

# CA SERIES

Related Information

■ General terms and conditions..... P.1

■ General precautions ..... p.1027



- Never use this product in a device for personnel protection.
- In case of using devices for personnel protection, use products which meet laws and standards, such as OSHA, ANSI or IEC etc., for personnel protection applicable in each region or country.

SUNX website <http://www.sunx.com>

## Best partner for analog sensors

### ORDER GUIDE

Type	Appearance	Input range	Model No.	Output
Relay output		4 to 20 mA	<b>CA-R1</b>	Relay contact 1a (HH, HI, LO and LL) Relay contact 1c (GO)
		1 to 5 V	<b>CA-R2</b>	
		±1 V	<b>CA-R3</b>	
		±5 V	<b>CA-R4</b>	
		±10 V	<b>CA-R5</b>	
Transistor output		4 to 20 mA	<b>CA-T1</b>	NPN open-collector transistor (HH, HI, GO, LO and LL)
		1 to 5 V	<b>CA-T2</b>	
		±1 V	<b>CA-T3</b>	
		±5 V	<b>CA-T4</b>	
		±10 V	<b>CA-T5</b>	
With BCD output		4 to 20 mA	<b>CA-B1</b>	NPN open-collector transistor (HH, HI, GO, LO, LL and BCD output)
		1 to 5 V	<b>CA-B2</b>	
		±1 V	<b>CA-B3</b>	
		±5 V	<b>CA-B4</b>	
		±10 V	<b>CA-B5</b>	

Digital Panel Controller

**CA2**

Other Products

**SPECIFICATIONS**The CAD data in the dimensions can be downloaded from the SUNX website: <http://www.sunx.com>

Item	Type Basic model No.	Relay output <b>CA-R□</b>	Transistor output	
			<b>CA-T□</b>	With BCD output <b>CA-B□</b>
Supply voltage		100 to 240 V AC ± 10 %		
Power consumption		17 VA or less		
Power supply for sensor		12 V DC $+10\%$ , 150 mA		
Analog input	Input range	<b>CA-□1:</b> 4 to 20 mA, <b>CA-□2:</b> 1 to 5 V, <b>CA-□3:</b> ±1 V, <b>CA-□4:</b> ±5 V, <b>CA-□5:</b> ±10 V		
	Input impedance	Current input: 20 Ω, Voltage input: 1 MΩ ( <b>CA-□3:</b> 100 kΩ)		
	No. of inputs	2 Nos.		
	Input method	Single end	Floating	
	A/D conversion method	Successive approximation method		
	Sampling period	1 ms or more (1,000 times/sec. max.)		
Switching inputs (Process number selection External synchronization Zero-adjustment Reset Auto-reference Hold)		Operation: Negative logic Signal condition: 5 V-CMOS · LSTTL compatible		
Comparative outputs (HH, HI, GO, LO and LL)		Relay contact 1a (HH, HI, LO and LL) Relay contact 1c (GO) • Switching capacity: 250 V 1 A AC (resistive load) 30 V 1 A DC (resistive load) • Electrical life: 100,000 switching operations or more (switching frequency 1,800 operations/hour) • Mechanical life: 50 million switching operations or more (Switching frequency 18,000 operations/hour)	NPN open-collector transistor • Maximum sink current: 100 mA • Applied voltage: 35 V DC or less (between comparative output and COM.) • Residual voltage: 1 V or less (at 100 mA sink current) 0.4 V or less (at 16 mA sink current)	
	Response time	10 ms or less	1ms or less	
Data outputs (A0 to D3, POL) (DTV, OR)			BCD 4 digits, negative logic NPN open-collector transistor • Maximum sink current: 70mA • Applied voltage: 35 V DC or less (between data output and GND) • Residual voltage: 1 V or less (at 70 mA sink current) 0.4 V or less (at 16 mA sink current)	
Measurement value display		3 5/6 digit LED display (letter height: 14.2 mm <b>0.559 in</b> )		
Display refresh rate		Selectable from 0.2, 0.5, 1, 2.5, 10 or 20 times/sec.		
Display range		-5999 to +5999 ("+" is not displayed)		
Display accuracy		± (0.1 % rdg + 2 digits) at +23 ± 5 °C <b>+73.4 ± 41 °F</b>		
Temperature characteristics		±100 ppm F.S./°C		
Threshold value display		3 5/6 digit LED display (letter height: 8 mm <b>0.315 in</b> )		
Display range		-5999 to +5999 ("+" is not displayed)		
Process number display		1 digit LED display (letter height: 8 mm <b>0.315 in</b> )		
Display range		0 to 7		
Main functions		Process number selection, arithmetic, hold, scaling, auto-reference, power supply ON-delay, start delay, hysteresis setting, etc.		
Ambient temperature		0 to +50 °C <b>+32 to +122 °F</b> (No dew condensation), strage: -20 to +70 °C <b>-4 to +158 °F</b>		
Material		Enclosure: ABS		
Connecting method		Screw-on terminal block [BCD output type: Screw-on terminal block and connector (Note 2)]		
Weight		Net weight: 500 g approx.		
Dimensions		W96 × H48 × D145.2 mm <b>W3.780 × H1.890 × D5.717 in</b>		
Accessory		Unit seal: 1 set		

Notes: 1) Where measurement conditions have not been specified precisely, the conditions used were an ambient temperature of +20 °C **+68 °F**.

2) Purchase the mating connector for the BCD output type separately.

Recommended mating connector: HIF3BA-34D-2.54R (Manufactured by Hirose Electric CO., LTD.)

AXM134415A (Manufactured by Matsushita Electric Works, Ltd.)

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