

# DIGITAL CONTROLLER

## SERIES SR37

- DIN Size 96 (H) × 48 (W) × 133 (D) mm (Panel Depth: 100mm)
- Indication Mode: Digital Indication
- Control Modes: 2-Position or Proportioning
- Control Output: Contact, SSR Voltage or Current
- High / Low Deviation Alarm (Option)
- Heater Break Alarm / Sensor Break Alarm (Option)
- Lateral Mounting Available



### SPECIFICATIONS

<b>Display:</b>		<b>Alarm:</b>	
Indication:	Digital 7-segment LED 3-digit (H10.2mm)	High / Low Setting Type Deviaton Alarm (Non-Inhibit)	
Tolerance:	±0.5% + 1 digit of measuring range	Action:	On / Off
Range:	See Measuring Range Codes.	Setting method / range:	Adjustable by front (AL) / -10-0 ~+10% FS
A / D conversion method:	Dual-slope integration	Sensitivity:	0.3% Fixed in the measuring range
<b>Setting:</b>		Indication:	Red LED lights when alarm is on.
Setting mode:	Digital switches (3-digit)	Output / contact rating:	Contact / 240V AC, 2.5A / resistive load
Setting accuracy:	±0.7% of measuring range	Heater Break Alarm:	Available only for control outputs Y and P
<b>Input:</b>		Setting range:	Selectable 1.5~15A or 3~30A
Thermocouple:	J, K, L	Sensitivity:	Approx. 15% Fixed of max. setting current value (15A=2.25A / 30A=4.5A)
External resistance:	100Ω max.	Indication:	Red lamp (H / B) lights when on.
Input resistance:	200kΩ min.	Output / contact rating:	Contact / 240V AC, 2.5A / resistive load
Burnout circuit:	Standard feature (up-scale)	Attachment:	CT (current transformer)
R.T.D:	Pt100 JIS / DIN	Sensor Break Alarm:	Avilable only for R.T.D. and T / C inputs, functions when unit is equipped with heater break alarm.
Amperage:	2mA	Action:	On / Off
Lead wire tolerable range:	2Ω max. / wire	Indication:	Red LED (S / B) lights when on.
Voltage:	0~10mV DC linear	Output:	Contact
Input impedance:	200kΩ min.	<b>Operating Ambient</b>	
Current:	4~20mA DC linear	Temperature Range and Humidity:	-10~+50°C, 90% RH max.
Receiving impedance:	250Ω	Power Supply:	See Ordering Information.
<b>Control Mode:</b>		Power Consumption:	Approx. 4VA
Proportioning:		Insulation Resistance:	500V DC 20MΩ min.between input terminal and power supply terminals
Proportional Band (PB):	1~20% FS adjustable	Dielectric Strength:	1 min.at 500V AC between power supply terminal and earth terminals
Manual reset (MR):	Adjustable from front (approx. ±50% of proportional band)	Dimensions:	96 (H) × 48 (W) × 113 (D) mm (panel depth: 100mm)
Proportional cycle:	Contact output: Approx. 30 sec. SSR output: Approx. 3 sec.	Panel Thickness:	1~3.5mm
<b>On / Off:</b>		Panel Cutout:	92 (H) × 45 (W) mm
Sensitivity (SA):	0.3~5% FS adjustable on the front	Weight:	Approx. 390g
<b>Control Output:</b>			
Contact:	240V AC, 2.5A / resistive load, 1A / inductive load		
Current:	4~20mA DC / RA, 600Ω max. / load resistance		
SSR voltage:	15V DC / RA, 20mA max.		
Control action display: (green LED):			
Contact output:	C-L / On		
Current output:	Power supply lamp		
SSR voltage output:	Lights when loaded.		

**ORDERING INFORMATION**

ITEMS	CODE		SPECIFICATIONS
SERIES	SR37-		DIN 96 × 48 mm, Digital Setting & Digital Display Controller
INPUT	1		Thermocouple, Input resistance: 200kΩ, External resistance: 100Ω max.
	2		R.T.D. (Pt100), Amperage: 2mA, Tolerable resistance: 2Ω max. / wire
	3		Voltage, 0~10mV DC Linear, Input resistance: 200kΩ min
	4		Current, 4~20mA DC Linear, Receiving impedance: 250Ω
	9		0~100mV DC, 0~1V DC (For others, please consult before ordering.)
CONTROL MODE	01		Proportioning, PB: 1~20% FS Variable
	02		On / Off (2-position), Sensitivity adjust (SA): 0.3~5% FS Variable
	99		Others (Please consult before ordering.)
CONTROL OUTPUT	Y-		Contact, 240V AC, 1A / Inductive load, 2.5A / Resistive load
	I-		Current (Proportioning type only), 4~20mA DC / RA, Load resistance: 600Ω max.
	P-		SSR voltage, 15V DC / RA, Max. current: 20mA
	X-		Others (Please consult before ordering.)
ALARM	00		None provided
	93		Selectable setting (High or Low) deviation alarm, -10~0~+10% FS
HEATER / SENSOR BREAK ALARM WITH CT (Only for Y & P)	0		None provided
	1		Heater current value setting range: 1.5~15A
	2		Heater current value setting range: 3~30A
POWER SUPPLY	11-		100~110V / 200~220V AC ±10%, 50 / 60Hz
	12-		110~120V / 220~240V AC ±10%, 50 / 60Hz
	99-		Others (Please consult before ordering.)
INPUT STANDARD		N	None (current & voltage inputs)
		J	JIS
		F	JIS (New Pt100-JIS)
		D	DIN
		A	ANSI
TYPE OF INPUT		J	Thermocouple (J)
		K	Thermocouple (K)
		Q	Thermocouple (L) (DIN 43710)
		P	R.T.D. (Pt100)
		L	Linear — voltage and current inputs
MEASURING RANGE		□□□	See Measuring Range Codes.
LEGEND		N	No legend
		C	°C Temperature
		F	°F Temperature
		H	% RH Humidity
		X	Others (Please consult before ordering.)
REMARKS		0	Without
		9	With (Please consult before ordering.)

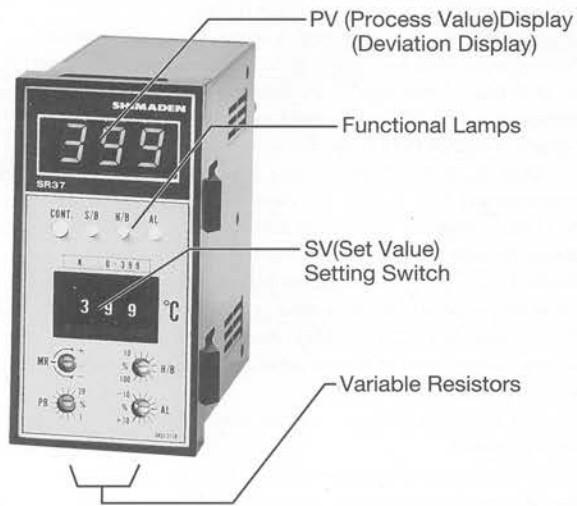
**MEASURING RANGE CODES**

INPUT	RANGE	CODE
R.T.D. (Pt100)	-99~ +99°C	576
	0~ 99.9°C	781
	0~ 399°C	792
Thermocouple	J 0~ 399°C	792
	L 0~ 399°C	792
	K 0~ 399°C	792
	K 0~ 999°C	874
Voltage / Current	0~ 99.9%RH	781
	0~ 499°C	795
	0~ 999°C	874

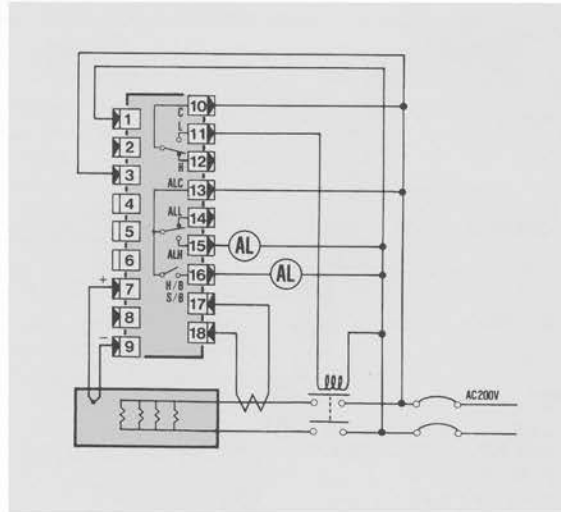
INPUT	RANGE	CODE
R.T.D. (Pt100)	0~ 399°F	792
	0~ 799°F	871
Thermo- couple	J 0~ 799°F	871
	K 0~ 999°F	874

# DIGITAL CONTROLLER

## NAMES OF PARTS

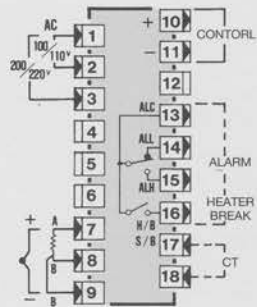


## WIRING EXAMPLE

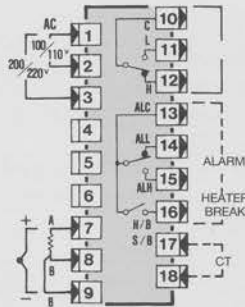


## TERMINAL ARRANGEMENT

SSR Voltage / Current Output Output

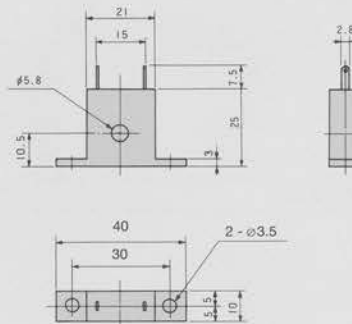


Contact Output



## ATTACHMENT (CT)

\* (CT) is the only model provided with a heater break alarm.



## EXTERNAL DIMENSIONS

