SDC10

DigitroniK
Digital Indicating Controller

The SDC10 is a group multi-range digital indicating controller with self-tuning (adaptive control).

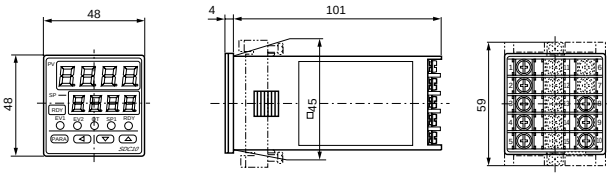
A compact instrument (48W×48H mm) featuring PID control, it can either be panel or socket mounted and the control outputs are either relay contact or voltage operated.

Specifications

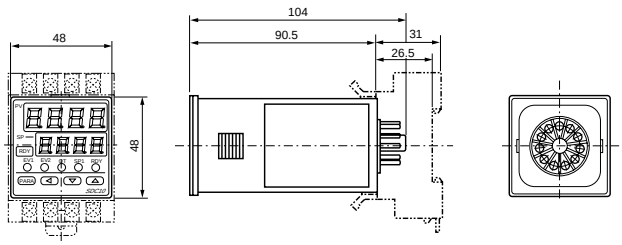
General	**Memory backup**	Semiconductor non-volatile memory
	Power supply voltage	85 to 264Vac, 50/60Hz and 24Vdc
	Power consumption	7VA max.
	Ambient temperature	0 to 50°C
	Ambient humidity	10 to 90%RH (no condensation allowed)
	Weight	Socket type: approx. 300g, Mounting bracket type: approx. 200g
PV Input	**Type**	Thermocouple, RTD, Voltage
	Sampling cycle	0.5s
	Bias	-1999 to +9999 or -199.9 to 999.9U (U: industrial unit)
Indication & Setting	**PV, SP indication**	4-digit, 7-segment LED
	No. of set points	Max. 4 points
	Range	±0.5%FS ± 1 digit, (T/C negative range is ± 1%FS + 1 digit)
	Indication accuracy	ON/OFF, self-tuning (adaptive control), or fixed PID Control
Control Output	**Control mode**	Direct/reverse selectable
	Control action	Selectable by RDY key or remote switch input
	RUN/READY	2
Remote Switch (RSW) Input	**No. of inputs**	SP, READY/RUN, latch cancel, timer start, auto-tuning start/stop
	Function	Dry contact or open collector
	Type	2
Event (EV) Output	**No of outputs**	Upper PV, Lower PV, Upper & Lower PV, Upper DEV, Lower DEV
	Type	Upper & Lower DEV, Heater Line break/over-current, Operation terminal short-circuit, Timer, Instrument alarm
	Control mode	ON/OFF
	Output type	SPST relay contact
Auxiliary Parts (order separately)	**QN206A**	Current transformer (5.8mm dia hole)
	QN212A	Current transformer (12mm dia hole)
	81446391-001	Mounting socket

Dimensions (unit:mm)

• Panel mounting type (T)



• Socket mounting type (S)



Selection Guide

I II III IV V VI VII Example: **C10S0DTA0100**

Table	Selection				Description			
I	Basic Model No.	**C10**	↓	↓	Digital indicating controller			
II	Mounting	**S**	–	○	Socket mounting			
		T	○	–	Panel mounting			
III	Control output	**0D**	○	○	Time proportional PID or ON/OFF Relay contact: 250Vac, 3A (resistive load)			
		6D	○	○	Time proportional PID or ON/OFF 22.5Vdc ± 15%, internal resistive 1.1kΩ			
IV	PV input				Input type		Range	Range code
		T	○	○	T/C	K	0 to 1200°C	0 to 2200°F	01
						K	0 to 600°C	0 to 1100°F	02
						K	0 to 400°C	0 to 700°F	03
						K	-200 to +400°C	-300 to +700°F	04
						J	0 to 800°C	0 to 1500°F	05
						J	-200 to +400°C	-300 to +700°F	06
						E	0 to 600°C	0 to 1100°F	07
						T	-200 to +400°C	-300 to +700°F	08
						DIN U	-200 to +400°C	-300 to +700°F	09
						DIN L	0 to 800°C	0 to 1500°F	10
						R	0 to 1600°C	0 to 3000°F	11
		R	○	○	RTD	Pt100	-200 to +500°C	-300 to +700°F	21
						Pt100	0 to 200°C	0 to 300°F	22
						Pt100	0.0 to 200.0°C	0.0 to 300.0°F	23
						JPt100	-200 to +500°C	-300 to +700°F	24
						JPt100	0 to 200°C	0 to 300°F	25
						JPt100	0.0 to 200.0°C	0 .0to 300.0°F	26
						Pt100	-50 to +100°C	-50 to +150°F	27
						Pt100	-50.0 to +100.0°C	-50.0 to +150.0°F	28
						JP1100	-50 to +100°C	-50 to +150°F	29
						JP1100	-50.0 to +100.0°C	-50.0 to +150.0°F	30
		L	○	○	Voltage	1 to 5V	Programmable at -19999 to +9999		42
						0 to 5V			43
						0 to 1V			44
V	Power supply	**A**	○	○	85 to 264Vac, 50/60Hz			
		D	○	○	24Vdc			
VI	Option (1)	**01**	○	–	2 event (additional contact) relay outputs			
		03	○	–	2 event (additional contact) relay outputs, 2 external contact inputs and current transformer (heat current sensor) input			
		05	○	–	RS-485 + 2 event (additional contact) relay outputs, current transformer (heat current sensor) input			
VIII	Option (2)	**00**	○	○	Not available			
		D0	○	○	With test data			

*The socket mounted type **S** cannot be combined with 6D (control output)