

°C	<b>Series SR80</b>
%RH	
<b>SHIMADEN</b>	

# SHIMADEN DIGITAL CONTROLLER



## BASIC FEATURES

- High accuracy:  $\pm (0.25\% FS + 1 \text{ digit})$**
- Only SR83 (96 x 96) Large 20 mm bright display**  
**Make reading from long distance and low light location easier.**
- 2-output heating and cooling control available for SR83 (96 x 96) and SR84 (48 x 96)**
- Auto tuning function for both heating and cooling outputs in a high performance individual expert PID control**
- Both RS232C/RS485 and CC-Link are communication interface ready. (CC-Link available only for SR83)**
- Dust and splash proof front panel Equivalent to IP66**
- A wide selection of additional functions (optional) is available to suit various needs.**

□ SR82 (72 x 72)



- Wide range of optional features
- Event output, Remote input, Analog output signal and Communication interface
- Others

□ SR83 (96 x 96)

Large 20 mm bright display (PV)



- Wide range of optional features
- Event output, Remote input, Analog output signal and Communication interface
- For example  
Selectable One control output type or Two control output type.
- Others

□ SR84 (48 x 96)



- Wide range of optional features
- Event output, Remote input, Analog output signal and Communication interface
- For example  
Selectable One control output type or Two control output type.
- Others

■ DISPLAY

- LED display: Measured value (PV) display/  
7-segment red LED 4 digits  
Set value (SV) display/  
7-segment green LED 4 digits  
 $\pm(0.25\% \text{ FS} + 1 \text{ digit})$
- Display accuracy:  $23^{\circ}\text{C} \pm 5^{\circ}\text{C}$
- Range in which display accuracy is maintained: Depends on measuring range (0.001, 0.01, 0.1, 1)
- Display resolution: 250 msec. (0.25 sec.)
- Sampling cycle: 11 types, LED lamp display
- Action display/color: Control output: (OUT1, 2)/  
green  
Event action (EV1, 2, 3)/  
orange  
Auto tuning action (AT)/green  
Manual control action (MAN)/green  
Set value bias action (SV2/SB)/  
green  
Remote action (REM)/green  
Stand-by action (STBY)/green  
Communication status (COM/RUN)/  
green

■ SETTING

- Setting method: By front key switch operation
- Setting range: Same as measuring range (within setting limiter)
- Setting limiter: Higher and lower limits separate setting; free within measuring range (Lower limit < higher limit)
- Set value resolution: Depends on range and scaling (0.001, 0.01, 0.1, 1)
- Setting key type: 6 types - PARA (parameter selection), UP, DOWN, AT, ENT and DISP keys
- Ramp control upon reaching set value: Ascending/descending ramp control
- Ramp setting range: OFF, 1~9999 Units
- Ramp unit time: /sec, /min switching by front key operation and communication
- Ramp rate: x 1, x 0.1 switching by front key operation and communication

■ INPUT

- Thermocouple: B, R, S, K, E, J, T, N, PL II, WRe5-26, {L, U (DIN43710)} K, AuFe-Cr Kelvin unit input
- Allowable external resistance range: 100Ω maximum
- Input impedance: 500k Ω minimum
- Burnout function: Standard feature (up scale)
- Cold junction temperature compensation accuracy:  $\pm 2^{\circ}\text{C}$  (within a range from 5 to 45°C)
- R.T.D.: Pt100/JPt100
- Amperage: Approx. 0.25mA
- Allowable range of lead wire resistance: 5Ω maximum/wire
- Voltage (multiple input): -10~10, 0~10, 0~20, 0~50, 10~50, 0~100mV DC, or -1~1, 0~1, 0~2, 0~5, 1~5, 0~10V DC
- Input impedance: 500k Ω minimum
- Current: 0~20mA, 4~20mA DC
- Receiving impedance: 250Ω
- Sampling cycle: 250 msec. (0.25 sec.)
- PV bias: -1999~1999 Units
- PV filter: OFF, 1~100 sec.

<ul style="list-style-type: none"> <li>• Cold junction temperature compensation switching: INT (internal)/EXT (external) switching by front key operation</li> <li>• Isolation: Insulated from various outputs [not insulated from system, DI (external switching input) and CT input]</li> </ul> <p>■ CONTROL (SR82: 1 output only)</p> <ul style="list-style-type: none"> <li>• Control system: One output operation: Expert PID control with auto tuning function RA (reverse action): Heating action DA (direct action): Cooling action Two output operation (option): Expert PID + PID (control outputs 1 and 2 individually in action) control with auto tuning function RA (reverse action): Heating action (output 1 side and cooling (output 2 side) DA (direct action): 2-stage heating action (by both of control outputs 1 and 2)</li> </ul> <ul style="list-style-type: none"> <li>• PID (Control outputs 1 and 2 individually) Control output 1: Proportional band (P): OFF, 0.1~999.9% (OFF=ON/OFF action) Integral time (I): OFF, 1~6000 sec. (OFF=with manual reset) Derivative time (D): OFF, 0~3600 sec. Manual reset: -50.0 to +50.0% (valid when I=OFF) ON/OFF hysteresis: 1~1000 unit (valid during ON/OFF action)</li> </ul> <p>Control output 2 (only when two output option is added):</p> <p>Proportional band (P): OFF, 0.1~999.9% (OFF=ON/OFF action) Integral time (I): OFF, 1~6000 sec. Derivative time (D): OFF, 0~3600 sec. ON/OFF hysteresis: 1~1000 Units (valid during ON/OFF action) Dead band: -1999~5000 Units Separate setting for SV2 is possible. Setting range is the same as the one listed above.</p> <ul style="list-style-type: none"> <li>• Proportional cycle: (for contact and SSR drive voltage output) Control output 1: 1~120 sec. Control output 2: 1~120 sec.</li> <li>• AT point setting: 0-5000 Units</li> <li>• Control output characteristics: RA (reverse action)/DA (direct action) switchable by front key operation or DI (external switching input) through communication.</li> </ul> <ul style="list-style-type: none"> <li>• Higher and lower limit output limiter (individually for control outputs 1 and 2): Lower limit side: 0.0~99.9%,</li> </ul>	<ul style="list-style-type: none"> <li>Higher limit side: 0.1~100.0% on condition that lower limit value &lt; higher limit value. Separate setting for SB/SV2 is possible. Setting range is the same as the one listed above.</li> </ul> <ul style="list-style-type: none"> <li>• Control output at time of error (individually for control outputs 1 and 2): 0.0~100.0%</li> <li>• Control output type/rating (common to control outputs 1 and 2): Contact (Y): 240V AC 2.5A/resistive load SSR drive voltage (P): 12V ±1.5V DC, load current 30mA maximum Current (I): 4~20mA DC, load resistance 600Ω maximum. Voltage (V): 0~10V DC, load current 2mA maximum</li> </ul> <ul style="list-style-type: none"> <li>• Output resolution Control output 1: Approx. 0.0125% (1/8000) Control output 2: Approx. 0.5% (1/200)</li> <li>• Sampling cycle: 250 msec. (0.25 sec.)</li> <li>• Manual control Manual switching: Front key operation or DI (external switching input) through communication Manual control output: 0.0-100.0% (out of output limiter range possible) Setting resolution: 0.1% Manual ↔ automatic control: Balanceless bumpless (within proportional band, though)</li> <li>• Isolation: Insulated between control output and system and various inputs (not insulated between control output of current, voltage or SSR and analog output)</li> </ul> <p>■ EVENT OUTPUT (optional)</p> <ul style="list-style-type: none"> <li>• Number of event outputs: SR82 - 2 SR83 - 3 (2 when 2 output option is added) SR84 - 3 (2 when communication option, analog output option and/or 2 output option are added) (In case of 2 event outputs, EV2 and EV3 are common output with OR.)</li> <li>• Event type: Selectable from 8 types (7 types when heater break alarm option is not added) A_Hi: Higher limit absolute value alarm A_Lo: Lower limit absolute value alarm D_Hi: Higher limit deviation value alarm D_Lo: Lower limit deviation value alarm D_i: Higher/lower limit deviation value alarm (within range) D_o: Higher/lower limit deviation value alarm (out of range) Sco: Scaleover (input trouble alarm)</li> </ul>
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- Hb: Heater break alarm (selectable only when heater break alarm option is added)
- Event setting range
  - Deviation value alarm
  - Higher limit alarm: -1999~9999 Units
  - Lower limit alarm: -1999~9999 Units
  - Higher/lower limit alarm: 0~9999 Units
  - Absolute value alarm
  - Both higher and lower limits: Within measuring range
- Event setting system: By front key operation
- Event action: ON/OFF action
- Event hysteresis: 1~1000 Units
- Stand-by/nonstand-by action:
  - Selectable from 5 types
  - Alarm action without stand-by
  - Alarm action with stand-by (When power is ON)
  - Alarm action with stand-by (When power is ON, when stand-by is switched to execution)
  - Alarm action with stand-by (When power is ON, when stand-by is switched to execution, including the time when SV is changed)
  - Control action
- Event action delay: OFF, 1~9999 sec.
- Event output/rating: Contact 240V AC 1.0A (resistive load)
- Output updating cycle: 250 msec. (0.25 sec.)
- ANALOG OUTPUT (optional, not selectable together with communication type (1) and (2))
- The number of analog output: 1
- Output signal:
  - Selectable from 5 types (3 types for instrument with one output)
  - PV: Measured value
  - SV: Set value
  - DEV: Deviation output
  - OUT 1: Control output 1
  - OUT 2: Control output 2 (selectable only when 2 output option is added)
- Output type/rating
  - 0~10mV DC/FS Output impedance: 10Ω
  - 0~10V DC/FS Load current: 2mA maximum
  - 4~20mA DC/FS Load resistance: 300Ω maximum
- Output scaling
  - PV/SV: Within measuring range (inverted scaling possible)
  - OUT1/OUT2: 0.0-100.0% (inverted scaling possible)
  - DEV: -100.0~100.0% (inverted scaling possible) on condition that Ao\_L ≠ Ao\_H
- Output accuracy: ±0.3% FS (to displayed value)
- Output resolution: 0.01% FS (1/10000)
- Output updating cycle: 250 msec. (0.25 sec.)
- Isolation: Insulated from system and various inputs (not insulated from control outputs I, P and V)
- HEATER BREAK ALARM (optional, not selectable together with REM input)
- Current capacity: 30A or 50A CT to be specified when order is placed.

- Alarm action:
  - Heater amperage detected by external CT (CT attached).
  - Alarm output ON upon detection of heater break while control output is ON.
  - Alarm output ON upon detection of heater loop alarm while control output is OFF.
- Current setting range: 0.1~50.0A (Alarm action stops when OFF is set.)
- Setting resolution: 0.1A
- Current display: 0.0~55.0A
- Display accuracy: Approx. 3% FS (for 50Hz/60Hz sine wave)
- Minimum time for action confirmation: ON (OFF) time 250 msec.
- Alarm output/rating: Contact 240V AC 1.0A (resistive load)
- Alarm action display: "Event" lamp lights during action.
- Alarm holding mode: Switchable between holding and not holding on the setting screen.
- Sampling time: 500 msec. (0.5 sec.)
- Isolation: Insulated between CT input and various outputs (not insulated from system and other inputs)
- REMOTE (optional, not selectable together with heater break alarm)
- Remote setting:
  - By external analog signal
  - Switching to remote: By DI (external switching) input (valid only when DI option is added)
  - Remote/local switching function by remote signal
- Remote switching point: OFF, 0.1~50.0%
- Remote switching hysteresis: 0.1~10.0%
- Remote scaling:
  - Within measuring range (inverted scaling possible)
  - Accuracy of setting: ±(0.25% SF + 1 digit)
  - Setting signal: 0~10, 1~5V DC (Input impedance: 500k Ω min.) 4~20mA DC (Receiving impedance: 250Ω)
- Remote bias: -1999~1999 units
- Remote filter: OFF, 1~100 sec.
- Sampling cycle: 500 msec. (0.5 sec.)
- Isolation: Insulated between remote input and various outputs (not insulated from system and various inputs)
- COMMUNICATION (optional, not selectable together with analog output for SR82 and SR84)
- Communication type (1): RS-232C, RS-485
- Communication system:
  - RS-232C 3-line half duplex system
  - RS-485 2-line half duplex multiple drop (bus) system
- Synchronization system: Start-stop synchronization system
- Communication distance:
  - RS-232C maximum 15 m
  - RS-485 maximum 500 m (depending on conditions)
- Communication speed: 1200, 2400, 4800, 9600, 19200 bps

- Data bit length: 7 bits, even parity, stop bit 1  
7 bits, even parity, stop bit 2  
7 bits, no parity, stop bit 1  
7 bits, no parity, stop bit 2  
8 bits, even parity, stop bit 1  
8 bits, even parity, stop bit 2  
8 bits, no parity, stop bit 1  
8 bits, no parity, stop bit 2
- Communication address: 1~99
- Communication memory mode: EEPROM/r\_E
- Communication BCC: Add/Add two's cmp/XOR/None
- Communication delay time: OFF, 1~100
- Communication code: ASCII code
- Communication protocol: Shimaden standard protocol
- The number of instruments allowed to be connected: RS-232C 1  
RS-485 32 maximum (depending on conditions; host included)
- Isolation: Insulated between communication signal and various inputs/system/ various outputs
- Communication type (2): Conforming with Mitsubishi Electric Company's CC-Link (only for SR83, simultaneous selection of analog output is not possible)
- Transmission speed: 156K, 625K, 2.5M, 5M, 10Mbps
- Private station: 1
- Communication method: Polling method
- Synchronization method: Frame synchronous method
- Coding system: NRZI system
- Transmission line: Bus (RS-485)
- Transmission format: Conforming with HDLC
- DI (EXTERNAL SWITCHING) INPUT (optional)  
\*DI stands for "Digital Input."
- Number of DI point: 2
- DI input type: Selectable from 8 types (7 types if the remote option is not added.)  
NOP: No operation  
STB: Execution/stand-by  
SB/SV2: Set value bias/set value 2  
AT: Auto tuning  
MAN: Manual  
STP: Ramp temporary stop  
DA: Direct action  
REM: Remote (selectable only when remote option is added)
- DI input rating: Nonvoltage contact, open collector input (about 5V/2mA impress)
- Isolation: Insulated between DI input and various outputs (not insulated from system and various inputs)
- SET VALUE 2 (SV2)/Set Value Bias (SB) (optional)  
(DI option is prerequisite.)
- Action input: Nonvoltage contact by SB/SV2 selection through DI (external switching) input (in action during closed input)
- Selection of setting: Absolute value setting (SV2)

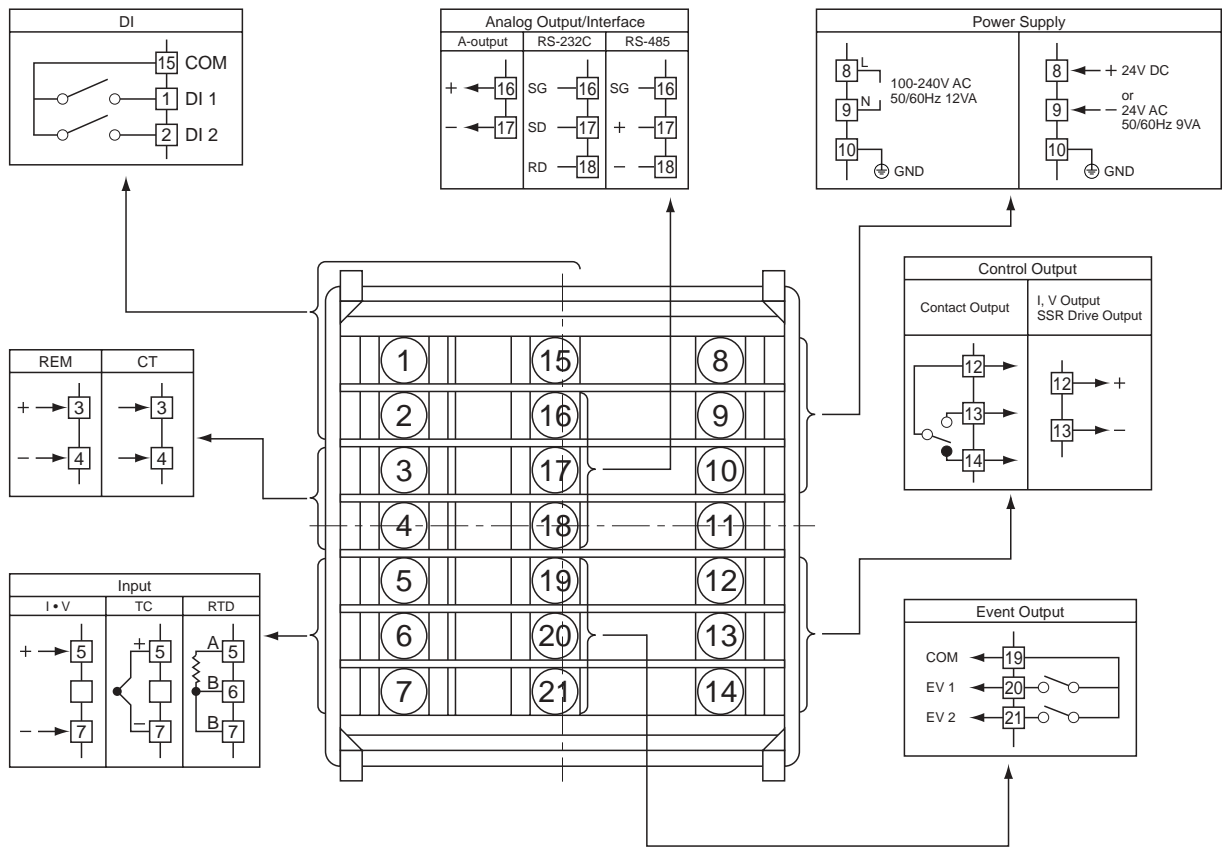
- Setting range: Deviation value setting (SB)  
Absolute value setting:  
Within measuring range  
Deviation value setting:  
-1999~5000 Units  
SV2 allows PID and output limit to be set.
- OTHERS
- Data storage: By non-volatile memory (EEPROM)
- Ambient temperature/humidity ranges for use: -10~+50°C/below 90% RH (on condition that there is no dew condensation)
- Temperature for storage: Between -20 and +65°C
- Power supply: 100V-240V AC±10% (50/60 Hz), 24V AC±10% (50/60Hz), 24V DC±10%.  
(One of the above to be specified)
- Power consumption: 12V A maximum
- Input noise removal ratio: Normal mode 60 dB minimum (50/60 Hz)  
Common mode 140 dB minimum (50/60 Hz)
- Applicable standards: Safety: IEC1010-1 and EN61010-1  
EMC: EN50081-2: 1993 (EMI/Emission)  
EN50082-2, 1995 (EMS/Immunity)
- Insulation resistance: Between input/output terminals and power terminal 500V DC 20M Ω minimum  
Between input/output terminals and protective conductor terminal 500V DC 20M Ω minimum
- Dielectric strength: 1 minute at 2300V AC between input/output terminals and power terminal  
1 minute at 1500V AC between power terminal and protective conductor terminal
- Protective structure: Only front panel has simple dust-proof and drip-proof structure (equivalent to IP66)
- Material of case: PPO resin molding (equivalent to UL94V-1)
- External dimensions: SR82  
H72 x W72 x D111 mm (Inside depth of panel: 100 mm)  
SR83  
H96 x W96 x D111 mm (Inside depth of panel: 100 mm)  
SR84  
H96 x W48 x D111 mm (Inside depth of panel: 100 mm)
- Mounting: Push-in panel (one-touch mount)
- Applicable panel thickness: 1.0~4.0 mm
- Panel cutout size: SR82: H68 x W68 mm  
SR83: H92 x W92 mm  
SR84: H92 x W45 mm
- Weight: SR82: 300g  
SR83: 420g  
SR84: 280g

ITEMS	CODE		SPECIFICATIONS	
SERIES	SR82-		MPU-Based Auto-Tuning PID Digital Controller DIN H72 × W72 mm	
INPUT	1		Thermocouple	User-selectable inputs and ranges
	2		R.T.D.	User-selectable ranges
	3		DC Voltage	User-selectable 0~10, 10~50, -10~10, 0~20, 0~50, 0~100mV DC linear inputs
	4		DC Current	User-selectable 4~20, 0~20mA DC linear inputs
	6		DC Voltage	User-selectable 0~1, 1~5, -1~1, 0~2, 0~5, 0~10V DC linear inputs
CONTROL OUTPUT 1	Y-		Contact	PB Cycle: 1~120 seconds, Contact Capacity: 240V AC 2.5A / resistive load, 1A / inductive load
	I-		Current	4~20mA DC Load resistance: 600 Ω Max.
	P-		SSR Voltage	PB Cycle 1~120 seconds, Output rating: 12V ±1.5V DC 30mA Max.
	V-		Voltage	0~10V DC Maximum load current: 2mA Max.
CONTROL OUTPUT 2	N-		None	
POWER SUPPLY	90-		100~240V AC ±10% 50/60Hz	
	10-		24V AC ±10% 50/60Hz	
	02-		24V DC ±10%	
EVENT OUTPUT (2 points) [OPTION]	0		None	
	1		Contact output, Contact capacity: 240V AC 1A / resistive load	
	2		Contact output + Heater break alarm (with 30A CT)	Selectable only for Y or P Control output
	3		Contact output + Heater break alarm (with 50A CT)	
REMOTE INPUT (Not selectable together with Heater break alarm function) [OPTION]	00		None	
	14		Current 4~20mA DC Receiving resistance: 250 Ω	Non-Isolated input
	15		Voltage 1~5V DC Input resistance: 500k Ω Min.	
	16		Voltage 0~10V DC Input resistance: 500k Ω Min.	
ANALOG OUTPUT (Not selectable together with Interface function) [OPTION]	0		None	
	3		Voltage 0~10mV DC, Output resistance: 10 Ω	
	4		Current 4~20mA DC, Load resistance: 300 Ω Max.	
	6		Voltage 0~10V DC, Load current: 2mA Max.	
INTERFACE FUNCTION (Not selectable together with Analog output function) [OPTION]	0		None	
	5		RS-485	
	7		RS-232C	
EXTERNAL INPUT CONTROL SIGNAL / SET VALUE BIAS [OPTION]	0		None	
	1		Control input 2 points, Non-voltage contact, Open collector input (about 5V / 2mA impress)	
REMARKS	0		Without	
	9		With (Please consult before ordering.)	

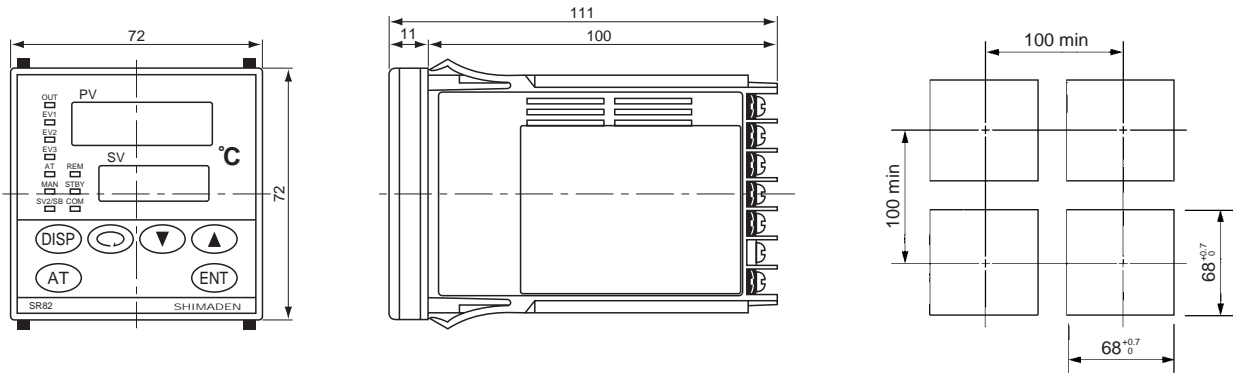
# TERMINAL ARRANGEMENT

Series **SR80**

• SR82



# EXTERNAL DIMENSIONS & PANEL CUTOUT

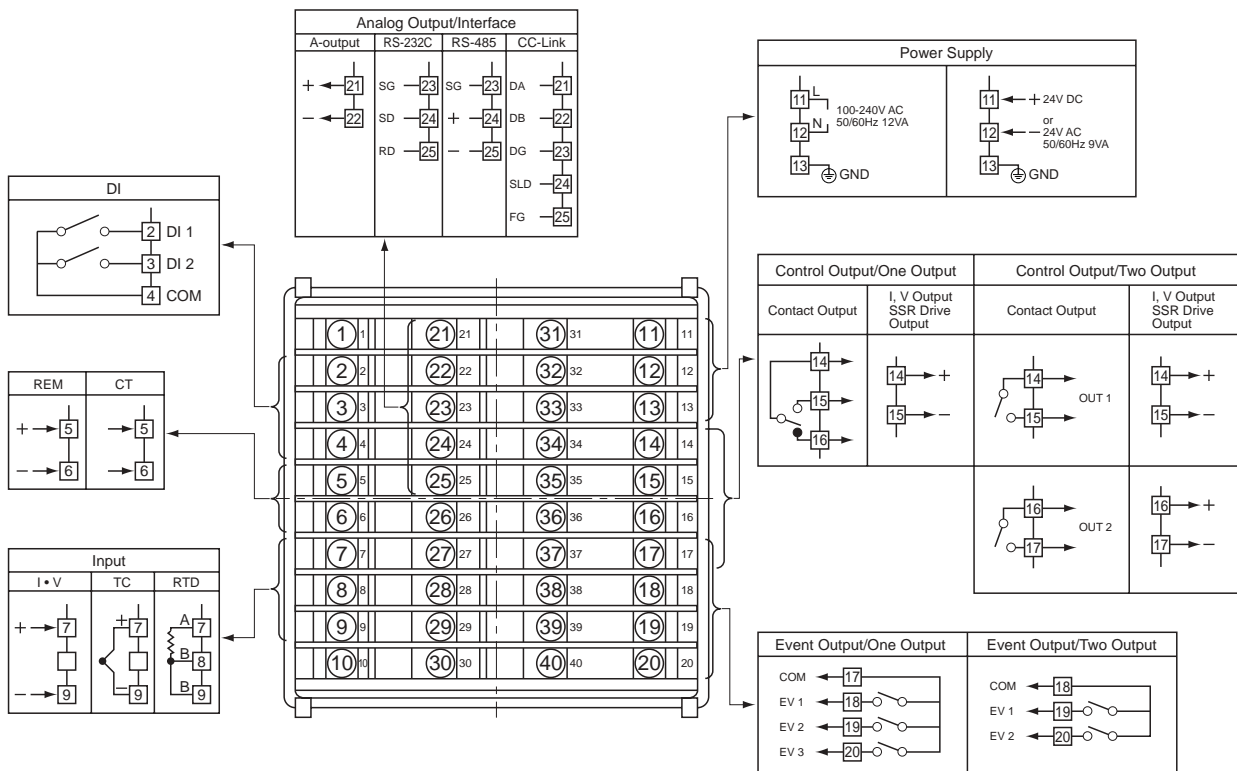


(Unit : mm)

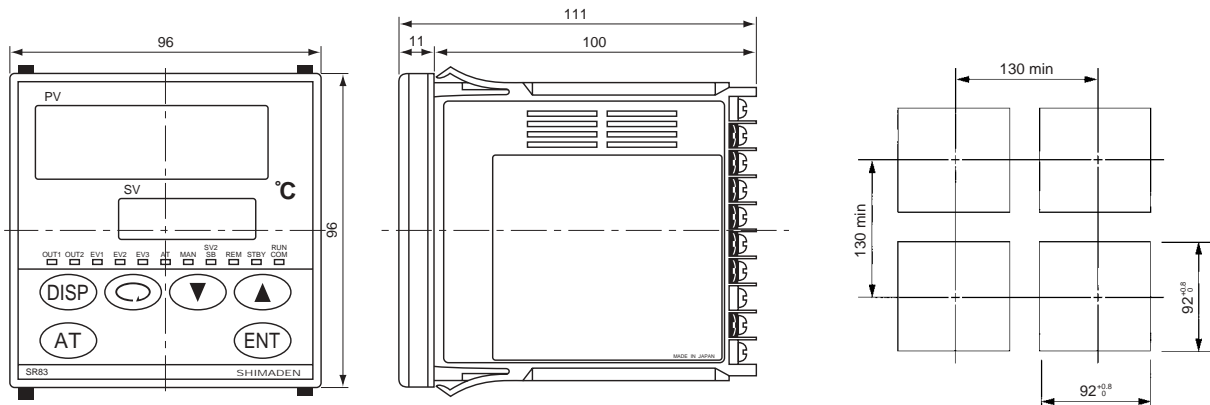
ITEMS	CODE		SPECIFICATIONS	
SERIES	SR83-		MPU-Based Auto-Tuning PID Digital Controller DIN H96 × W96 mm	
INPUT	1		Thermocouple	User-selectable inputs and ranges
	2		R.T.D.	User-selectable ranges
	3		DC Voltage	User-selectable 0~10, 10~50, -10~10, 0~20, 0~50, 0~100mV DC linear inputs
	4		DC Current	User-selectable 4~20, 0~20mA DC linear inputs
	6		DC Voltage	User-selectable 0~1, 1~5, -1~1, 0~2, 0~5, 0~10V DC linear inputs
CONTROL OUTPUT 1	Y-		Contact	PB Cycle: 1~120 seconds, Contact Capacity: 240V AC 2.5A / resistive load, 1A / inductive load
	I-		Current	4~20mA DC Load resistance: 600 Ω Max.
	P-		SSR Voltage	PB Cycle 1~120 seconds, Output rating: 12V ±1.5V DC 30mA Max.
	V-		Voltage	0~10V DC Maximum load current: 2mA Max.
CONTROL OUTPUT 2 [OPTION]	N-		None	
	Y-		Contact	PB Cycle: 1~120 seconds, Contact Capacity: 240V AC 2.5A / resistive load, 1A / inductive load
	I-		Current	4~20mA DC Load resistance: 600 Ω Max.
	P-		SSR Voltage	PB Cycle: 1~120 seconds, Output rating: 12V ±1.5V DC 30mA Max.
	V-		Voltage	0~10V DC Maximum load current: 2mA Max.
POWER SUPPLY	90-		100~240V AC ±10% 50/60Hz	
	10-		24V AC ±10% 50/60Hz	
	02-		24V DC ±10%	
EVENT OUTPUT (3 points) (2 points when 2 output option is added) [OPTION]	0		None	
	1		Contact output, Contact capacity: 240V AC 1A / resistive load	
	2		Contact output + Heater break alarm (with 30A CT)	Selectable only for Y or P Control output
	3		Contact output + Heater break alarm (with 50A CT)	
REMOTE INPUT (Not selectable together with Heater break alarm function) [OPTION]	00		None	
	14		Current 4~20mA DC Receiving resistance: 250 Ω	Non-Isolated input
	15		Voltage 1~5V DC Input resistance: 500k Ω Min.	
	16		Voltage 0~10V DC Input resistance: 500k Ω Min.	
ANALOG OUTPUT (Not selectable together with CC-Link function) [OPTION]	0		None	
	3		Voltage 0~10mV DC, Output resistance: 10 Ω	
	4		Current 4~20mA DC, Load resistance: 300 Ω Max.	
	6		Voltage 0~10V DC, Load current: 2mA Max.	
INTERFACE FUNCTION (When CC-Link function is selected, simultaneous selection of Analog output is not possible) [OPTION]	0		None	
	5		RS-485	
	7		RS-232C	
	8		CC-Link (Conforming with Mitsubishi Electric Company's CC-Link) (Not selectable together with Analog output function)	
EXTERNAL INPUT CONTROL SIGNAL / SET VALUE BIAS [OPTION]	0		None	
	1		Control input 2 points, Non-voltage contact, Open collector input (about 5V / 2mA impress)	
REMARKS	0		Without	
	9		With (Please consult before ordering.)	

Note: Selection together with ANALOG OUTPUT and INTERFACE FUNCTION (RS485 or RS232C) is possible.

• SR83



# EXTERNAL DIMENSIONS & PANEL CUTOUT



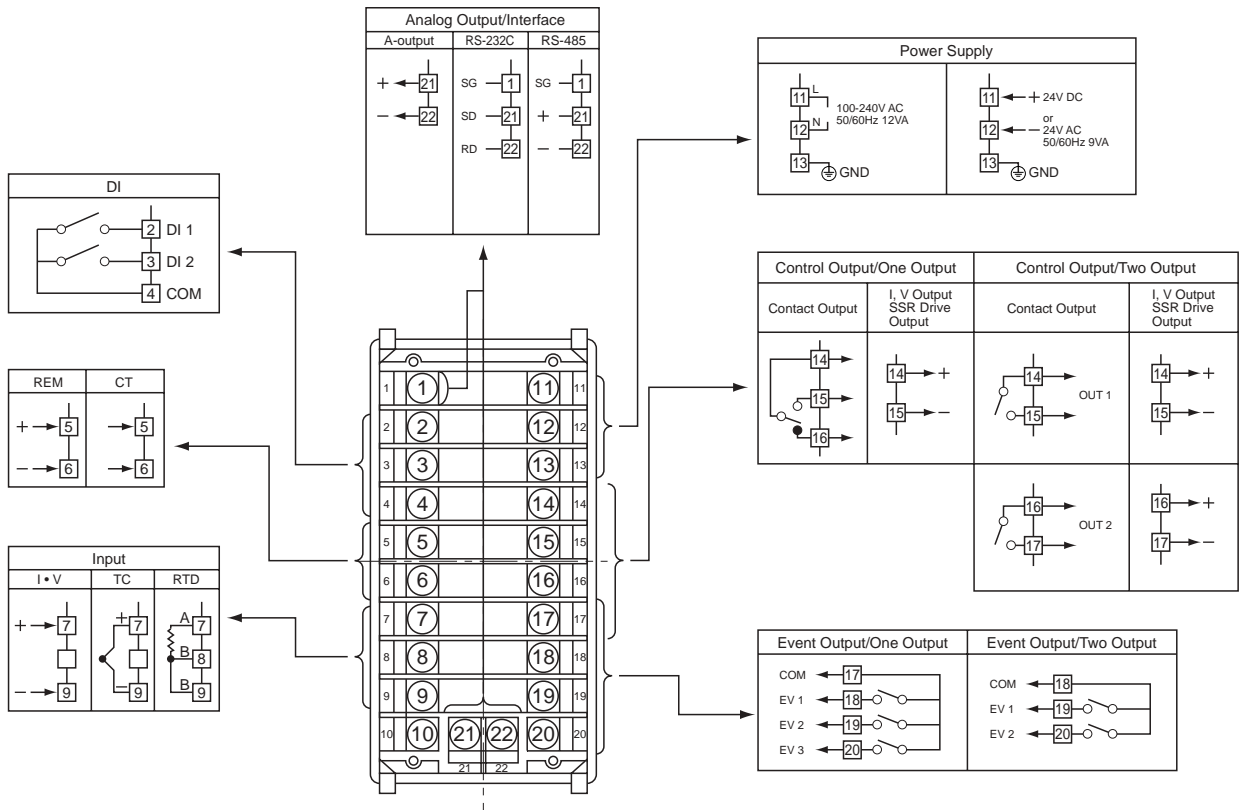
(Unit : mm)

ITEMS	CODE		SPECIFICATIONS	
SERIES	SR84-		MPU-Based Auto-Tuning PID Digital Controller DIN H96 × W48 mm	
INPUT	1		Thermocouple	User-selectable inputs and ranges
	2		R.T.D.	User-selectable ranges
	3		DC Voltage	User-selectable 0~10, 10~50, -10~10, 0~20, 0~50, 0~100mV DC linear inputs
	4		DC Current	User-selectable 4~20, 0~20mA DC linear inputs
	6		DC Voltage	User-selectable 0~1, 1~5, -1~1, 0~2, 0~5, 0~10V DC linear inputs
CONTROL OUTPUT 1	Y-		Contact	PB Cycle: 1~120 seconds, Contact Capacity: 240V AC 2.5A / resistive load, 1A / inductive load
	I-		Current	4~20mA DC Load resistance: 600 Ω Max.
	P-		SSR Voltage	PB Cycle: 1~120 seconds, Output rating: 12V ±1.5V DC 30mA Max.
	V-		Voltage	0~10V DC Maximum load current: 2mA Max.
CONTROL OUTPUT 2 [OPTION]	N-		None	
	Y-		Contact	PB Cycle: 1~120 seconds, Contact Capacity: 240V AC 2.5A / resistive load, 1A / inductive load
	I-		Current	4~20mA DC Load resistance: 600 Ω Max.
	P-		SSR Voltage	PB Cycle 1~120 seconds, Output rating: 12V ±1.5V DC 30mA Max.
	V-		Voltage	0~10V DC Maximum load current: 2mA Max.
POWER SUPPLY	90-		100~240V AC ±10% 50/60Hz	
	10-		24V AC ±10% 50/60Hz	
	02-		24V DC ±10%	
EVENT OUTPUT (3 points) (2 points when 2 output option is added) [OPTION]	0		None	
	1		Contact output, Contact capacity: 240V AC 1A / resistive load	
	2		Contact output + Heater break alarm (with 30A CT)	Selectable only for Y or P Control output
	3		Contact output + Heater break alarm (with 50A CT)	
REMOTE INPUT (Not selectable together with Heater break alarm function) [OPTION]	00		None	
	14		Current 4~20mA DC Receiving resistance: 250 Ω	Non-Isolated input
	15		Voltage 1~5V DC Input resistance: 500k Ω Min.	
	16		Voltage 0~10V DC Input resistance: 500k Ω Min.	
ANALOG OUTPUT (Not selectable together with Interface function) [OPTION]	0		None	
	3		Voltage 0~10mV DC, Output resistance: 10 Ω	
	4		Current 4~20mA DC, Load resistance: 300 Ω Max.	
	6		Voltage 0~10V DC, Load current: 2mA Max.	
INTERFACE FUNCTION (Not selectable together with Analog output function) [OPTION]	0		None	
	5		RS-485	
	7		RS-232C	
EXTERNAL INPUT CONTROL SIGNAL / SET VALUE BIAS [OPTION]	0		None	
	1		Control input 2 points, Non-voltage contact, Open collector input (about 5V / 2mA impress)	
REMARKS	0		Without	
	9		With (Please consult before ordering.)	

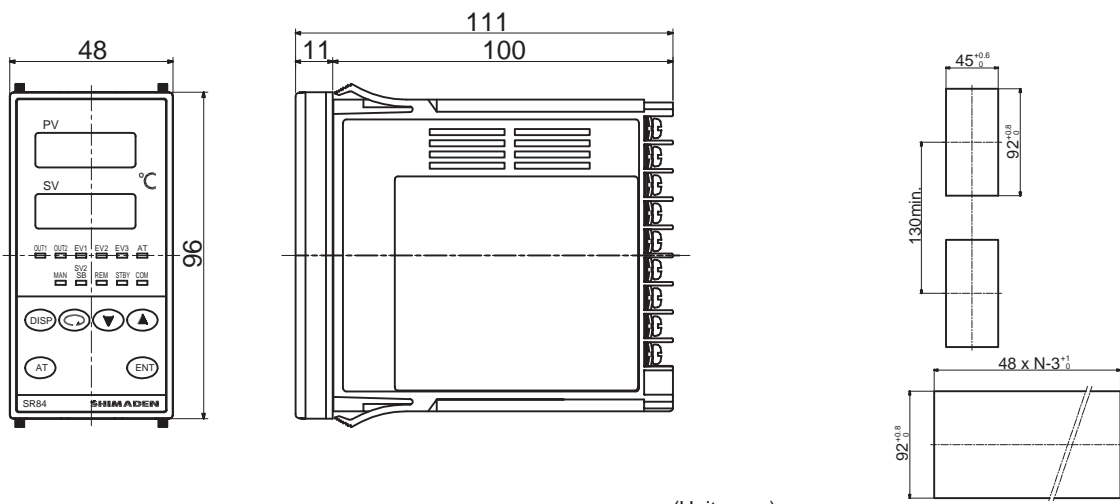
# TERMINAL ARRANGEMENT

Series **SR80**

• SR84



# EXTERNAL DIMENSIONS & PANEL CUTOUT



(Unit : mm)

