# XW2Z

CSM\_XW2Z\_DS\_E\_5\_2

Connect Connector-Terminal
Block Conversion Units (XW2□) to
I/O Units for Programmable
Controllers with one touch.



Shielded

# **Ordering Information**

For 32-point, Connector-type I/O Units for Programmable Controllers

 $XW2Z-\Box\Box\Box$ A

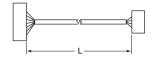
(For XW2D-20G6/XW2B-20G□/-40G5-T/-20G5-D/XW2C-20G5-IN16/20G6-IO16/XW2E-20G5-IN16/XW2F-20G7-IN16/-OUT16/XW2N-20G8-IN16)

| Cable length L (m) * | Model     |
|----------------------|-----------|
| 0.5                  | XW2Z-050A |
| 1.0                  | XW2Z-100A |
| 1.5                  | XW2Z-150A |
| 2.0                  | XW2Z-200A |
| 3.0                  | XW2Z-300A |
| 5.0                  | XW2Z-500A |
| 10.0                 | XW2Z-010A |
| 15.0                 | XW2Z-15MA |
| 20.0                 | XW2Z-20MA |

**XW2Z-**□□□**AU** (For XW2D-20C6)

| Cable length L (m) * | Model      |
|----------------------|------------|
| 0.5                  | XW2Z-050AU |
| 1.0                  | XW2Z-100AU |
| 1.5                  | XW2Z-150AU |
| 2.0                  | XW2Z-200AU |
| 3.0                  | XW2Z-300AU |
| 5.0                  | XW2Z-500AU |

<sup>\*</sup>Cable length L (m)



# For 32-point, Connector-type I/O Units (Group 2) for Programmable Controllers For 64-point, Connector-type I/O Units for Programmable Controllers

**XW2Z-**□□□**B** (For XW2D-40G6/XW2B-40G□)

| Туре             | Cable length L (m) * | Model        |
|------------------|----------------------|--------------|
|                  | 0.5                  | XW2Z-050B    |
|                  | 1.0                  | XW2Z-100B    |
|                  | 1.5                  | XW2Z-150B    |
|                  | 2.0                  | XW2Z-200B    |
| Normal<br>wiring | 3.0                  | XW2Z-300B    |
| 9                | 5.0                  | XW2Z-500B    |
|                  | 10.0                 | XW2Z-010B    |
|                  | 15.0                 | XW2Z-15MB    |
|                  | 20.0                 | XW2Z-20MB    |
|                  | 0.5                  | XW2Z-050B-R1 |
|                  | 1.0                  | XW2Z-100B-R1 |
| Reverse          | 1.5                  | XW2Z-150B-R1 |
| wiring           | 2.0                  | XW2Z-200B-R1 |
|                  | 3.0                  | XW2Z-300B-R1 |
|                  | 5.0                  | XW2Z-500B-R1 |

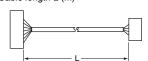
**XW2Z-**□□□**BU** (For XW2D-40C6)

| Туре   | Cable length L (m) * | Model      |
|--------|----------------------|------------|
|        | 0.5                  | XW2Z-050BU |
|        | 1.0                  | XW2Z-100BU |
| Normal | 1.5                  | XW2Z-150BU |
| wiring | 2.0                  | XW2Z-200BU |
|        | 3.0                  | XW2Z-300BU |
|        | 5.0                  | XW2Z-500BU |

#### **XW2Z- B-A** (For XW2F-40G7-IN32)

| Type             | Cable length L (m) * | Model       |
|------------------|----------------------|-------------|
|                  | 1.0                  | XW2Z-100B-A |
|                  | 1.5                  | XW2Z-150B-A |
| Normal<br>wiring | 2.0                  | XW2Z-200B-A |
| 9                | 3.0                  | XW2Z-300B-A |
|                  | 5.0                  | XW2Z-500B-A |

#### \*Cable length L (m)

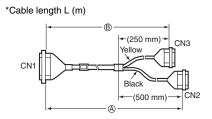


### **XW2Z-**□□**B-B** (For XW2F-40G7-OUT32)

| Туре             | Cable length L (m) * | Model       |
|------------------|----------------------|-------------|
|                  | 1.0                  | XW2Z-100B-B |
|                  | 1.5                  | XW2Z-150B-B |
| Normal<br>wiring | 2.0                  | XW2Z-200B-B |
| 9                | 3.0                  | XW2Z-300B-B |
|                  | 5.0                  | XW2Z-500B-B |

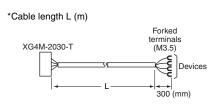
# For 32-point, Connector-type Input Units (Group 2) for Programmable Controllers For 64-point, Connector-type Input Units for Programmable Controllers XW2Z-□□□D

| Cable length L (m) * |       | Model     |
|----------------------|-------|-----------|
| A                    | B     | Model     |
| 1.0                  | 0.75  | XW2Z-100D |
| 1.5                  | 1.25  | XW2Z-150D |
| 2.0                  | 1.75  | XW2Z-200D |
| 3.0                  | 2.75  | XW2Z-300D |
| 5.0                  | 4.75  | XW2Z-500D |
| 10.0                 | 9.75  | XW2Z-010D |
| 15.0                 | 14.75 | XW2Z-15MD |
| 20.0                 | 19.75 | XW2Z-20MD |



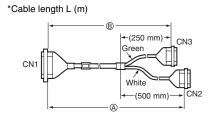
# 20-pole Cable with Discrete-wire Press-fit Terminals XW2Z-□□□F

| Cable length L (m) * | Model     |
|----------------------|-----------|
| 1.0                  | XW2Z-100F |
| 1.5                  | XW2Z-150F |
| 2.0                  | XW2Z-200F |
| 3.0                  | XW2Z-300F |
| 5.0                  | XW2Z-500F |
| 10.0                 | XW2Z-010F |
| 15.0                 | XW2Z-15MF |
| 20.0                 | XW2Z-20MF |



# For 32-point, Connector-type Output Units (Group 2) for Programmable Controllers For 64-point, Connector-type Output Units for Programmable Controllers XW2Z-□□□L

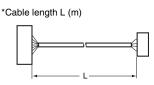
| Cable length L (m) * |       | Model     |
|----------------------|-------|-----------|
| (A)                  | B     | Wiodei    |
| 1.0                  | 0.75  | XW2Z-100L |
| 1.5                  | 1.25  | XW2Z-150L |
| 2.0                  | 1.75  | XW2Z-200L |
| 3.0                  | 2.75  | XW2Z-300L |
| 5.0                  | 4.75  | XW2Z-500L |
| 10.0                 | 9.75  | XW2Z-010L |
| 15.0                 | 14.75 | XW2Z-15ML |
| 20.0                 | 19.75 | XW2Z-20ML |



# For 96-point, Connector-type I/O Units for Programmable Controllers

XW2Z-DDH-1 (For CS1-series I/O Unit Connection)

| Special Connecting Cables * |              |  |
|-----------------------------|--------------|--|
| Cable length L (m)          | Model        |  |
| 0.5                         | XW2Z-050H-1  |  |
| 1.0                         | XW2Z-100H-1  |  |
| 1.5                         | XW2Z-150H-1  |  |
| 2.0                         | XW2Z-200H-1  |  |
| 3.0                         | XW2Z-300H-1  |  |
| 5.0                         | XW2Z-500H-1  |  |
| 7.0                         | XW2Z-700H-1  |  |
| 10.0                        | XW2Z-010H-1  |  |
| 1.0                         | XW2Z-100H-1G |  |
| 1.5                         | XW2Z-150H-1G |  |
| 2.0                         | XW2Z-200H-1G |  |
| 3.0                         | XW2Z-300H-1G |  |
| 5.0                         | XW2Z-500H-1G |  |



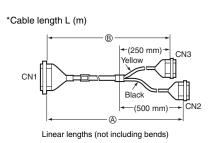
\*Up to two cables required for each Programmable Controller I/O Unit.

Note: CS1 signal names connected to the XW2B/D are different for the XW2Z-□□□H-□ and the XW2Z-□□□H-□G.

Refer to the I/O Signal Tables on page 9.

### XW2Z-DDH-2 (For CS1-series I/O Unit Connection)

| Special Connecting Cables * |            |              |
|-----------------------------|------------|--------------|
| Cable len                   | igth L (m) | Model        |
| A                           | B          | Model        |
| 1.0                         | 0.75       | XW2Z-100H-2  |
| 1.5                         | 1.25       | XW2Z-150H-2  |
| 2.0                         | 1.75       | XW2Z-200H-2  |
| 3.0                         | 2.75       | XW2Z-300H-2  |
| 5.0                         | 4.75       | XW2Z-500H-2  |
| 10.0                        | 9.75       | XW2Z-010H-2  |
| 1.0                         | 0.75       | XW2Z-100H-2G |
| 1.5                         | 1.25       | XW2Z-150H-2G |
| 2.0                         | 1.75       | XW2Z-200H-2G |
| 3.0                         | 2.75       | XW2Z-300H-2G |
| 5.0                         | 4.75       | XW2Z-500H-2G |



\*Up to two cables required for each Programmable Controller I/O Unit.

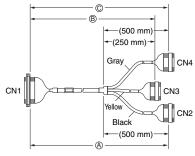
Note: CS1 signal names connected to the XW2B/D are different for the XW2Z-□□□H-□ and the XW2Z-□□□H-□G. Refer to the I/O Signal Tables on page 9.

# XW2Z-□□□H-3 (For CS1-series I/O Unit Connection)

| Special Connecting Cables * |                    |          |      |
|-----------------------------|--------------------|----------|------|
| Model                       | Cable length L (m) |          |      |
|                             | C                  | <b>B</b> | (A)  |
| XW2Z-100H-3                 | 1.0                | 0.75     | 1.0  |
| XW2Z-150H-3                 | 1.5                | 1.25     | 1.5  |
| XW2Z-200H-3                 | 2.0                | 1.75     | 2.0  |
| XW2Z-300H-3                 | 3.0                | 2.75     | 3.0  |
| XW2Z-500H-3                 | 5.0                | 4.75     | 5.0  |
| XW2Z-010H-3                 | 10.0               | 9.75     | 10.0 |

<sup>\*</sup>Up to two cables required for each Programmable Controller I/O Unit.

#### \*Cable length L (m)



Linear lengths (not including bends)

# For 32-point, MIL Connector-type I/O Units for Programmable Controllers XW2Z-□□□K

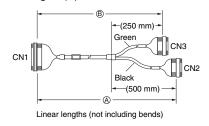
| Cable length L (m) * | Model     |
|----------------------|-----------|
| 0.25                 | XW2Z-C25K |
| 0.5                  | XW2Z-C50K |
| 1.0                  | XW2Z-100K |
| 1.5                  | XW2Z-150K |
| 2.0                  | XW2Z-200K |
| 3.0                  | XW2Z-300K |
| 5.0                  | XW2Z-500K |



## $XW2Z-\Box\Box\Box N$

| Cable length L (m) * |          | - Model   |  |
|----------------------|----------|-----------|--|
| <b>(A</b> )          | <b>B</b> | Wodel     |  |
| 1.0                  | 0.75     | XW2Z-100N |  |
| 1.5                  | 1.25     | XW2Z-150N |  |
| 2.0                  | 1.75     | XW2Z-200N |  |
| 3.0                  | 2.75     | XW2Z-300N |  |
| 5.0                  | 4.75     | XW2Z-500N |  |
| 10.0                 | 9.75     | XW2Z-010N |  |
| 15.0                 | 14.75    | XW2Z-15MN |  |
| 20.0                 | 19.75    | XW2Z-20MN |  |





### XW2Z-□□□X

| Cable length L (m) * | Model     |
|----------------------|-----------|
| 0.5                  | XW2Z-C50X |
| 1.0                  | XW2Z-100X |
| 2.0                  | XW2Z-200X |
| 3.0                  | XW2Z-300X |
| 5.0                  | XW2Z-500X |
| 10.0                 | XW2Z-010X |

#### \*Cable length L (m)



# **Ratings and Specifications**

| Rated current                 | 1 A   |
|-------------------------------|---|
| Rated voltage                 | 125 VAC 24 VDC                                    |
| Contact resistance            | 20 mΩ max. (at 20 mV, 100 mA max.) *1             |
| Insulation resistance         | 100 MΩ min. (at 500 VDC)                          |
| Dielectric strength           | 500 VAC for 1 min (leakage current: 1 mA max.) *2 |
| Ambient operating temperature | 0 to 80°C   |

<sup>\*1.</sup> Contact resistance for the Connector. \*2. Dielectric strength for the Connector.

# **Materials and Finish**

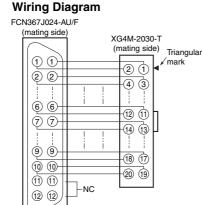
| Item           | P                      | Part name             |               | Materials and Finish                              |  |
|----------------|------------------------|-----------------------|---------------|---|--|
|                |                        | Housing               |               | Fiber-glass reinforced PBT resin (UL94V-0)/black  |  |
|                | XG4M-2030              | Cover                 |               | Fiber-glass reinforced PBT resift (OL94V-0)/black |  |
|                | XG4M-4030              | Contacts              | Mating end    | Phosphor bronze/nickel base, 0.15-µm gold plating |  |
|                |                        | Contacts              | Press-fit end | Phosphor bronze/nickel base, 2.0-µm tin plating   |  |
| FC             | XG4T-2004/4004         | Strain Relief         |               | Fiber-glass reinforced PBT resin (UL94V-0)/black  |  |
|                |                        | Housing               |               | Polyester resin (UL94V-0)/black                   |  |
|                | FCN-367J024-AU/F *     | Contacts              | Mating end    | Copper alloy/gold plated                          |  |
|                | FCN-367J040-AU/F       |                       | Press-fit end | Copper alloy/tin plated                           |  |
|                |                        | Connecting screw      |               | Steel/nickel plated                               |  |
| Cable          | UL2464 Interface Cable | L2464 Interface Cable |               | AWG28/Shielded                                    |  |
| Crimp terminal | Forked crimp terminal  |                       |               | 1.25 Y AS 3.5 or the equivalent                   |  |

Note: These housings, contacts, and connecting screws are made by Fujitsu.

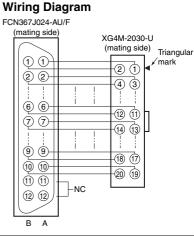
# For 32-point, Connector-type I/O Units for Programmable Controllers

XW2Z-\\_\\_\A (For XW2D-20G6/XW2B-20G\\_/-40G5-T/-20G5-D/ XW2C-20G5-IN16/20G6-IO16/XW2E-20G5-IN16/ XW2F-20G7-IN16/-OUT16/XW2N-20G8-IN16) **XW2Z-**□□**AU** (For XW2D-20C6)







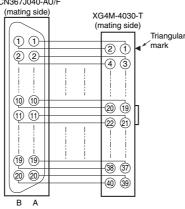


For 32-point, Connector-type I/O Units (Group 2) for Programmable Controllers For 64-point, Connector-type I/O Units for Programmable Controllers

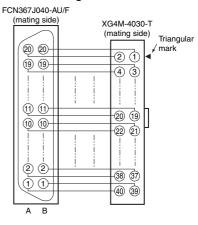
### **XW2Z-**□□□**B** (For XW2D-40G6/XW2B-40G□)







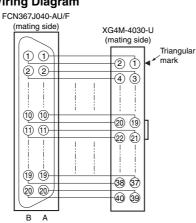
Reverse wiring



### XW2Z- BU (For XW2D-40C6)







# **XW2Z-** B-A (For XW2F-40G7-IN32)



Wiring Diagram

| •          | •       |         |      |
|------------|---------|---------|------|
| FCN367J040 | -AU/F X | G4M-403 | 30-T |
| B20        |         | - 1     |      |
| B19        |         | - 2     |      |
| B18        |         | 3       |      |
| B17        |         | - 5     |      |
| B16        |         | 7       |      |
| B15        |         | 9       |      |
| B14        |         | 11      |      |
| B13        |         | 13      |      |
| B12        |         | 15      |      |
| B11        |         | 17      |      |
| B10        |         | 19      |      |
| B9         |         | - 4     |      |
| B8         |         | - 6     |      |
| B7         |         | - 8     |      |
| B6         |         | 10      |      |
| B5         |         | 12      |      |
| B4         |         | 14      |      |
| B3         |         | 16      |      |
| B2         |         | 18      |      |
| B1         |         | 20      |      |
| A20        |         | 21      |      |
| A19        |         | - 22    |      |
| A18        |         | 23      |      |
| A17        |         | 25      |      |
| A16        |         | 27      |      |
| A15        |         | 29      |      |
| A14        |         | 31      |      |
| A13        |         | 33      |      |
| A12        |         | 35      |      |
| A11        |         | 37      |      |
| A10        | ı       | 20      | 1    |

# **XW2Z-**□□□**B-B** (For XW2F-40G7-OUT32)



|            | <b>J</b> |             |   |
|------------|----------|-------------|---|
| FCN367J040 | -AU/F    | XG4M-4030-T | - |
| B20        |          | 1           |   |
| B19        |          | 3           |   |
| B18        |          | - 5         |   |
| B17        |          | 7           |   |
| B16        |          | 9           |   |
| B15        |          | 11          |   |
| B14        |          | 13          |   |
| B13        |          | 15          |   |
| B12        |          | 17          |   |
| B11        |          | 19          |   |
| B10        |          | 2           |   |
| B9         |          | 4           |   |
| B8         |          | 6           |   |
| B7         |          | 8           |   |
| B6         |          | 10          |   |
| B5         |          | 12          |   |
| B4         |          | 14          |   |
| B3         |          | 16          |   |
| B2         |          | 18          |   |
| B1         |          | 20          |   |
| A20        |          | 21          |   |
| A19        |          | 23          |   |
| A18        |          | 25          |   |
| A17        |          | 27          |   |
| A16        |          | 29          |   |
| A15        |          | 31          |   |
| A14        |          | 33          |   |
| A13        |          | 35          |   |
| A12        |          | 37          |   |
| A11        |          | 39          |   |
| A10        |          | 22          |   |
| A9         |          | 24          |   |
| A8         |          | 26          |   |
| A7         |          | 28          |   |
| A6         |          | 30          |   |
| A5         |          | 32          |   |
| A4         |          | 34          |   |
| A3         |          | 36          |   |
| A2         |          | 38          |   |
| A1         |          | 40          |   |
|            |          |             |   |

# For 32-point, Connector-type Input Units (Group 2) for Programmable Controllers For 64-point, Connector-type Input Units for Programmable Controllers

26 28

40

# XW2Z-□□□D



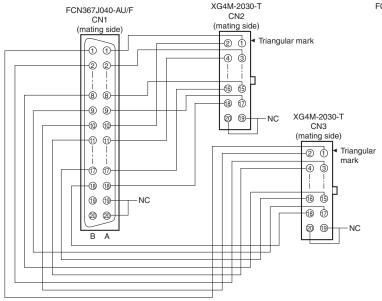
### **Wiring Diagram**

A9

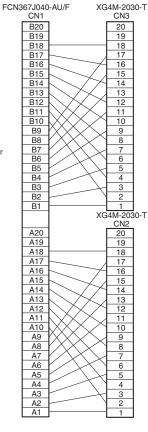
A8 A7

A6 A5

A3 A2

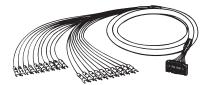


Note: XW2Z-R Cables for I/O Relay Terminals have different wiring and cannot be used with the XW2C.

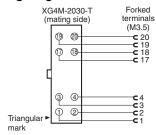


# 20-pole Cable with Discrete-wire Press-fit Terminals

# XW2Z-□□□F



### **Wiring Diagram**



### **Connector Pin No. Table**

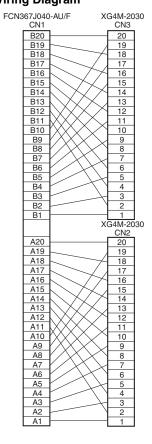
| Forked terminal | No. of cores | Insulation color | Dot<br>marks | Dot<br>color | Connector pin No. |
|-----------------|--------------|------------------|--------------|--------------|-------------------|
| 1               | 1            | Blue             |              | Red          | 1⊲                |
| 2               | ı            | Blue             |              | Black        | 2                 |
| 3               | 2            | Pink             |              | Red          | 3                 |
| 4               | 2            | Pink             |              | Black        | 4                 |
| 5               | 3            | Green            |              | Red          | 5                 |
| 6               | 3            | Green            |              | Black        | 6                 |
| 7               | 4            | Orange           |              | Red          | 7                 |
| 8               | 4            | Orange           |              | Black        | 8                 |
| 9               | 5            | Gray             |              | Red          | 9                 |
| 10              | 5            | Gray             |              | Black        | 10                |
| 11              | 6            | Blue             |              | Red          | 11                |
| 12              | 0            | Blue             |              | Black        | 12                |
| 13              | 7            | Pink             |              | Red          | 13                |
| 14              | ,            | Pink             |              | Black        | 14                |
| 15              | 8            | Green            |              | Red          | 15                |
| 16              | 0            | Green            |              | Black        | 16                |
| 17              | 9            | Orange           |              | Red          | 17                |
| 18              | 9            | Orange           |              | Black        | 18                |
| 19              | 10           | Gray             |              | Red          | 19                |
| 20              | 10           | Gray             |              | Black        | 20                |

For 32-point, Connector-type Output Units (Group 2) for Programmable Controllers For 64-point, Connector-type Output Units for Programmable Controllers

# XW2Z-□□□L

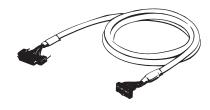


# Wiring Diagram



# For 96-point, Connector-type I/O Units for Programmable Controllers

# XW2Z- H (For CS1-series I/O Unit Connection)







# I/O Signal Tables (Example Using CN1 on CS1W-OD291)

| XW2Z-□□□H-□   | Connecting  | Cables |
|---------------|-------------|--------|
| ^ *** <u></u> | COLLICCTION | Cabics |

| XVVZZ       |  |   |  |
|-------------|--|---|--|
| XW2Z-□□□H-3 |  | Word N+1 (CN3)  1 2 3 4 5 6 7 COM NC  3 5 7 9 1 3 5 7 9  2 4 6 8 1 2 4 6 8 2  8 9 10 11 12 13 14 15 +V NC | Word N+2 (CN4) 0 1 2 3 4 5 6 7 COM NC 1 3 5 7 9 1 3 5 7 0 1 1 1 12 13 14 15 +V NC  |
| XW2Z-□□□H-2 | XW2□-40G□<br>  Word N (CN2)<br>  0 1 2 3 4 5 6 7 COM NC 0 1 1<br>  ① ③ ⑤ ⑦ ⑨ ⑪ ③ ⑥ ⑰ ⑩ ❷ ② ②<br>  ② ④ ⑥ ⑧ ⑩ ② ④ ⑥ ⑩ ② ② ②<br>  8 9 10 11 12 13 14 15 +V NC 8 9 | Word N+1 (CN2) 2 3 4 5 6 7 COM NC 0 3 2 3 9 3 3 5 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7 6 7                   | V2 □ - 20 G □  |
| XW2Z-□□□H-1 |  | 3 4 5 6 7 COM 0 1 2 3 4<br>3 2 2 3 3 3 5 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9                          | N+2 (CN2) 5 6 7 COM NC NC NC \$\begin{array}{c c c c c c c c c c c c c c c c c c c |

| XW2Z-  |          | - Connecting  | Cables |
|--|----------|---------------|--------|
| $\lambda W Z Z - \Box \Box \Box \Box - \Box G / \lambda W Z Z -$ | -NUUU-UU | -uuu Connecum | Lables |

| ATTLE BOOT BOOK | 22-NCConnecting t   | Oubics  |  |
|-----------------|---|---|--|
|                 | XW2□-20G□   |   |  |
| XW2Z-R          | Word N (CN2) +V NC 15 14 13 12 11 10 9 8 1 3 5 9 1 3 5 9 2 4 6 8 0 2 4 6 8 2 NC COM 7 6 5 4 3 2 1 0 | Word N+1 (CN3) +V NC 15 14 13 12 11 10 9 8 1 3 5 7 9 1 3 5 7 9 2 4 6 8 9 9 9 9 9 NC COM 7 6 5 4 3 2 1 0 | Word N+2 (CN4) +V NC 15 14 13 12 11 10 9 8 1 3 5 7 9 1 3 5 7 9 2 4 6 8 6 6 6 6 6 6 6 7 6 6 5 4 3 2 1 0 |
| XW2Z-□□□H-2G    | XW2□-40G□  Word N (CN2)  +V NC 15 14 13 12 11 10 9 8 +V N   | Word N+ 1 (CN2)<br>NC 15 14 13 12 11 10 9 8<br>3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3                    | W2□-20G□  Word N +2 (CN3)  +V NC 15 14 13 12 11 10 9 8  1 3 5 7 9 1 3 5 7 9  Q 4 6 8 1 2 4 3 2 1 0     |
| XW2Z-□□□H-1G    |   |   | B 47 49 51 53 55 57 59<br> 46 48 50 52 54 56 58 60   |

 $Note: The \ XW2Z-\square\square\squareH-\squareG \ I/O \ signal \ arrangement \ is \ oriented \ the \ same \ as \ the \ XW2Z-R \ Cables \ for \ I/O \ Relay \ Terminals.$ 

# For 32-point, MIL Connector-type I/O Units for Programmable Controllers

 $XW2Z-\Box\Box\Box N$ 

# $XW2Z-\Box\Box\Box K$ **Wiring Diagram** XG4M-4030-T (mating side) XG4M-4030-T (mating side) Triangular mark 39 40 21 37 38 4 3 21 22 -20 (19 19 20 -22 21 3 4 -38 37 40 39 (1) (2) Triangular mark Note: Connector pins are connected 1-to-1 so

that pin numbers correspond.

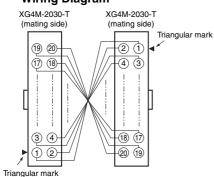
# **Wiring Diagram** XG4M-2030-T CN2 (mating side) Triangular mark XG4M-4030-T (mating side) 2 (1) 39 40 4 3 37 38 18 (17) 23 24 -20 (19) 21 22 Triangular mark (19 (20) 2 1 (17) (18) 4 3 3 4 -18 (17 1 2 -20 (19 Triangular mark XG4M-2030-T CN3

(mating side)

# $XW2Z-\Box\Box\Box X$



### **Wiring Diagram**



Note: Connector pins are connected 1-to-1 so that pin numbers correspond.

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