

Solid-state Timers

H3DT

More Advanced Timers for New Control Panels



- Low power consumption
- Push-In Plus terminal blocks for easy wiring
- Certified for safety standards of major countries

For building green control panels

Natural disasters caused by global warming and climate change are becoming a 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

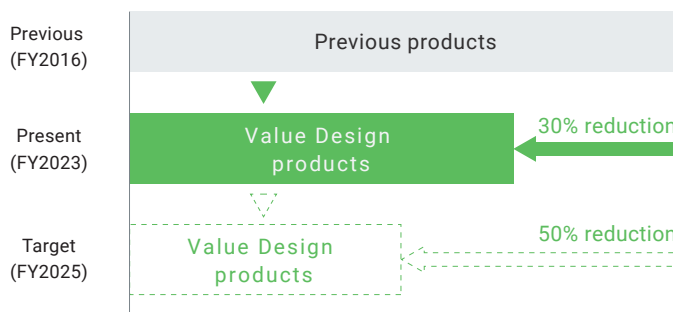
Value Design for Panel (Value Design) is the common concept shared across OMRON's in-panel product specifications to deliver new value to your control panels.

This Value Design also integrate environment consideration concept that enable earth and user-friendly control panel building.



- 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



*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 referring the life cycle assessment method that based on international standards ISO14067 which define CO₂ 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.

Technology and Quality Developed over 80 Years of History



Now the H3DT Series of Timers Are Available with New Advanced Concepts

It's been 80 years since the production of OMRON's first product: an X-ray Timer. They provide more value to the customer while leading control panels to a new stage.



Even with the slim design, the dial size is equivalent to the one for previous OMRON Timers with a 22.5-mm width to ensure operability.

Width of **17.5mm** even for Two-relay output.



Half the Power Consumption*1

At Least 3 Times the Life Expectancy*2

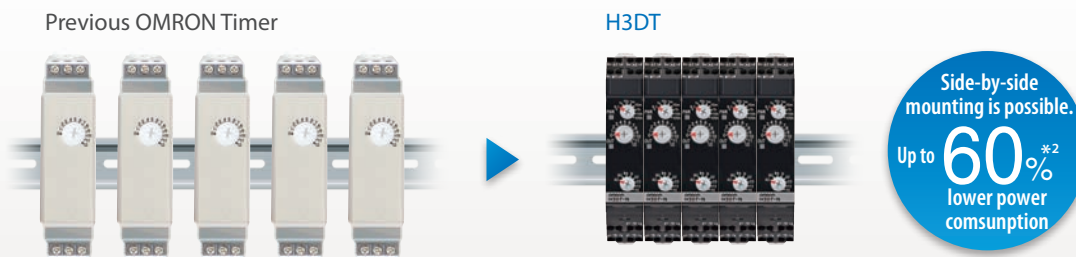
Ambient Operating Temperature of 60°C

*1. Comparison with previous OMRON Timer (excluding the H3DT-H).

*2. Comparison with previous OMRON Timer under adverse conditions.

The Top Class in Industry*1 for Low Power Consumption

Power consumption is low, which reduces the DC power supply load for the entire control panel.



And more The expected service life is more than **THREE times*3**
 Reduces the work and cost involved in replacement and other maintenance.

*1. According to OMRON investigation in November 2015.
 *2. Comparison with previous OMRON Timer (excluding the H3DT-H).
 *3. Comparison with previous OMRON Timer under adverse conditions.

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

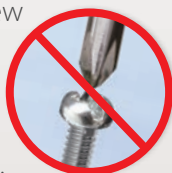


Conventional screw terminal blocks OMRON Push-In Plus terminal block

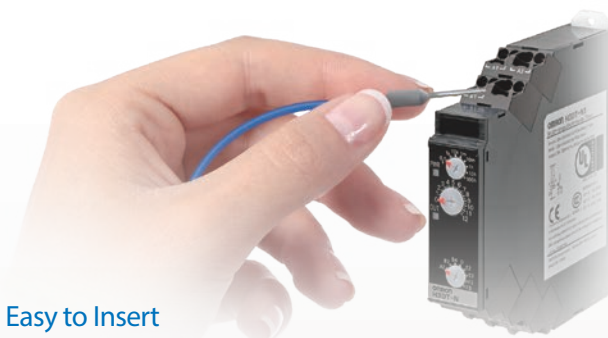
*Information for Push-In Plus and screw terminal blocks is based on OMRON's actual measurement value data.

No Retightening Required

Tightening screws is necessary for screw terminal blocks, but with Push-In Plus terminal blocks, there is no need for retightening.



This reduces works for wirings, inspections, delivery (shipping), or maintenance.



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.

Certified for Safety Standards of Major Countries

The Timers help to reduce the work involved in control panel design with certifications and compliance for various standards, including UL Listing.



Product Lineup

Model	H3DT-N/L	H3DT-A	H3DT-F	H3DT-G	H3DT-H
Type	Multi-functional Timers	Power ON-delay Timers	Twin Timers	Star-delta Timers	Power OFF-delay Timers
Appearance					

Refer to the H3DT Solid-state Timers Datasheet (Cat. No. M090) for details.

Accessories

Model	Y92A-D1A
Name	Front cover
Appearance	

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

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