



SDC46V

Super DigitroniK Digital Indicating Controller with Multi-Input Computation Function

The DigitroniK SDC46V is a highly advanced, high-precision compact digital indicating controller.

A dual-input computation function can be used for each input and output processing unit, allowing sensor input changeover, control based on the average of 2 PV values, control output changeover, feed-forward control, override control, etc.



DIGITAL CONTROLLERS

Specifications

PV input	Type	2-input model	Full multi-range input : thermocouple, RTD, DC current and DC voltage
		3-input model	Input 1: thermocouple, RTD, DC current and DC voltage full multi-range inputs Input 21 : DC current and DC voltage Input 22 : DC voltage
	Sampling cycle	100ms	
Indication	Indication method	5-digit, 7-segment LED. 3-digit, 11-segment LED.	
	Indication accuracy	±0.1% rdg. ± 1 digit (depending on the range)	
Control output	No. of outputs	7max.	
	Type	Relay, motor drive (triac, relay), current, voltage pulse, continuous voltage, transmitter power supply (24Vdc)	
	No. of PID groups	16	
	Auto tuning	Calculation of PID values by limit cycle method	
DI	No. of inputs	14max. (for models with CT input: 12max.)	
	Functions	LSP No., RUN/READY, AUTO/MANUAL, REMOTE/LOCAL, etc.	
DO	No. of outputs	Assignable to output (4max.)	
	Functions	PV, SP, DEV, RSP, MV, MFB, etc. can be selected.	
	Event types (assignable to relay output)	PV direct, PV reverse, deviation direct, deviation reverse, absolute value deviation direct, absolute value deviation reverse, MV direct, MV reverse, RSP direct, RSP reverse, SP direct, SP reverse, etc.	
Communications	Communication system	RS-485	
	Network	Connect up to 31 units	
	Speed	Up to 38400bps	
General	Power	AC power model : 100-240V, 50/60Hz DC power model : 24Vdc	
	Power consumption	AC power model : 40VA max. DC power model : 15W max.	
	Front panel protection	IP65	
	Standards compliance	CE: EN61010-1, EN61326	
	Mass	700g	

Accessories (sold separately)

Model No.	Description
SLP-C45J60	Smart Loader Package
SLP-C45J61	Smart Loader Package (Without user's manual and loader cable)
QN206A	Current transformer (5.8mm dia. hole)
QN212A	Current transformer (12mm dia. hole)
81441422-001	Hard cover
81441420-001	Terminal cover (The SDC46V needs 2 units.)

Selection Guide I II III IV V VI VII VIII IX X Example: C46V2A1C000000

Segment	Model No. selection	Description
I	Basic No.	C46V Computation function model
	Inputs	2 2 inputs (full multiple 2)
		3 3 inputs (full multiple 1, linear 2)
III	Power supply	A 100 to 240 Vac
		D 24 Vdc
IV	Output 1 and 2	1 1 form 1a1b relay
		2 2 form 1a relays
V	Output 3 and 4	C0 Current output (output 3)
		D0 Continuous voltage output (output 3)
		V0 Voltage pulse output (output 3)
		RR 2 form 1a relays
		CC 2 current outputs
		VV 2 voltage pulse outputs
		CV Current (output 3) + voltage pulse (output 4)
		SS Motor drive triac + MFB input
VI	Output 5	R1 Motor drive relay + MFB input
		0 None (note 2)
		R Form 1a relay (note 2)
		C Current output (note 2)
		D Continuous voltage output (note 2)
		P Transmitter power supply (note 2)
VII	Output 6 and 7	0 None
		1 Current output (output 6)
		2 Transmitter power supply (output 7)
		3 2 current outputs (note 1)
		4 Current (output 6) + transmitter power supply (output 7)
VIII	Option	0 2 digital inputs (DI-F1/2) (note 3)
		1 14 digital inputs (note 4)
		2 14 digital inputs + 8 digital outputs (note 4)
		3 14 digital inputs + 8 digital outputs + RS-485 communication (note 4)
		4 2 CT inputs (note 5)
		5 2 CT inputs + 12 digital inputs (note 5)
		6 2 CT inputs + 12 digital inputs + 8 digital outputs (note 5)
7 2 CT inputs + 12 digital inputs + 8 digital outputs + RS-485 communication (note 5)		
IX	Addition features 1	0 None
		T Tropicalization
		K Antisulfidization
		D Inspection certificate
		B Tropicalization + inspection certificate
		L Antisulfidization + inspection certificate
		Y With traceability certification
		Z Tropicalization + traceability certification
		X Antisulfidization + traceability certification
X	Addition features 2	0 None
		1 LEDs: all orange

- Notes : 1 . Not available if "CC" is selected for Outputs 3, 4 and "C" is selected for Output 5.
 2 . Selection must be "0" if "R1" is selected for Outputs 3, 4.
 3 . There are no digital inputs if "SS" or "R1" is selected for Outputs 3, 4.
 4 . There are 12 digital inputs if "SS" or "R1" is selected for Outputs 3, 4.
 5 . Not available if "SS" or "R1" is selected for Outputs 3, 4.

Input Types and Ranges

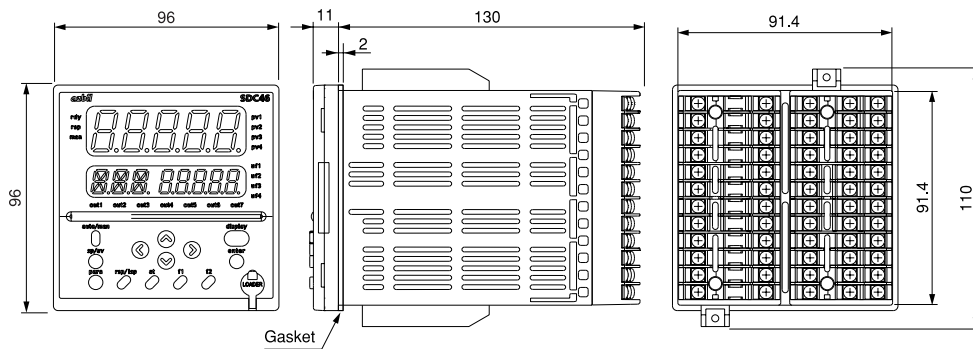
Input type	Pv-01	Sensor type	Range
Thermocouple	1	K	-270.0 to +1372.0 °C
	2	E	-270.0 to +1000.0 °C
	3	J	-200.0 to +1200.0 °C
	4	T	-270.0 to +400.0 °C
	5	B	0.0 to 1800.0 °C
	6	R	-50.0 to +1768.0 °C
	7	S	-50.0 to +1768.0 °C
	8	W(WRe5-26)	0.0 to 2300.0 °C
	9	PR40-20	0.0 to 1900.0 °C
	10	Ni-NiMo	0.0 to 1300.0 °C
	11	N	-200.0 to +1300.0 °C
	12	PL II	0.0 to 1390.0 °C
	13	DIN U	-200.0 to 600.0 °C
	14	DIN L	-200.0 to +900.0 °C
	15	Gold-iron/Chromel	-273.0 to +27.0 °C

Input type	Pv-01	Sensor type	Range
RTD	21	Pt100	-200.0 to +850.0 °C
	22		-200.00 to +300.00 °C
	31	JPt100	-200.0 to +640.0 °C
	32		-200.00 to +300.00 °C
Linear (DC voltage/ current)	41	Current	4 to 20 mA
	42		0 to 20 mA
	43		0 to 10 mV
	44	Voltage	-10 to +10 mV
	45		0 to 100 mV
	46		-100 to +100 mV
	47		0 to 1 V
	48		-1 to +1 V
	49		1 to 5 V
	50		0 to 5 V
	51		0 to 10 V

Dimensions

(Unit: mm)

• C46V



• Panel cutout

