                                                                       |
|                              |                                 |                                             | 50                                                                                   | XW2B-50Y4                                                                             |                                                                                       |
|                              | Terminal block with M3.5 screws |                                             | 50                                                                                   |   | XW2B-50Y5                                                                             |

\*1. Flat Cable Connectors have one polarity slot.

\*2. These Plugs and Sockets are made by Honda Tsushin Kogyo.

### Accessories (Order Separately)

#### Connecting Cables for Connector-Terminal Block Conversion Units

For details on the Connecting Cable used between XW2B Daisy Chain-type Connectors, refer to the *XW2Z datasheet*.

## Ratings and Specifications

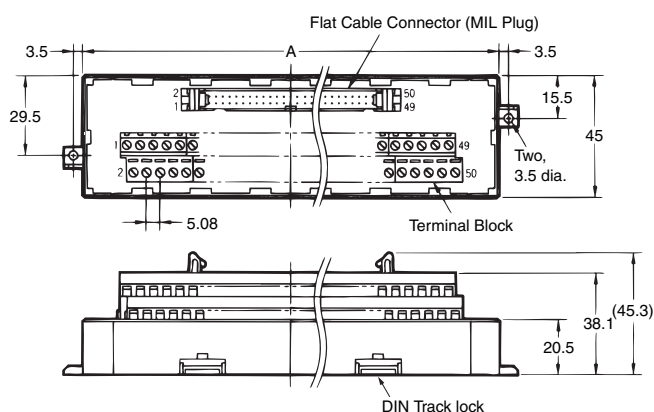
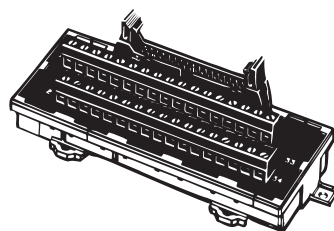
| Item                          | Type | XW2B-□□G□<br>Flat Cable Units                  | XW2B-□□Y□<br>Multi-pole, Square-connector Units | XW2B-40F5-P<br>Board I/O Unit |
|-------------------------------|------|------------------------------------------------|-------------------------------------------------|-------------------------------|
| Rated current                 |      | 1 A                                            |                                                 |                               |
| Rated voltage                 |      | 125 VAC                                        |                                                 |                               |
| Insulation resistance         |      | 100 M $\Omega$ min. (at 500 VDC)               |                                                 |                               |
| Dielectric strength           |      | 500 VAC for 1 min (leakage current: 1 mA max.) |                                                 |                               |
| Ambient operating temperature |      | 0 to 55°C                                      |                                                 |                               |

## Dimensions

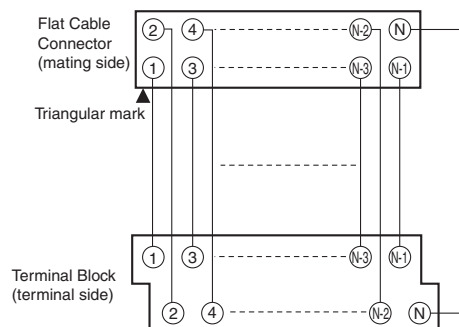
(Unit: mm)

### Flat Cable Units with a Terminal Block with M3 Screws

#### XW2B-□□G4



### Wiring Diagram



Note: All pins on the Flat Cable Connector correspond 1-to-1 to the terminal of the same number on the terminal block as shown above.

### Dimensions

| Model     | No. of poles | Dimension A (mm) | Applicable Connector models *1 |
|-----------|--------------|------------------|--------------------------------|
| XW2B-20G4 | 20           | 67.5             | XG4A-2031                      |
| XW2B-34G4 | 34           | 112.5            | XG4A-3431                      |
| XW2B-40G4 | 40           | 135.0            | XG4A-4031                      |
| XW2B-50G4 | 50           | 157.5            | XG4A-5031                      |
| XW2B-60G4 | 60           | 180.0            | XG4A-6031                      |

\*Flat Cable Connectors have one polarity slot.

Note: Terminal block pitch is 5.08 mm.

Use a wire size between 0.3 and 1.25 mm<sup>2</sup> (AWG22 to AWG16).

The wire insertion holes are 1.8 × 2.5 (H × W) mm.

### Applicable Connectors

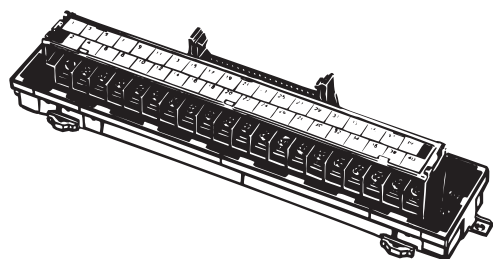
| Model     | Applicable Connectors (order separately)               |                                                  |                |
|-----------|--------------------------------------------------------|--------------------------------------------------|----------------|
|           | Flat Cable Connectors, MIL Sockets with Strain Reliefs | Discrete-wire IDC Connectors, Double-row Sockets |                |
|           |                                                        | Connectors *1                                    | Semi-covers *2 |
| XW2B-20G4 | XG4M-2030-T                                            | XG5M-2032-N<br>XG5M-2035-N                       | XG5S-1001      |
| XW2B-34G4 | XG4M-3430-T                                            | XG5M-3432-N<br>XG5M-3435-N                       | XG5S-1701      |
| XW2B-40G4 | XG4M-4030-T                                            | XG5M-4032-N<br>XG5M-4035-N                       | XG5S-2001      |
| XW2B-50G4 | XG4M-5030-T                                            | XG5M-5032-N<br>XG5M-5035-N                       | XG5S-2501      |
| XW2B-60G4 | XG4M-6030-T                                            | XG5M-6032-N<br>XG5M-6035-N                       | XG5S-3001      |

\*1. Either the XG5M-□□32-N or the XG5M-□□35-N may be used.

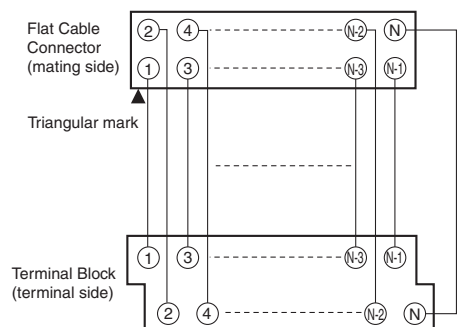
\*2. Each Connector requires two Semi-covers.

## Flat Cable Units with a Terminal Block with M3.5 Screws

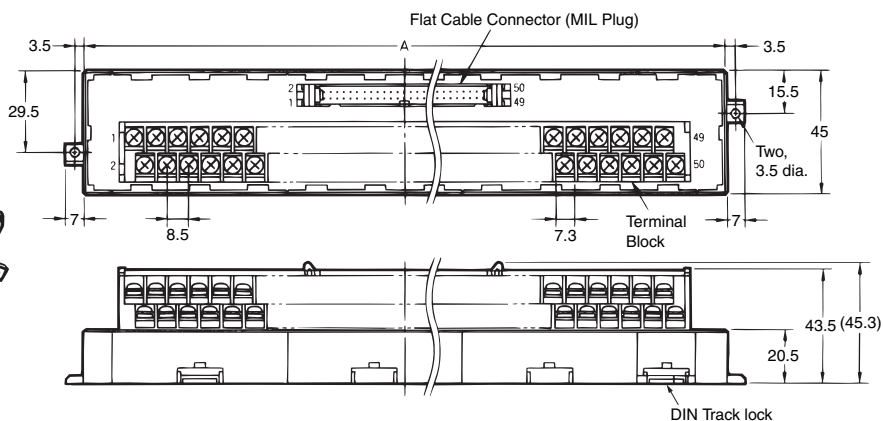
### XW2B-□□G5



### Wiring Diagram



Note: All pins on the Flat Cable Connector correspond 1-to-1 to the terminal of the same number on the terminal block as shown above.



### Dimensions

| Model     | No. of poles | Dimension A (mm) | Applicable Connector models * |
|-----------|--------------|------------------|-------------------------------|
| XW2B-20G5 | 20           | 112.5            | XG4A-2031                     |
| XW2B-34G5 | 34           | 180.0            | XG4A-3431                     |
| XW2B-40G5 | 40           | 202.5            | XG4A-4031                     |
| XW2B-50G5 | 50           | 247.5            | XG4A-5031                     |
| XW2B-60G5 | 60           | 292.5            | XG4A-6031                     |

\*Flat Cable Connectors have one polarity slot.

Note: Terminal block pitch is 8.5 mm.

### Applicable Connectors

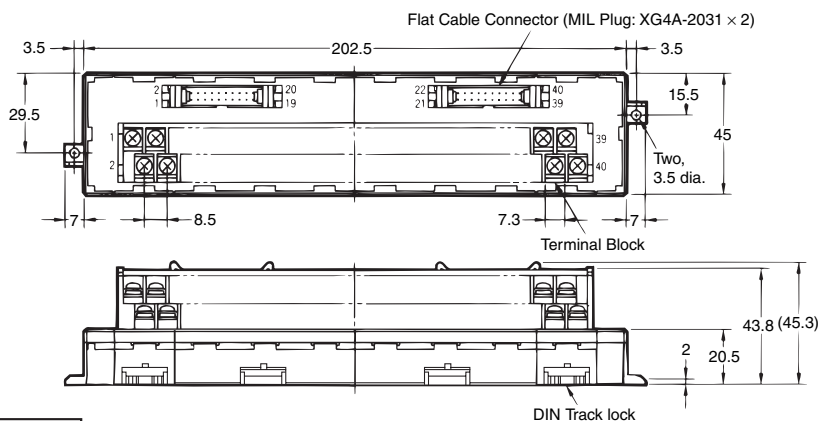
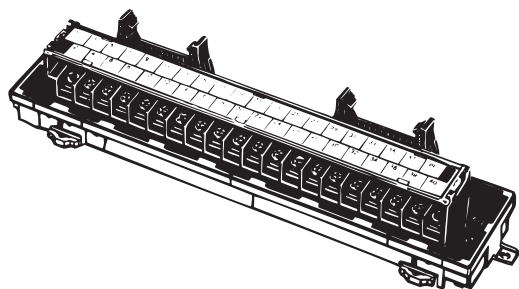
| Model     | Applicable Connectors (order separately)               |                                                  |                |
|-----------|--------------------------------------------------------|--------------------------------------------------|----------------|
|           | Flat Cable Connectors, MIL Sockets with Strain Reliefs | Discrete-wire IDC Connectors, Double-row Sockets |                |
|           |                                                        | Connectors *1                                    | Semi-covers *2 |
| XW2B-20G5 | XG4M-2030-T                                            | XG5M-2032-N<br>XG5M-2035-N                       | XG5S-1001      |
| XW2B-34G5 | XG4M-3430-T                                            | XG5M-3432-N<br>XG5M-3435-N                       | XG5S-1701      |
| XW2B-40G5 | XG4M-4030-T                                            | XG5M-4032-N<br>XG5M-4035-N                       | XG5S-2001      |
| XW2B-50G5 | XG4M-5030-T                                            | XG5M-5032-N<br>XG5M-5035-N                       | XG5S-2501      |
| XW2B-60G5 | XG4M-6030-T                                            | XG5M-6032-N<br>XG5M-6035-N                       | XG5S-3001      |

\*1. Either the XG5M-□□32-N or the XG5M-□□35-N may be used.

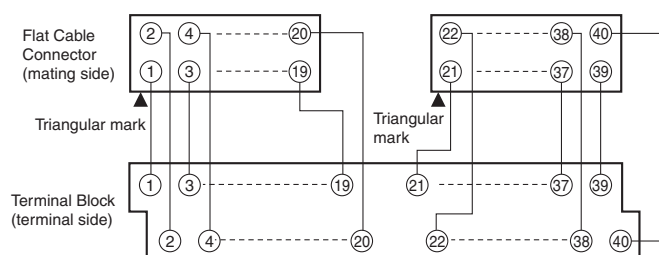
\*2. Each Connector requires two Semi-covers.

## Twin-connector Units with a Terminal Block with M3.5 Screws

### XW2B-40G5-T



### Wiring Diagram



Note: All pins on the Flat Cable Connector correspond 1-to-1 to the terminal of the same number on the terminal block as shown above.

### Applicable Connectors

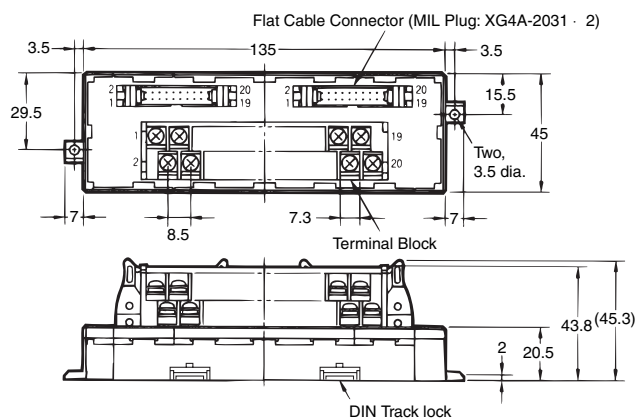
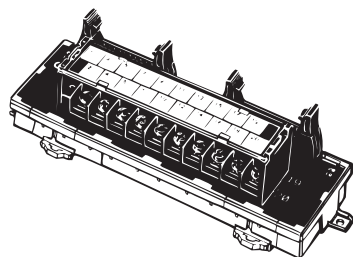
| Model       | Applicable Connectors (order separately)               |                                                  |                |
|-------------|--------------------------------------------------------|--------------------------------------------------|----------------|
|             | Flat Cable Connectors, MIL Sockets with Strain Reliefs | Discrete-wire IDC Connectors, Double-row Sockets |                |
|             |                                                        | Connectors *1                                    | Semi-covers *2 |
| XW2B-40G5-T | XG4M-2030-T                                            | XG5M-2032-N<br>XG5M-2035-N                       | XG5S-1001      |

\*1. Either the XG5M-□□32-N or the XG5M-□□35-N may be used.

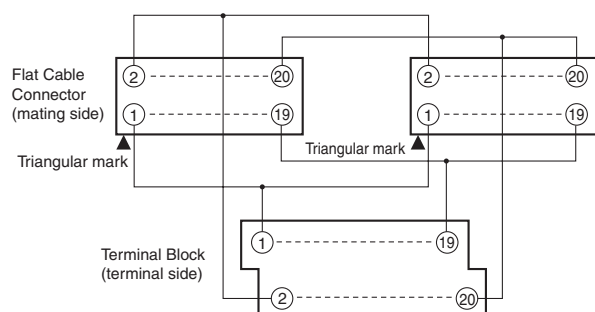
\*2. Each Connector requires two Semi-covers.

## Daisy Chain Units with a Terminal Block with M3.5 Screws

### XW2B-20G5-D



### Wiring Diagram



Note: All pins on the Flat Cable Connector correspond 1-to-1 to the terminal of the same number on the terminal block as shown above.

### Applicable Connectors

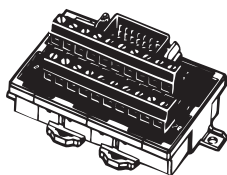
| Model       | Applicable Connectors (order separately)               |                                                  |                |
|-------------|--------------------------------------------------------|--------------------------------------------------|----------------|
|             | Flat Cable Connectors, MIL Sockets with Strain Reliefs | Discrete-wire IDC Connectors, Double-row Sockets |                |
|             |                                                        | Connectors *1                                    | Semi-covers *2 |
| XW2B-20G5-D | XG4M-2030-T                                            | XG5M-2032-N<br>XG5M-2035-N                       | XG5S-1001      |

\*1. Either the XG5M-□□32-N or the XG5M-□□35-N may be used.

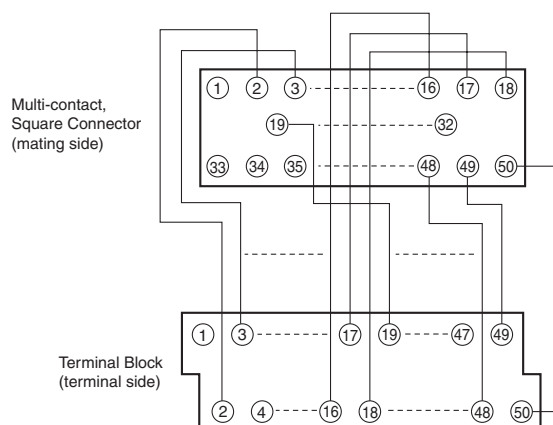
\*2. Each Connector requires two Semi-covers.

## Multi-pole, Square-connector Plug Units with a Terminal Block with M3 Screws

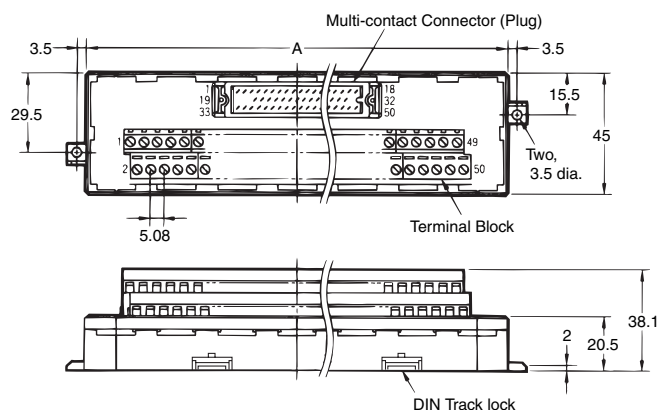
XW2B-□□Y4



### Wiring Diagram (Example for Terminal Block with 50 Poles)



Note: All pins on the Multi-pole, Square Connector correspond 1-to-1 to the terminal of the same number on the terminal block as shown above.



### Dimensions

| Model     | No. of poles | Dimension A (mm) | Applicable Connector models * |
|-----------|--------------|------------------|-------------------------------|
| XW2B-20Y4 | 20           | 67.5             | MR-20RMD2                     |
| XW2B-34Y4 | 34           | 112.5            | MR-34RMD2                     |
| XW2B-50Y4 | 50           | 157.5            | MR-50RMD2                     |

\*These Connectors are made by Honda Tsushin Kogyo.

Note: Terminal block pitch is 5.08 mm.

Use a wire size between 0.3 and 1.25 mm<sup>2</sup> (AWG22 to AWG16).

The wire insertion holes are 1.8 × 2.5 (H × W) mm.

### Applicable Connectors

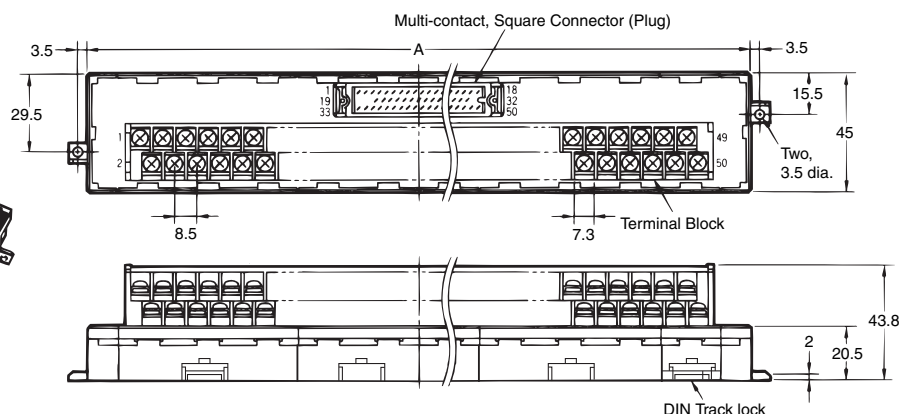
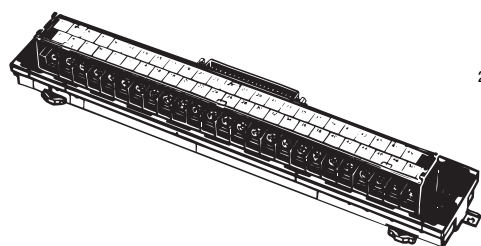
| Model     | Applicable Connectors *1                                         | Hood *1 |
|-----------|------------------------------------------------------------------|---------|
| XW2B-20Y4 | MR-20F (soldered)<br>MRP-20F01 (crimped) *2<br>MR-20FW (wrapped) | MR-20L  |
| XW2B-34Y4 | MR-34F (soldered)<br>MRP-34F01 (crimped) *2<br>MR-34FW (wrapped) | MR-34L  |
| XW2B-50Y4 | MR-50F (soldered)<br>MRP-50F01 (crimped) *2<br>MR-50FW (wrapped) | MR-50L  |

\*1. All applicable Connector Hoods are made by Honda Tsushin Kogyo.

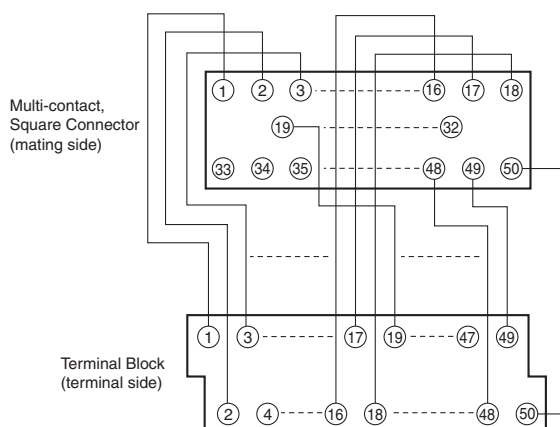
\*2. Use MRP-F113 or MRP-F103 crimp terminals made by Honda Tsushin Kogyo.

## Multi-pole, Square-connector Plug Units with a Terminal Block with M3.5 Screws

### XW2B-50Y5



### Wiring Diagram (Example for Terminal Block with 50 Poles)



Note: All pins on the Multi-pole, Square Connector correspond 1-to-1 to the terminal of the same number on the terminal block as shown above.

### Dimensions

| Model     | No. of poles | Dimension A (mm) | Applicable Connector models * |
|-----------|--------------|------------------|-------------------------------|
| XW2B-50Y5 | 50           | 247.5            | MR-50RMD2                     |

\*These Connectors are made by Honda Tsushin Kogyo.  
Note: Terminal block pitch is 8.5 mm.

### Applicable Connectors

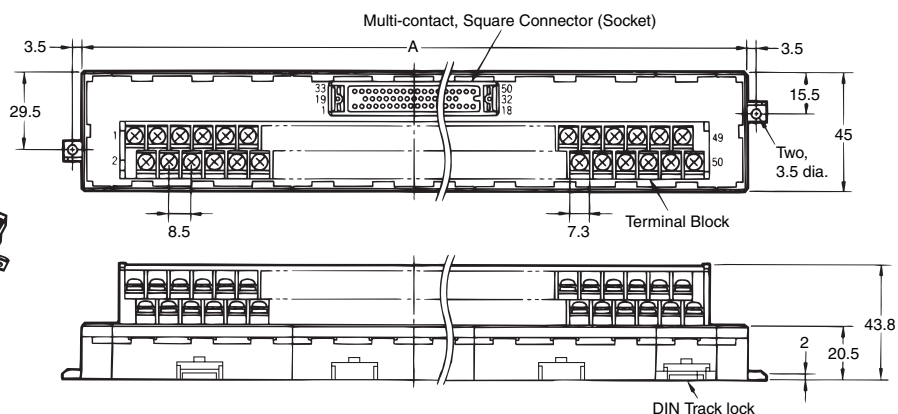
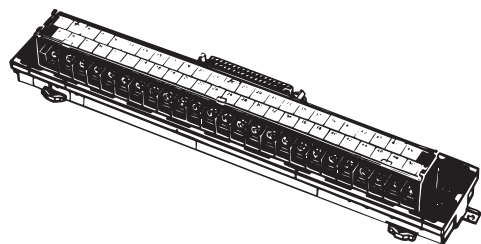
| Model     | Applicable Connectors *1                                         | Hood *1 |
|-----------|------------------------------------------------------------------|---------|
| XW2B-50Y5 | MR-50F (soldered)<br>MRP-50F01 (crimped) *2<br>MR-50FW (wrapped) | MR-50L  |

\*1. All applicable Connector Hoods are made by Honda Tsushin Kogyo.

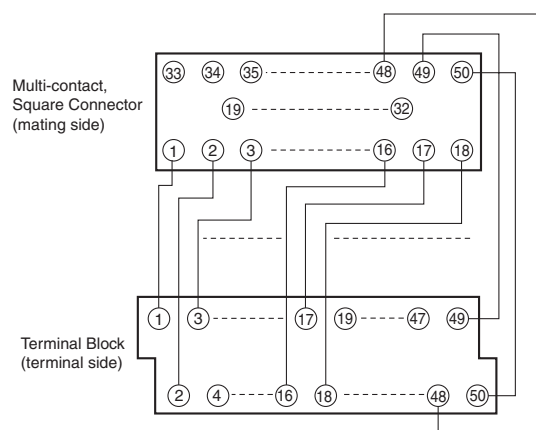
\*2. Use MRP-F113 or MRP-F103 crimp terminals made by Honda Tsushin Kogyo.

## Multi-pole, Square Connector Socket Units with a Terminal Block with M3.5 Screws

XW2B-□□X5



### Wiring Diagram (Example for Terminal Block with 50 Poles)



Note: All pins on the Multi-pole, Square Connector correspond 1-to-1 to the terminal of the same number on the terminal block as shown above.

### Dimensions

| Model     | No. of poles | Dimension A (mm) | Applicable Connector models * |
|-----------|--------------|------------------|-------------------------------|
| XW2B-20X5 | 20           | 112.5            | MR-20RFD2                     |
| XW2B-34X5 | 34           | 180.0            | MR-34RFD2                     |
| XW2B-50X5 | 50           | 247.5            | MR-50RFD2                     |

\*These Connectors are made by Honda Tsushin Kogyo.  
Note: Terminal block pitch is 8.5 mm.

### Applicable Connectors

| Model     | Applicable Connectors *1                                         | Hood *1 |
|-----------|------------------------------------------------------------------|---------|
| XW2B-20X5 | MR-20M (soldered)<br>MRP-20M01 (crimped) *2<br>MR-20MW (wrapped) | MR-20L  |
| XW2B-34X5 | MR-34M (soldered)<br>MRP-34M01 (crimped) *2<br>MR-34MW (wrapped) | MR-34L  |
| XW2B-50X5 | MR-50M (soldered)<br>MRP-50M01 (crimped) *2<br>MR-50MW (wrapped) | MR-50L  |

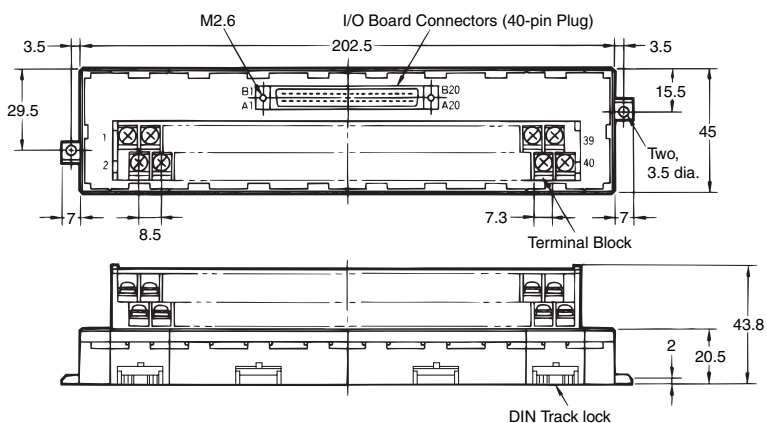
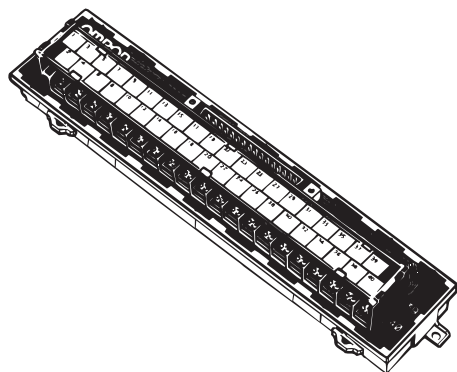
\*1. All applicable Connector Hoods are made by Honda Tsushin Kogyo.

\*2. Use MRP-F113 or MRP-F103 crimp terminals made by Honda Tsushin Kogyo.



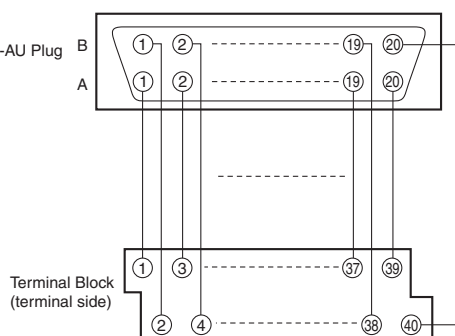
## Board I/O Units with a Terminal Block with M3.5 Screws

### XW2B-40F5-P



### Wiring Diagram

FCN-364P040-AU Plug  
(mating side)



### Dimensions

| Model       | No. of poles | Applicable Connectors and Circuits *            |
|-------------|--------------|-------------------------------------------------|
| XW2B-40F5-P | 40           | FCN-364P40-AU (Connector)<br>FCN-360A1 (Anchor) |

\*These Connectors and circuits are made by Fujitsu component.  
Note: Terminal block pitch is 8.5 mm.

### Applicable Connectors

| Model       | Applicable Connectors *1                             | Hood *1      |
|-------------|------------------------------------------------------|--------------|
| XW2B-40F5-P | FCN361J040-AU (soldered)<br>FCN363J040-AAU (crimped) | FCN360C040-B |

\*1. All applicable Connectors and Covers are made by Fujitsu component.

\*2. Refer to the *OMNUC U Series user's manual* for details on the Connecting Cable used between the XW2B-40F5-P and the U-series AC Servo Driver.

## Safety Precautions

### Precautions for Correct Use

#### ● Wiring

- Always turn OFF the power supply before wiring. Otherwise, cables or other conductors can short the terminals and cause the Unit to fail.
- Do not connect or disconnect Connectors with the power turned ON. Otherwise, it may cause malfunctions.

#### ● Wiring Terminal Blocks

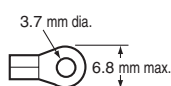
- Direct Wire Connections with a Terminal Block with M3 Screws
  - Use a wire size between 0.3 and 1.25 mm<sup>2</sup> (AWG22 to AWG16).
  - Prepare the end of each wire as shown in the following diagram.



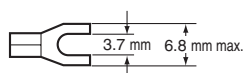
- The wire insertion holes are 1.8 × 2.5 (H × W) mm on the terminal block with M3 screws.

- Direct Wire Connections with a Terminal Block with M3.5 Screws

##### Round



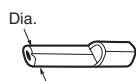
##### Forked



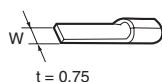
| Applicable crimp terminals |           | Applicable wires                                  |
|----------------------------|-----------|---------------------------------------------------|
| Round                      | 1.25-3.5  | AWG22 to AWG16<br>(0.30 to 1.25 mm <sup>2</sup> ) |
|                            | 2-3.5     | AWG16 to AWG14<br>(1.25 to 2.0 mm <sup>2</sup> )  |
| Forked                     | 1.25Y-3.5 | AWG22 to AWG16<br>(0.30 to 1.25 mm <sup>2</sup> ) |
|                            | 2Y-3.5    | AWG16 to AWG14<br>(1.25 to 2.0 mm <sup>2</sup> )  |

(With a Terminal Block with M3 Screws)

##### Round rod



##### Blade



| Applicable crimp terminals |                                      | Applicable wires                                  |
|----------------------------|--------------------------------------|---------------------------------------------------|
| Rod                        | TC-05<br>Dia. = 1                    | AWG22 to AWG18<br>(0.30 to 0.75 mm <sup>2</sup> ) |
|                            | TC-1.25S<br>Dia. = 1.5               | AWG22 to AWG16<br>(0.30 to 1.25 mm <sup>2</sup> ) |
| Blade                      | BT1.25-9-1<br>BT1.25-10-1<br>W = 2.2 | AWG22 to AWG16<br>(0.30 to 1.25 mm <sup>2</sup> ) |

Note: Round rod and blade crimp terminals are made by Nichifu.

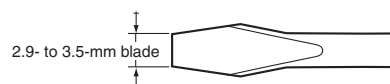
#### ● Terminal Screw Tightening Torque

- Select a tightening torque from the following table when connecting wires or crimp terminals to the terminal block.

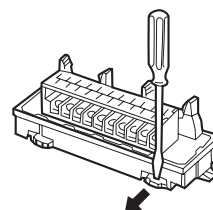
| Terminal Block   | Tightening torque<br>N·m |
|------------------|--------------------------|
| With M3 screws   | 0.40                     |
| With M3.5 screws | 0.59                     |

#### ● Mounting Units to and Removing Units from DIN Track

- For terminal blocks with M3 screws, use a flat-head screwdriver like the one shown in the following diagram.



- XW2B Connector-Terminal Block Conversion Units can be mounted side-to-side on DIN Track. The flanges for mounting screws are located on each side at the bottom of the XW2B.
- Secure both ends of the XW2B with End Plates.
- When removing the Unit from a DIN Track, insert a flat-head screwdriver into the slider and pull the lock out.



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