

# **DIN Track Push-in Terminal Blocks** XW5T

# **Push-in Plus Terminal Blocks to Downsize Control Panels and Save** Work

• Push-in Plus terminal blocks are more compact than traditional screw terminal blocks.

No loosening means maintenance-free application.

- Slim models available down to a width of 3.5 mm to help downsize control panels.
- · Light insertion force and strong holding strength to achieve both less wiring work and high reliability.
- 'Hands-free' structure that holds an inserted screwdriver to achieve better workability when wiring stranded wires without crimp terminals.



For the most recent information on models that have been certified for safety standards, refer to your OMRON website.

Refer to Safety Precautions on page 17.

# Model Number Legend

# **Feed Through Terminal Blocks**

XW5T - P□-□-□□ (1) (2) (3)(4)

(1) Maximum Applicable Stranded Wire

1.5: 1.5mm<sup>2</sup> 2.5: 2.5mm<sup>2</sup> 4.0: 4.0mm<sup>2</sup> (2) Wiring

1.1: 1:1 🔘 1.2: 1:2 O-O-O 

(3) Number of Tiers

2: 2 tiers

(1) (2) (3)

XW5G - P□-□-□

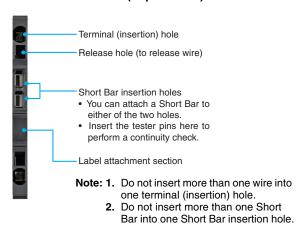
(4) Color 1: 1 tier Blank: Dark gray

**Grounding Terminal Blocks** 

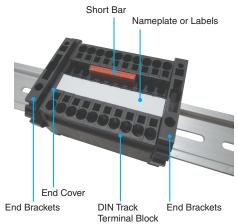
BL: Blue

# **Part Names and Configuration**

# DIN Track Terminal Block (Top Surface)



# **Basic Configuration**



Name	Description
DIN Track Terminal Blocks	Both Feed Through and Grounding Terminal Blocks are available.
End Cover	This part is required to prevent electric shock. Attach one End Cover to the exposed metal surface of the last Terminal Block or to any Terminal Block that is next to a different shape of Terminal Block.
End Brackets	End Brackets must be attached to both ends to hold the Terminal Block in place.
Nameplate or Labels	This part is available as an accessory. Select the most suitable one for your needs. You can also use commercially available nameplates that are 9.5 mm wide and 0.5 mm thick on the top. *
Short Bar	This part is available as an accessory. Select one as required.

<sup>\*</sup>Do not use on the side. Two-tier Terminal Blocks with a width of 3.5 mm are excluded.

# **Ordering Information**

Classification	Product Type	Nominal Cross Section (mm²)	Number of levels	Number of cramp position per level	Color	Weight (gram)	Model
		1.0	1	2		3.3	XW5T-P1.5-1.1-1
		2.5	1	2	Dark grey	6.3	XW5T-P2.5-1.1-1
	Standard terminals	4.0	1	2		8.4	XW5T-P4.0-1.1-1
	Standard terminals	1.0	1	2		3.3	XW5T-P1.5-1.1-1BL
		2.5	1	2	Blue	6.3	XW5T-P2.5-1.1-1BL
		4.0	1	2		8.4	XW5T-P4.0-1.1-1BL
		1.0	2	2		6.5	XW5T-P1.5-1.1-2
		2.5	2	2	Dark grey	12.5	XW5T-P2.5-1.1-2
	Multi tieve teverinel	4.0	2	2		16.5	XW5T-P4.0-1.1-2
	Multi tiers terminal	1.0	2	2		6.5	XW5T-P1.5-1.1-2BL
		2.5	2	2	Blue	12.5	XW5T-P2.5-1.1-2BL
Feed Through		4.0	2	2		16.5	XW5T-P4.0-1.1-2BL
Terminal blocks		1.0	1	3		4.1	XW5T-P1.5-1.2-1
	Multi conductor terminals	2.5	1	3	Dark grey	8.2	XW5T-P2.5-1.2-1
		4.0	1	3		10.8	XW5T-P4.0-1.2-1
		1.0	1	3	Blue	4.1	XW5T-P1.5-1.2-1BL
		2.5	1	3		8.2	XW5T-P2.5-1.2-1BL
		4.0	1	3		10.8	XW5T-P4.0-1.2-1BL
		1.0	1	4	Dark grey	4.9	XW5T-P1.5-2.2-1
		2.5	1	4		10.4	XW5T-P2.5-2.2-1
		4.0	1	4		13.4	XW5T-P4.0-2.2-1
		1.0	1	4	Blue	4.9	XW5T-P1.5-2.2-1BL
		2.5	1	4		10.4	XW5T-P2.5-2.2-1BL
		4.0	1	4		13.4	XW5T-P4.0-2.2-1BL
		1.0	1	2		4.7	XW5G-P1.5-1.1-1
	Standard terminals	2.5	1	2		9.9	XW5G-P2.5-1.1-1
		4.0	1	2		11.8	XW5G-P4.0-1.1-1
		1.0	2	2		8.1	XW5G-P1.5-1.1-2
	Multi tiers terminal	2.5	2	2		16.6	XW5G-P2.5-1.1-2
Grounding		4.0	2	2	0 / "	20.8	XW5G-P4.0-1.1-2
Terminal blocks		1.0	1	3	Green/yellow	5.5	XW5G-P1.5-1.2-1
		2.5	1	3		11.6	XW5G-P2.5-1.2-1
	Multi conductor	4.0	1	3		14.1	XW5G-P4.0-1.2-1
	terminals	1.0	1	4		6.3	XW5G-P1.5-2.2-1
		2.5	1	4		13.8	XW5G-P2.5-2.2-1
		4.0	1	4		16.7	XW5G-P4.0-2.2-1

# **Accessories**

# **Short Bars**

For XW5T-P1.5-□

Appearance	No. of poles	Colors	Model*	Application
	2		XW5S-P1.5-2□	
m m u	3	Red (RD) Blue (BL) Yellow (YL)	XW5S-P1.5-3□	
1111 111 11	4		XW5S-P1.5-4□	Used for cross-over wiring between Terminal Blocks.
	5		XW5S-P1.5-5□	
	10		XW5S-P1.5-10□	

<sup>\*</sup>Replace the box (
) in the model number with the code for the covering color. Specify the color: RD = red, BL = blue, YL = yellow

# For XW5T-P2.5-□

Appearance	No. of poles	Colors	Model*	Application
	2		XW5S-P2.5-2□	
1111 111 11	3	Red (RD) Blue (BL)	XW5S-P2.5-3□	
100000	4		XW5S-P2.5-4□	Used for cross-over wiring between Terminal Blocks.
	5	Yellow (YL)	XW5S-P2.5-5□	
	10		XW5S-P2.5-10□	

<sup>\*</sup>Replace the box (
) in the model number with the code for the covering color. Specify the color: RD = red, BL = blue, YL = yellow

#### For XW5T-P4.0-□

Appearance	No. of poles	Colors	Model*	Application
	2	Red (RD) Blue (BL) Yellow (YL)	XW5S-P4.0-2□	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	3		XW5S-P4.0-3□	
HILLIAN III	4		XW5S-P4.0-4□	Used for cross-over wiring between Terminal Blocks.
**********	5		XW5S-P4.0-5□	
	10		XW5S-P4.0-10□	

<sup>\*</sup>Replace the box ( $\square$ ) in the model number with the code for the covering color. Specify the color: RD = red, BL = blue, YL = yellow

#### Labels

Appearance	Applicable Terminal Blocks	Model	Minimum order in sheets (quantity per sheet)	Application	
	XW5□-P1.5-□	XW5Z-P1.5LB1	5 sheets with 102 top labels per sheet		
	XVV5L-F1.5-L	XW5Z-P1.5LB2	5 sheets with 108 side labels per sheet		
	XW5□-P2.5-□	XW5Z-P2.5LB1	5 sheets with 72 top labels per sheet	Used to identify wiring. (Material: PA	
	AVV5LI-F2.5-LI	XW5Z-P2.5LB2	5 sheets with 72 side labels per sheet	resin, blank)	
	XW5Z-P4.0LB1		5 sheets with 60 top labels per sheet		
	∧vv3□-F4.U-□	XW5Z-P4.0LB2	5 sheets with 60 side labels per sheet		

- Note: 1. Different models are used for the top and side surfaces.

  - There is no place to mount the Top-surface Labels on Two-tier Terminal Blocks with a width of 3.5 mm, so they cannot be used.
     Use commercially available nameplates (9.5 mm wide, 0.5 mm thick) on the top only. Do not use on the side. You can also use a commercially available printer. Check with the manufacturer of the nameplates for information on applicable printers.
  - 4. Refer to page 20 for details on printing labels.

#### **End Cover**

Appearance	Applicable Terminal Blocks	Model	Application
	XW5□-P1.5-1.1-1	XW5E-P1.5-1.1-1	
	XW5□-P1.5-1.1-2	XW5E-P1.5-1.1-2	
	XW5□-P1.5-1.2-1	XW5E-P1.5-1.2-1	
	XW5□-P1.5-2.2-1	XW5E-P1.5-2.2-1	
	XW5□-P2.5-1.1-1	XW5E-P2.5-1.1-1	This part is required to prevent electric shock.
omeon	XW5□-P2.5-1.1-2	XW5E-P2.5-1.1-2	Always mount End Covers to the following locations when you use Terminal Blocks. (For details, refer to page 21.)
	XW5□-P2.5-1.2-1	XW5E-P2.5-1.2-1	Exposed metal surface of the last Terminal Block     Any Terminal Block that is next to a different shape of
	XW5□-P2.5-2.2-1	XW5E-P2.5-2.2-1	Terminal Block that is flext to a different shape of
	XW5□-P4.0-1.1-1	XW5E-P4.0-1.1-1	
	XW5□-P4.0-1.1-2	XW5E-P4.0-1.1-2	
	XW5□-P4.0-1.2-1	XW5E-P4.0-1.2-1	
	XW5□-P4.0-2.2-1	XW5E-P4.0-2.2-1	

#### **End Brackets**

Appearance	Width (mm)	Model	Application	
	6	XW5Z-EP6	End Brackets are installed on the ends of the Terminal Blocks to prevent them from moving on the DIN Track.	

# **Separator Plates**

Appearance	Width (mm)	Model	Application	
	12	XW5Z-EP12	This part is used to create insulation distance. Use Separator Plates according to the clearance and creeping distances required by the operating conditions of your equipment.	

Note: Refer to 6. Using the Accessories on page 20 for information on using the accessories.

# **Ratings and Performance**

# **Ratings**

# Feed Through Terminal blocks Standard terminals

Model			XW5T-P1.	5-1.1-1 (BL	.)	XW5T-P2.5-1.1-1 (BL)	XW5T-P4.0-1.1-1 (BL)	
Appearance and internal wiring			1 tie	r, 1:1		1 tier, 1:1	1 tier, 1:1	
	NOMINAL CROSS SECTION	0.75 mm <sup>2</sup>	(1.5 mm <sup>2</sup> ) <sup>3</sup>	*2		2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	
	Minimum conductor cross section solid	0.14 mm <sup>2</sup>				0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
_	Maximum conductor cross section solid	1.5 mm <sup>2</sup>				4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>	
Applicable wire sizes*1	Minimum conductor cross section fine stranded	0.08 mm <sup>2</sup>				0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
cable wi	Maximum conductor cross section fine stranded	1.5 mm <sup>2</sup>				2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Appli	Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.14 mm²				0.14 mm <sup>2</sup>	0.25 mm <sup>2</sup>	
	Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.75 mm²	(1.5 mm²) <sup>3</sup>	*2		2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Dim	ensions	3.5 × 45 × 30.5				5.2 × 48.8 × 35.3	6.2 × 56.1 × 35.3	
IEC	rated voltage	500 V				800 V	800 V	
IEC	rated current	17.5 A/1.5	5 mm²			24 A/2.5 mm <sup>2</sup> 32 A/4.0 mm <sup>2</sup>		
Usa	ge Group (UG)	B, C	D			B, C		
UL ı	rated voltage	300 V	51-150 V	151-300 V	301-600 V	600 V		
UL ı	rated current	(SOL)	15 A/AWG14 (SOL) 10 A/AWG16	10 A/ AWG16	5 A/ AWG16-20	20 A/AWG12 (SOL), 15 A/AWG14	30 A/AWG10 (SOL), 20 A/AWG12	
Diel	ectric strength		C for 1 min current: 1 n		•	2,000 VAC for 1 min (leakage current: 1 mA max.)	2,000 VAC for 1 min (leakage current: 1 mA max.)	
End	Cover	XW5E-P1	.5-1.1-1			XW5E-P2.5-1.1-1	XW5E-P4.0-1.1-1	
Spe	cial tool	XW4Z-00	В			XW4Z-00B	XW4Z-00B	
Арр	olicable nameplates	nameplate with 9.5 mm width and 0.5 mm				XW5Z-P2.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	XW5Z-P4.0LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	
Арр	olicable Short Bars	XW5S-P1 (□: Poles	.5-□ = 2, 3, 4, 5	or 10)		XW5S-P2.5- (:: Poles = 2, 3, 4, 5 or 10)	XW5S-P4.0- (: Poles = 2, 3, 4, 5 or 10)	

**<sup>\*1.</sup>** For the applicable wire ranges, refer to page 17 for solid and stranded wires and to page 19 for ferrules. **\*2.** You can also use ferrules for 1.0 to 1.5 mm<sup>2</sup> wires if you use ferrules without insulation sleeve.

# Feed Through Terminal blocks Multi tiers terminal

Model			XW5T-P1.	5-1.1-2 (BL	.)	XW5T-P2.5-1.1-2 (BL)	XW5T-P4.0-1.1-2 (BL)	
App wiri	pearance and internal ng		2 tier	s, 1:1		2 tiers, 1:1	2 tiers, 1:1	
	NOMINAL CROSS SECTION	0.75 mm <sup>2</sup>	(1.5 mm <sup>2</sup> )*	2		2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
	Minimum conductor cross section solid	0.14 mm <sup>2</sup>				0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
_	Maximum conductor cross section solid	1.5 mm <sup>2</sup>				4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>	
Applicable wire sizes*1	Minimum conductor cross section fine stranded	0.08 mm <sup>2</sup>				0.14 mm²	0.2 mm <sup>2</sup>	
cable wi	Maximum conductor cross section fine stranded	1.5 mm <sup>2</sup>				2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Appli	Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.14 mm²				0.14 mm <sup>2</sup>	0.25 mm <sup>2</sup>	
	Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.75 mm²	(1.5 mm <sup>2</sup> )*	2		2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Dim	ensions	$3.5 \times 65.7$	′×41.1			5.2 × 78.8 × 45.9	6.2 × 85 × 45.9	
IEC	rated voltage	500 V						
IEC	rated current	17.5 A/1.5	5 mm²			22 A/2.5 mm <sup>2</sup>	28 A/4.0 mm <sup>2</sup>	
Usa	ge Group (UG)	B, C	D			B, C		
UL	rated voltage	300 V	51-150 V	151-300 V	301-600 V	600 V		
UL	rated current	15 A/AWG14 (SOL) 10 A/AWG16	15 A/AWG14 (SOL) 10 A/AWG16	10 A/ AWG16	5 A/ AWG16-20	20 A/AWG12 (SOL), 15 A/AWG14	30 A/AWG10 (SOL), 20 A/AWG12	
Diel	ectric strength		C for 1 min current: 1 m	nA max.)		2,000 VAC for 1 min (leakage current: 1 mA max.)		
End	l Cover	XW5E-P1	.5-1.1-2			XW5E-P2.5-1.1-2 XW5E-P4.0-1.1-2		
Spe	cial tool	XW4Z-00	В			,	<del>'</del>	
App	olicable nameplates	XW5Z-P1.5LB2				XW5Z-P2.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness XW5Z-P4.0LB□ or commercially available nameplate with 9.5 mm width and 0 thickness		
App	olicable Short Bars	XW5S-P1 (□: Poles	.5-□ = 2, 3, 4, 5	or 10)		XW5S-P2.5- (: Poles = 2, 3, 4, 5 or 10)	XW5S-P4.0-□ (□: Poles = 2, 3, 4, 5 or 10)	

<sup>\*1.</sup> For the applicable wire ranges, refer to page 17 for solid and stranded wires and to page 19 for ferrules. \*2. You can also use ferrules for 1.0 to 1.5 mm² wires if you use ferrules without insulation sleeve.

# Feed Through Terminal blocks Multi conductor terminals

iel	XW5T-P1.5-1.2-1 (BL)				XW5T-P2.5-1.2-1 (BL)	XW5T-P4.0-1.2-1 (BL)	
earance and internal ng		1 tie	r, 1:2		1 tier, 1:2	1 tier, 1:2	
NOMINAL CROSS SECTION	0.75 mm <sup>2</sup>	² (1.5 mm²)*	2		2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Minimum conductor cross section solid	0.14 mm <sup>2</sup>	!			0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
Maximum conductor cross section solid	1.5 mm <sup>2</sup>				4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>	
Minimum conductor cross section fine stranded	0.08 mm <sup>2</sup>	!			0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
Maximum conductor cross section fine stranded	1.5 mm <sup>2</sup>				2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.14 mm²				0.14 mm <sup>2</sup>	0.25 mm <sup>2</sup>	
Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.75 mm² (1.5 mm²)*2				2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
ensions	3.5 × 54.1	1 × 30.5			5.2 × 60.5 × 35.3	6.2 × 66.5 × 35.3	
rated voltage	500 V				800 V		
rated current	17.5 A/1.5	5 mm²			24 A/2.5 mm <sup>2</sup> 32 A/4.0 mm <sup>2</sup>		
ge Group (UG)	B, C	D			B, C		
rated voltage	300 V	51-150 V	151-300 V	301-600 V	600 V		
rated current	(SOL)	(SOL)	10 A/ AWG16	5 A/ AWG16-20	20 A/AWG12 (SOL), 15 A/AWG14	30 A/AWG10 (SOL), 20 A/AWG12	
ectric strength			nA max.)	•	2,000 VAC for 1 min (leakage current: 1 mA max.)		
Cover	XW5E-P1	1.5-1.2-1			XW5E-P2.5-1.2-1 XW5E-P4.0-1.2-1		
cial tool	XW4Z-00	В					
licable nameplates	XW5Z-P1.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness				XW5Z-P2.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	XW5Z-P4.0LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	
licable Short Bars			or 10)		XW5S-P2.5- (:: Poles = 2, 3, 4, 5 or 10)	XW5S-P4.0- (: Poles = 2, 3, 4, 5 or 10)	
	NOMINAL CROSS SECTION Minimum conductor cross section solid Maximum conductor cross section solid Minimum conductor cross section fine stranded Maximum conductor cross section fine stranded Minimum conductor cross section fine stranded Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve ensions rated voltage rated current ge Group (UG) rated voltage rated current ectric strength Cover cial tool dicable nameplates	NOMINAL CROSS SECTION  Minimum conductor cross section solid  Maximum conductor cross section fine stranded  Maximum conductor cross section fine stranded  Maximum conductor cross section fine stranded  Minimum conductor cross section fine stranded  Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  ensions  3.5 × 54.  7.5 A/1.9  7.5 A/1.9  7.6 Group (UG)  7.7 Grated current  7.8 A/1.9  7.9 Grated voltage  7.9 A/1.9  7.9 Cross section (flex., stranded)  7.9 Cross section (flex., stranded) with ferrule with Plastic sleeve  8. A/1.9  8. Cover cross section (flex., stranded) with ferrule with Plastic sleeve  8. A/1.9  8. Cover cross section (flex., stranded) with ferrule with Plastic sleeve  9. A/1.9  9. A/1.	NOMINAL CROSS SECTION  Minimum conductor cross section solid  Maximum conductor cross section fine stranded  Maximum conductor cross section fine stranded  Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  ensions  3.5 × 54.1 × 30.5  7.5 mm² (1.5 mm²)  7.5 mm² (1.5 mm²)  7.5 mm² (1.5 mm²)  8. C D  8.	NOMINAL CROSS SECTION  Nominam conductor cross section solid  Maximum conductor cross section fine stranded  Maximum conductor cross section fine stranded  Maximum conductor cross section fine stranded  Minimum conductor cross section fine stranded  Minimum conductor cross section fine stranded  Minimum conductor cross section filex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Plastic sleeve  Plastic sleeve  Plastic sleeve  17.5 A/1.5 mm²  15. A/WG14 (SOL) 15. A/WG14 (SOL) 10. A/WG16 10. A/WG1	NOMINAL CROSS SECTION  0.75 mm² (1.5 mm²)¹2  Minimum conductor cross section solid  Maximum conductor cross section fine stranded  Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve  maximum conductor cross section fine stranded  1.5 mm²  10 A/ AWG16  10 A/ AWG16  10 A/ AWG16  AWG16-20  1.890 VAC for 1 min (leakage current: 1 mA max.)  Cover XW5E-P1.5-1.2-1  cial tool XW4Z-00B  XW5Z-P1.5LB or commercially available nameplate with 9.5 mm width and 0.5 mm thickness  Licable Shet Reve XW5S-P1.5-□	NoMINAL CROSS   SECTION   Security   Secur	

**<sup>\*1.</sup>** For the applicable wire ranges, refer to page 17 for solid and stranded wires and to page 19 for ferrules. **\*2.** You can also use ferrules for 1.0 to 1.5 mm² wires if you use ferrules without insulation sleeve.

# XW5T

Model		XW5T-P1.5-2.2-1 (BL)		5-2.2-1 (BL)	)	XW5T-P2.5-2.2-1 (BL)	XW5T-P4.0-2.2-1 (BL)
Appearance and internal wiring		1 tier, 2:2			1 tier, 2:2	1 tier, 2:2	
	NOMINAL CROSS SECTION	0.75 mm <sup>2</sup>	(1.5 mm <sup>2</sup> )*	2		2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>
	Minimum conductor cross section solid	0.14 mm <sup>2</sup>				0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>
_	Maximum conductor cross section solid	1.5 mm <sup>2</sup>				4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>
re sizes*	Minimum conductor cross section fine stranded	0.08 mm <sup>2</sup>				0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>
Applicable wire sizes*1	Maximum conductor cross section fine stranded	1.5 mm <sup>2</sup>				2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>
Appli	Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.14 mm <sup>2</sup>				0.14 mm <sup>2</sup>	0.25 mm <sup>2</sup>
	Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.75 mm² (1.5 mm²)*2				2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>
Dim	ensions	3.5 × 63.2 × 30.5				5.2 × 72.2 × 35.3	6.2 × 76.9 × 35.3
IEC	rated voltage	500 V				800 V	
IEC	rated current	17.5 A/1.5 mm <sup>2</sup>				24 A/2.5 mm <sup>2</sup>	32 A/4.0 mm <sup>2</sup>
Usa	ge Group (UG)	В, С	D			B, C	
UL r	ated voltage	300 V	51-150 V	151-300 V	301-600 V	600 V	
UL r	ated current	(SOL)	15 A/AWG14 (SOL) 10 A/AWG16	10 A/ AWG16	5 A/ AWG16-20	20 A/AWG12 (SOL), 15 A/AWG14	30 A/AWG10 (SOL), 20 A/AWG12
Dielectric strength		1,890 VAC for 1 min (leakage current: 1 mA max.)				2,000 VAC for 1 min (leakage current: 1 mA max.)	
End Cover XW5E-P		(W5E-P1.5-2.2-1			XW5E-P2.5-2.2-1	XW5E-P4.0-2.2-1	
Spe	cial tool	XW4Z-00	В			,	
Арр	licable nameplates	XW5Z-P1.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness			XW5Z-P2.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	XW5Z-P4.0LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	
Арр	licable Short Bars	XW5S-P1 (□: Poles	.5-□ = 2, 3, 4, 5	or 10)		XW5S-P2.5- (: Poles = 2, 3, 4, 5 or 10)	XW5S-P4.0-□ (□: Poles = 2, 3, 4, 5 or 10)

<sup>\*1.</sup> For the applicable wire ranges, refer to page 17 for solid and stranded wires and to page 19 for ferrules.
\*2. You can also use ferrules for 1.0 to 1.5 mm² wires if you use ferrules without insulation sleeve.

# **Grounding Terminal blocks Standard terminals**

Model  Appearance and internal wiring		XW5G-P1.5-1.1-1	XW5G-P2.5-1.1-1	XW5G-P4.0-1.1-1	
		1 tier, 1:1	1 tier, 1:1	1 tier, 1:1	
	NOMINAL CROSS SECTION	0.75 mm² (1.5 mm²)*2	2.5 mm <sup>2</sup>	4 mm <sup>2</sup>	
	Minimum conductor cross section solid	0.14 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
_	Maximum conductor cross section solid	1.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>	
Applicable wire sizes*1	Minimum conductor cross section fine stranded	0.08 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
icable wi	Maximum conductor cross section fine stranded	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Appli	Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.14 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.25 mm <sup>2</sup>	
	Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.75 mm² (1.5 mm²)*2	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Dim	ensions	3.5 × 45 × 30.5	5.2 × 48.8 × 35.3	6.2 × 56.1 × 35.3	
IEC	rated voltage	500 V	800 V		
UL rated voltage		600 V			
Dielectric strength		1,890 VAC for 1 min (leakage current: 1 mA max.)	2,000 VAC for 1 min (leakage current: 1 mA max.)		
End	Cover	XW5E-P1.5-1.1-1	XW5E-P2.5-1.1-1	XW5E-P4.0-1.1-1	
Spe	cial tool	XW4Z-00B			
Арр	licable nameplates	XW5Z-P1.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	XW5Z-P2.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	XW5Z-P4.0LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	

Note: Use a conductive DIN Track when using a Grounding Terminal Block.

OMRON does not offer conductive DIN Tracks. Please use a commercially available product.

\*1. For the applicable wire ranges, refer to page 17 for solid and stranded wires and to page 19 for ferrules.

\*2. You can also use ferrules for 1.0 to 1.5 mm² wires if you use ferrules without insulation sleeve.

# **Grounding Terminal blocks Multi tiers terminal**

Model		XW5G-P1.5-1.1-2	XW5G-P2.5-1.1-2	XW5G-P4.0-1.1-2	
Appearance and internal wiring		2 tiers, 1:1	2 tiers, 1:1	2 tiers, 1:1	
	NOMINAL CROSS SECTION	0.75 mm <sup>2</sup> (1.5 mm <sup>2</sup> )*2	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
	Minimum conductor cross section solid	0.14 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
_	Maximum conductor cross section solid	1.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>	
Applicable wire sizes*1	Minimum conductor cross section fine stranded	0.08 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
cable wi	Maximum conductor cross section fine stranded	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Applic	Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.14 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.25 mm <sup>2</sup>	
	Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.75 mm² (1.5 mm²)*2	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Dim	ensions	3.5 × 65.7 × 41.1	5.2 × 78.8 × 45.9	6.2 × 85 × 45.9	
IEC	rated voltage	500 V			
UL rated voltage		600 V			
Dielectric strength		1,890 VAC for 1 min (leakage current: 1 mA max.)	2,000 VAC for 1 min (leakage current: 1 mA max.)		
End	Cover	XW5E-P1.5-1.1-2	XW5E-P2.5-1.1-2	XW5E-P4.0-1.1-2	
Spe	cial tool	XW4Z-00B			
Арр	licable nameplates	XW5Z-P1.5LB2	XW5Z-P2.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	XW5Z-P4.0LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	
	a Haa a sasahadia DIN	Tue ali cultura cue la constanta Cue cue discon Tesses in	al Diagle		

Note: Use a conductive DIN Track when using a Grounding Terminal Block.

OMRON does not offer conductive DIN Tracks. Please use a commercially available product.

\*1. For the applicable wire ranges, refer to page 17 for solid and stranded wires and to page 19 for ferrules.

\*2. You can also use ferrules for 1.0 to 1.5 mm² wires if you use ferrules without insulation sleeve.

# **Grounding Terminal blocks Multi conductor terminals**

Model		XW5G-P1.5-1.2-1	XW5G-P2.5-1.2-1	XW5G-P4.0-1.2-1	
Appearance and internal wiring		1 tier, 1:2	1 tier, 1:2	1 tier, 1:2	
	NOMINAL CROSS SECTION	0.75 mm <sup>2</sup> (1.5 mm <sup>2</sup> )*2	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
	Minimum conductor cross section solid	0.14 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
_	Maximum conductor cross section solid	1.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>	
Applicable wire sizes*1	Minimum conductor cross section fine stranded	0.08 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>	
cable wi	Maximum conductor cross section fine stranded	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Appli	Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.14 mm²	0.14 mm <sup>2</sup>	0.25 mm <sup>2</sup>	
	Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.75 mm² (1.5 mm²)*2	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	
Dim	ensions	3.5 × 54.1 × 30.5	5.2 × 60.5 × 35.3	6.2 × 66.5 × 35.3	
IEC	rated voltage	500 V	800 V		
UL rated voltage		600 V	600 V		
Dielectric strength		1,890 VAC for 1 min (leakage current: 1 mA max.)	2,000 VAC for 1 min (leakage current: 1 mA max.)		
End Cover		XW5E-P1.5-1.2-1	XW5E-P2.5-1.2-1	XW5E-P4.0-1.2-1	
Spe	cial tool	XW4Z-00B			
Applicable nameplates		XW5Z-P1.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	XW5Z-P2.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	XW5Z-P4.0LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	

Note: Use a conductive DIN Track when using a Grounding Terminal Block.

OMRON does not offer conductive DIN Tracks. Please use a commercially available product.

\*1. For the applicable wire ranges, refer to page 17 for solid and stranded wires and to page 19 for ferrules.

\*2. You can also use ferrules for 1.0 to 1.5 mm² wires if you use ferrules without insulation sleeve.

Model		XW5G-P1.5-2.2-1	XW5G-P2.5-2.2-1	XW5G-P4.0-2.2-1
Appearance and internal wiring		1 tier, 2:2	1 tier, 2:2	1 tier, 2:2
	NOMINAL CROSS SECTION	0.75 mm <sup>2</sup> (1.5 mm <sup>2</sup> )*2	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>
	Minimum conductor cross section solid	0.14 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>
_	Maximum conductor cross section solid	1.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>	6.0 mm <sup>2</sup>
Applicable wire sizes*1	Minimum conductor cross section fine stranded	0.08 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.2 mm <sup>2</sup>
cable wi	Maximum conductor cross section fine stranded	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>
Applic	Minimum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.14 mm <sup>2</sup>	0.14 mm <sup>2</sup>	0.25 mm <sup>2</sup>
	Maximum conductor cross section (flex., stranded) with ferrule with Plastic sleeve	0.75 mm² (1.5 mm²)*2	2.5 mm <sup>2</sup>	4.0 mm <sup>2</sup>
Dim	ensions	3.5 × 63.2 × 30.5	5.2 × 72.2 × 35.3	6.2 × 76.9 × 35.3
IEC	rated voltage	500 V	800 V	
UL rated voltage		600 V		
Dielectric strength		1,890 VAC for 1 min (leakage current: 1 mA max.)	2,000 VAC for 1 min (leakage current: 1 mA max.)	
End	Cover	XW5E-P1.5-2.2-1	XW5E-P2.5-2.2-1	XW5E-P4.0-2.2-1
Spe	cial tool	XW4Z-00B		
Applicable nameplates		XW5Z-P1.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	XW5Z-P2.5LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness	XW5Z-P4.0LB□ or commercially available nameplate with 9.5 mm width and 0.5 mm thickness

Note: Use a conductive DIN Track when using a Grounding Terminal Block.

OMRON does not offer conductive DIN Tracks. Please use a commercially available product.

\*1. For the applicable wire ranges, refer to page 17 for solid and stranded wires and to page 19 for ferrules.
\*2. You can also use ferrules for 1.0 to 1.5 mm² wires if you use ferrules without insulation sleeve.

# **Performance**

Operating temperature	-40 to 55°C (with no condensation or icing)
Operating humidity	5% to 95%
Insulating material	PA resin
Fire resistance	UL94 V-0
Insertion durability	50 times
Vibration resistance	10 to 150 Hz, Acceleration of 50 m/s² for 80 min each in X, Y, and Z directions
Shock resistance	500 m/s² for 11 ms each in 6 directions 5 times
Storage Temperature Range	-40 to 85°C (with no condensation or icing)
Storage Humidity Range	5% to 95%

#### **Short Bars**

Model	XW5S-P1.5-□	XW5S-P2.5-□	XW5S-P4.0-□
Rated voltage	500 V	800 V	_
Rated current	17.5 A	24 A	32 A

# **Standards**

# **Compliant standard**

- UL1059
- CSA (C22.2 No.158)
- IEC 60947-7-1

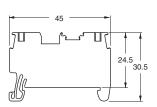
#### Certification

• cURus (File No. E245101)

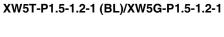
Dimensions (Unit: mm)

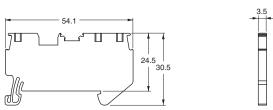
# **DIN Track Terminal Blocks**

# XW5T-P1.5-1.1-1 (BL)/XW5G-P1.5-1.1-1

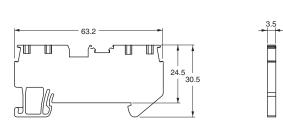




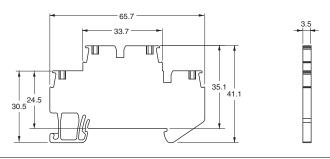




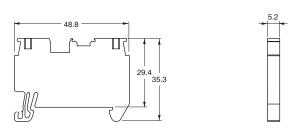
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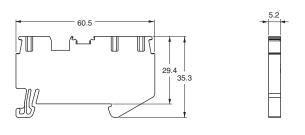
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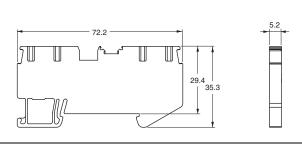
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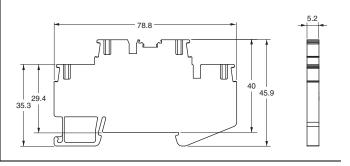
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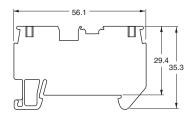
XW5T-P2.5-2.2-1 (BL)/XW5G-P2.5-2.2-1



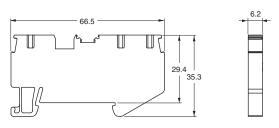
XW5T-P2.5-1.1-2 (BL)/XW5G-P2.5-1.1-2



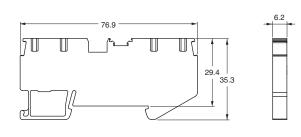
# XW5T-P4.0-1.1-1 (BL)/XW5G-P4.0-1.1-1



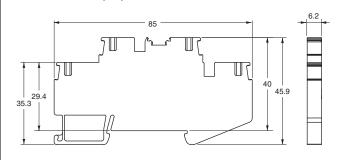
# XW5T-P4.0-1.2-1 (BL)/XW5G-P4.0-1.2-1



# XW5T-P4.0-2.2-1 (BL)/XW5G-P4.0-2.2-1

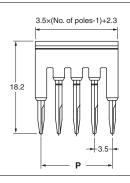


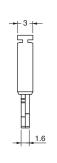
# XW5T-P4.0-1.1-2 (BL)/XW5G-P4.0-1.1-2



# **Short Bars**

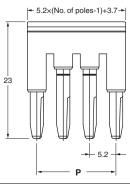
# XW5S-P1.5-□





Model	P (mm)
XW5S-P1.5-2□	3.5
XW5S-P1.5-3□	7.0
XW5S-P1.5-4□	10.5
XW5S-P1.5-5□	14.0
XW5S-P1.5-10□	31.5

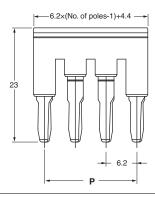
XW5S-P2.5-□

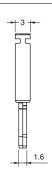




Model	P (mm)
XW5S-P2.5-2□	5.2
XW5S-P2.5-3□	10.4
XW5S-P2.5-4□	15.6
XW5S-P2.5-5□	20.8
XW5S-P2.5-10□	46.8

# XW5S-P4.0-□

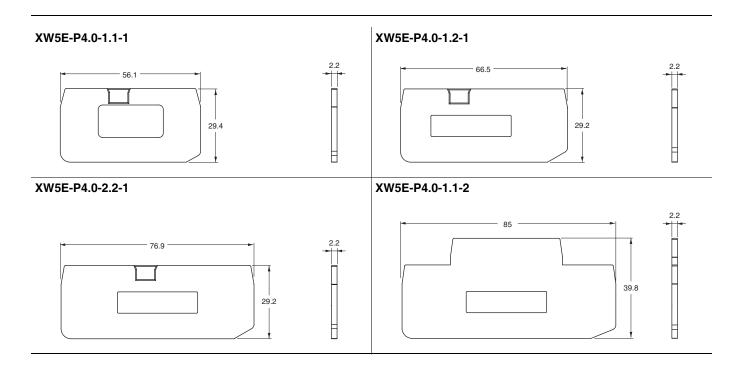




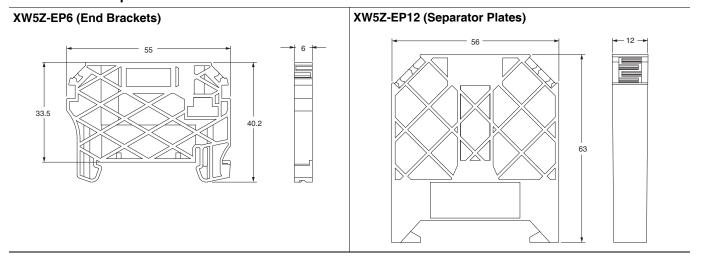
Model	P (mm)
XW5S-P4.0-2□	6.2
XW5S-P4.0-3□	12.4
XW5S-P4.0-4□	18.6
XW5S-P4.0-5□	24.8
XW5S-P4.0-10□	55.8

# **End Cover** XW5E-P1.5-1.1-1 XW5E-P1.5-1.2-1 <sup>-</sup> 54.1 <sup>--</sup> - 45 -24.5 24.5 XW5E-P1.5-2.2-1 XW5E-P1.5-1.1-2 65.4 63.2 -35.1 24.5 XW5E-P2.5-1.1-1 XW5E-P2.5-1.2-1 - <sub>48.8</sub> -60.5 -29.4 29.2 XW5E-P2.5-2.2-1 XW5E-P2.5-1.1-2 - 78.8 -39.8 29.2

# XW5T



# **End Brackets/Separator Plates**



# **Safety Precautions**

#### Warning Indications

Precautions for Safe Use	Supplementary comments on what to do or avoid doing, to use the product safely.
Precautions for Correct Use	Supplementary comments on what to do or avoid doing, to prevent failure to operate, malfunction, or undesirable effects on product performance.

#### **Precautions for Safe Use**

- Do not drop the Terminal Block.
   Terminal Block functionality may be inhibited.
- Do not exceed the ratings. Doing so may damage or burn out the Terminal Block
- Mount the Terminal Blocks on a DIN Track and secure both ends with Stoppers.
- Do not use the Terminal Block in locations where toxic gases, such as H<sub>2</sub>S, SO<sub>2</sub>, NH<sub>3</sub>, HNO<sub>3</sub>, and Cl<sub>2</sub>, may be present, or in locations subject to high temperature or humidity. Doing so may damage the Terminal Block due to contact failure or corrosion.
- Do not use the Terminal Block submersed in oil or water, or in locations continuously subject to splashes of oil or water. Doing so may result in oil or water entering and damaging the Terminal Block.
- Do not use or keep the Terminal Block under the following conditions:
  - · Subject to severe temperature changes.
  - Subject to high humidity or condensation.
  - Subject to severe vibration or shock.
  - · Where direct rays of the sun strike.
  - Where sea breeze may be present.
- · Do not wire anything to the release holes.
- Do not tilt or twist a flat-blade screwdriver while it is inserted into a release hole on the terminal block. The terminal block may be damaged.
- Insert a flat-blade screwdriver into the release holes at an angle.
   The terminal block may be damaged if you insert the screwdriver straight in.
- Do not allow the flat-blade screwdriver to fall out while it is inserted into a release hole.
- Do not bend a wire past its natural bending radius or pull on it with excessive force.
  - Doing so may cause the wire disconnection. Do not place excessive force on a Terminal Block. Doing so may damage or deform the Terminal Block and result in contact failure.
- Do not insert more than one wire into each terminal insertion hole.
- If you mount more than one Terminal Block, mount them so that the conductive parts of adjacent Terminal Blocks are facing in the same direction. If they face in different directions, short circuits may occur between adjacent Terminal Blocks.
- To prevent wire materials from smoking or igniting, confirm wire ratings and use the wiring materials given in the following table.

	Recomme	Stripping length	
	Solid	Stranded	(Without Ferrules)
XW5T-P1.5-□	0.14 to 1.5 mm <sup>2</sup> /	0.14 to 1.5 mm <sup>2</sup> /	8 mm
XW5G-P1.5-□	AWG 26 to 14	AWG 28 to 16	
XW5T-P2.5-□	0.14 to 4.0 mm <sup>2</sup> /	0.14 to 2.5 mm <sup>2</sup> /	10 mm
XW5G-P2.5-□	AWG 26 to 12	AWG 26 to 14	
XW5T-P4.0-□	0.25 to 6.0 mm <sup>2</sup> /	0.25 to 4.0 mm <sup>2</sup> /	12 mm
XW5G-P4.0-□	AWG 24 to 10	AWG 24 to 12	

#### **Precautions for Correct Use**

#### 1. Precautions for Correct Use

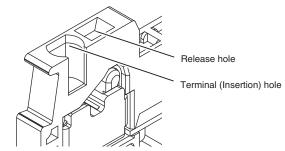
- Always mount End Covers to the following locations when you use Terminal Blocks.
  - · Exposed metal surface of the last Terminal Block
  - Any Terminal Block that is next to a different shape of Terminal Block

There is a risk of electric shock if End Covers are not used.

- When you wire the Terminal Block, do not subject it or the wires to stress. Secure the wires so that they do not resonate with vibrations from the facilities in installation conditions.
- Always turn OFF the power supply before wiring. Electrical shock may occur.

# 2. Connecting Wires to the Push-In Plus Terminal Block

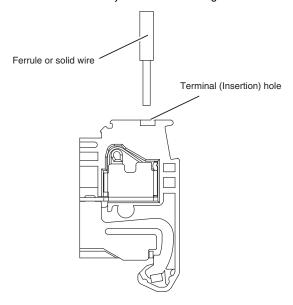
#### **Part Names of the Terminal Block**



#### **Connecting Wires with Ferrules and Solid Wires**

Insert the solid wire or ferrule straight into the terminal block until the end strikes the terminal block.

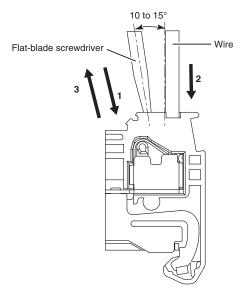
If a wire is difficult to connect because it is too thin, use a flat-blade screwdriver in the same way as when connecting stranded wire.



#### **Connecting Stranded Wires**

Use the following procedure to connect the wires to the terminal block.

- Hold a flat-blade screwdriver at an angle and insert it into the release hole. The angle should be between 10° and 15°.
   If the flat-blade screwdriver is inserted correctly, you will feel the spring in the release hole.
- With the flat-blade screwdriver still inserted into the release hole, insert the wire into the terminal hole until it strikes the terminal block
- 3. Remove the flat-blade screwdriver from the release hole.



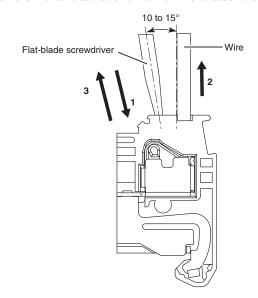
#### **Checking Connections**

- After the insertion, pull gently on the wire to make sure that it will not come off and the wire is securely fastened to the terminal block.
- If you use a ferrule with a conductor length of 10 mm, part of the conductor may be visible after the ferrule is inserted into the terminal block, but the product insulation distance will still be satisfied.

# 3. Removing Wires from the Push-In Plus Terminal Block

Use the following procedure to remove wires from the terminal block. The same method is used to remove stranded wires, solid wires, and ferrules.

- Hold a flat-blade screwdriver at an angle and insert it into the release hole.
- 2. With the flat-blade screwdriver still inserted into the release hole, remove the wire from the terminal insertion hole.
- 3. Remove the flat-blade screwdriver from the release hole.



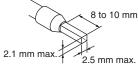
# **4. Recommended Ferrules and Crimp Tools** Recommended ferrules

XW5T-P1.5- - - \( \Box \) / XW5G- \( \Box \) P1.5- \( \Box \) - \( \Box \)

Applica	ble wire	Ferrule	Stripping	Recommended ferrules		
(mm²)	(AWG)	Conductor length (mm)	length (mm) (Ferrules used)	Manufactured by Phoenix Contact	Manufactured by Weidmuller	Manufactured by Wago
0.14	26	8	10	AI 0,14-8	H0.14/12	
0.25	24	8	10	AI 0,25-8	H0.25/12	216-301
0.23		10	12	AI 0,25-10		
0.34	22	8	10	AI 0,34-8	H0.34/12	216-302
0.34		10	12	AI 0,34-10		
0.50	20	8	10	AI 0,5-8	H0.5/14	216-201
0.50		10	12	AI 0,5-10	H0.5/16	216-241
0.75	18	8	10	AI 0,75-8	H0.75/14	216-202
0.75		10	12	AI 0,75-10	H0.75/16	216-242
Recom	nmende	d crimp to	ol	CRIMPFOX6 CRIMPFOX6T-F CRIMPFOX10S	PZ6 roto	Variocrimp4

- **Note: 1.** Make sure that the outer diameter of the wire is smaller than the inner diameter of the insulation sleeve of the recommended ferrule.
  - 2. Make sure that the ferrule processing dimensions conform to the following figure.

Ferrule Processed Dimensions



 For the ferrule which is for applicable wire (1 to 1.5 mm²/ AWG 18 to 16), please use a ferrule without an insulation sleeve. (Refer to the following table.)

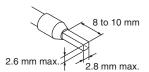
Applicable wire		Ferrule	Stripping	Recommended ferrules		
(mm2)	(AWG)	Conductor length (mm)	length (mm) (Ferrules used)	Manufactured by Phoenix Contact	Manufactured by Weidmuller	Manufactured by Wago
1/1.25	18/17	8	8	A 1-8		F-1.0-8
1/1.23		10	10	A 1-10	H1,0/10	F-1.0-10
1.25/1.5	17/16	10	10	A 1,5-10	H1,5/10	F-1.5-10
Recom	nmende	d crimp to	ols	CRIMPFOX6 CRIMPFOX6T-F CRIMPFOX10S	PZ6 roto	Variocrimp4

#### XW5T-P2.5- - - - XW5G- P2.5- - -

Applicable wire		Ferrule	Stripping	Recommended ferrules		
(mm²)	(AWG)	Conductor length (mm)	length (mm) (Ferrules used)	Manufactured by Phoenix Contact	Manufactured by Weidmuller	Manufactured by Wago
0.14	26	8	10	AI 0,14-8	H0.14/12	
0.25	24	8	10	AI 0,25-8	H0.25/12	216-301
0.25	24	10	12	AI 0,25-10		
0.34	22	8	10	AI 0,34-8	H0.34/12	216-302
0.54		10	12	AI 0,34-10		
0.50	20	8	10	AI 0,5-8	H0.5/14	216-201
0.50		10	12	AI 0,5-10	H0.5/16	216-241
0.75	18	8	10	AI 0,75-8	H0.75/14	216-202
		10	12	AI 0,75-10	H0.75/16	216-242
1/1.25	18/17	8	10	AI 1-8	H1.0/14	216-203
1/1.23		10	12	AI 1-10	H1.0/16	216-243
1 05/1 5	17/16	8	10	AI 1,5-8	H1.5/14	216-204
1.25/1.5		10	12	AI 1,5-10	H1.5/16	216-244
2.5	14	10	12	AI 2,5-10	H2.5/16DS	216-246
Recommended crimp tool				CRIMPFOX6 CRIMPFOX6T-F CRIMPFOX10S	PZ6 roto	Variocrimp4

- **Note: 1.** Make sure that the outer diameter of the wire is smaller than the inner diameter of the insulation sleeve of the recommended ferrule.
  - 2. Make sure that the ferrule processing dimensions conform to the following figure.

Ferrule Processed Dimensions

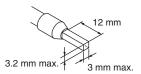


XW5T-P4.0- - - - XW5G- P4.0- - -

Ī	Applicable wire		Ferrule			Recommended ferrules			
	(mm²)	(AWG)	Conductor length (mm)	length (mm) (Ferrules used)	Manufactured by Phoenix Contact	Manufactured by Weidmuller	Manufactured by Wago		
	0.25	24			AI 0,25-12				
	0.34	22			AI 0,34-12				
-	0.50	20	12	14	AI 0,5-12		216-261		
-	0.75	18			AI 0,75-12	H0.75/18	216-262		
-	1/1.25	18/17		12	12	14	AI 1-12	H1.0/18	216-263
-	1.25/1.5	17/16			Al 1,5-12	H1.5/18D	216-264		
-	2.5	14			AI 2,5-12	H2.5/19D	216-266		
	4	12			AI 4-12	H4.0/20D	216-267		
_	Recommended crimp tool				CRIMPFOX6 CRIMPFOX6T-F CRIMPFOX10S	PZ6 roto	Variocrimp4		

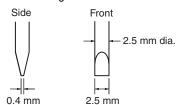
- **Note: 1.** Make sure that the outer diameter of the wire is smaller than the inner diameter of the insulation sleeve of the recommended ferrule.
  - Make sure that the ferrule processing dimensions conform to the following figure.

Ferrule Processed Dimensions



# **Recommended Flat-blade Screwdriver**

Use a flat-blade screwdriver to connect and remove wires. Use the following flat-blade screwdriver. The following table shows manufacturers and models as of 2015/Dec.



Model	Manufacturer
ESD 0,40×2,5	Wera
SZS 0,4×2,5 SZF 0-0,4×2,5*	Phoenix Contact
0.4×2.5×75 302	Wiha
AEF.2,5×75	Facom
210-719	Wago
SDIS 0.4×2.5×75	Weidmuller
9900 (-2.5×75)	Vessel

\*OMRON's exclusive purchase model XW4Z-00B is available to order as SZF 0-0,4×2,5 (manufactured by Phoenix Contact).

# **Equivalent Labels from Other Companies and Recommended Label Printers**

Use the following label printer.

The following table gives the manufacturer's model number as of March 2017.

Manufacturer	Omron	Phoenix Contact	Weidmuller	Cembre
	XW5Z-P1.5LB1	UCT-TM3,5	NA	MG-CPM-04 41392
			MF 8/5	
	XW5Z-P2.5LB1		MF 10/5	MG-CPM-04 41390N
Label			MF 12/5	
Labei	XW5Z-P4.0LB1	UCT-TM6	MF 10/6	MG-CPM-04 41391
	XW5Z-P1.5LB2	UCT-TMF3,5		
	XW5Z-P2.5LB2	UCT-TMF5		
	XW5Z-P4.0LB2	UCT-TMF6		
Label printer	*	BLUEMARK CLED, THERMOMA RK CARD SET PLUS, THERMOMA RK CARD	PrintJet ADVCANCED, Plotter MCP Plus, Plotter MCP Basic	Markingenius MG3

\*When using a printing tool, use a Phoenix Contact label printer.

Note: Ask the label manufacturer or printer manufacturer for details.

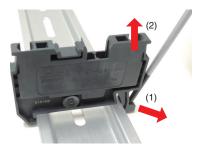
# **5. Mounting to DIN Track/Removing from DIN Track Mounting Method**

To mount a Terminal Block to a DIN Track, press it against the DIN Track as shown in the following figure.



#### **Removal Method**

To remove a Terminal Block from the DIN Track, catch the tip of a screwdriver in the hook, operate the screwdriver so that the tip moves in direction (1), and then remove the Terminal Block in direction (2). However, do not apply excessive force to the Terminal Block. Doing so may damage it.

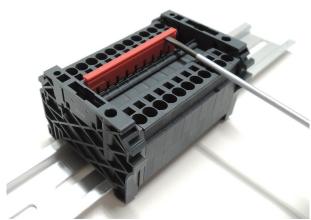


# 6. Using the Accessories Short Bars Mounting Method



- 1. Insert the Short Bar into the Short Bar holes.
- 2. Press the Short Bar in all of the way.

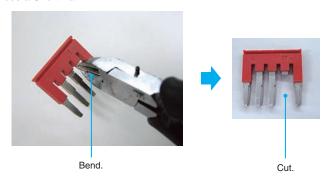
#### **Removal Method**



- 1. Insert the tip of a flat-blade screwdriver into the groove on the Short Bar and lift it up.
- 2. Remove the Short Bar.

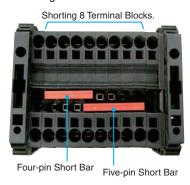
#### Installation

You can bend and cut off any of the middle pins with a tool when you use a Short Bar.

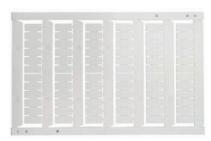


If a Short Bar that has the required pins is not available, you can combine more than one Short Bar to short the required Terminal Blocks.

For example, the following figure shows combining Four-pin and Five-pin Short Bars to short eight Terminal Blocks.



# Labels Mounting Method Top-surface Labels





- 1. Remove the Labels one at a time.
- 2. Insert them on the tops of the Terminal Blocks.

**Note:** If multiple Terminal Blocks of the same type are used side by side, you can use multiple Labels still connected to each other.

# Side-surface Labels





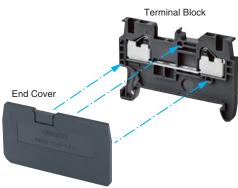


- 1. Remove the Labels one at a time.
- 2. Insert them on the sides of the Terminal Blocks.
- **Note: 1.** There is no place to mount the Top-surface Labels on Twotier Terminal Blocks with a width of 3.5 mm, so they cannot be used.
  - Different models of Labels are used for the top and side surfaces.
  - If multiple Terminal Blocks of the same type are used side by side, you can use multiple Labels still connected to each other.

# **End Cover**

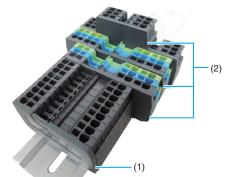
# **Mounting Method**

Attach the End Cover to the side of the Terminal Block with exposed metal.



Always mount  $\operatorname{End}$  Covers to the following locations when you use  $\operatorname{Terminal}$  Blocks.

- (1) Exposed metal surface of the last Terminal Block
- (2) Any Terminal Block that is next to a different shape of Terminal Block There is a risk of electric shock if End Covers are not used.



Note: End Brackets or Separator Plate cannot be used in place of an End Cover.

# **End Brackets**

# **Mounting Method**

The mounting and removal methods for DIN Track are the same as those for the Terminal Blocks.

# **Separator Plate**

# **Mounting Method**

Use a flat-blade screwdriver to tighten the screw in the middle of the top surface to mount the Separator Plate.

Loosen the screw to remove the Separator Plate from the DIN Track.



# 7. Storage

**Storage Temperature Range** 

-40 to 85°C with no condensation or icing

# **Storage Humidity Range**

5% to 95%

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