New Value For Control Panels

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 **NEW**

OMRON

New Value For Control Panels

Control Panels: The Heart of Manufacturing Sites.
Evolution in control panels results in large evolution in production facilities.
And if control panel design, control panel manufacturing processes, and human interaction with them are innovated,
control panel manufacturing becomes simpler and takes a leap forward.
OMRON will continue to achieve a control panel evolution and process innovation through many undertakings starting
with the shared Value Design for Panel *1 concept for the specifications of products used in control panels.

Value Design for Panel

*1 Value Design for Panel

Our shared Value Design for Panel (herein after referred to as "Value Design") concept for the specifications of products used in control panels will create new value to our customer's control panels.
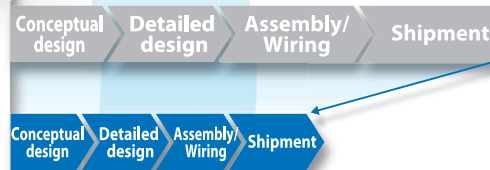Combining multiple products that share the Value Design concept will further increase the value provided to control panels.

Innovation for panel building
Process

Further Evolution for
Panels

New Value For Control Panels

Simple & Easy for panel business
People

Process

| Conceptual design | Detailed design | Assembly/ Wiring | Shipment |

| Conceptual design | Detailed design | Assembly/ Wiring | Shipment |

Panels

People

More Efficient Control Panel Production Starts with the Terminals

OMRON Products from Terminal Blocks to Controllers Let You Efficiently Build Control Panels

Control panels can be downsized by using the many OMRON Controllers,
Power Supply, Relays, and other products that connect to the Terminal Blocks.
We can also help you reduce terminal preparation and wiring work and reduce stock
management work by maximizing the use of the components to unify tools and wires.

Everything from DIN Track Terminal Blocks to Controllers Available with Push-in Plus Terminal Blocks

Controllers / I/O Units

Power Supplies

Relays
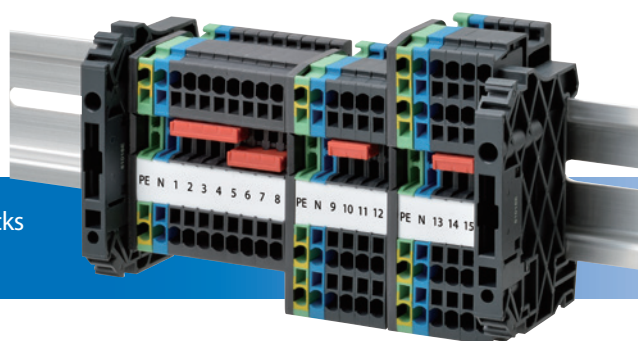
DIN Track Terminal Blocks
XW5T
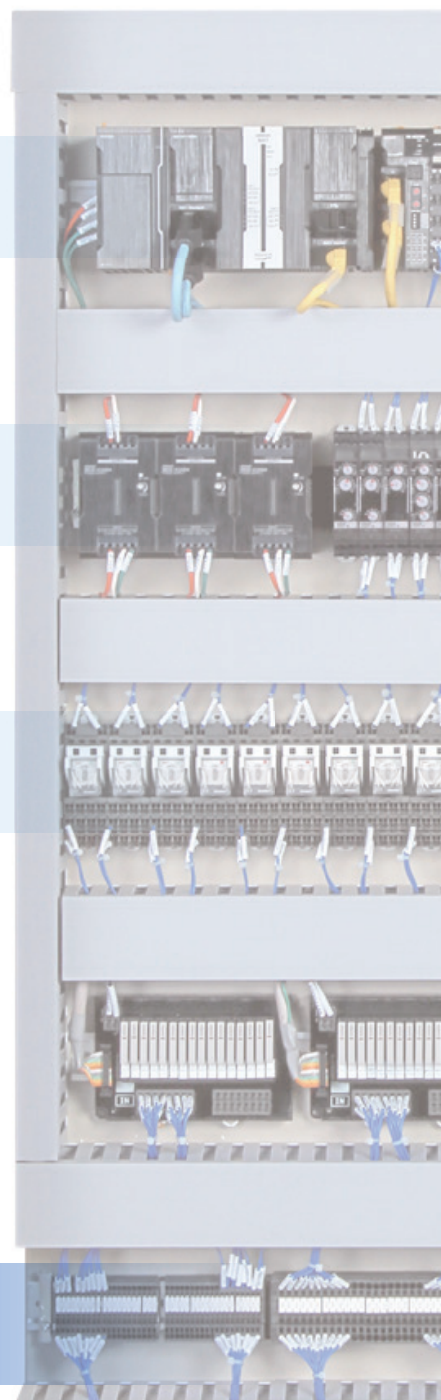
Push-In Plus Terminal Blocks for Easy Wiring

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!
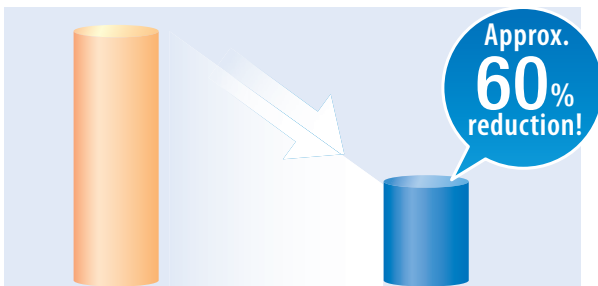
Conventional screw terminal blocks   **OMRON Push-In Plus terminal block**

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

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 mm^2)	**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

Needless

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.
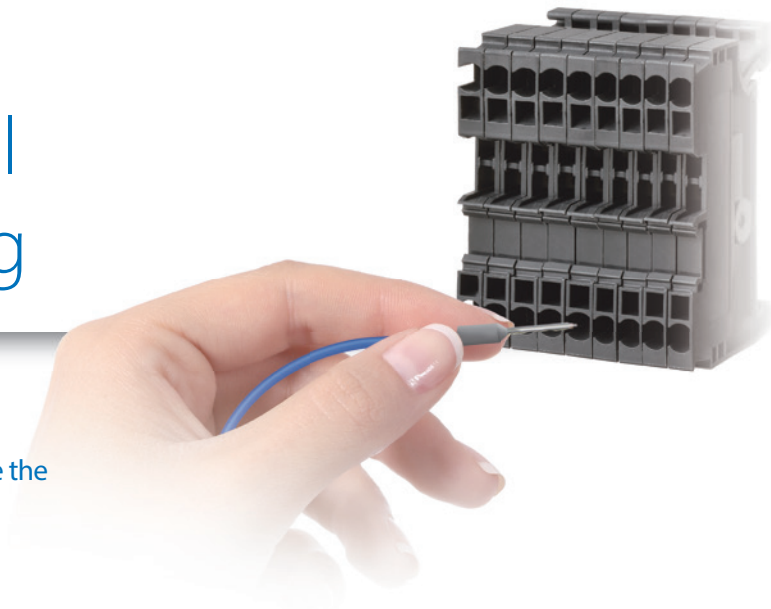
Wiring Possible with Stranded Wires

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
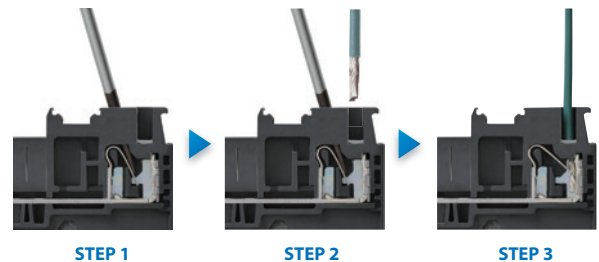
Screwdriver Held in Place to Free Both Your Hands

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.

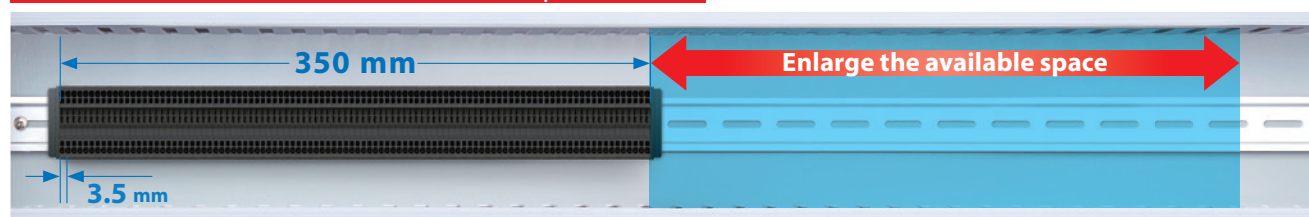*According to OMRON investigation in March 2017.

Approx. 50% More Compact

Terminal Block with 100 Poles

Commercially available Phillips screw terminal blocks 7-mm pitch

700 mm

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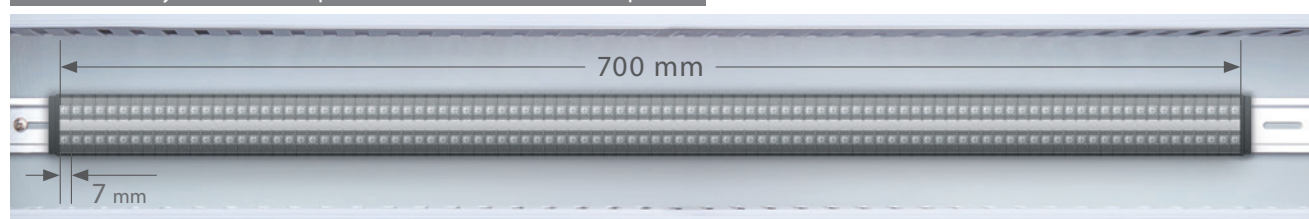
XW5T Push-In Plus Terminal Blocks 3.5-mm pitch (1 tier)

350 mm

Enlarge the available space

3.5 mm

Web Service That Helps Reduce Work in Selecting Terminal Blocks and Designing

- If you use OMRON's website, you can easily select the Terminal Blocks to connect to the control panel components that you have selected.
- You can easily confirm the dimensions of the Terminal Blocks that you have selected.
- And you can easily create Terminal Block parts lists (BOMs) and marking formats.

(This window is for illustrative purposes only.)
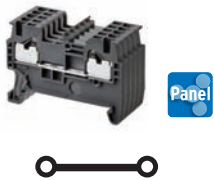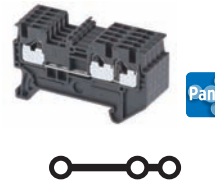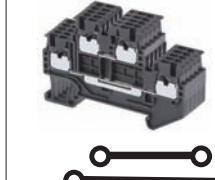
Take a Look Now! ▶ www.ia.omron.com/solution/panel/

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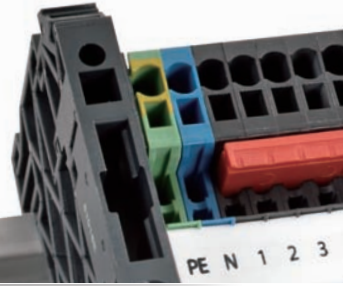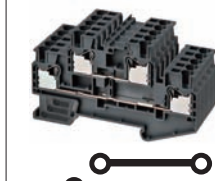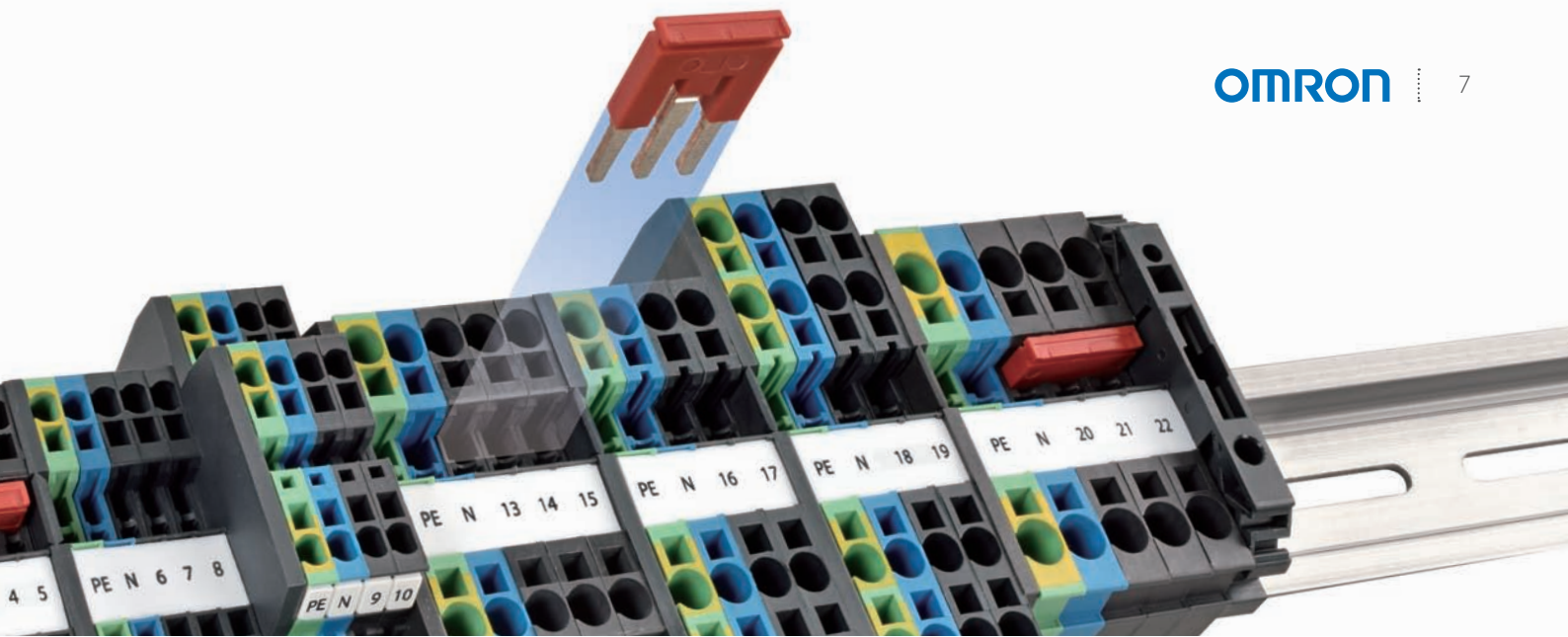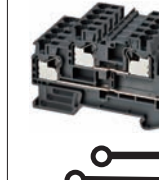
Product Lineup

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 mm^2(AWG16)			
Rated current	17.5 A			
Colors	■ Dark gray ■ Blue ▨ Green/yellow stripes (for ground)			
Standards	c**RU**us			

Terminal Blocks with Width of 5.2 mm
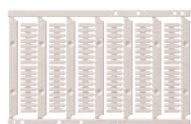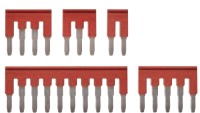
	Standard terminals	Multi conductor terminals		Multi tiers terminal
Model	XW5T-P2.5-1.1-1 XW5T-P2.5-1.1-1BL XW5G-P2.5-1.1-1	XW5T-P2.5-1.2-1 XW5T-P2.5-1.2-1BL XW5G-P2.5-1.2-1 **NEW**	XW5T-P2.5-2.2-1 XW5T-P2.5-2.2-1BL XW5G-P2.5-2.2-1 **NEW**	XW5T-P2.5-1.1-2 XW5T-P2.5-1.1-2BL XW5G-P2.5-1.1-2 **NEW**
Appearance and internal wiring	1tier 1:1	1tier 1:2	1tier 2:2	2tier 1:1
Maximum applicable wire size (Stranded wire)	2.5 mm^2(AWG14)			
Rated current	24 A			22 A
Colors	■ Dark gray ■ Blue ▨ Green/yellow stripes (for ground)			
Standards	c**RU**us			

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 **NEW**	XW5T-P4.0-2.2-1 XW5T-P4.0-2.2-1BL XW5G-P4.0-2.2-1 **NEW**	XW5T-P4.0-1.1-2 XW5T-P4.0-1.1-2BL XW5G-P4.0-1.1-2 **NEW**
Appearance and internal wiring	1tier 1:1	1tier 1:2	1tier 2:2	2tier 1:1
Maximum applicable wire size (Stranded wire)	4.0 mm^2(AWG12)			
Rated current	32 A			28 A
Colors	Dark gray Blue Green/yellow stripes (for ground)			
Standards	c**RU**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.

Products That Create New Value in Control Panels

Value Design for Panel

Switch Mode Power Supplies
S8VK-S

Uninterruptible Power Supply (UPS)
S8BA

Power Monitors
KM-N2/KM-N3

Measuring and Monitoring Relays
K8DT

Solid-state Timers
H3DT

Solid-state Timers
H3Y(N)-B

Solid-state Timers
H3RN-B

Liquid Leakage Sensor Amplifiers
K7L-B

Sockets for Relays with Forcibly Guided Contacts (for G7SA)
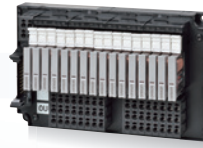P7SA-PU

Common Sokets (for MY/H3Y(N)-B)
PYF-PU(-L)

Common Sokets (for G2R-S/H3RN-B/K7L-B)
P2RF-PU

Slim I/O Relays
G2RV-SR

Slim I/O Relays
G3RV-SR

I/O Relay Terminals
G70V

Pushbutton Switches Push-In Plus Terminal Block Series
A22N-P/A30N-P/M22N-P

Solid State Relays for Heaters
G3PJ

DIN Track Terminal Block
XW5T

Digital Temperature Controllers
E5CC-B/E5EC-B

Innovation in Control Panel Building
Cat. No. Y218

Panel Assist Web
www.ia.omron.com/solution/panel/

Authorized Distributor:

CSM_1_4_0418
Cat. No. G123-E1-02

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