

Technical Information

YS1000 Series Drawing Package (Guide for selecting new models)



TI 01B08A01-03EN

This document is a package of YS1000 series drawings.

YS1000 series has each the model and suffix code that is a guide for replacing from our previous single-loop controllers. For this reason, each dimension is different by the model and suffix code.

Use this document together with the "General Specifications" of YS1000 series for checking the specification in selecting the model.

For detailed information about the replacement model, see the YS1000 Series Replacement Manual, IM01B08H01-01E.

Contents

| YS1700 Programmable Indicating Controller | | GS No.: GS 01B08B01-01E | |
|---|--|---------------------------------|------------|
| Model and Suffix Code | Remark | SD No. | Page |
| YS1700-00 | Basic type | SD 01B08B01-01E | 1-1 to 1-4 |
| YS1700-01□ | Basic type with expandable I/O | SD 01B08B01-01E | 1-1 to 1-4 |
| YS1700-02□ | Compatible type for YS100 (with YS100 case) | SD 01B08H01-01E | 3-1 to 3-6 |
| YS1700-03□ | Compatible type for YS80 internal unit/compatible type for EBS, I, EK, and HOMAC | SD 01B08H01-02E | 4-1 to 4-8 |
| YS1700-04□ | Compatible type for YS80 (compatible size for YS80 with YS100 terminal) | SD 01B08H01-03E | 5-1 to 5-6 |
| YS1700-05□ | Compatible type for 100 line (with YS100 terminal) | SD 01B08H01-04E | 6-1 to 6-5 |

| YS1500 Indicating Controller | | GS No.: GS 01B08C01-01E | |
|------------------------------|--|---------------------------------|------------|
| Model and Suffix Code | Remark | SD No. | Page |
| YS1500-00□ | Basic type | SD 01B08B01-01E | 1-1 to 1-4 |
| YS1500-02□ | Compatible type for YS100 (with YS100 case) | SD 01B08H01-01E | 3-1 to 3-6 |
| YS1500-03□ | Compatible type for YS80 internal unit/compatible type for EBS, I, EK, and HOMAC | SD 01B08H01-02E | 4-1 to 4-8 |
| YS1500-04□ | Compatible type for YS80 (compatible size for YS80 with YS100 terminal) | SD 01B08H01-03E | 5-1 to 5-6 |
| YS1500-05□ | Compatible type for 100 line (with YS100 terminal) | SD 01B08H01-04E | 6-1 to 6-5 |

| YS1310 Indicator with Alarm | | GS No.: GS 01B08D01-01E | |
|-----------------------------|--|---------------------------------|------------|
| Model and Suffix Code | Remark | SD No. | Page |
| YS1310-00□ | Basic type | SD 01B08D01-01E | 2-1 to 2-3 |
| YS1310-02□ | Compatible type for YS100 (with YS100 case) | SD 01B08H01-01E | 3-1 to 3-6 |
| YS1310-03□ | Compatible type for YS80 internal unit/compatible type for EBS, I, EK, and HOMAC | SD 01B08H01-02E | 4-1 to 4-8 |
| YS1310-04□ | Compatible type for YS80 (compatible size for YS80 with YS100 terminal) | SD 01B08H01-03E | 5-1 to 5-6 |
| YS1310-05□ | Compatible type for 100 line (with YS100 terminal) | SD 01B08H01-04E | 6-1 to 6-5 |

| YS1350 Manual Setter for SV Setting | | GS No.: GS 01B08E01-01E | |
|-------------------------------------|--|---------------------------------|------------|
| Model and Suffix Code | Remark | SD No. | Page |
| YS1350-00□ | Basic type | SD 01B08D01-01E | 2-1 to 2-3 |
| YS1350-02□ | Compatible type for YS100 (with YS100 case) | SD 01B08H01-01E | 3-1 to 3-6 |
| YS1350-03□ | Compatible type for YS80 internal unit/compatible type for EBS, I, EK, and HOMAC | SD 01B08H01-02E | 4-1 to 4-8 |
| YS1350-04□ | Compatible type for YS80 (compatible size for YS80 with YS100 terminal) | SD 01B08H01-03E | 5-1 to 5-6 |
| YS1350-05□ | Compatible type for 100 line (with YS100 terminal) | SD 01B08H01-04E | 6-1 to 6-5 |

| YS1360 Manual Setter for MV Setting | | GS No.: GS 01B08K01-01E | |
|-------------------------------------|--|---------------------------------|------------|
| Model and Suffix Code | Remark | SD No. | Page |
| YS1360-00□ | Basic type | SD 01B08D01-01E | 2-1 to 2-3 |
| YS1360-02□ | Compatible type for YS100 (with YS100 case) | SD 01B08H01-01E | 3-1 to 3-6 |
| YS1360-03□ | Compatible type for YS80 internal unit/compatible type for EBS, I, EK, and HOMAC | SD 01B08H01-02E | 4-1 to 4-8 |
| YS1360-04□ | Compatible type for YS80 (compatible size for YS80 with YS100 terminal) | SD 01B08H01-03E | 5-1 to 5-6 |
| YS1360-05□ | Compatible type for 100 line (with YS100 terminal) | SD 01B08H01-04E | 6-1 to 6-5 |

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Drawings

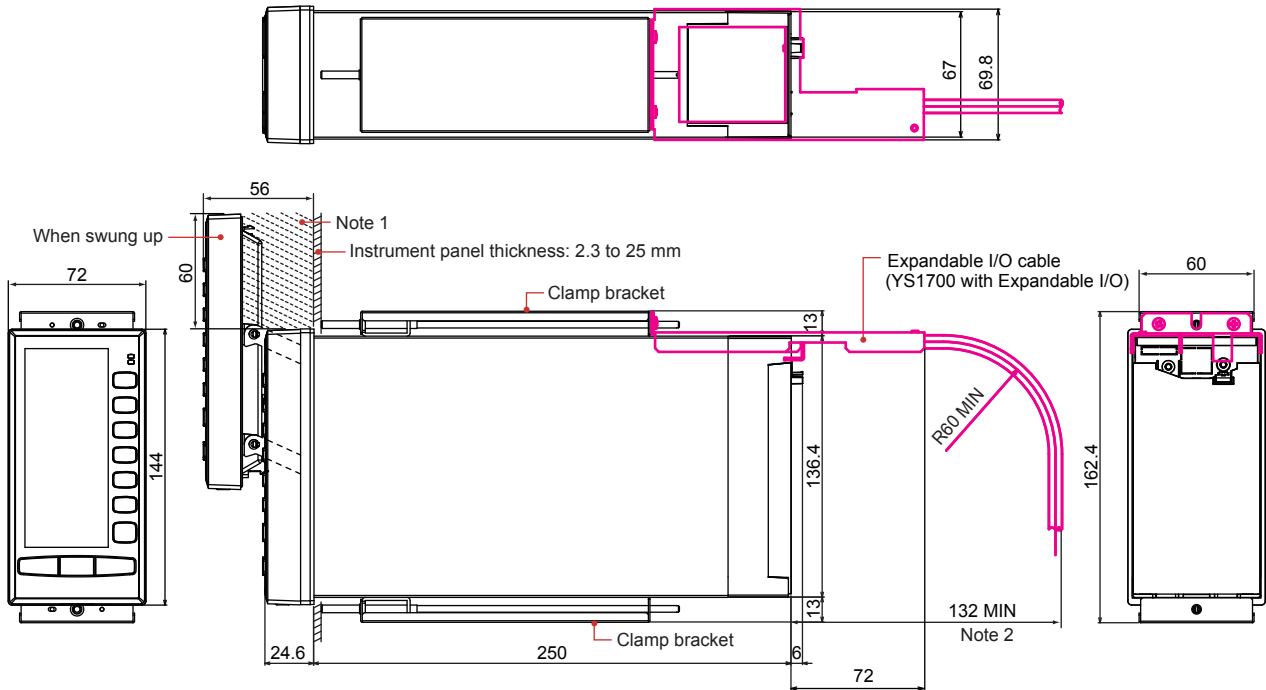
YS1500 Indicating Controller
(YS1500-00□)
YS1700 Programmable Indicating Controller
(YS1700-00□, YS1700-01□)

YS1000 Series

SD 01B08B01-01E

Unit: mm

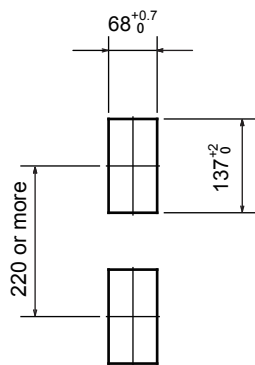
<External Dimensions>



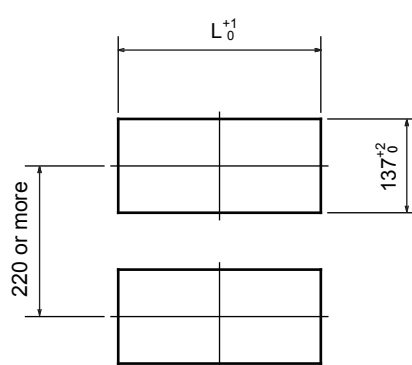
Weight: 1.6 kg (Basic type)
2.2 kg (Basic type with Expandable I/O)

Panel Cutout Dimensions

For single mounting:



For side-by-side mounting:



Panel Cutout Width for Side-by-side Mounting

| Number of instruments to be mounted | L(mm) |
|-------------------------------------|-------|
| 2 | 140 |
| 3 | 212 |
| 4 | 284 |
| 5 | 356 |
| 6 | 428 |
| 7 | 500 |
| 8 | 572 |
| 9 | 644 |
| 10 | 716 |
| 11 | 788 |
| 12 | 860 |
| 13 | 932 |
| 14 | 1004 |

Trigonometry

General tolerance = ±(value of tolerance class IT18 based on JIS B 0401-1998) / 2

Note 1: If a nameplate, etc. is installed within 60 mm above the instrument, the height of the nameplate, etc. must be 30 mm or less from the panel surface.

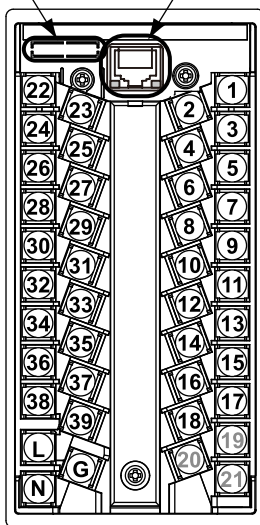
Note 2: When installing the expandable I/O cable, secure the wiring space of at least 60 mm for a minimum curvature radius of the cable in addition to the mounting bracket space of 72 mm from the terminal cover face of the main unit.

Note 3: To ensure good air ventilation, allow space of 100 mm or more at the top and bottom of the panel.

<Terminals Layout>

To the expandable
I/O terminals
YS1700-01□ only

Ethernet Communication
(Optional code /A34)



<Terminal Arrangement Table>

| Terminal number | Programmable mode (YS1700 only) | Single-loop mode | Cascade mode | Selector mode | User settings () mode (Note 8) |
|----------------------------|---|---|---|---|---------------------------------|
| 1 2 | + > Analog input 1 - > (1-5V DC) | + > Measurement input - > (1-5V DC) | + > Measurement input 1 - > (1-5V DC) | + > Measurement input 1 - > (1-5V DC) | |
| 3 4 | + > Analog input 2 - > (1-5V DC) | + > Cascade setting input - > (1-5V DC) | + > Cascade setting input - > (1-5V DC) | + > Cascade setting input 1 - > (1-5V DC) | |
| 5 6 | + > Analog input 3 - > (1-5V DC) | + > Input value for output tracking (1-5V DC) | + > Measurement input 2 - > (1-5V DC) | + > Measurement input 2 - > (1-5V DC) | |
| 7 8 | + > Analog input 4 - > (1-5V DC) | + > Feedforward input - > (1-5V DC) | + > Feedforward input - > (1-5V DC) (Note 1) | + > Cascade setting input 2 - > (1-5V DC) (Note 1) | |
| 9 10 | + > Analog input 5 - > (1-5V DC) (Note 2) | | | | |
| 11 12 | + > FAIL output (Note 2) - > | + > FAIL output (Note 2) - > | + > FAIL output (Note 2) - > | + > FAIL output (Note 2) - > | |
| 13 | Connection of transmitter supply power (24V DC) (Note 3) | Connection of transmitter supply power (24V DC) (Note 3) | Connection of transmitter supply power (24V DC) (Note 3) | Connection of transmitter supply power (24V DC) (Note 3) | |
| 14 15 16 17 18 | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | |
| 19 20 21 | | | | | |
| 22 23 | + > Analog output 1 - > (4 to 20mA DC) | + > Manipulated output variable 1 - > (4 to 20mA DC) | + > Manipulated output variable 1 - > (4 to 20mA DC) | + > Manipulated output variable 1 - > (4 to 20mA DC) | |
| 24 25 | + > Analog output 2 - > (1-5V DC) | + > Manipulated output variable 2 - > (1-5V DC) (Note 4) | + > Manipulated output variable 2 - > (1-5V DC) (Note 4) | + > Manipulated output variable 2 - > (1-5V DC) (Note 4) | |
| 26 27 | + > Analog output 3 - > (4 to 20mA DC/1-5V DC) (Note 5) | + > Setpoint value output - > (1-5V DC) (Note 4) | + > Setpoint value output - > (1-5V DC) (Note 4) | + > Setpoint value output - > (1-5V DC) (Note 4) | |
| 28 29 | + > Digital output 1/Digital input 6 (Note 6) - > | + > High limit alarm setpoint - > for PV output (Note 7) - > | + > LOOP 1 alarm output - > (Note 7) - > | + > LOOP 1 alarm output - > (Note 7) - > | |
| 30 31 | + > Digital output 2/Digital input 5 (Note 6) - > | + > Low limit alarm setpoint - > for PV output (Note 7) - > | + > LOOP 2 alarm output - > (Note 7) - > | + > LOOP 2 alarm output - > (Note 7) - > | |
| 32 33 | + > Digital output 3/Digital input 4 (Note 6) - > | + > Velocity alarm setpoint for - > PV output (Note 7) - > | + > O/C status output - > (Note 7) - > | + > L/R status output - > (Note 7) - > | |
| 34 35 | + > Digital output 4/Digital input 3 (Note 6) - > | + > C/A · M status output - > (Note 7) - > | + > C/A · M status output - > (Note 7) - > | + > C/A · M status output - > (Note 7) - > | |
| 36 37 | + > Digital output 5/Digital input 2 (Note 6) - > | + > C · A/M status output - > (Note 7) - > | + > C · A/M status output - > (Note 7) - > | + > C · A/M status output - > (Note 7) - > | |
| 38 39 | + > Digital output 6/Digital input 1 (Note 6) - > | + > No function (Factory - > default) (Note 7) - > | + > No function (Factory - > default) (Note 7) - > | + > No function (Factory - > default) (Note 7) - > | |
| L N ≡ | + > Power supply - > Grounding terminal | + > Power supply - > Grounding terminal | + > Power supply - > Grounding terminal | + > Power supply - > Grounding terminal | |

Note 1: These terminals can be used as output tracking input if feedforward input or cascade setting input 2 is not used.

Note 2: Using the terminals as fail output requires an external power supply.

Note 3: For a transmitter power supply, see "Wiring" of "Installation and Wiring" in each YS1000 Operation Guide.

Note 4: For manipulated output variable 2 and setpoint output, the output types can be changed using the analog output-2 selection Y2S and analog output-3 selection Y3S engineering parameters.

Note 5: For analog output 3, the output type can be changed using the analog output-3 current/voltage switching Y3TP engineering parameter.

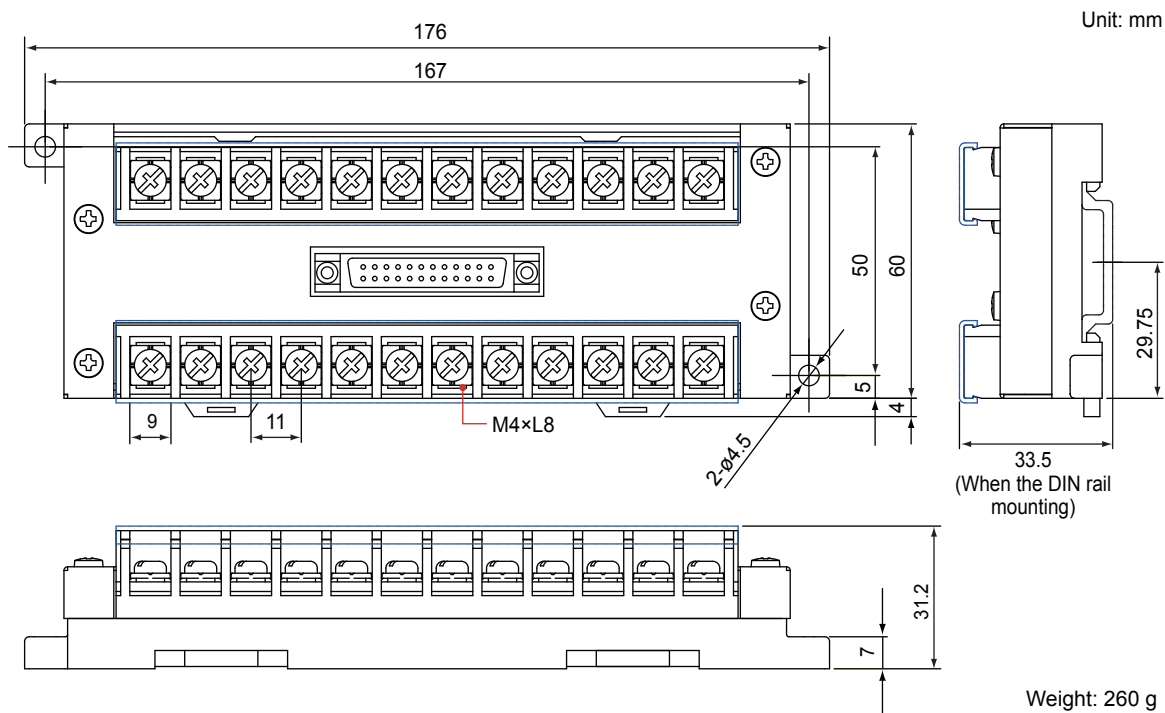
Note 6: Using these terminals as digital output requires an external power supply. The function of digital inputs or digital outputs can be set using the YSS1000 Setting Software (sold separately).

Note 7: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 to DIO61 engineering parameters. Functions can be set using the DI1F to DI6F and DO1F to DO6F engineering parameters.

Note 8: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

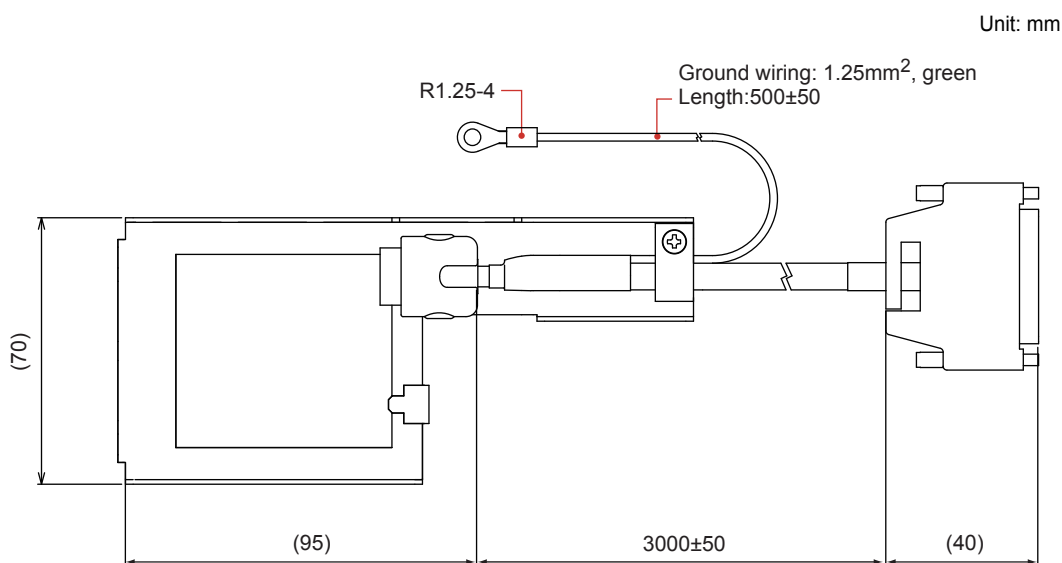
NOTE : Do not use an unused terminal as a relaying terminal, etc.

● Expandable I/O Terminal (YS010)



Weight: 260 g

● Expandable I/O Cable (YS011)



Weight: 320 g

Drawings

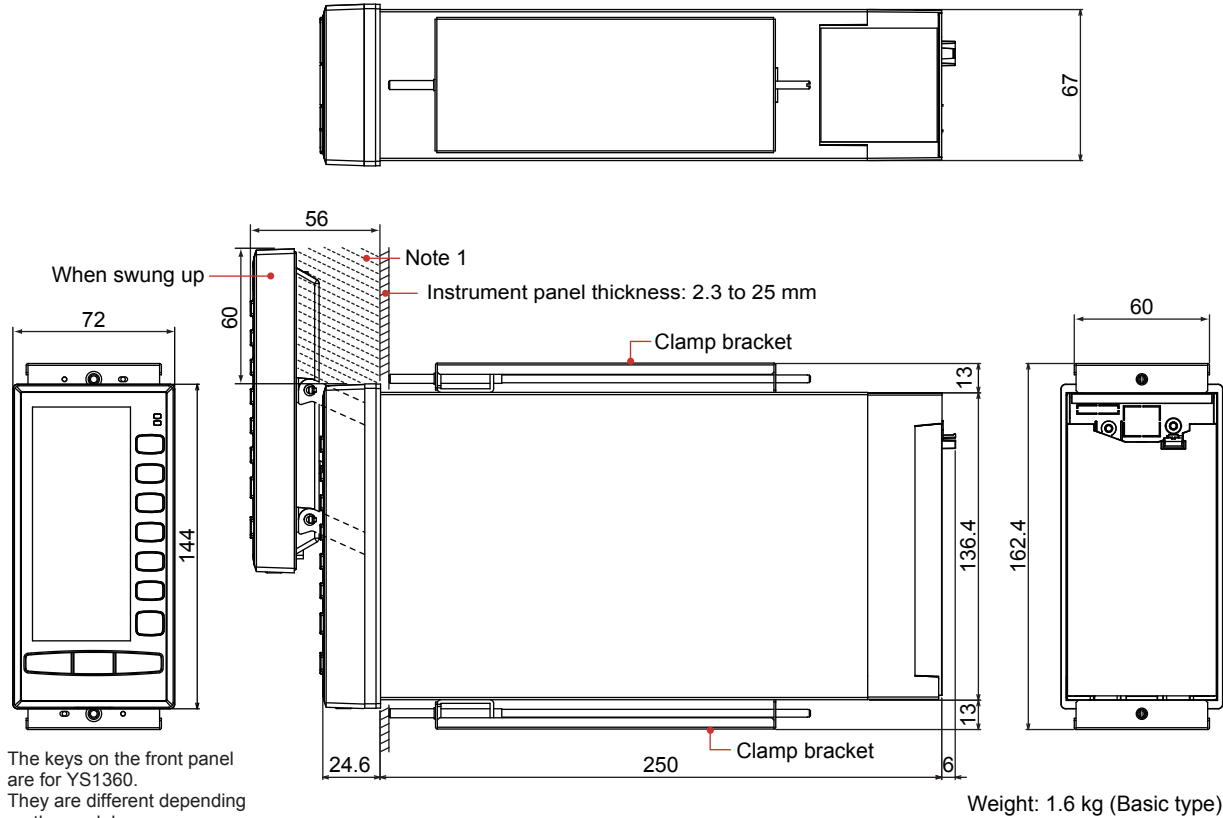
YS1310 Indicator with Alarm
 YS1350 Manual Setter for SV Setting
 YS1360 Manual Setter for MV Setting
 (YS13□0-00□)

YS1000 Series

SD 01B08D01-01E

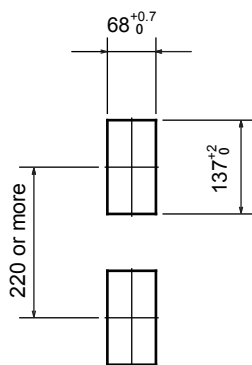
Unit: mm

<External Dimensions>

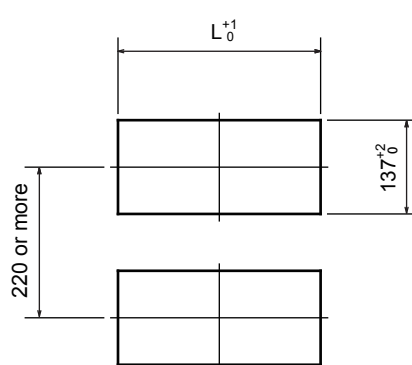


Panel Cutout Dimensions

For single mounting:



For side-by-side mounting:



Panel Cutout Width for Side-by-side Mounting

| Number of instruments to be mounted | L(mm) |
|-------------------------------------|-------|
| 2 | 140 |
| 3 | 212 |
| 4 | 284 |
| 5 | 356 |
| 6 | 428 |
| 7 | 500 |
| 8 | 572 |
| 9 | 644 |
| 10 | 716 |
| 11 | 788 |
| 12 | 860 |
| 13 | 932 |
| 14 | 1004 |

Trigonometry

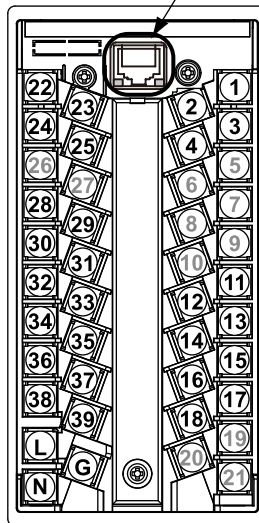
General tolerance = $\pm(\text{value of tolerance class IT18 based on JIS B 0401-1998}) / 2$

Note 1: If a nameplate, etc. is installed within 60 mm above the instrument, the height of the nameplate, etc. must be 30 mm or less from the panel surface.

Note 2: To ensure good air ventilation, allow space of 100 mm or more at the top and bottom of the panel.

<Terminals Layout>

YS1310/YS1350/YS1360

Ethernet Communication
(Optional code /A34)

<Terminal Arrangement Table>

| Terminal number | YS1310 | YS1350 | YS1360 | User settings (Note 6) |
|-----------------|---|--|--|------------------------|
| 1 2 | + > Measurement input 1 - > (1-5V DC) | + > Measurement input 1 - > (1-5V DC) | + > Measurement input 1 - > (1-5V DC) | |
| 3 4 | + > Measurement input 2 - > (1-5V DC) | + > Cascade setting input (1-5V DC) | + > Cascade setting input (1-5V DC) | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 | | | | |
| 10 | | | | |
| 11 12 | + > FAIL output (Note 1) | + > FAIL output (Note 1) | + > FAIL output (Note 1) | |
| 13 | Connection of transmitter supply power (24V DC) (Note 2) | Connection of transmitter supply power (24V DC) (Note 2) | Connection of transmitter supply power (24V DC) (Note 2) | |
| 14 | Communication terminal SG | Communication terminal SG | Communication terminal SG | |
| 15 | Communication terminal SDA (-) | Communication terminal SDA (-) | Communication terminal SDA (-) | |
| 16 | Communication terminal SDB (+) | Communication terminal SDB (+) | Communication terminal SDB (+) | |
| 17 | Communication terminal RDA (-) | Communication terminal RDA (-) or LCS (+) | Communication terminal RDA (-) or LCS (+) | |
| 18 | Communication terminal RDB (+) | Communication terminal RDB (+) or LCS (-) | Communication terminal RDB (+) or LCS (-) | |
| 19 | | | | |
| 20 | | | | |
| 21 | | | | |
| 22 23 | | | + > Manipulated output variable 1 (4 to 20mA DC) | |
| 24 25 | | + > Setpoint value output (1-5V DC) | + > Manipulated output variable 2 (1-5V DC) | |
| 26 | | | | |
| 27 | | | | |
| 28 29 | + > High limit alarm output for PV 1 (Note 3) | + > High limit alarm output (Note 4) | + > High limit alarm output (Note 4) | |
| 30 31 | + > Low limit alarm output for PV 1 (Note 3) | + > Low limit alarm output (Note 4) | + > Low limit alarm output (Note 4) | |
| 32 33 | + > High-high limit alarm output for PV 1 (Note 3) | | | |
| 34 35 | + > Low-low limit alarm output for PV 1 (Note 3) | + > C/M status output (Note 4) | + > C/M status output (Note 4) | |
| 36 37 | + > OR output of high limit alarm output for PV 2 and low limit alarm output for PV 2 (Note 3) | + > No function (Factory default) (Note 5) | + > No function (Factory default) (Note 5) | |
| 38 39 | + > OR output of high-high limit alarm output for PV 2 and low-low limit alarm output for PV 2 (Note 3) | + > No function (Factory default) (Note 5) | + > No function (Factory default) (Note 5) | |
| L N ⏏ | + > Power supply Grounding terminal | + > Power supply Grounding terminal | + > Power supply Grounding terminal | |

Note 1: Using the terminals as fail output requires an external power supply.

Note 2: For a transmitter power supply, see "Wiring" of "Installation and Wiring" in each YS1000 Operation Guide.

Note 3: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 engineering parameter. Functions can be set using the DI1F and DO1F to DO6F engineering parameters.

Note 4: Using these terminals as digital output requires an external power supply.

Note 5: The settings in the table are the factory defaults. Functions can be set using the DI1F and DI2F engineering parameters.

Note 6: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

NOTE: Do not use an unused terminal as a relaying terminal, etc.

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Drawings

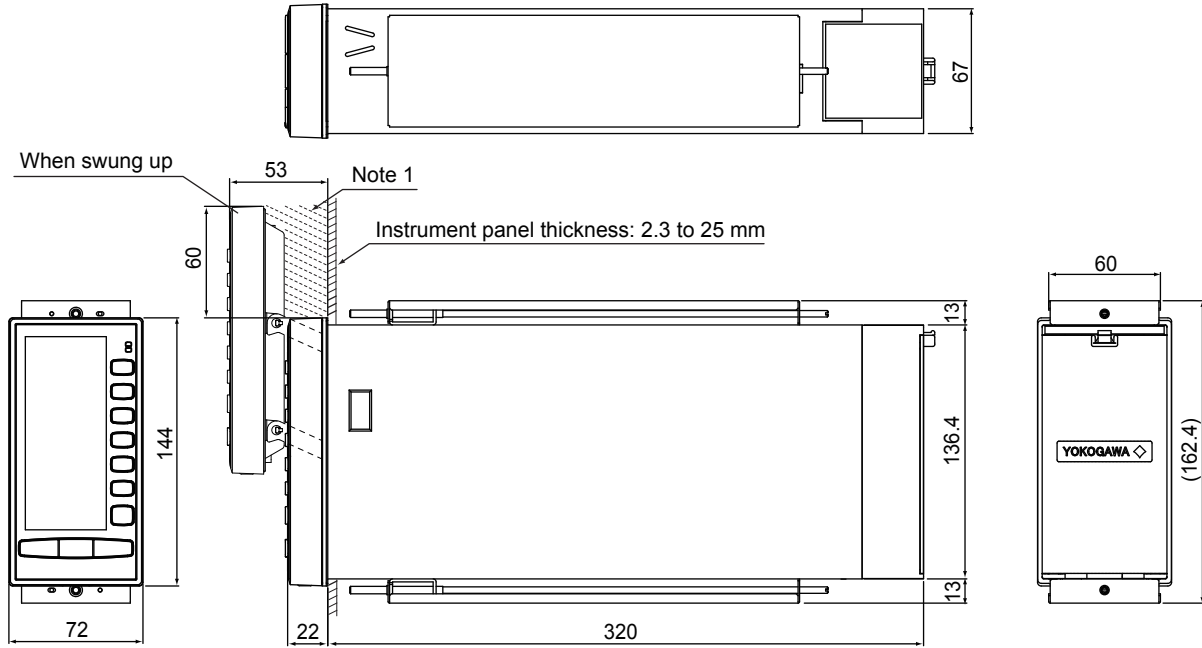
YS1000 Series
YS1□□0-02□
Compatible Type for YS100
(with YS100 case)



SD 01B08H01-01E

Unit: mm

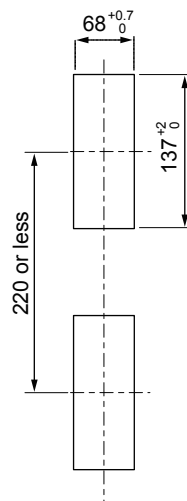
<External Dimensions>



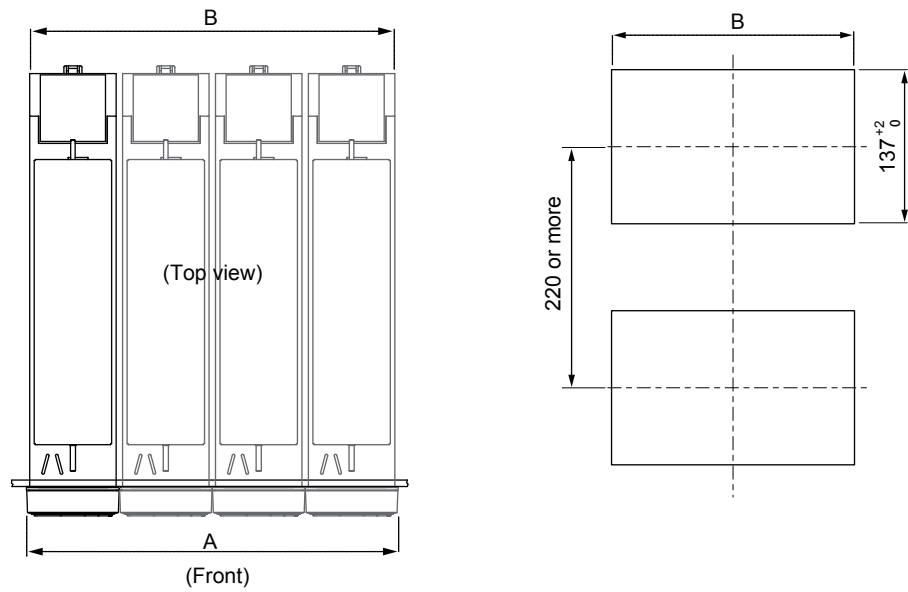
Weight: 2.4 kg

- Note 1: If a nameplate, etc. is installed within 60 mm above the instrument, the height of the nameplate, etc. from the panel surface must be 30 mm or less.
Note 2: To provide good air ventilation, secure a space of 100 mm or more at the top and bottom of the panel.
Note 3: General tolerance = \pm (value of tolerance class IT18 based on JIS B 0401-1998) / 2

● Panel Cutout Dimensions For Single Mounting



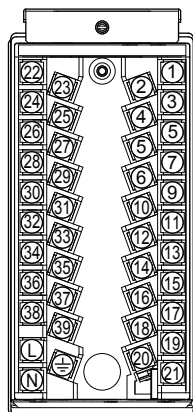
For Side-by-side Mounting



| Number of Units / Location | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|----------------------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| A | 72 | 144 | 216 | 288 | 360 | 432 | 504 |
| B | $68^{+1.0}_0$ | $140^{+1.0}_0$ | $212^{+1.0}_0$ | $284^{+1.0}_0$ | $356^{+1.0}_0$ | $428^{+1.0}_0$ | $500^{+1.0}_0$ |

| Number of Units / Location | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
|----------------------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|
| A | 576 | 648 | 720 | 792 | 864 | 936 | 1008 |
| B | $572^{+1.0}_0$ | $644^{+1.0}_0$ | $716^{+1.0}_0$ | $788^{+1.0}_0$ | $860^{+1.0}_0$ | $932^{+1.0}_0$ | $1004^{+1.0}_0$ |

<Terminals Layout>



<Terminal Arrangement Table>

(1) YS1500/YS1700

| Terminal number | Programmable mode (YS1700 only) | Single-loop mode | Cascade mode | Selector mode | User settings (Note 10) |
|----------------------------|---|---|---|---|-------------------------|
| 1 2 | +> Analog input 1 -> (1-5V DC) | +> Measurement input -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | |
| 3 4 | +> Analog input 2 -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input 1 -> (1-5V DC) | |
| 5 6 | +> Analog input 3 -> (1-5V DC) | +> Input value for output -> tracking (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | |
| 7 8 | +> Analog input 4 -> (1-5V DC) | +> Feedforward input -> (1-5V DC) | +> Feedforward input -> (1-5V DC) (Note 1) | +> Cascade setting input 2 -> (1-5V DC) (Note 1) | |
| 9 10 | +> Analog input 5 -> (1-5V DC) (Note 2) | +> Output of the direct input -> signal (1-5V DC) | +> Output of the direct input -> signal (1-5V DC) | +> Output of the direct input -> signal (1-5V DC) | |
| 11 12 | +> FAIL output (Note 3) | +> FAIL output (Note 3) | +> FAIL output (Note 3) | +> FAIL output (Note 3) | |
| 13 | Connection of transmitter supply power (24V DC) (Note 4) | Connection of transmitter supply power (24V DC) (Note 4) | Connection of transmitter supply power (24V DC) (Note 4) | Connection of transmitter supply power (24V DC) (Note 4) | |
| 14 15 16 17 18 | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | |
| 19 20 21 | +> Direct input terminals -> (Note 5) | +> Direct input terminals -> (Note 5) | +> Direct input terminals -> (Note 5) | +> Direct input terminals -> (Note 5) | |
| 22 23 | +> Analog output 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | |
| 24 25 | +> Analog output 2 -> (1-5V DC) | +> Manipulated output variable 2 -> (1-5V DC) (Note 6) | +> Manipulated output variable 2 -> (1-5V DC) (Note 6) | +> Manipulated output variable 2 -> (1-5V DC) (Note 6) | |
| 26 27 | +> Analog output 3 -> (4 to 20mA DC/1-5V DC) (Note 7) | +> Setpoint value output -> (1-5V DC) (Note 6) | +> Setpoint value output -> (1-5V DC) (Note 6) | +> Setpoint value output -> (1-5V DC) (Note 6) | |
| 28 29 | +> Digital output 1/Digital -> input 6 (Note 8) | +> High limit alarm setpoint -> for PV output (Note 9) | +> LOOP 1 alarm output -> (Note 9) | +> LOOP 1 alarm output -> (Note 9) | |
| 30 31 | +> Digital output 2/Digital -> input 5 (Note 8) | +> Low limit alarm setpoint -> for PV output (Note 9) | +> LOOP 2 alarm output -> (Note 9) | +> LOOP 2 alarm output -> (Note 9) | |
| 32 33 | +> Digital output 3/Digital -> input 4 (Note 8) | +> Velocity alarm setpoint for -> PV output (Note 9) | +> O/C status output -> (Note 9) | +> L/R status output -> (Note 9) | |
| 34 35 | +> Digital output 4/Digital -> input 3 (Note 8) | +> C/A • M status output -> (Note 9) | +> C/A • M status output -> (Note 9) | +> C/A • M status output -> (Note 9) | |
| 36 37 | +> Digital output 5/Digital -> input 2 (Note 8) | +> C • A/M status output -> (Note 9) | +> C • A/M status output -> (Note 9) | +> C • A/M status output -> (Note 9) | |
| 38 39 | +> Digital output 6/Digital -> input 1 (Note 8) | +> No function (Factory -> default) (Note 9) | +> No function (Factory -> default) (Note 9) | +> No function (Factory -> default) (Note 9) | |
| L N ≡ | +> Power supply -> Grounding terminal | +> Power supply -> Grounding terminal | +> Power supply -> Grounding terminal | +> Power supply -> Grounding terminal | |

NOTE: Do not use an unused terminal as a relaying terminal, etc.

-
- Note 1: These terminals can be used as output tracking input if feedforward input or cascade setting input 2 is not used.
- Note 2: For models with direct input (optional code /A0□), these terminals are treated as direct input signal output (1-5 V DC).
- Note 3: Using the terminals as fail output requires an external power supply.
- Note 4: For a transmitter power supply, see “Wiring” of “Installation and Wiring” in each YS1000 Operation Guide.
- Note 5: For models with direct input (optional code /A0□), the direct input terminals (19, 20, and 21) are used as input terminals. Connect the terminals as specified in Table 1, Connecting Direct Input Terminals.
- Note 6: For manipulated output variable 2 and setpoint output, the output types can be changed using the analog output-2 selection Y2S and analog output-3 selection Y3S engineering parameters.
- Note 7: For analog output 3, the output type can be changed using the analog output-3 current/voltage switching Y3TP engineering parameter.
- Note 8: Using these terminals as digital output requires an external power supply. The function of digital inputs or digital outputs can be set using the YSS1000 Setting Software (sold separately).
- Note 9: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 to DIO61 engineering parameters. Functions can be set using the DI1F to DI6F and DO1F to DO6F engineering parameters.
- Note 10: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

(2) YS1310/YS1350/YS1360

| Terminal number | YS1310 | YS1350 | YS1360 | User settings (Note 8) |
|----------------------------|---|---|---|------------------------|
| 1 2 | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | |
| 3 4 | +> Measurement input 2 -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 10 | +> Direct input signal output -> (1-5V DC) (Note 1) | +> Direct input signal output -> (1-5V DC) (Note 1) | +> Direct input signal output -> (1-5V DC) (Note 1) | |
| 11 12 | +> FAIL output (Note 2) | +> FAIL output (Note 2) | +> FAIL output (Note 2) | |
| 13 | Connection of transmitter supply power (24V DC) (Note 3) | Connection of transmitter supply power (24V DC) (Note 3) | Connection of transmitter supply power (24V DC) (Note 3) | |
| 14 15 16 17 18 | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) Communication terminal RDB (+) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | |
| 19 20 21 | +> Direct input terminals (Note 4) | +> Direct input terminals (Note 4) | +> Direct input terminals (Note 4) | |
| 22 23 | | | +> Manipulated output variable 1 -> (4 to 20mA DC) | |
| 24 25 | | +> Setpoint value output -> (1-5V DC) | +> Manipulated output variable 2 -> (1-5V DC) | |
| 26 | | | | |
| 27 | | | | |
| 28 29 | +> High limit alarm output for PV 1 (Note 5) | +> High limit alarm output (Note 6) | +> High limit alarm output (Note 6) | |
| 30 31 | +> Low limit alarm output for PV 1 (Note 5) | +> Low limit alarm output (Note 6) | +> Low limit alarm output (Note 6) | |
| 32 33 | +> High-high limit alarm output for PV 1 (Note 5) | | | |
| 34 35 | +> Low-low limit alarm output for PV 1 (Note 5) | +> C/M status output (Note 6) | +> C/M status output (Note 6) | |
| 36 37 | +> OR output of high limit alarm output for PV 2 and low limit alarm output for PV 2 (Note 5) | +> No function (Factory default) (Note 7) | +> No function (Factory default) (Note 7) | |
| 38 39 | +> OR output of high-high limit alarm output for PV 2 and low-low limit alarm output for PV 2 (Note 5) | +> No function (Factory default) (Note 7) | +> No function (Factory default) (Note 7) | |
| L N ⏏ | +> Power supply Grounding terminal | +> Power supply Grounding terminal | +> Power supply Grounding terminal | |

NOTE: Do not use an unused terminal as a relaying terminal, etc.

Note 1: For models with direct input (optional code /A0□), these terminals are treated as direct input signal output (1-5 V DC).

Note 2: Using the terminals as fail output requires an external power supply.

Note 3: For a transmitter power supply, see "Wiring" of "Installation and Wiring" in each YS1000 Operation Guide.

Note 4: For models with direct input (optional code /A0□), the direct input terminals (19, 20, and 21) are used as input terminals. Connect the terminals as specified in Table 1, Connecting Direct Input Terminals.

Note 5: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 engineering parameter. Functions can be set using the DI1F and DO1F to DO6F engineering parameters.

Note 6: Using these terminals as digital output requires an external power supply.

Note 7: The settings in the table are the factory defaults. Functions can be set using the DI1F and DI2F engineering parameters.

Note 8: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

Table 1 Connecting Direct Input Terminals

| | | Terminal Symbol | | |
|--|--|---|--------------|----|
| | | 19 | 21 | 20 |
| mV input (optional code /A01) Isolator (optional code /A05) | | + | / | - |
| Thermocouple (optional code /A02) | | | | |
| RTD input (optional code /A03) | | <p>Match the wiring resistances of terminals 19 and 21 with each other.</p> | | |
| Potentiometer input (optional code /A04) | | <p>Match the wiring resistances of terminals 19 and 20 with each other.</p> | | |
| Frequency input (optional code /A08) | Two-wire type (voltage, contact) | + | / | - |
| | Power feed type, two-wired | Signal | Power supply | / |
| | Power feed type, three-wired | + | Power supply | - |
| Two-wire transmitter input (optional codes /A06, /A07) | Supply voltage required | | | |
| | Case of 4 to 20 mA signal not requiring power supply | | | |

Note 1: Compatible type for YS100: YS1□□0-02□/A02, an external RJC is connected.

This is different from the existing YS100s.

Connect the provided RJC to terminals 20 and 21. (Mount the RJC at the terminal 21 side.)

Drawings

YS1000 Series
YS1□□0-03□

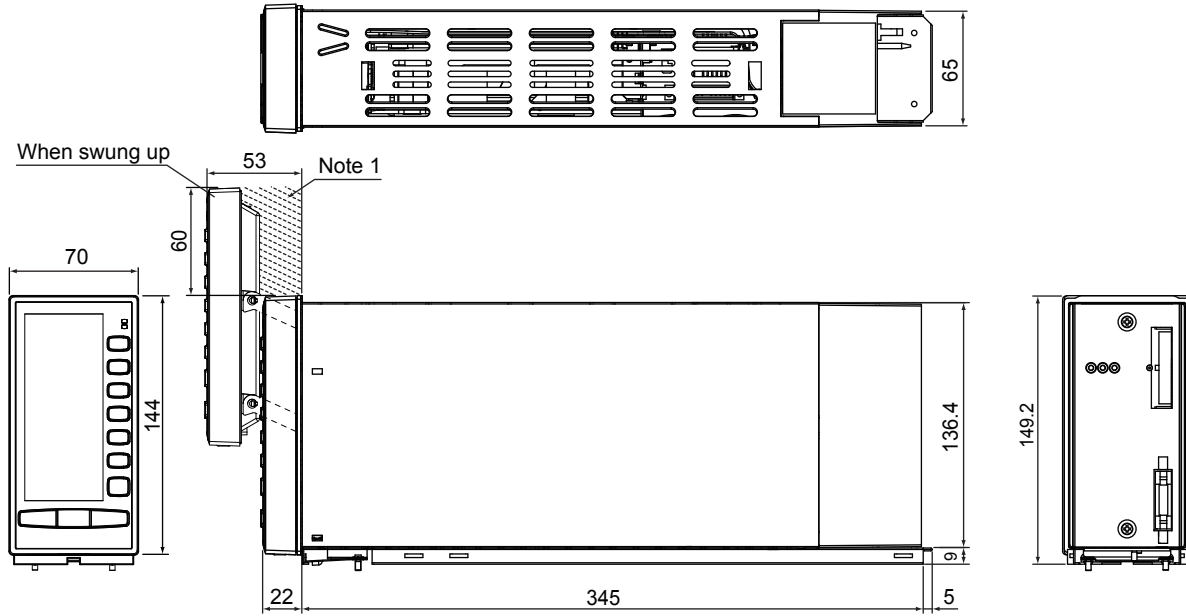
YS1000 Series

Compatible Type for YS80 Internal Unit/
Compatible Type for EBS, I, EK, and HOMAC

SD 01B08H01-02E

Unit: mm

<External Dimensions>



Weight: 2.5 kg

- Note 1: If a nameplate, etc. is installed within 60 mm above the instrument, the thickness of the nameplate, etc. must be 30 mm or less from the panel surface.
- Note 2: To ensure good air ventilation, allow space of 100 mm or more at the top and bottom of the panel.
- Note 3: General tolerance = \pm (value of tolerance class IT18 based on JIS B 0401-1998) / 2

To use this instrument, the separately sold SHUP housing is required. The type of SHUP housing differs depending on the model to be replaced.

| Model to be Replaced | Corresponding Housing |
|----------------------|-----------------------|
| YS80 | SHUP-000*A |
| EBS or I series | SHUP-100*A |
| EK or HOMAC | SHUP-420*A |

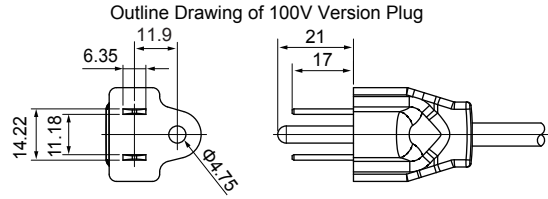
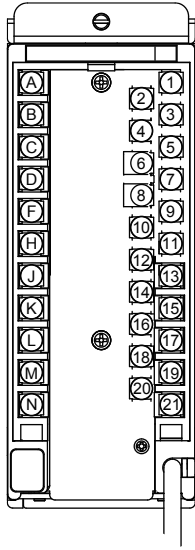
Refer to the Drawings of SHUP for the external dimensions and panel cutout dimensions of each SHUP housing.

SHUP-000*A, SHUP-000*A/A2ER (SD 01F04F01-01E)
SHUP-000*A/HTB (SD 01B04F01-11E)
SHUP-100*A (SD 01B04F01-02E)
SHUP-420*A (SD 01B04F01-14E)

Note: The YS1□□0-031 of 220V AC power supply cannot be used with the SHUP housing of 100V power supply.
For the YS1□□0-031 of 220V AC power supply, use the following SHUP housing.
SHUP-000*A/A2ER (220V version plug)
SHUP-000*A/A2/HTB (220V version, power terminal)
SHUP-100*A/A2 (220V version)
(Optional code /A2 is customized specification.)

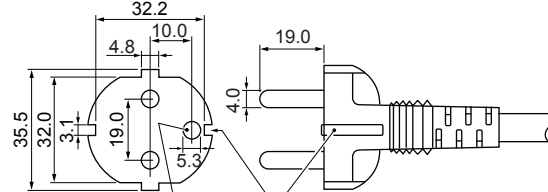
<Terminals Layout of SHUP>

- SHUP-000*A (YS80 Housing), SHUP-000*A/A2ER (YS80 Housing, 220V Version Plug)



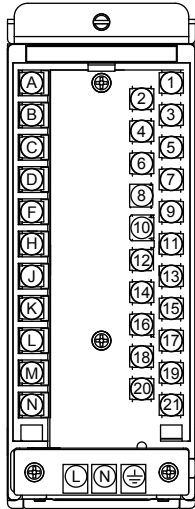
JIS C 8303 15A, 125 V Grounding Type Two-prong Attachment Plug

Outline Drawing of 220V Version Plug (Optional Code: /A2ER)



CEE PUBLICATION 7 STANDARD SHEET VII
10/16A 250V TWO-POLE PLUG WITH DUAL-EARTHING CONTACTS

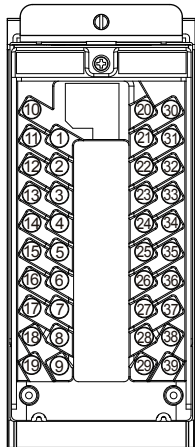
- SHUP-000*A/HTB (YS80 Housing Power Terminal Type), SHUP-100*A (EBS or I Series-compatible Housing)



| Terminal Symbol | Remarks |
|-----------------|---------------------------|
| L | + Power supply (DC or AC) |
| N | |
| | Grounding |

Note: Be aware that the signal terminals also have L and N terminals.

- SHUP-420*A (EK or HOMAC-compatible Housing)



Screws: M3.5

<Terminal Arrangement Table of SHUP>

- SHUP-000*A (YS80 Housing), SHUP-000*A/A2ER (YS80 Housing, 220V Version Plug), SHUP-000*A/HTB (YS80 Housing, Power Terminal Type), SHUP-100*A (EBS or I Series-compatible Housing)

(1) YS1500/YS1700

| Terminal number | Programmable mode (YS1700 only) | Single-loop mode | Cascade mode | Selector mode | User settings () mode (Note 8) |
|-----------------|---|---|---|---|---------------------------------|
| 1 2 | +> Analog input 1 -> (1-5V DC) | +> Measurement input -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | |
| 3 4 | +> Analog input 2 -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input 1 -> (1-5V DC) | |
| 5 6 | +> Analog input 3 -> (1-5V DC) | +> Input value for output tracking (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | |
| 7 8 | +> Analog input 4 -> (1-5V DC) | +> Feedforward input -> (1-5V DC) | +> Feedforward input -> (1-5V DC) (Note 2) | +> Cascade setting input 2 -> (1-5V DC) (Note 2) | |
| 9 10 | +> Analog input 5 -> (1-5V DC) | +> Output of the direct input signal (1-5V DC) | +> Output of the direct input signal (1-5V DC) | +> Output of the direct input signal (1-5V DC) | |
| N 21 | +> FAIL output (Note 3) | +> FAIL output (Note 3) | +> FAIL output (Note 3) | +> FAIL output (Note 3) | |
| | Connection of transmitter supply power (24V DC) | Connection of transmitter supply power (24V DC) | Connection of transmitter supply power (24V DC) | Connection of transmitter supply power (24V DC) | |
| 17 | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) | |
| 18 | Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | |
| | +> Direct input terminals | +> Direct input terminals | +> Direct input terminals | +> Direct input terminals | |
| A B | +> Analog output 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | |
| C D | +> Analog output 2 -> (1-5V DC) | +> Manipulated output variable 2 -> (1-5V DC) (Note 4) | +> Manipulated output variable 2 -> (1-5V DC) (Note 4) | +> Manipulated output variable 2 -> (1-5V DC) (Note 4) | |
| F H | +> Analog output 3 -> (4 to 20mA DC/1-5V DC) (Note 5) | +> Setpoint value output -> (1-5V DC) (Note 4) | +> Setpoint value output -> (1-5V DC) (Note 4) | +> Setpoint value output -> (1-5V DC) (Note 4) | |
| J K | +> Digital output 1/Digital input 6 (Note 6) | +> High limit alarm setpoint for PV output (Note 7) | +> LOOP 1 alarm output (Note 7) | +> LOOP 1 alarm output (Note 7) | |
| L M | +> Digital output 2/Digital input 5 (Note 6) | +> Low limit alarm setpoint for PV output (Note 7) | +> LOOP 2 alarm output (Note 7) | +> LOOP 2 alarm output (Note 7) | |
| 19 20 | +> Digital output 3/Digital input 4 (Note 6) | +> Velocity alarm setpoint for PV output (Note 7) | +> O/C status output (Note 7) | +> L/R status output (Note 7) | |
| 15 16 | +> Digital output 4/Digital input 3 (Note 6) | +> C/A, M status output (Note 7) | +> C/A, M status output (Note 7) | +> C/A, M status output (Note 7) | |
| 13 14 | +> Digital output 5/Digital input 2 (Note 6) | +> C, A/M status output (Note 7) | +> C, A/M status output (Note 7) | +> C, A/M status output (Note 7) | |
| 11 12 | +> Digital output 6/Digital input 1 (Note 6) | +> No function (Factory default) (Note 7) | +> No function (Factory default) (Note 7) | +> No function (Factory default) (Note 7) | |

Note 1: The functions in the shaded areas or those described in shaded characters are not available in the YS80 housing or EBS or I series-compatible housing.

Note 2: These terminals can be used as output tracking input if feedforward input or cascade setting input 2 is not used.

Note 3: Using the terminals as fail output requires an external power supply.

Note 4: For manipulated output variable 2 and setpoint output, the output types can be changed using the analog output-2 selection Y2S and analog output-3 selection Y3S engineering parameters.

Note 5: For analog output 3, the output type can be changed using the analog output-3 current/voltage switching Y3TP engineering parameter.

Note 6: Using these terminals as digital output requires an external power supply. The function of digital inputs or digital outputs can be set using the YSS1000 Setting Software (sold separately).

Note 7: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 to DIO61 engineering parameters. Functions can be set using the DI1F to DI6F and DO1F to DO6F engineering parameters.

Note 8: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

NOTE: Do not use an unused terminal as a relaying terminal, etc.

(2) YS1310/YS1350/YS1360

| Terminal number | YS1310 | YS1350 | YS1360 | User settings (Note 6) |
|-----------------|---|---|---|------------------------|
| 1 2 | + Measurement input - (1-5V DC) | + Measurement input 1 - (1-5V DC) | + Measurement input 1 - (1-5V DC) | |
| 3 4 | + Measurement input 2 - (1-5V DC) | + Cascade setting input - (1-5V DC) | + Cascade setting input - (1-5V DC) | |
| 5 | | | | |
| 6 | | | | |
| 7 | | | | |
| 8 | | | | |
| 9 10 | + Output of the direct input - signal (1-5V DC) | + Output of the direct input - signal (1-5V DC) | + Output of the direct input - signal (1-5V DC) | |
| N 21 | + FAIL output (Note 2) - | + FAIL output (Note 2) - | + FAIL output (Note 2) - | |
| | Connection of transmitter supply power (24V DC) | Connection of transmitter supply power (24V DC) | Connection of transmitter supply power (24V DC) | |
| 17 | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | |
| 18 | | | | |
| | + Direct input terminals - | + Direct input terminals - | + Direct input terminals - | |
| A B | | | + Manipulated output variable 1 - (4 to 20mA DC) | |
| C D | | + Setpoint value output - (1-5V DC) | + Manipulated output variable 2 - (1-5V DC) | |
| F H | | | | |
| J K | + High limit alarm setpoint - for PV 1 output (Note 3) | + High limit alarm output - (Note 4) | + High limit alarm output - (Note 4) | |
| L M | + Low limit alarm setpoint - for PV 1 output (Note 3) | + Low limit alarm output - (Note 4) | + Low limit alarm output - (Note 4) | |
| 19 20 | + High-high limit alarm - output for PV 1 (Note 3) | | | |
| 15 16 | + Low-low limit alarm output - for PV 1 (Note 3) | + C/M status output - (Note 4) | + C/M status output - (Note 4) | |
| 13 14 | + OR output of high limit - alarm output for PV 2 and low limit alarm output for PV 2 (Note 3) | + No function (Factory - default) (Note 5) | + No function (Factory - default) (Note 5) | |
| 11 12 | + OR output of high-high - limit alarm output for PV 2 and low-low limit alarm output for PV 2 (Note 3) | + No function (Factory - default) (Note 5) | + No function (Factory - default) (Note 5) | |

Note 1: The functions in the shaded areas or those described in shaded characters are not available in the YS80 housing or EBS or I series-compatible housing.

Note 2: Using the terminals as fail output requires an external power supply.

Note 3: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 engineering parameter. Functions can be set using the DI1F and DO1F to DO6F engineering parameters.

Note 4: Using these terminals as digital output requires an external power supply.

Note 5: The settings in the table are the factory defaults. Functions can be set using the DI1F and DI2F engineering parameters.

Note 6: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

NOTE: Do not use an unused terminal as a relaying terminal, etc.

● SHUP-420*A (EK or HOMAC-compatible Housing)

(1) YS1500/YS1700

| Terminal number | Programmable mode (YS1700 only) | Single-loop mode | Cascade mode | Selector mode | User settings () mode (Note 9) |
|-----------------|--|---|---|---|---------------------------------|
| 1 2 | +> Analog input 2 -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input 1 -> (1-5V DC) | |
| 3 4 | +> Analog input 3 -> (1-5V DC) | +> Input value for output tracking -> (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | |
| 5 6 | +> Analog input 1 -> (1-5V DC) | +> Measurement input -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | |
| 7 8 | +> Analog output 1 -> (4 to 20mA DC) (Note 2) | +> Manipulated output variable 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | |
| 9 10 | | | | | |
| 11 12 | +> Digital output 1/Digital input 6 (Note 3) | +> High limit alarm setpoint for PV output | +> LOOP 1 alarm output | +> LOOP 1 alarm output | |
| 13 14 | +> Digital output 2/Digital input 5 (Note 3) | +> Low limit alarm setpoint for PV output | +> LOOP 2 alarm output | +> LOOP 2 alarm output | |
| 15 16 | +> Analog output 2 -> (1-5V DC) | +> Manipulated output variable 2 -> (1-5V DC) (Note 4) | +> Manipulated output variable 2 -> (1-5V DC) (Note 4) | +> Manipulated output variable 2 -> (1-5V DC) (Note 4) | |
| 17 18 | +> Analog output 3 -> (4 to 20mA DC/1-5V DC) (Note 5) | +> Setpoint value output -> (1-5V DC) | +> Setpoint value output -> (1-5V DC) (Note 4) | +> Setpoint value output -> (1-5V DC) (Note 4) | |
| 19 | Grounding terminal | Grounding terminal | Grounding terminal | Grounding terminal | |
| 20 21 | +> Digital output 6/Digital input 1 (Note 3) | +> No function (Factory default) (Note 6) | +> No function (Factory default) (Note 6) | +> No function (Factory default) (Note 6) | |
| 22 23 | +> Digital output 5/Digital input 2 (Note 3) | +> C, A/M status output -> (Note 6) | +> C, A/M status output -> (Note 6) | +> C, A/M status output -> (Note 6) | |
| 24 25 | +> Digital output 4/Digital input 3 (Note 3) | +> C/A, M status output -> (Note 6) | +> C/A, M status output -> (Note 6) | +> C/A, M status output -> (Note 6) | |
| 26 27 | +> Digital output 3/Digital input 4 (Note 3) | +> Velocity alarm setpoint for PV output (Note 6) | +> O/C status output -> (Note 6) | +> L/R status output -> (Note 6) | |
| 28 | - FAIL output (Note 7) | - FAIL output (Note 7) | - FAIL output (Note 7) | - FAIL output (Note 7) | |
| 29 | + Power supply L1 | + Power supply L1 | + Power supply L1 | + Power supply L1 | |
| 30 31 | +> Analog input 4 -> (1-5V DC) | +> Feedforward input -> (1-5V DC) (Note 8) | +> Feedforward input -> (1-5V DC) (Note 8) | +> Cascade setting input 2 -> (1-5V DC) | |
| 32 33 | +> Analog input 5 -> (1-5V DC) | +> Output of the direct input signal -> (1-5V DC) | +> Output of the direct input signal -> (1-5V DC) | +> Output of the direct input signal -> (1-5V DC) | |
| 34 | Connection of transmitter supply power (24V DC) | Connection of transmitter supply power (24V DC) | Connection of transmitter supply power (24V DC) | Connection of transmitter supply power (24V DC) | |
| 35 36 | Communication terminal SG | Communication terminal SG | Communication terminal SG | Communication terminal SG | |
| | Communication terminal SDA (-) | Communication terminal SDA (-) | Communication terminal SDA (-) | Communication terminal SDA (-) | |
| | Communication terminal SDB (+) | Communication terminal SDB (+) | Communication terminal SDB (+) | Communication terminal SDB (+) | |
| 35 36 | Communication terminal RDA (-) or LCS (+) | Communication terminal RDA (-) or LCS (+) | Communication terminal RDA (-) or LCS (+) | Communication terminal RDA (-) or LCS (+) | |
| | Communication terminal RDB (+) or LCS (-) | Communication terminal RDB (+) or LCS (-) | Communication terminal RDB (+) or LCS (-) | Communication terminal RDB (+) or LCS (-) | |
| | Communication terminal RDB (+) or LCS (-) | Communication terminal RDB (+) or LCS (-) | Communication terminal RDB (+) or LCS (-) | Communication terminal RDB (+) or LCS (-) | |
| | +> Direct input terminals | +> Direct input terminals | +> Direct input terminals | +> Direct input terminals | |
| 37 | | | | | |
| 38 | + FAIL output (Note 7) | + FAIL output (Note 7) | + FAIL output (Note 7) | + FAIL output (Note 7) | |
| 39 | - Power supply L2 | - Power supply L2 | - Power supply L2 | - Power supply L2 | |

NOTE: Do not use an unused terminal as a relaying terminal, etc.

-
- Note 1: The functions in the shaded areas or those described in shaded characters are not available in the EK or HOMAC-compatible housings.
- Note 2: If analog output 1 is not used, short-circuit these terminals.
- Note 3: Using these terminals as digital output requires an external power supply.
The function of digital inputs or digital outputs can be set using the YSS1000 Setting Software (sold separately).
- Note 4: For manipulated output variable 2 and setpoint output, the output types can be changed using the analog output-2 selection Y2S and analog output-3 selection Y3S engineering parameters.
- Note 5: For analog output 3, the output type can be changed using the analog output-3 current/voltage switching Y3TP engineering parameter.
- Note 6: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 to DIO61 engineering parameters. Functions can be set using the DI1F to DI6F and DO1F to DO6F engineering parameters.
- Note 7: Using the terminals as fail output requires an external power supply.
- Note 8: These terminals can be used as output tracking input if feedforward input or cascade setting input 2 is not used.
- Note 9: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

(2) YS1310/YS1350/YS1360

| Terminal number | YS1310 | YS1350 | YS1360 | User settings (Note 7) |
|-----------------|---|---|---|------------------------|
| 1 2 | +> Measurement input 2 -> (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | |
| 3 4 | | | | |
| 5 6 | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | |
| 7 8 | | | +> Manipulated output variable 1 -> (4 to 20mA DC) (Note 2) | |
| 9 10 | | | | |
| 11 12 | +> High limit alarm setpoint -> for PV 1 output (Note 3) | +> High limit alarm output -> (Note 4) | +> High limit alarm output -> (Note 4) | |
| 13 14 | +> Low limit alarm setpoint -> for PV 1 output (Note 3) | +> Low limit alarm output -> (Note 4) | +> Low limit alarm output -> (Note 4) | |
| 15 16 | | +> Setpoint value output -> (1-5V DC) | +> Manipulated output variable 2 -> (1-5V DC) | |
| 17 18 | | | | |
| 19 | Grounding terminal | Grounding terminal | Grounding terminal | |
| 20 21 | +> OR output of high-high -> limit alarm output for PV 2 and low-low limit alarm output for PV 2 (Note 3) | +> No function (Factory -> default) (Note 3) | +> No function (Factory -> default) (Note 3) | |
| 22 23 | +> OR output of high limit -> alarm output for PV 2 and low limit alarm output for PV 2 (Note 3) | +> No function (Factory -> default) (Note 3) | +> No function (Factory -> default) (Note 3) | |
| 24 25 | +> Low-low limit alarm output -> for PV 1 (Note 4) | +> C/M status output -> (Note 5) | +> C/M status output -> (Note 5) | |
| 26 27 | +> High-high limit alarm -> output for PV 1 (Note 4) | | | |
| 28 | - FAIL output (Note 6) | - FAIL output (Note 6) | - FAIL output (Note 6) | |
| 29 | + Power supply L1 | + Power supply L1 | + Power supply L1 | |
| 30 31 | | | | |
| 32 33 | +> Output of the direct input -> signal (1-5V DC) | +> Output of the direct input -> signal (1-5V DC) | +> Output of the direct input -> signal (1-5V DC) | |
| 34 | Connection of transmitter supply power (24V DC) | Connection of transmitter supply power (24V DC) | Connection of transmitter supply power (24V DC) | |
| 35 | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) | |
| 36 | Communication terminal RDB (+) or LCS (-) | Communication terminal RDB (+) or LCS (-) | Communication terminal RDB (+) or LCS (-) | |
| | +> Direct input terminals -> | +> Direct input terminals -> | +> Direct input terminals -> | |
| 37 | | | | |
| 38 | + FAIL output (Note 6) | + FAIL output (Note 6) | + FAIL output (Note 6) | |
| 39 | - Power supply L2 | - Power supply L2 | - Power supply L2 | |

NOTE: Do not use an unused terminal as a relaying terminal, etc.

Note 1: The functions in the shaded areas or those described in shaded characters are not available in the EK or HOMAC-compatible housings.

Note 2: If manipulated output variable 1 is not used, short-circuit these terminals.

Note 3: The settings in the table are the factory defaults. Functions can be set using the DI1F and DI2F engineering parameters.

Note 4: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 engineering parameter. Functions can be set using the DI1F and DO1F to DO6F engineering parameters.

Note 5: Using these terminals as digital output requires an external power supply.

Note 6: Using the terminals as fail output requires an external power supply.

Note 7: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

Drawings

YS1000 Series
YS1□□0-04□

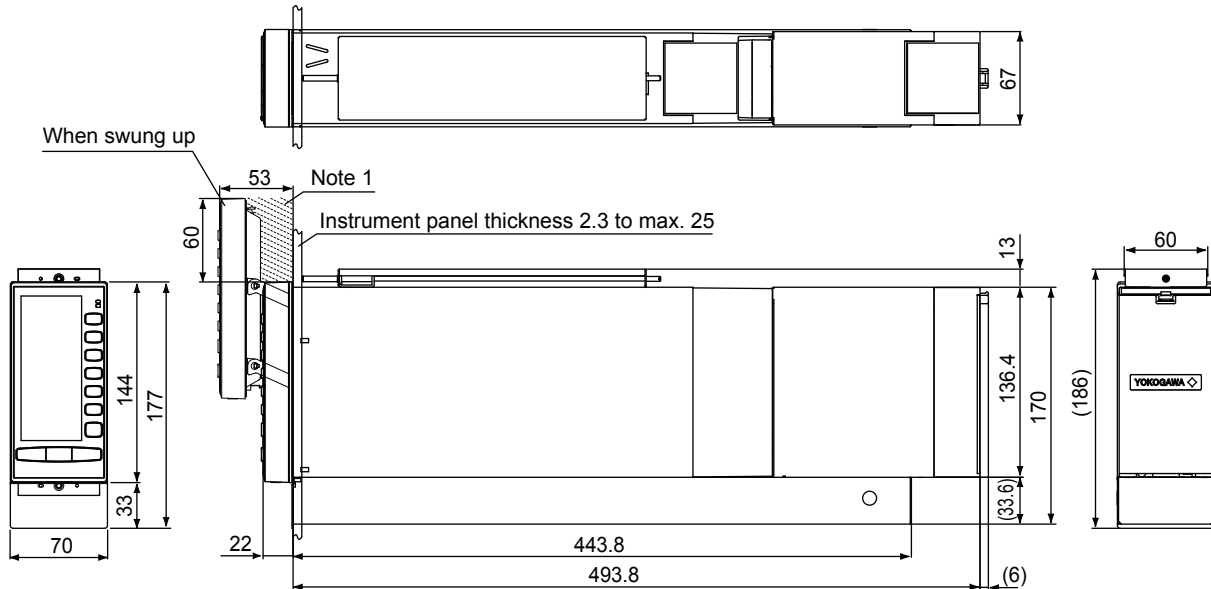
YS1000 Series

Compatible Type for YS80 (compatible size for YS80 with YS100 terminal)

SD 01B08H01-03E

Unit: mm

<External Dimensions>



Weight: 3.4 kg (excluding mounting kit)

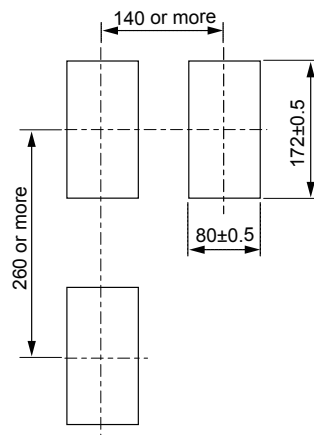
Note 1: If a nameplate, etc. is installed within 60 mm above the instrument, the thickness of the nameplate, etc. must be 30 mm or less from the panel surface.

Note 2: To ensure good air ventilation, allow space of 100 mm or more at the top and bottom of the panel.

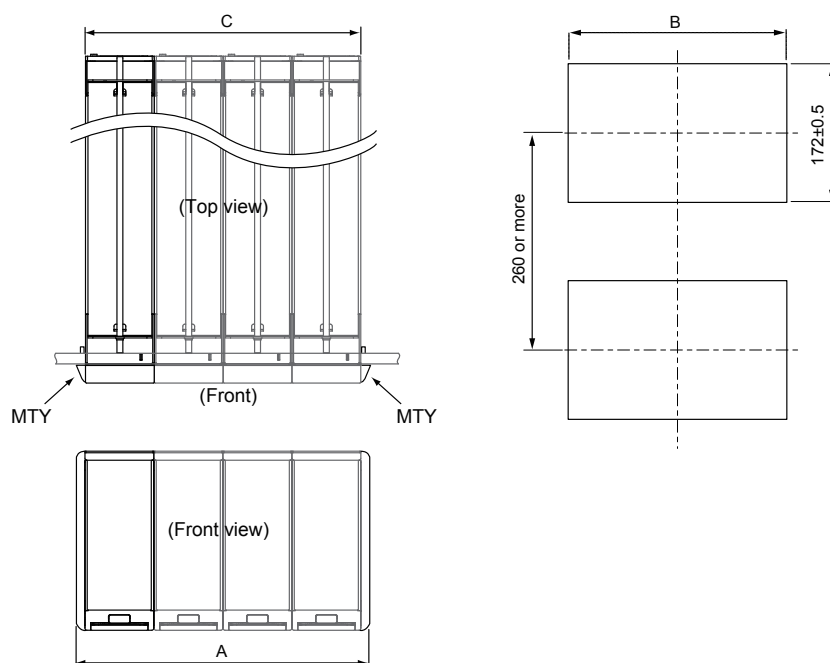
Note 3: General tolerance = \pm (value of tolerance class IT18 based on JIS B 0401-1998) / 2

● Panel Cutout Dimensions

For Single Mounting



For Side-by-side Mounting



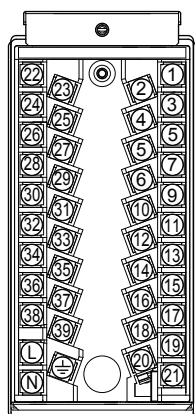
| Number of Units Location | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|-----------------------------|--------|---------|--------------------------------|--------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|
| A* | 87 | 159 | 229 | 300 | 370 | 442 | 512 | 583 |
| B | 80±0.5 | 150±0.5 | 220 ⁺¹ ₀ | 291 ⁺¹ ₀ | 361 ^{+1.5} ₀ | 433 ^{+1.5} ₀ | 503 ^{+1.5} ₀ | 574 ^{+1.5} ₀ |
| C | 70 | 140 | 210 | 280 | 350 | 420 | 490 | 560 |

| Number of Units Location | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|-----------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|
| A* | 653 | 723 | 794 | 864 | 935 | 1005 | 1075 |
| B | 644 ^{+1.5} ₀ | 714 ^{+1.5} ₀ | 785 ^{+1.5} ₀ | 855 ^{+1.5} ₀ | 926 ^{+1.5} ₀ | 996 ^{+1.5} ₀ | 1066 ⁺² ₀ |
| C | 630 | 700 | 770 | 840 | 910 | 980 | 1050 |

*: The numerical values in line A include the MTY's bezels.

Note: If the YS1000 is mounted at an end in single mounting or side-by-side mounting, attach the separately sold mounting kit (MTY) to the housing.

<Terminals Layout>



<Terminal Arrangement Table>

● YS1500/YS1700

| Terminal number | Programmable mode (YS1700 only) | Single-loop mode | Cascade mode | Selector mode | User settings () mode (Note 10) |
|----------------------------|---|---|---|---|----------------------------------|
| 1 2 | +> Analog input 1 -> (1-5V DC) | +> Measurement input -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | |
| 3 4 | +> Analog input 2 -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input 1 -> (1-5V DC) | |
| 5 6 | +> Analog input 3 -> (1-5V DC) | +> Input value for output tracking (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | |
| 7 8 | +> Analog input 4 -> (1-5V DC) | +> Feedforward input -> (1-5V DC) | +> Feedforward input -> (1-5V DC) (Note 1) | +> Cascade setting input 2 -> (1-5V DC) (Note 1) | |
| 9 10 | +> Analog input 5 -> (1-5V DC) (Note 2) | +> Output of the direct input signal (1-5V DC) | +> Output of the direct input signal (1-5V DC) | +> Output of the direct input signal (1-5V DC) | |
| 11 12 | +> FAIL output (Note 3) | +> FAIL output (Note 3) | +> FAIL output (Note 3) | +> FAIL output (Note 3) | |
| 13 | Connection of transmitter supply power (24V DC) (Note 4) | Connection of transmitter supply power (24V DC) (Note 4) | Connection of transmitter supply power (24V DC) (Note 4) | Connection of transmitter supply power (24V DC) (Note 4) | |
| 14 15 16 17 18 | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | |
| 19 20 21 | +> Direct input terminals (Note 5) | +> Direct input terminals (Note 5) | +> Direct input terminals (Note 5) | +> Direct input terminals (Note 5) | |
| 22 23 | +> Analog output 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | |
| 24 25 | +> Analog output 2 -> (1-5V DC) | +> Manipulated output variable 2 -> (1-5V DC) (Note 6) | +> Manipulated output variable 2 -> (1-5V DC) (Note 6) | +> Manipulated output variable 2 -> (1-5V DC) (Note 6) | |
| 26 27 | +> Analog output 3 -> (4 to 20mA DC/1-5V DC) (Note 7) | +> Setpoint value output -> (1-5V DC) (Note 6) | +> Setpoint value output -> (1-5V DC) (Note 6) | +> Setpoint value output -> (1-5V DC) (Note 6) | |
| 28 29 | +> Digital output 1/Digital input 6 (Note 8) | +> High limit alarm setpoint for PV output (Note 9) | +> LOOP 1 alarm output -> (Note 9) | +> LOOP 1 alarm output -> (Note 9) | |
| 30 31 | +> Digital output 2/Digital input 5 (Note 8) | +> Low limit alarm setpoint for PV output (Note 9) | +> LOOP 2 alarm output -> (Note 9) | +> LOOP 2 alarm output -> (Note 9) | |
| 32 33 | +> Digital output 3/Digital input 4 (Note 8) | +> Velocity alarm setpoint for PV output (Note 9) | +> O/C status output -> (Note 9) | +> L/R status output -> (Note 9) | |
| 34 35 | +> Digital output 4/Digital input 3 (Note 8) | +> C/A, M status output (Note 9) | +> C/A, M status output -> (Note 9) | +> C/A, M status output -> (Note 9) | |
| 36 37 | +> Digital output 5/Digital input 2 (Note 8) | +> C, A/M status output (Note 9) | +> C, A/M status output -> (Note 9) | +> C, A/M status output -> (Note 9) | |
| 38 39 | +> Digital output 6/Digital input 1 (Note 8) | +> No function (Factory default) (Note 9) | +> No function (Factory default) (Note 9) | +> No function (Factory default) (Note 9) | |
| L N ≡ | +> Power supply Grounding terminal | +> Power supply Grounding terminal | +> Power supply Grounding terminal | +> Power supply Grounding terminal | |

NOTE: Do not use an unused terminal as a relaying terminal, etc.

-
- Note 1: These terminals can be used as output tracking input if feedforward input or cascade setting input 2 is not used.
- Note 2: For models with direct input (optional code /A0□), these terminals are treated as direct input signal output (1-5 V DC).
- Note 3: Using the terminals as fail output requires an external power supply.
- Note 4: For a transmitter power supply, see "Wiring" of "Installation and Wiring" in each YS1000 Operation Guide.
- Note 5: For models with direct input (optional code /A0□), the direct input terminals (19, 20, and 21) are used as input terminals. Connect the terminals as specified in Table 1, Connecting Direct Input Terminals.
- Note 6: For manipulated output variable 2 and setpoint output, the output types can be changed using the analog output-2 selection Y2S and analog output-3 selection Y3S engineering parameters.
- Note 7: For analog output 3, the output type can be changed using the analog output-3 current/voltage switching Y3TP engineering parameter.
- Note 8: Using these terminals as digital output requires an external power supply. The function of digital inputs or digital outputs can be set using the YSS1000 Setting Software (sold separately).
- Note 9: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 to DIO61 engineering parameters. Functions can be set using the DI1F to DI6F and DO1F to DO6F engineering parameters.
- Note 10: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

● YS1310/YS1350/YS1360

| Terminal number | YS1310 | YS1350 | YS1360 | User settings (Note 8) |
|----------------------------|---|---|---|------------------------|
| 1 2 | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | |
| 3 4 | +> Measurement input 2 -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | |
| 5 6 7 8 | | | | |
| 9 10 | +> Direct input signal output -> (1-5V DC) (Note 1) | +> Direct input signal output -> (1-5V DC) (Note 1) | +> Direct input signal output -> (1-5V DC) (Note 1) | |
| 11 12 | +> FAIL output (Note 2) | +> FAIL output (Note 2) | +> FAIL output (Note 2) | |
| 13 | Connection of transmitter supply power (24V DC) (Note 3) | Connection of transmitter supply power (24V DC) (Note 3) | Connection of transmitter supply power (24V DC) (Note 3) | |
| 14 15 16 17 18 | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) Communication terminal RDB (+) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | |
| 19 20 21 | +] Direct input terminals -] (Note 4) | +] Direct input terminals -] (Note 4) | +] Direct input terminals -] (Note 4) | |
| 22 23 | | | +> Manipulated output variable 1 -> (4 to 20mA DC) | |
| 24 25 | | +> Setpoint value output -> (1-5V DC) | +> Manipulated output variable 2 -> (1-5V DC) | |
| 26 27 | | | | |
| 28 29 | +> High limit alarm output for PV 1 (Note 5) | +> High limit alarm output (Note 6) | +> High limit alarm output (Note 6) | |
| 30 31 | +> Low limit alarm output for PV 1 (Note 5) | +> Low limit alarm output (Note 6) | +> Low limit alarm output (Note 6) | |
| 32 33 | +> High-high limit alarm output for PV 1 (Note 5) | | | |
| 34 35 | +> Low-low limit alarm output for PV 1 (Note 5) | +> C/M status output (Note 6) | +> C/M status output (Note 6) | |
| 36 37 | +> OR output of high limit alarm output for PV 2 and low limit alarm output for PV 2 (Note 5) | +> No function (Factory default) (Note 7) | +> No function (Factory default) (Note 7) | |
| 38 39 | +> OR output of high-high limit alarm output for PV 2 and low-low limit alarm output for PV 2 (Note 5) | +> No function (Factory default) (Note 7) | +> No function (Factory default) (Note 7) | |
| L N ⏚ | +> Power supply Grounding terminal | +> Power supply Grounding terminal | +> Power supply Grounding terminal | |

NOTE: Do not use an unused terminal as a relaying terminal, etc.

Note 1: For models with direct input (optional code /A0□), these terminals are treated as direct input signal output (1-5 V DC).

Note 2: Using the terminals as fail output requires an external power supply.

Note 3: For a transmitter power supply, see "Wiring" of "Installation and Wiring" in each YS1000 Operation Guide.

Note 4: For models with direct input (optional code /A0□), the direct input terminals (19, 20, and 21) are used as input terminals. Connect the terminals as specified in Table 1, Connecting Direct Input Terminals.

Note 5: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 engineering parameter. Functions can be set using the DI1F and DO1F to DO6F engineering parameters.

Note 6: Using these terminals as digital output requires an external power supply.

Note 7: The settings in the table are the factory defaults. Functions can be set using the DI1F and DI2F engineering parameters.

Note 8: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

Table 1 Connecting Direct Input Terminals

| | | Terminal Symbol | | |
|--|--|-----------------|--------------|----|
| | | 19 | 21 | 20 |
| mV input (optional code /A01) Isolator (optional code /A05) | | + | | - |
| Thermocouple input (optional code /A02) | | | | |
| RTD input (optional code /A03) | | | | |
| Potentiometer input (optional code /A04) | | | | |
| Frequency input (optional code /A08) | Two-wire type (voltage, contact) | + | | - |
| | Power feed type, two-wired | Signal | Power supply | |
| | Power feed type, three-wired | + | Power supply | - |
| Two-wire transmitter input (optional codes /A06, /A07) | Supply voltage required | | | |
| | Case of 4 to 20 mA signal not requiring power supply | | | |

Note 1: Compatible type for YS80: YS1□□0-04□/A02, an external RJC is connected.

This is different from the existing YS100s.

Connect the provided RJC to terminals 20 and 21. (Mount the RJC at the terminal 21 side.)

Drawings

YS1000 Series

YS1□□0-05□

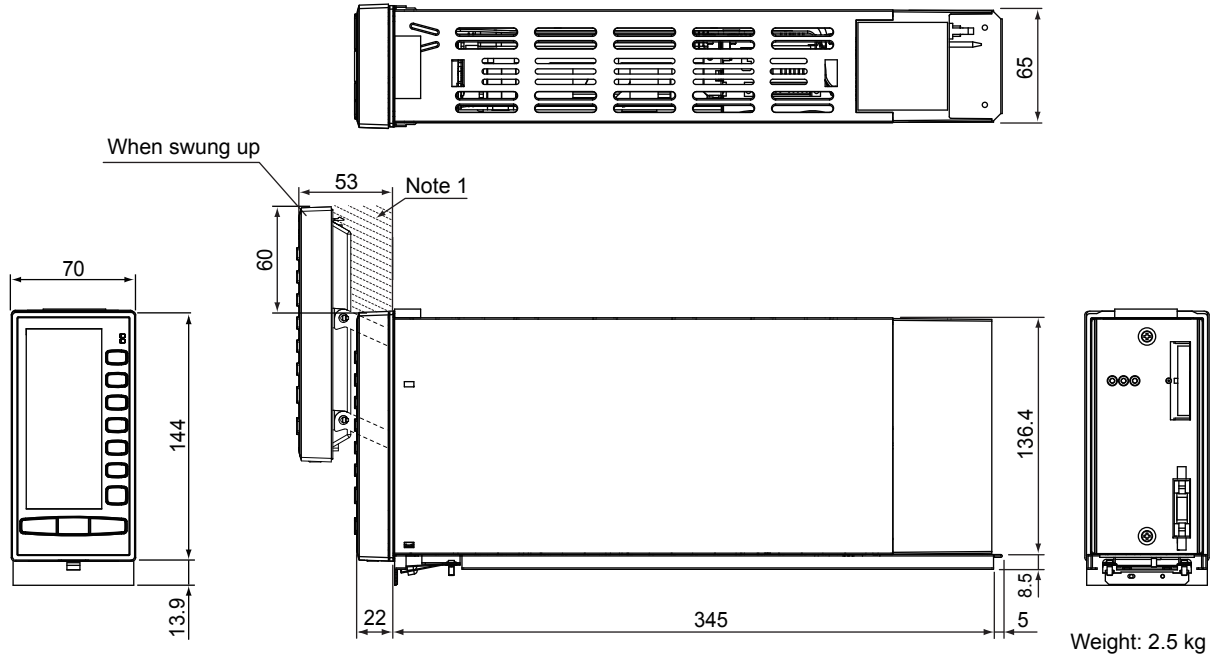
Compatible Type for Pneumatic 100 Line
(with YS100 Terminal)

YS1000 Series

SD 01B08H01-04E

Unit: mm

<External Dimensions>



Note 1: If a nameplate, etc. is installed within 60 mm above the instrument, the thickness of the nameplate, etc. must be 30 mm or less from the panel surface.

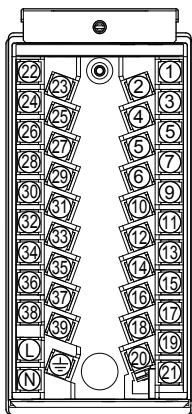
Note 2: To ensure good air ventilation, allow space of 100 mm or more at the top and bottom of the panel.

Note 3: General tolerance = \pm (value of tolerance class IT18 based on JIS B 0401-1998) / 2

To use this instrument, the separately sold YS006 (pneumatic 100 line-compatible housing) is required. The YS006 can be used with the YS1□□0-050 (100V AC, 24V DC common power supply) and YS1□□0-051 (220V AC power supply).

Refer to the Drawings of YS006 (SD YS006-01E) for the external dimensions and panel cutout dimensions.

<External Dimensions>



<Terminal Arrangement Table of YS006>

● YS1500/YS1700

| Terminal number | Programmable mode (YS1700 only) | Single-loop mode | Cascade mode | Selector mode | User settings () mode (Note 10) |
|----------------------------|---|---|---|---|----------------------------------|
| 1 2 | +> Analog input 1 -> (1-5V DC) | +> Measurement input -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | |
| 3 4 | +> Analog input 2 -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input 1 -> (1-5V DC) | |
| 5 6 | +> Analog input 3 -> (1-5V DC) | +> Input value for output tracking (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | +> Measurement input 2 -> (1-5V DC) | |
| 7 8 | +> Analog input 4 -> (1-5V DC) | +> Feedforward input -> (1-5V DC) | +> Feedforward input -> (1-5V DC) (Note 1) | +> Cascade setting input 2 -> (1-5V DC) (Note 1) | |
| 9 10 | +> Analog input 5 -> (1-5V DC) (Note 2) | +> Output of the direct input signal (1-5V DC) | +> Output of the direct input signal (1-5V DC) | +> Output of the direct input signal (1-5V DC) | |
| 11 12 | +> FAIL output (Note 3) | +> FAIL output (Note 3) | +> FAIL output (Note 3) | +> FAIL output (Note 3) | |
| 13 | Connection of transmitter supply power (24V DC) (Note 4) | Connection of transmitter supply power (24V DC) (Note 4) | Connection of transmitter supply power (24V DC) (Note 4) | Connection of transmitter supply power (24V DC) (Note 4) | |
| 14 15 16 17 18 | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | |
| 19 20 21 | +> Direct input terminals (Note 5) | +> Direct input terminals (Note 5) | +> Direct input terminals (Note 5) | +> Direct input terminals (Note 5) | |
| 22 23 | +> Analog output 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | +> Manipulated output variable 1 -> (4 to 20mA DC) | |
| 24 25 | +> Analog output 2 -> (1-5V DC) | +> Manipulated output variable 2 -> (1-5V DC) (Note 6) | +> Manipulated output variable 2 -> (1-5V DC) (Note 6) | +> Manipulated output variable 2 -> (1-5V DC) (Note 6) | |
| 26 27 | +> Analog output 3 -> (4 to 20mA DC/1-5V DC) (Note 7) | +> Setpoint value output -> (1-5V DC) (Note 6) | +> Setpoint value output -> (1-5V DC) (Note 6) | +> Setpoint value output -> (1-5V DC) (Note 6) | |
| 28 29 | +> Digital output 1/Digital input 6 (Note 8) | +> High limit alarm setpoint for PV output (Note 9) | +> LOOP 1 alarm output -> (Note 9) | +> LOOP 1 alarm output -> (Note 9) | |
| 30 31 | +> Digital output 2/Digital input 5 (Note 8) | +> Low limit alarm setpoint for PV output (Note 9) | +> LOOP 2 alarm output -> (Note 9) | +> LOOP 2 alarm output -> (Note 9) | |
| 32 33 | +> Digital output 3/Digital input 4 (Note 8) | +> Velocity alarm setpoint for PV output (Note 9) | +> O/C status output -> (Note 9) | +> L/R status output -> (Note 9) | |
| 34 35 | +> Digital output 4/Digital input 3 (Note 8) | +> C/A, M status output (Note 9) | +> C/A, M status output -> (Note 9) | +> C/A, M status output -> (Note 9) | |
| 36 37 | +> Digital output 5/Digital input 2 (Note 8) | +> C, A/M status output (Note 9) | +> C, A/M status output -> (Note 9) | +> C, A/M status output -> (Note 9) | |
| 38 39 | +> Digital output 6/Digital input 1 (Note 8) | +> No function (Factory default) (Note 9) | +> No function (Factory default) (Note 9) | +> No function (Factory default) (Note 9) | |
| L N ⏚ | +> Power supply Grounding terminal | +> Power supply Grounding terminal | +> Power supply Grounding terminal | +> Power supply Grounding terminal | |

NOTE: Do not use an unused terminal as a relaying terminal, etc.

-
- Note 1: These terminals can be used as output tracking input if feedforward input or cascade setting input 2 is not used.
- Note 2: For models with direct input (optional code /A0□), these terminals are treated as direct input signal output (1-5 V DC).
- Note 3: Using the terminals as fail output requires an external power supply.
- Note 4: For a transmitter power supply, see "Wiring" of "Installation and Wiring" in each YS1000 Operation Guide.
- Note 5: For models with direct input (optional code /A0□), the direct input terminals (19, 20, and 21) are used as input terminals. Connect the terminals as specified in Table 1, Connecting Direct Input Terminals.
- Note 6: For manipulated output variable 2 and setpoint output, the output types can be changed using the analog output-2 selection Y2S and analog output-3 selection Y3S engineering parameters.
- Note 7: For analog output 3, the output type can be changed using the analog output-3 current/voltage switching Y3TP engineering parameter.
- Note 8: Using these terminals as digital output requires an external power supply. The function of digital inputs or digital outputs can be set using the YSS1000 Setting Software (sold separately).
- Note 9: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 to DIO61 engineering parameters. Functions can be set using the DI1F to DI6F and DO1F to DO6F engineering parameters.
- Note 10: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

● YS1310/YS1350/YS1360

| Terminal number | YS1310 | YS1350 | YS1360 | User settings (Note 8) |
|----------------------------|---|---|---|------------------------|
| 1 2 | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | +> Measurement input 1 -> (1-5V DC) | |
| 3 4 | +> Measurement input 2 -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | +> Cascade setting input -> (1-5V DC) | |
| 5 6 7 8 | | | | |
| 9 10 | +> Direct input signal output -> (1-5V DC) (Note 1) | +> Direct input signal output -> (1-5V DC) (Note 1) | +> Direct input signal output -> (1-5V DC) (Note 1) | |
| 11 12 | +> FAIL output (Note 2) | +> FAIL output (Note 2) | +> FAIL output (Note 2) | |
| 13 | Connection of transmitter supply power (24V DC) (Note 3) | Connection of transmitter supply power (24V DC) (Note 3) | Connection of transmitter supply power (24V DC) (Note 3) | |
| 14 15 16 17 18 | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) Communication terminal RDB (+) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | Communication terminal SG Communication terminal SDA (-) Communication terminal SDB (+) Communication terminal RDA (-) or LCS (+) Communication terminal RDB (+) or LCS (-) | |
| 19 20 21 | +> Direct input terminals -> (Note 4) | +> Direct input terminals -> (Note 4) | +> Direct input terminals -> (Note 4) | |
| 22 23 | | | +> Manipulated output variable 1 -> (4 to 20mA DC) | |
| 24 25 | | +> Setpoint value output -> (1-5V DC) | +> Manipulated output variable 2 -> (1-5V DC) | |
| 26 27 | | | | |
| 28 29 | +> High limit alarm output for PV 1 (Note 5) | +> High limit alarm output (Note 6) | +> High limit alarm output (Note 6) | |
| 30 31 | +> Low limit alarm output for PV 1 (Note 5) | +> Low limit alarm output (Note 6) | +> Low limit alarm output (Note 6) | |
| 32 33 | +> High-high limit alarm output for PV 1 (Note 5) | | | |
| 34 35 | +> Low-low limit alarm output for PV 1 (Note 5) | +> C/M status output (Note 6) | +> C/M status output (Note 6) | |
| 36 37 | +> OR output of high limit alarm output for PV 2 and low limit alarm output for PV 2 (Note 5) | +> No function (Factory default) (Note 7) | +> No function (Factory default) (Note 7) | |
| 38 39 | +> OR output of high-high limit alarm output for PV 2 and low-low limit alarm output for PV 2 (Note 5) | +> No function (Factory default) (Note 7) | +> No function (Factory default) (Note 7) | |
| L N ⏏ | +> Power supply Grounding terminal | +> Power supply Grounding terminal | +> Power supply Grounding terminal | |

NOTE: Do not use an unused terminal as a relaying terminal, etc.

Note 1: For models with direct input (optional code /A0□), these terminals are treated as direct input signal output (1-5 V DC).

Note 2: Using the terminals as fail output requires an external power supply.

Note 3: For a transmitter power supply, see "Wiring" of "Installation and Wiring" in each YS1000 Operation Guide.

Note 4: For models with direct input (optional code /A0□), the direct input terminals (19, 20, and 21) are used as input terminals. Connect the terminals as specified in Table 1, Connecting Direct Input Terminals.

Note 5: Using these terminals as digital output requires an external power supply. The settings in the table are the factory defaults. Digital inputs or digital outputs can be appropriately used by setting the DI/DO setting DIO16 engineering parameter. Functions can be set using the DI1F and DO1F to DO6F engineering parameters.

Note 6: Using these terminals as digital output requires an external power supply.

Note 7: The settings in the table are the factory defaults. Functions can be set using the DI1F and DI2F engineering parameters.

Note 8: If you change a function using the parameter concerned, enter the setting in the relevant field in the User settings column.

Table 1 Connecting Direct Input Terminals

| | | Terminal Symbol | | |
|--|--|---|--------------|----|
| | | 19 | 21 | 20 |
| mV input (optional code /A01) Isolator (optional code /A05) | | + | | - |
| Thermocouple input (optional code /A02) | | | | |
| RTD input (optional code /A03) | | <p>Match the wiring resistances of terminals 19 and 21 with each other.</p> | | |
| Potentiometer input (optional code /A04) | | <p>Match the wiring resistances of terminals 19 and 20 with each other.</p> | | |
| Frequency input (optional code /A08) | Two-wire type (voltage, contact) | + | | - |
| | Power feed type, two-wired | Signal | Power supply | |
| | Power feed type, three-wired | + | Power supply | - |
| Two-wire transmitter input (optional codes /A06, /A07) | Supply voltage required | | | |
| | Case of 4 to 20 mA signal not requiring power supply | | | |

Note 1: Compatible type for pneumatic 100 line: YS1□□0-05□/A02, an external RJC is connected.

This is different from the existing YS100s.

Connect the provided RJC to terminals 20 and 21. (Mount the RJC at the terminal 21 side.)

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