PLC
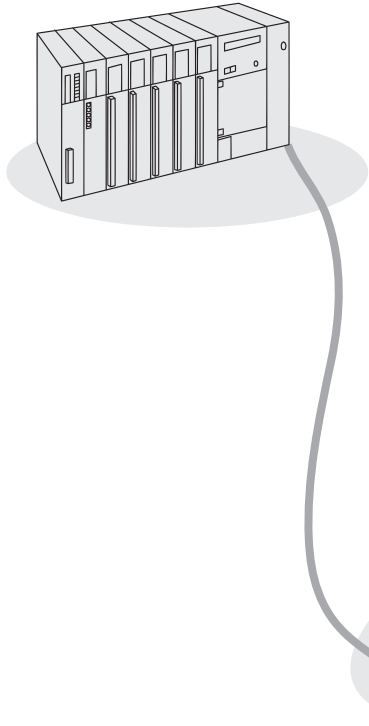
# SIF-400

Indicating controllers with
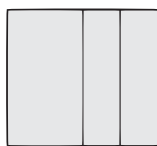communication function

## Making things easier!

No extra programming,
DIN rail mounting saves space.

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System configuration of PLC interface unit SIF-400 and Shinko digital indicating controllers (DCL-33A or JCx-33A series)

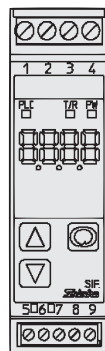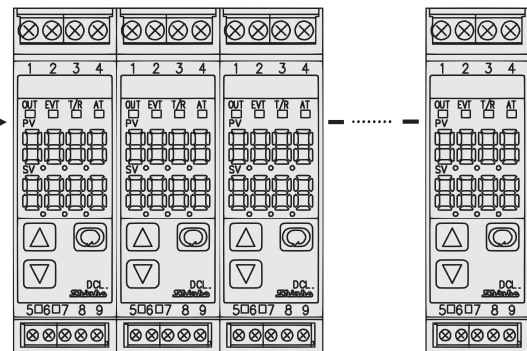(The following example shows the configuration of the DCL-33A units.)

**Configuration example**

**PLC interface unit
SIF-400**

**DCL-33A**
(Flexible address selection: Up to 32 units connectable
Fixed address: Up to 20 units connectable)

PLC ＋ Link unit

RS-422A
RS-485
RS-232C

RS-485

Shinko digital indicating controllers
· DCL-33A or JCx-33A

**PLCs corresponding to SIF-400 and its manufacturer**
· **Mitsubishi Electric Corp.**
  MELSEC A (A, AnA), Q series, QnA series
  MELSEC FX2N series

· **Omron Corp.**
  SYSMAC C200H series

· **Fuji Electric Co., Ltd.**
  MICREX-F series

For products other than listed above, consult us.
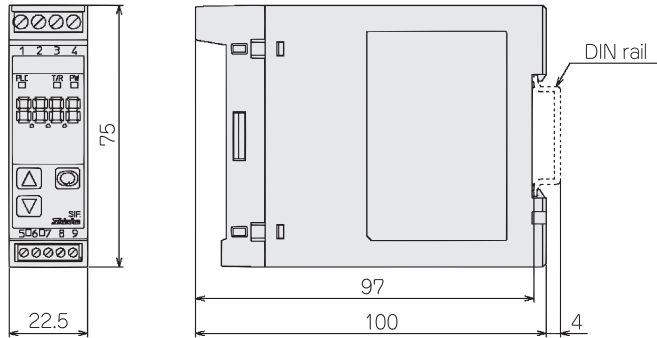
**PLC Interface Unit**

# Shinko

## ■ Overview

The SIF-400 is a unit for interfacing between the PLC and a maximum of 32 units of digital indicating controllers (DCL-33A or JCx-33A series)
The SIF-400 stores the data of the controllers in the PLC register, and exchanges data by activating Reading/Writing flag.
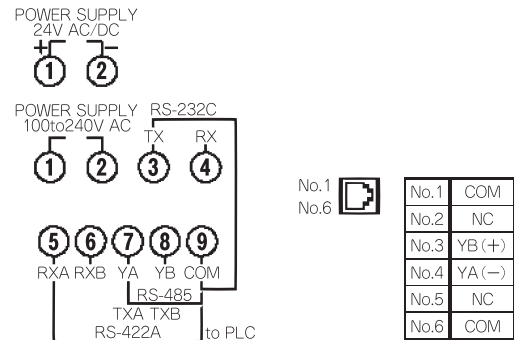
Three types of memory allocation for the PLC

| 1. Flexible address selection (Memory allocation per item) | · Top address that SIF-400 uses, the number of controllers connected with the SIF-400 and communication item Used/Not used can be freely designated by software such as ladder software, loaded in the PLC. |
|---|---|
| 2. Flexible address selection (Memory allocation per channel) | · A maximum of 32 units can be connected. |
| 3. Fixed address | · The predetermined communication items are written to and read from the register area.<br>· Initial setting on the PLC side is not necessary.<br>· A maximum of 20 units can be connected. |

## ■ External dimensions



## ■ Terminal arrangement



| No.1 | COM |
|---|---|
| No.2 | NC |
| No.3 | YB (+) |
| No.4 | YA (−) |
| No.5 | NC |
| No.6 | COM |

## ■ Standard specifications

| Model | PLC Interface Unit | | |
|---|---|---|---|
| Name | SIF-400 | | |
| Supply voltage | Must be specified.<br>· 100 to 240V AC  50/60Hz<br>· 24V AC/DC  50/60Hz | PLC link | **PLC manufacturer** / **Model name** |
| Allowable voltage fluctuation range | 100 to 240V AC : 85 to 264V AC<br>24V AC/DC        : 20 to 28V AC/DC | | Mitsubishi Electric Corp. — **PLC model name:** MELSEC A (A, AnA), Q series, QnA series, MELSEC FX2N series; **Host link unit model name:** AJ71UC24, A1SJ71UC24-R2/R4/PRF, A1SJ71C24-R2/R4/PRF, QJ71C24 |
| Communication line | Between SIF-400 and PLC: Based on RS-232C/RS-485/RS-422A (terminal)<br>Between SIF-400 and controllers: Based on RS-485 (modular jack) | | |
| External dimensions | 22.5 x 75 x 100mm (W x H x D) | | |
| Mounting method | DIN rail mounting | | |
| Display | Parameter display: Green LED 4 digits,  Character size: 7.5 x 4.1mm | | |
| Indicator | PLC communication indicator (yellow)<br>Controller communication indicator (yellow)<br>Power indicator (green) | | Omron Corp. — **PLC model name:** SYSMAC C200H series; **Host link unit model name:** LK201-V1, LK202-V1 |
| Power consumption | Approx. 5VA | | |
| Isolation resistance | 10MΩ or greater at 500V DC | | |
| Dielectric strength | 1.5kV AC for 1 minute<br>Between power terminal and controller communication modular jack<br>Between power terminal and PLC communication terminal | | Fuji Electric Co., Ltd. — **PLC model name:** MICREX-F series; **Host link unit model name:** NC1L-RS2, NC1L-RS4 |
| Ambient temperature, humidity | 0 to 50℃   35 to 85%RH (Non-condensing) | | |
| Case | Flame resistant resin, Light gray | | |
| Weight | Approx. 150g | | |
| Functions | **Communication with controllers**<br>Communicates with the digital indicating controllers selected during the Parameter setting mode.<br>· Controller model name selection: DCL-33A, JCx-33A series Selectable by keypad (Default: DCL-33A)<br>· Communication line    Based on RS-485<br>· Communication method  Half-duplex communication start-stop synchronous<br>· Communication speed  19200bps, 9600bps Selectable by keypad (Default: 9600bps)<br>· Data format    Start bit    : 1 (Fixed value)<br>  Data length  : 7 (Fixed value)<br>  Parity        : Even (Fixed value)<br>  Stop bit     : 1 (Fixed value) | **Communication with the PLC**<br>Communicates with the PLC selected during the Parameter setting mode.<br>· PLC model name selection  Mitsubishi MELSEC, Omron SYSMAC, Fuji MICREX-F<br>· Communication line    Based on RS-232C/RS-485/RS-422A RS-422A  Built-in terminator (200Ω) between RXA and RXB<br>· Communication method  Half-duplex communication start-stop synchronous<br>· Communication speed  19200bps, 9600bps Selectable by keypad (Default: 9600bps)<br>· Data format    Start bit    : 1<br>  Data length  : 7, 8  Selectable by keypad (Default: 7)<br>  Parity        : No, Even, Odd Selectable by keypad (Default: Even)<br>  Stop bit     :1, 2  Selectable by keypad  (Default: 1) | |

· This catalog is as of February 2004, and specifications are subject to change without notice.
· If you have any inquiries, please consult us or our agency.

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