

SDC26

Super DigitroniK Single Loop Controller

The DigitroniK SDC26 is a digital indicating controller featuring multiple input types and a PID control system using the new "RationalLOOP" and "Just-FITTER" algorithms.



Up to two control outputs (depending on the exact model) can be used, which are selectable from relay, voltage pulse, and current output.

Specifications

PV input	Type	Selectable from multiple input types: thermocouple, RTD, DC current and DC voltage				
	Sampling cycle	0.3s				
Indication	Indication method	4-digit, 7-segment LED. (PV: Upper green display, SP: Lower orange display)				
	Indication accuracy	±0.3% FS ± 1 digit. In the negative area of the thermocouple, the accuracy is ±0.6% FS ± 1 digit (at an ambient temperature of 23±2°C).				
Control output	Model No. Segment II	R0	V0	VC	VV	C0
	Control output 1	Relay	Voltage pulse (for SSR drive)	Voltage pulse (for SSR drive)	Voltage pulse (for SSR drive)	Current
	Control output 2	—	—	Current	Voltage pulse (for SSR drive)	Current
	Control action	ON/OFF control, Time proportional PID, Current proportional PID				
	No. of PID groups	Max. 4				
	PID auto-tuning	Automatic PID value setting by limit cycle method. However, one of the following 3 control characteristics can be selected: • Standard • Quick disturbance response • Less up-down fluctuations				
Remote switch input	No. of inputs	Max. 4				
	Function	UP to 4 kinds of SP selections, PID selection, RUN/READY selection, AUTO/MANUAL selection, Auto-tuning stop/start, etc.				
Event	No. of outputs	2 to 3 (according to the model)				
	Type	PV high limit, PV low limit, PV high/low limit, Deviation high limit, Deviation low limit, Deviation high/low limit, etc.				
Communications		RS-485				
Current transformer inputs		2 (option)				
General	Power	AC model: 100 to 240Vac 50/60Hz DC model: 24Vac 50/60Hz / 24Vdc				
	Power consumption	AC model: 12VA max. DC model: 12VA max. (24Vac), 8W max. (24Vdc)				
	Mass	Approx. 300g (including socket)				

Accessories (sold separately)

Model No.	Description
SLP-C35J50	Smart Loader software with user's manual and loader cable
SLP-C35J51	Smart Loader software without user's manual and loader cable
QN206A	Current transformer (5.8mm dia.)
QN212A	Current transformer (12mm dia.)
81446916-001	Hard cover
81441122-001	Soft cover
81446913-001	Terminal cover
81409654-001	Mounting bracket

Selection Guide I II III IV V VI VII Example: C26TR0UA1000

Segment	Model No. selection	Description		
I	Basic No.	C26T	↓	Single loop controller
II	Control output		↓	Output 1
		R0	○ ○	Relay
		V0	○ ○	Voltage pulse (for SSR drive)
		VC	○ ○	Voltage pulse (for SSR drive)
		VV	○ ○	Voltage pulse (for SSR drive)
		C0	○ ○	Current
		CC	○ ○	Current
III	PV input	U	○ ○	Universal (full multi) input
IV	Power	A	○ —	100 to 240Vac 50/60Hz
		D	— ○	24Vac 50/60Hz, 24 to 48Vdc
V	Option 1			EV (digital outputs)
		1	○ ○	3
		2	○ ○	3
		4	○ —	2 independent outputs
		5	○ —	2 independent outputs
VI	Option 2			2 CT inputs
		0	○ ○	—
		1	○ ○	○
		2	○ ○	○
		00	○ ○	None
VII	Option 3	D0	○ ○	With test data
		T0	○ ○	Tropicalization
		K0	○ ○	Antisulfidization
		B0	○ ○	Tropicalization + test data
		L0	○ ○	Antisulfidization + test data
		Y0	○ ○	With traceability certification

• A circle (○) denotes availability.

Input Types and Ranges

Range code	Input type	Range (°C)
1	K	-200 to +1200
2		0 to 1200
3		0.0 to 800.0
4		0.0 to 600.0
5		0.0 to 400.0
6		-200.0 to +400.0
7		-200.0 to +200.0
8	J	0 to 1200
9		0.0 to 800.0
10		0.0 to 600.0
11	E	-200.0 to +400.0
12		0.0 to 800.0
13		0.0 to 600.0
14	T	-200.0 to +400.0
15	R	0 to 1600
16	S	0 to 1600

• °F display is selectable.

Range code	Input type	Range (°C)
17	B	0 to 1800
18	N	0 to 1300
19	PL II	0 to 1300
20	Wre5-26	0 to 1400
21		0 to 2300
22	Ni-NiMo	0 to 1300
23	PR40-20	0 to 1900
24	DIN U	-200.0 to +400.0
25	DIN L	-100.0 to +800.0
26	Golden iron chromel	0.0 to 360.0K (K: Kelvin)
41	Pt100	-200.0 to +500.0
42	JPt100	-200.0 to +500.0
43	Pt100	-200.0 to +200.0
44	JPt100	-200.0 to +200.0
45	Pt100	-100.0 to +300.0
46	JPt100	-100.0 to +300.0

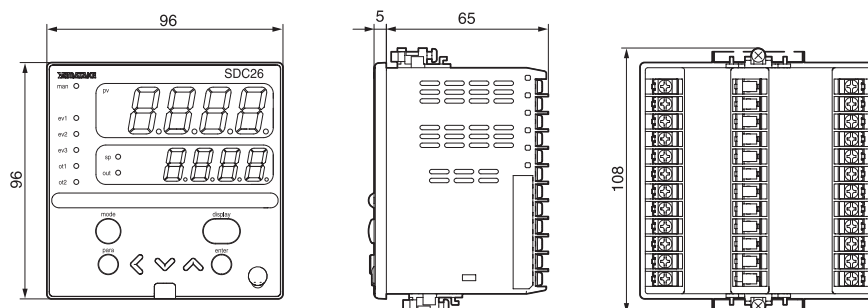
Range code	Input type	Range (°C)
47	Pt100	-100.0 to +200.0
48	JPt100	-100.0 to +200.0
49	Pt100	-100.0 to +150.0
50	JPt100	-100.0 to +150.0
51	Pt100	-50.0 to +200.0
52	JPt100	-50.0 to +200.0
53	Pt100	-50.0 to +100.0
54	JPt100	-50.0 to +100.0
55	Pt100	-60.0 to +40.0
56	JPt100	-60.0 to +40.0
57	Pt100	-40.0 to +60.0
58	JPt100	-40.0 to +60.0
59	Pt100	-10.00 to +60.00
60	JPt100	-10.00 to +60.00
61	Pt100	0.0 to 100.0
62	JPt100	0.0 to 100.0

Range code	Input type	Range (°C)
63	Pt100	0.0 to 200.0
64	JPt100	0.0 to 200.0
65	Pt100	0.0 to 300.0
66	JPt100	0.0 to 300.0
67	Pt100	0.0 to 500.0
68	JPt100	0.0 to 500.0
81	0 to 10mV	Scaling range is -1999 to +9999. Decimal point position changeable.
82	-10 to +10mV	
83	0 to 100mV	
84	0 to 1V	
86	1 to 5V	
87	0 to 5V	
88	0 to 10V	
89	0 to 20mA	
90	4 to 20mA	

Dimensions

(Unit: mm)

• SDC26



• Panel cutout

