SDC40B

DigitroniK
Digital Indicating Controller

The SDC40B is a single loop digital indicating controller used for controlling temperature, pressure flow rate, level and PH value.

A compact instrument with PID control and various auxiliary functions, offering instrumentation with a high level of cost performance. A PC loader allows the user to design any combination of functions.

Specifications

General	**Memory backup**	User setting, semiconductor non-volatile memory, Model/LSP/control output/hold computation: RAM backed up by super capacitor (stored for 24 hrs)
	Power supply voltage	90 to 264Vac, 50/60Hz
	Power consumption	25VA max.
	Ambient temperature	0 to 50°C
	Ambient humidity	10 to 90%RH (no condensation allowed)
	Weight	Approx. 750g
Analog Input	**Input type 1**	Multirange indication of thermocouple, RTD and DC voltage/currents
	Input type 2	4-20mA or 1-5Vdc
	Input type 3	1-5Vdc
	Sampling cycle	0.1 to 0.5s
	Accuracy	±0.1%FS
Digital Input	**No. of inputs**	12
	Connectable outputs	Dry relay contact and open collector
	Sampling cycle	0.1 to 0.5s
Computation Processing Block	**Processing**	Approx. 80 computational expressions can be assigned to a total of 50 units. Each expression can operate up to max of 4 inputs.
	Computational cycle setting	0.1 to 0.5s
	Output changing rate limit	0.0 to 100.0% per computation cycle
	No. of PID groups	8
	PID auto-tuning	Automatic setting of PID value by limit cycle method and neural/fuzzy/smart method
Output Processing Block	**Analog output**	M/M driving relay contact, or 4-20mAdc
	Digital output	SPST/SPDT relay contacts, or open collector
Indication & Setting	**Indicators**	No. 1 (5-digit, 7-segment, green), No.2 (5-digit, 7-segment, orange) No. 3 (2-digit, 7-segment, orange), and Bar LED (analog/digital monitoring, green)
Communications		RS-485
Auxiliary Parts (order separately)	**81446083-001**	Hard dust-proof cover
	80446087-001	Soft dust-proof cover
	81446084-001	Terminal cover
	SLPC4B-0000	PC loader package

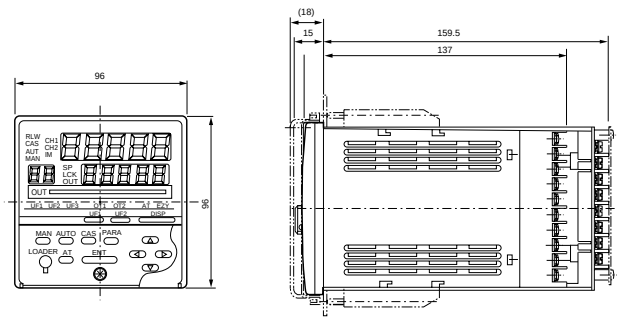
Selection Guide I II III IV V VI VII Example: **C40B2G4AS061D0**

Table	Selection				Description
I	Basic Model No.	**C40B**	↓	↓	Digital indicating controller
II	Control output	**2G**	○	–	Position proportional PID (M/M drive relay contact)
		5G	–	○	Continuous proportional (4-20mAdc)
III	Inputs	**4**	○	○	T/C, RTD, DC voltage/current
IV	Power supply	**AS**	○	○	90 to 264Vac 50/60Hz
V	Option (1)	**06**	○	–	1 auxiliary output, 12 digital inputs, 8 digital outputs (3 relays and 5 open collectors)
		09	–	○	Same as above except 2 auxiliary outputs
VI	Communication	**1**	○	○	None
		2	○	○	RS-485
VII	Option (2)	**D0**	○	○	With test data
		T0	○	○	Tropicalization

Functional structure

- Input . . . . . Analog inputs: 3
  Digital inputs: 12
- Output. . . . . Analog output: 3 (5G), (2G)
  Digital output: 8
- Number of computational expressions: Approx. 80
- Number of computational units: 50
- Variable parameters. . . . %: 40, time: 10
  Flag: 20, Index: 10
- Fixed parameters . . . . . Unlimited number
- Number of PID units: Up to 2 units
- Number of PID parameter groups: 8
- Engineering unit parameters: 8 per PID, a total of 16
- Linearization tables: 3 tables (connectable), 16 points per table
- PTB (% %) tables: 4 tables with 16 points per table that can be used as linearization tables
- TTB (%→time) tables: 4 tables with 16 points per table

Dimensions (unit:mm)



Block diagram of functions