

SDC40A

DigitroniK

Digital Indicating Controller

The SDC40A is a compact (96mm×96mm) digital indicating controller, using thermocouples, resistance temperature detectors, DC voltage and DC current as input signals.

Configuration is made easy by the use of a PC loader.



CONTROLLERS

Specifications

General	Memory backup	Semiconductor non-volatile memory
	Power supply voltage	85 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
PV input (PV1)	Type	Multirange: Thermocouple, RTD, DC voltage/current
	Sampling cycle	0.1s
	Accuracy	±0.1%FS
	Bias	-1000 to +1000U (U: industrial unit)
PV2	Type	4-20mA, 1-5Vdc
Indication & Setting	PV, SP indication	5-digit, 7-segment LED
	Function indication	2-digit, 7-segment LED
	Bar LED	Motor opening, OK indication, events 4 to 8, or RSW 1 to 12 monitoring
	No. of setpoints	1 to 8 points selectable
	Range	Selectable
	Setpoint limit	Lower: -1999 to upper limit Upper: Lower limit to 26000
Control Output	No. of PID sets	8 (Model No's 3D/AK/5K/9K/BK -4 sets for cooling, 4 sets for heating)
	PID auto-tuning	Automatic setting of PID value by limit cycle method and neural/fuzzy/smart method (No auto-tuning for 3D/AK/5K/9K/BK)
	Output limiter %	Lower: -10 to upper limit Upper: Lower limit to 110
	MV changing rate limiter	0.1 to 10.0% (every 100ms)
	Control action	Direct/reverse selectable
Remote Switch (RSW) Input	SP ramp	0 to 26000, unit: /h, 0.1/h, /min, 0.1/min
	No. of inputs	4 or 12
	Function	NOP, RUN/READY, AUTO/MANUAL, REMOTE/LOCAL, AT start/stop, direct/reverse, SP selection (PID group No. interlock), Fixed MV value output, LSP shift, Analog input 2 ratio number selection, Computer backup system 1 and 2
Event (EV) Output	Type	Dry contact open collector transistor
	No. of outputs	2 (standard), or 3 to 8 (optional)
	Type	PV, DEV, DEV , MV, RSP Motor feedback, Alarm, Control loop diagnostics
Auxiliary (AUX) Output	Control mode	ON/OFF SPST relay contact
	No. of outputs	1 or 2 (1 for 2G/3D/AK/5K/9K/BK)
Output	Type	PV, SP, DEV, RSP, MV, Motor feedback
	Output	4 to 20mAdc, load resistance: 680Ω max.
Communications		RS-485
Auxiliary	81446083-001	Hard dust-proof cover
Parts (order separately)	81466087-001	Soft dust-proof cover
	81446084-001	Terminal cover

Selection Guide

I II III IV V VI VII Example: C40A0D0AS000D0

Table	Basic Model No.	Selection				Description		
		C40A	↓	↓	↓			
I	Control output	0D	○	○	-	-	Digital indicating controller	
		6D	○	○	-	-	Relay output (ON/OFF or time proportional)	
		2G	-	-	○	○	Voltage output (with current calibration action functions, ON/OFF or time proportional)	
		5G	○	○	-	-	Position proportional output	
		3D	-	-	○	○	Current output (4-20mA)	
		AK	-	-	○	○	Heat-cool output, relay output + relay output	
		5K	-	-	○	○	Heat-cool output, relay output + current output	
		9K	-	-	○	○	Heat-cool output, current output + current output	
		BK	-	-	○	○	Heat-cool output, relay output + voltage output	
		0	○	○	○	○	Heat-cool output, current output + voltage output	
II	Function	0	○	○	○	○	Standard model	
		1	○	○	○	○	Remote SP function model	
		2	○	○	○	○	Internal cascade function model	
VI	Power supply	AS	○	○	○	○	90 to 264Vac 50/60Hz	
		V	Option (1)	00	○	-	-	-
03	-	○		-	-	○	4 remote switches + event output (1 SPDT relay contact)	
06	-	○		-	-	○	4 remote switches + event output (1 SPDT relay contact) + 1 auxiliary output	
09	-	○		-	-	-	4 remote switches + event output (1 SPDT relay contact) + 1 auxiliary output	
VI	Option (2)	0	○	○	○	○	None	
		1	-	○	-	-	○	8 remote switches + event output (5 open collector outputs)
		2	-	○	-	-	○	8 remote switches + event output (5 open collector outputs) + RS-485
VII	Option (3)	D0	○	○	○	○	With test data	
		T0	○	○	○	○	○	Tropicalization

Dimensions

(unit:mm)

