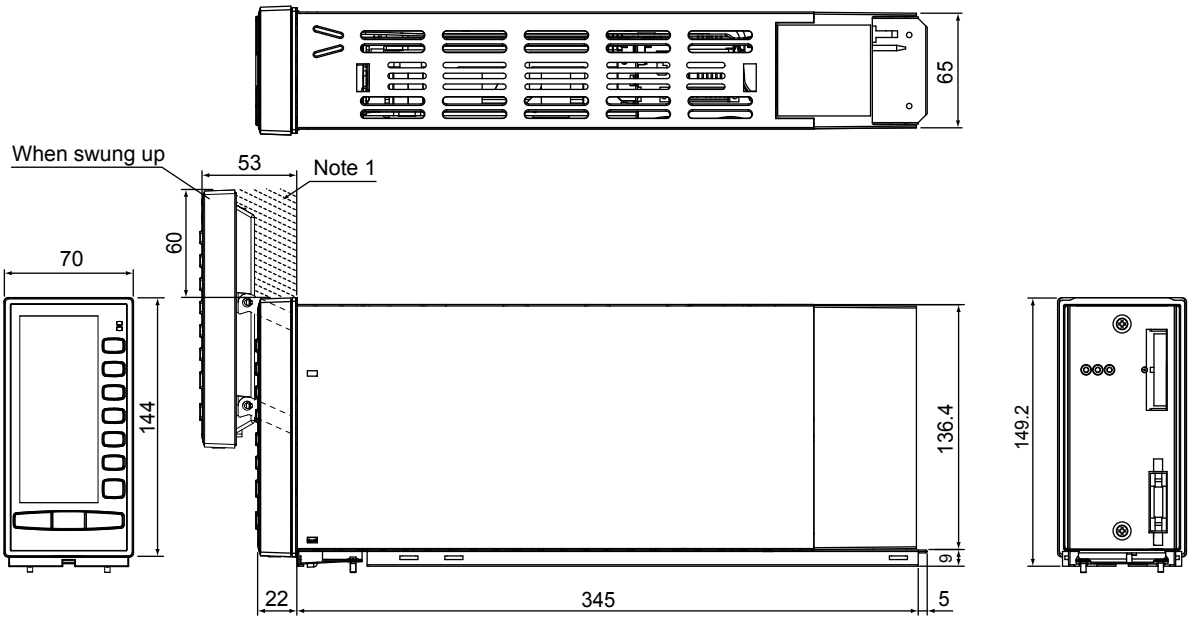
Drawings

YS1000 Series
YS1□□0-□3□
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 = ± (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-□31 of 220V AC power supply cannot be used with the SHUP housing of 100V power supply.
For the YS1□□0-□31 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.)

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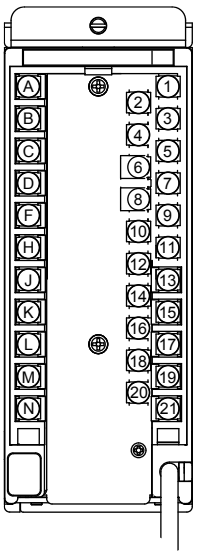
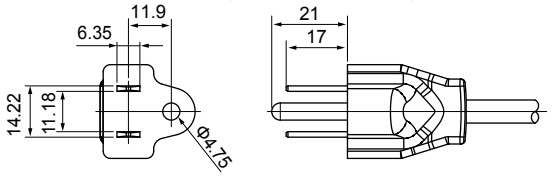
<Terminals Layout of SHUP>

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

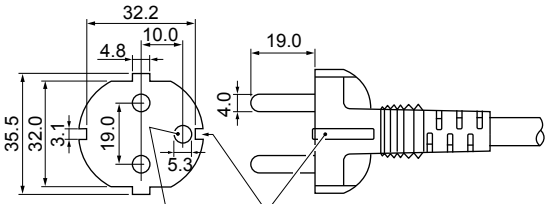


Outline Drawing of 100V Version Plug



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

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



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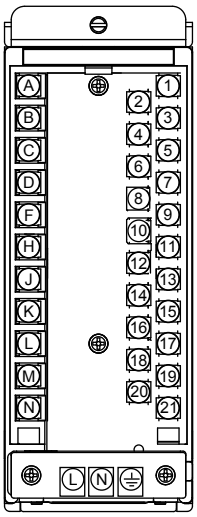
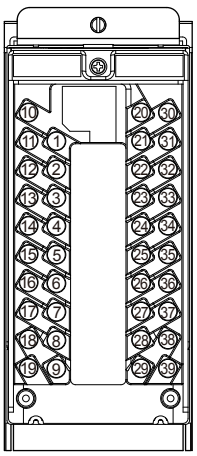
- **SHUP-000*A/HTB (YS80 Housing Power Terminal Type), SHUP-100*A (EBS or I Series-compatible Housing)**



Terminal Symbol	Remarks
L	+
N	– Power supply (DC or AC)
⏚	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 inpu 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 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 (–)	
	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)	
	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 (+)	
17 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 (–)	
	+ – 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)	
	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 (+)	
35	Communication terminal RDA (–) or LCS (+)	Communication terminal RDA (–) or LCS (+)	Communication terminal RDA (–) or LCS (+)	Communication terminal RDA (–) or LCS (+)	
36	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 36	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 (–)	
	+ / – 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.