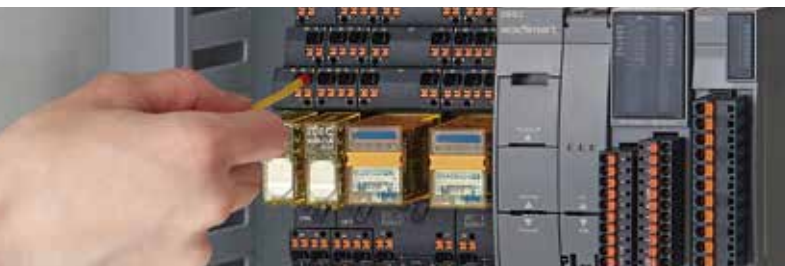
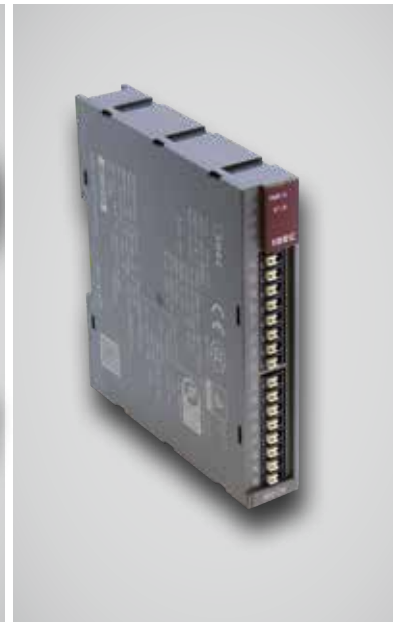




*Think Automation and beyond...*



# Push-in Products

Safe, Simple, & Smart.

IDEC CORPORATION



## All thoughts focused on the same goal

Since the late 1970s, IDEC has continued to instill and pursue “Save and Safe”, as part of our corporate DNA. Along with the rapid advancement in machine intelligence and demands for environmental resistance and high reliability in recent years, we need to face societal issues such as shortage in workforce.

To solve these issues, we have set as our goals “Safe, Simple & Smart=S<sup>3</sup> (S cube)”, aiming to provide society with products and services that will bring about greater innovation and lasting quality.

# Safe

Products anyone can use with safety and assurance, from a company seeking to be number one in safety

# Simple

Products appreciated by all our customers for their ease of connection regardless of experience

# Smart

Products that make labor-saving and space-saving a reality

# Push-in Product Lineup

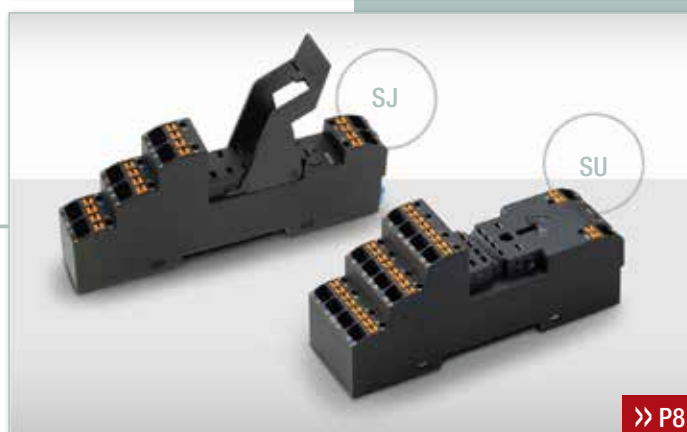
## HW & CW Series

ø22 Switches & Pilot Lights



## SU & SJ Series

Relay Sockets



## FC6A MICROSmart

Programmable Logic Controllers



## HR5S

Safety Relay Modules



# Push-in

## Simple wiring for greater work efficiency

Smart

Simple

Ferrules and solid wires can be connected simply by push-in insertion, without a screwdriver. (\*1)  
To remove, a flat-blade screwdriver is inserted in a simple two-action process.  
Since wiring can be performed regardless of operators' skill level, wiring time is reduced.

\*1) When connecting stranded wire, insert the wire while holding down the pusher with a flat-blade screwdriver.

### Connecting

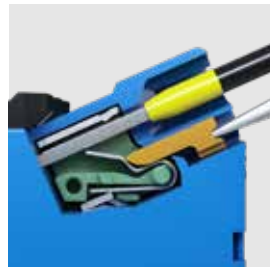


Push the wire straight in as far as it will go.

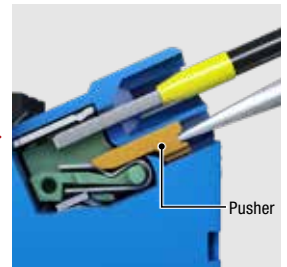


Connection is completed. Pull lightly to make sure it is firmly in place.

### Removing



Hold down the pusher with a flat-blade screwdriver.



While holding down the pusher, pull out the wire. Release the flat-blade screwdriver.

## Time saving and efficient

Smart

Push-in connections are made simple by inserting the wire, reducing wiring time by approximately 55% compared to conventional screw terminals.

[Conditions] Push-in: Insert wire with ferrule.  
Screw terminals: With screw loosened, insert wire, then tighten with electric driver.



Conventional  
Screw terminal

Push-in  
Terminal

Approx. **55%** reduced

\*) Based on IDEC research



## Reliable and easy Safe

Finger-safe structure and vibration resistance.  
What's more, the space-saving design means better workability in a smaller space.

### Stays firmly in place

Since the ferrule is held in place by a spring load, the wiring remains taut and vibration resistance is improved.

### Finger-safe structure

IP20 Finger-safe protection enables wiring to be performed without direct contact between screwdriver and conductive part.



Before inserting wire



Wire inserted



## Wiring procedure comparison Smart Simple

Work can be performed without using tools and regardless of operators' skill level.

\*1) When ferrule is used.

### Conventional Screw terminal

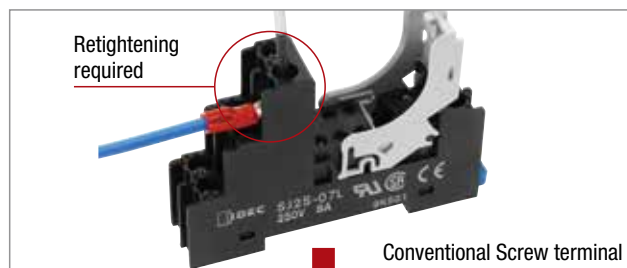


### Push-in Terminal (\*1)

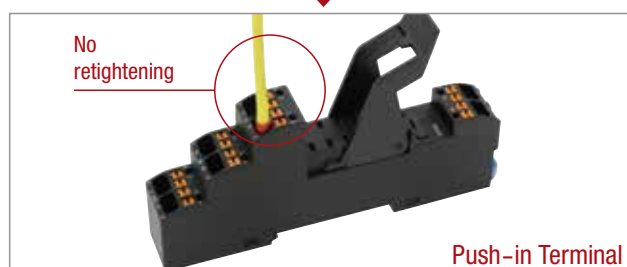


## No additional tightening needed Smart

Because screws are not used on push-in terminals, re-tightening of screws is not required.



Conventional Screw terminal



Push-in Terminal

# ø22 Switches & Pilot Lights HW & CW Series

HW & CW series  
push-in terminals.  
Reduces wiring and  
tightening work.

## Space-Saving

### ■ Contact block depth reduced

HW CW

Saves space inside panel and enables downsizing of equipment.

4-contact configuration available with double contact blocks.

Single contact block



**NEW**

Double contact block



### Pilot lights full voltage type

HW



Conventional HW Series

Panel depth  
reduced by  
**50%  
Down**



Push-in HW Series

### Illuminated pushbuttons 6V, 12V, 24V AC/DC



Conventional HW Series

Downsize  
**30%  
Down**



Push-in HW Series

**NEW**

### Illuminated pushbuttons 100/120V AC/DC, 200/220V AC, 230/240V AC



Conventional HW Series

Panel depth  
reduced by  
**40%  
Down**



Push-in HW Series

No transformers required for high voltage models

### Pushbuttons

CW

Single contact block



Panel depth  
**36.4mm**

**NEW**

Double contact block



Panel depth  
**59.6mm**

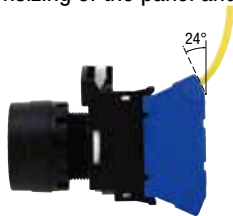
## Smart

### Angled Connections

HW CW

Angled connections make wiring easy even when switches are mounted on a panel.

Also, 24-degree inclination of the terminal block contributes to downsizing of the panel and equipment.



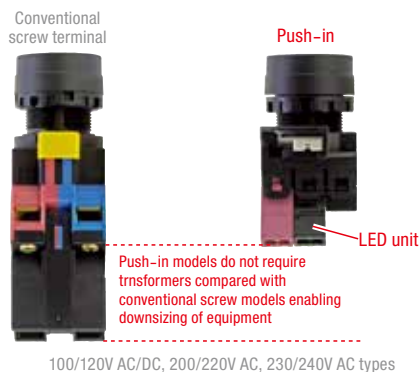
**NEW**

### High voltage LED illuminated unit for illuminated pushbuttons

HW

100/120V AC/DC, 200/220V AC, 230/240V AC types available. No transformers required and same depth behind the panel for all illuminated voltages.

High voltage models do not require transformers enabling downsizing of equipment and panels.

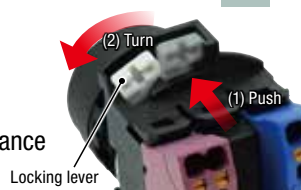


100/120V AC/DC, 200/220V AC, 230/240V AC types

### Locking lever

HW

Usability improved by easy mounting and removal. The mounting status of the contact blocks can be confirmed at a glance from the back of the switch.



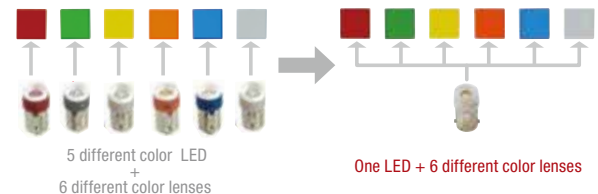
## Useful

### First in the industry

HW CW

#### Six different colors with a single LED

Previously, 5 different color LEDs were required but with the new illuminated unit, only a single LED is used. Only the lens needs to be replaced to change the illumination color. The new LED reduces maintenance time, makes stock control easier, and is environmentally friendly.



### High visibility with new LED

HW CW

Brighter and clearer compared to conventional LEDs



### ISO3864-4

HW CW

#### Safety color compliant

Safety colors are defined with ISO standards. The bright and clear colors are suited for emergency situations

\*Except for products below

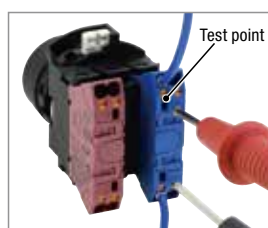
- Illuminated selector switches (illumination color: S (Blue), PW (Pure white))
- Illuminated pushbuttons (illumination color: S (Blue))

## Added Value

### Test point

HW CW

A test point is available to check connectivity of the wiring. Check the connectivity easily using a tester.



### Sub-Assembled Units

HW CW

Sub-assembled units can be ordered for flexible use, such as sudden changes in design.



# Relay Sockets SU & SJ Series



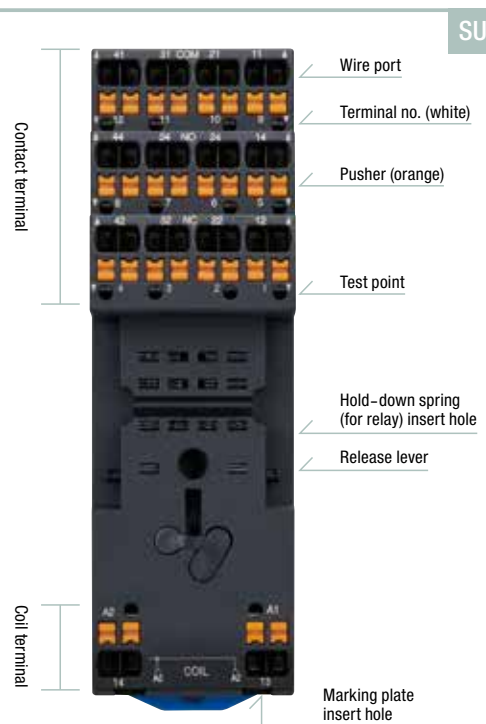
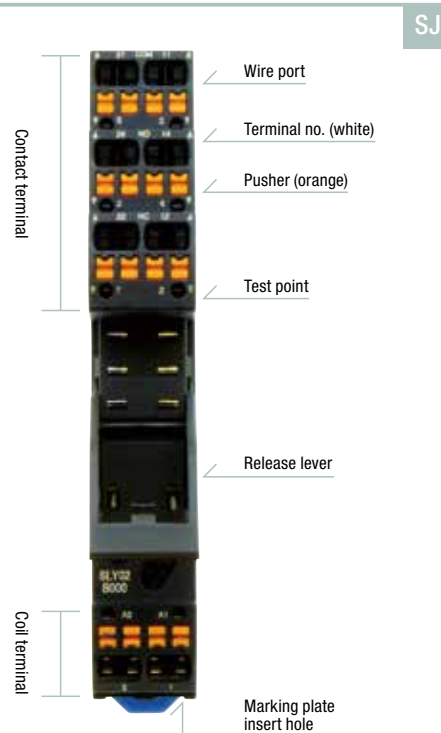
One step wiring,  
easy & quick connection  
Safe and efficient SJ and SU  
series Push-in relay sockets

## Highly reliable

### High visibility

The terminal number on the socket can be clearly seen on the socket preventing incorrect wiring.

Also, the distinct color pusher prevents a flat blade screwdriver from being inserted into the wire port.





## Wide range of options

### ■ Terminal jumpers

SU SJ

Easy wiring to coil side.



Note) The rated current is 2A.

### ■ Marking plate

SU SJ

A marking plate enables easy identification of connections. Maintenance time is reduced.



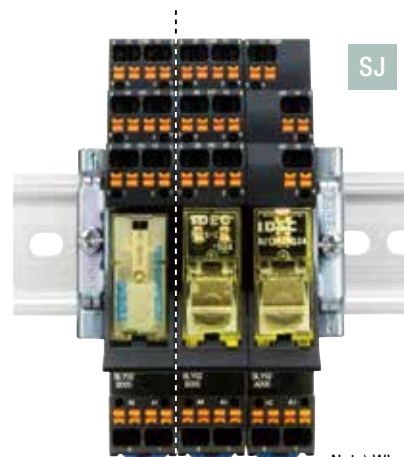
## Safe & easy

### ■ Equipped with a release lever

The release lever easily holds and removes the relay.



### ■ IDEC RF2 force guided relays (SJ) and GT5Y timers (SU) can be mounted



RF2 Force Guided Relays

RJ series relays

Note) When using with RF2S force guided relay, use at 150V maximum.



GT5Y timer

RU relays

## Programmable Logic Controllers

### FC6A MICROSmart

FC6A PLC I/O module with functions to meet the needs of the IoT era such as remote monitoring and operation.

## Time saving

### Removable terminal block

Simplifies wiring, installation, and module replacement—just wire the terminal block plugged into a module.



## Unmatched Performance

### Wide environmental temperature

Enhanced operating temperature allows FC6A to operate from -25°C to 65°C



## Safety Relay Modules

### HR5S

Creating a safety system for machines with highly reliable one step wiring.

## Category 2 Safety Relay Module

### Product Selection

			
	Simple model	Standard model	Off-delay model
Part number	HR5S-C2S	HR5S-C2B	HR5S-C2D

## Added Value

### ■ Web page creation

Drag and Drop Simplicity. Over 7,000 images available. No HTML programming required. No extra charge for creation software. (Built-in Wind LDR)

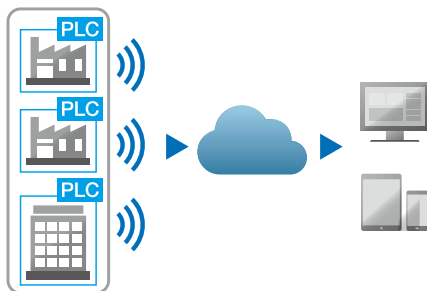


## Industrial internet of things

### ■ MQTT

COMING SOON

MQTT protocols allows FC6A to directly connect to cloud platforms without MQTT gateway. Provides benefit for maintenance and analytics.



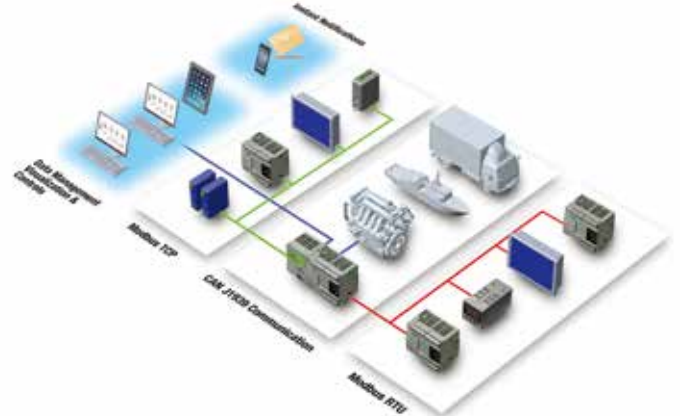
## Multiple Communication Options

### ■ CAN J1939 Protocol

CAN  
J1939

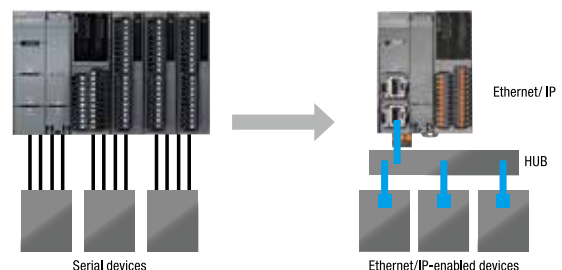
Commonly used in diesel power applications, in vehicle networks for trucks, buses, agriculture & forestry machinery, and marine navigation systems.

Note) CAN J1939 All-in-One FC6A CPU module only



### ■ Ethernet/IP

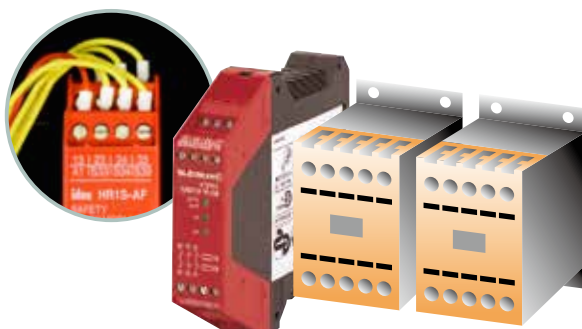
Saves wiring time. Connects easily to Ethernet-enabled sensor devices via LAN cables.



## Space & cost saving + Highly reliable + Time saving

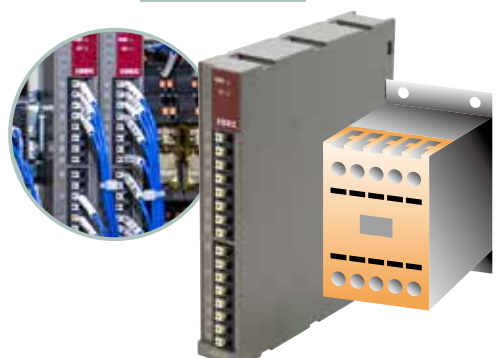
### ■ Performance of Category 2 system

HR1S-AF



HR5S-C2S

Total width  
41% Down  
Cost  
45% Down  
+  
Highly reliable  
+  
Saves  
wiring time



# IDEC CORPORATION

 [apac.idec.com](http://apac.idec.com)

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