DIN Track Terminal Blocks

XW5T

**More Efficient Control Panel Production
Starts with the Terminals**

- Push-In Plus terminal blocks for easy wiring
- Minimum width of 3.5 mm to help downsize control panels
- New models with widths of 5.2 mm and 6.2 mm joined the lineup

For building green control panels

Natural disasters caused by global warming and climate change are became global social issue, that drives over 150 countries and regions worldwide to take action toward decarbonization.Our goal is to reduce greenhouse gas (GHG) emissions toward half by through new ways of building control panels, that key figure of the manufacturing site.

Process
Realize greatly reduces design/manufacturing work

Innovation for design, building Process

Further Evolution for Panels

Panel
Realize compact & highly reliable control panels

Building sustainable control panels

Creating green control panels

Simple & Easy People

Green
Reducing GHG emission of control panels to achieve carbon neutrality

People
Provide reliable and comfortable manufacturing for all people who deal with control panels

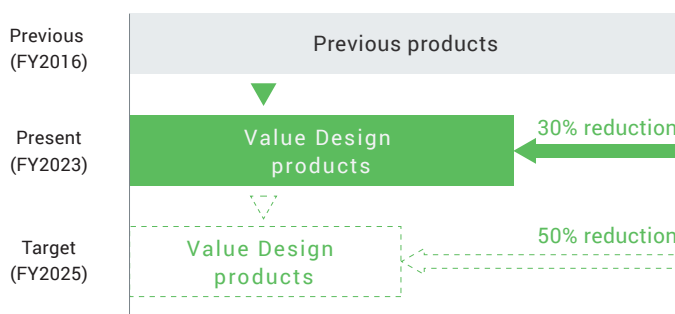# Integrating green perspectives into Value Design

Value Design for Panel (Value Design) is the common concept shared across OMRON's in-panel product specifications to deliver new value to your control panels.
This Value Design also integrate environment consideration concept that enable earth and user-friendly control panel building.

Value Design for Panel

1 ········ Unified height & slim size*1

2 ········ Side-by-side mounting at (55°C) ambient temperature*2

3 ········ Unique Push-In Plus technology*1

4 ········ Front-in and front-release wiring

5 ········ eCAD library

6 ········ Certification for CE, UL, and CSA

7 ········ Green features that save energy and resources*3

CFP of control panel (total GHG emissions)*4

|	
Previous (FY2016)	Previous products
Present (FY2023)	Value Design products — 30% reduction
Target (FY2025)	Value Design products — 50% reduction

*1. Expect for some products
*2. Side-by-side mounting is possible in the same series
*3. Greener design compared to previous (2016) products
*4. CFP (carbon footprint) of control panel is a calculation result of refering the life cycle assessment method that based on international standards ISO14067 which define CO_2 quantitative conversion of the environmental burden at every stage, from manufacturing, transportation, use, and disposal of the control panel (product). According to OMRON investigation in May 2023.

Push-In Plus Terminal Blocks for Easy Wiring

Just Insert Wires: No Tools Required

Now you can use Push-In Plus terminal blocks to reduce the time and work involved in wiring.

Greatly Reduce Wiring Work with Push-In Plus Terminal Blocks

Approx. 60% reduction!
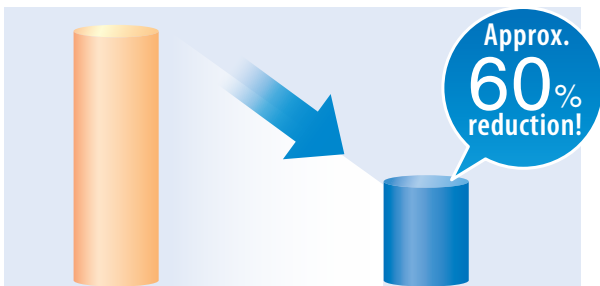
Conventional screw terminal blocks   OMRON Push-In Plus terminal block

*Information for Push-In Plus and screw terminal blocks is based on OMRON's actual measurement value data.

Wiring Possible with Stranded Wires

You can insert wires with pin terminals or ferrules, or you can also insert solid wires or stranded wires.

When a stranded wire is used: 3 Steps

STEP 1   **STEP 2**   **STEP 3**

Stranded wire	Ferrules	Solid wire

Just Insert Wires: No Tools Required

Easy to Insert

OMRON's Push-In Plus terminal blocks are as easy as inserting to an earphone jack. They help reduce the work load and improve wiring quality.

Held Firmly in Place

Even though less insertion force is required, the wires are held firmly in place. The advanced mechanism design technology and manufacturing technology produced a spring that ensures better workability and reliability.

IEC standard (cable diameter)	Push-In Plus terminal block	Screw terminal block
20 N min. (AWG20, 0.5 mm²)	**125 N**	112 N

*Information for Push-In Plus and screw terminal blocks is based on OMRON's actual measurement value data.
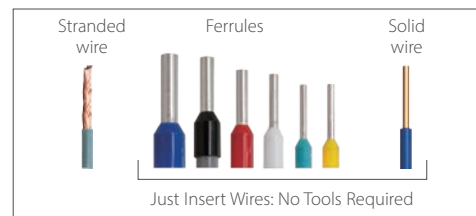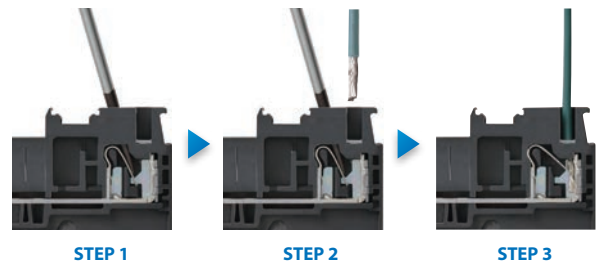
No Retightening Required

The retightening that is required for screw terminal blocks is not required for Push-in Plus terminal blocks.
Your work load is reduced not only when wiring, but also for inspections, delivery (shipping), and maintenance.

Needless

Screwdriver Held in Place to Free Both Your Hands

Optimized shape to hold the screwdriver was created by the resin parts and the spring.
Work goes smoothly when connecting stranded wires directly to the terminal because it's easier to aim at the desired terminal.

Safety

The structure provides finger protection so that your fingers never touch conductive parts.

# Minimum Width of 3.5 mm to Help Downsize Control Panels

Terminal blocks are the most numerous, most space-eating components in control panels. OMRON has achieved the top class* in the industry for downsizing.

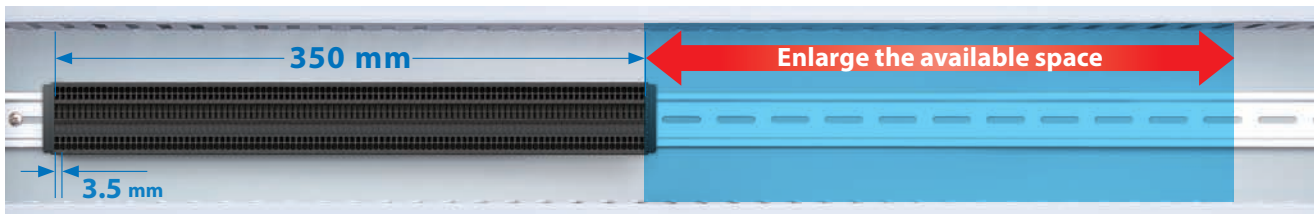*According to OMRON investigation in March 2017.
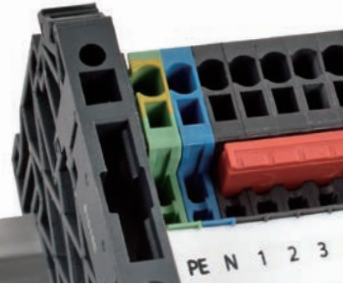
Approx. **50**% **More Compact**

Terminal Block with 100 Poles

Commercially available Phillips screw terminal blocks 7-mm pitch

700 mm

7 mm
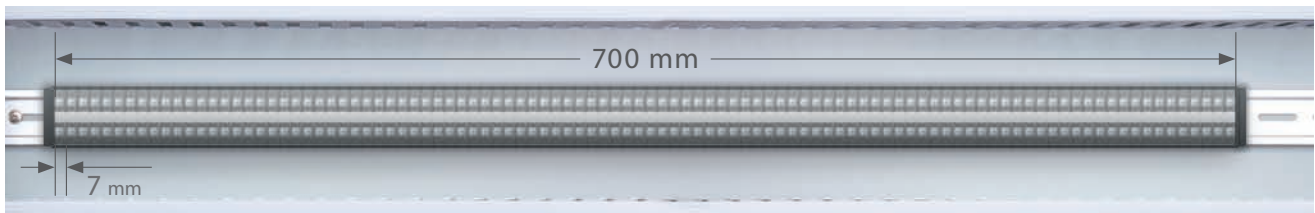
XW5T Push-In Plus Terminal Blocks 3.5-mm pitch (1 tier)

350 mm

Enlarge the available space

3.5 mm

Extensive Product Lineup with Push-in Plus Terminal Blocks to Efficiently Build Control Panels
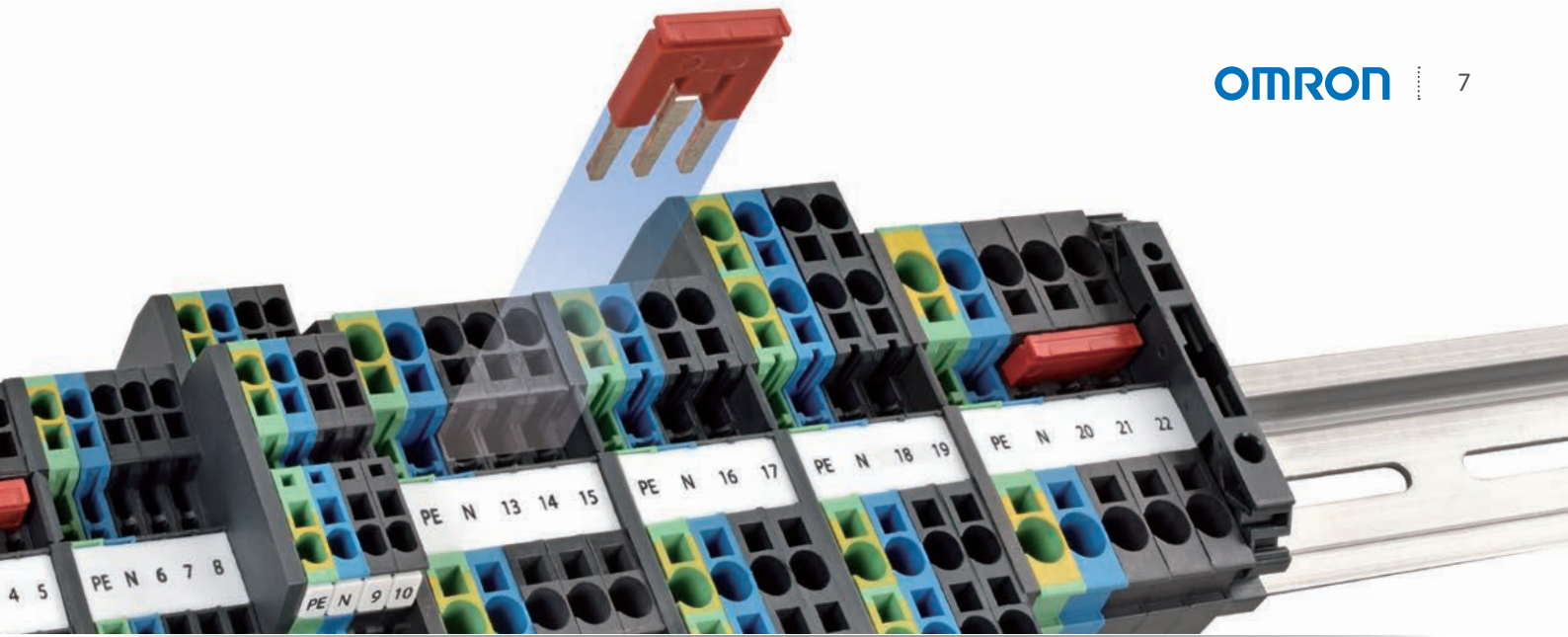
Product Lineup

Terminal Blocks with Width of 3.5 mm

	Standard terminals	Multi conductor terminals		Multi tiers terminal
Model	XW5T-P1.5-1.1-1 XW5T-P1.5-1.1-1BL XW5G-P1.5-1.1-1	XW5T-P1.5-1.2-1 XW5T-P1.5-1.2-1BL XW5G-P1.5-1.2-1	XW5T-P1.5-2.2-1 XW5T-P1.5-2.2-1BL XW5G-P1.5-2.2-1	XW5T-P1.5-1.1-2 XW5T-P1.5-1.1-2BL XW5G-P1.5-1.1-2
Appearance and internal wiring	1tier 1:1	1tier 1:2	1tier 2:2	2tier 1:1
Maximum applicable wire size (Stranded wire)	1.5 mm²(AWG16)			
Rated current	17.5 A			
Colors	■ Dark gray ■ Blue ▨ Green/yellow stripes (for ground)			
Standards	cULus			

Terminal Blocks with Width of 5.2 mm

	Standard terminals	Multi conductor terminals		Multi tiers terminal
Model	XW5T-P2.5-1.1-1 XW5T-P2.5-1.1-1BL XW5G-P2.5-1.1-1	XW5T-P2.5-1.2-1 XW5T-P2.5-1.2-1BL XW5G-P2.5-1.2-1	XW5T-P2.5-2.2-1 XW5T-P2.5-2.2-1BL XW5G-P2.5-2.2-1	XW5T-P2.5-1.1-2 XW5T-P2.5-1.1-2BL XW5G-P2.5-1.1-2
Appearance and internal wiring	1tier 1:1	1tier 1:2	1tier 2:2	2tier 1:1
Maximum applicable wire size (Stranded wire)	2.5 mm²(AWG14)			
Rated current	24 A			22 A
Colors	■ Dark gray ■ Blue ▨ Green/yellow stripes (for ground)			
Standards	cULus			

Terminal Blocks with Width of 6.2 mm

	Standard terminals	Multi conductor terminals		Multi tiers terminal
Model	XW5T-P4.0-1.1-1 XW5T-P4.0-1.1-1BL XW5G-P4.0-1.1-1	XW5T-P4.0-1.2-1 XW5T-P4.0-1.2-1BL XW5G-P4.0-1.2-1	XW5T-P4.0-2.2-1 XW5T-P4.0-2.2-1BL XW5G-P4.0-2.2-1	XW5T-P4.0-1.1-2 XW5T-P4.0-1.1-2BL XW5G-P4.0-1.1-2
Appearance and internal wiring	1tier 1:1	1tier 1:2	1tier 2:2	2tier 1:1
Maximum applicable wire size (Stranded wire)	4.0 mm²(AWG12)			
Rated current	32 A			28 A
Colors	Dark gray Blue Green/yellow stripes (for ground)			
Standards	c（UL）us			

Accessories

	End Cover	End Brackets	Labels	Short Bars	Separator Plates
Application	Electric shock prevention	Holding Terminal Blocks	Identifying wiring (top or side surfaces)*	Crossover wiring	Creating insulation distance
Model	XW5E	XW5Z-EP6	XW5Z	XW5S	XW5Z-EP12
Appearance				Product color ● ● ●	

*You can also use commercially available nameplates that are 9.5 mm wide and 0.5 mm thick (except on Two-tier Terminal Blocks with a width of 3.5 mm).

Refer to the *XW5T DIN Track Push-in Terminal Blocks Datasheet* (Cat. No. G124) for details.

Note: Do not use this document to operate the Unit.

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