

Digital Temperature Indicating Controller

BCS1 series



■ Features

- 48 x 48mm
Temperature indicating controller
- Money saving
- Space saving
- Made in Japan

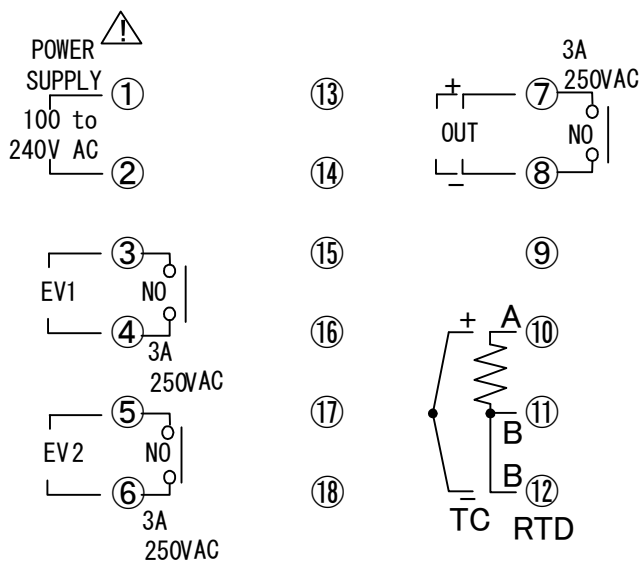
■ Model

Series	BCS1	BCS1	R	-	0	0	M00	-	0	000000000-00
Control output (OUT)	Relay contact		R							
	Non-contact voltage		S							
Supply voltage	100 to 240V AC					0				
Input	Multi-input						M00			
Event output	No Event output								0	
	2 Event outputs								2	

■ Rated scale

Input		Range		Resolution
M	K	-200 to 1370°C	-320 to 2500°F	1°C (°F)
	J	-200 to 1000°C	-320 to 1800°F	1°C (°F)
	Pt100	-199.9 to 850.0°C	-199.9 to 999.9°F	0.1°C (°F)

■ Terminal arrangement



POWER SUPPLY: 100 to 240V AC

EV1 : Event 1 (A1) output (option)

EV2 : Event 2 (A2) output (option)

OUT : Control output

TC : Thermocouple input

RTD : Resistance temperature detector input

Shinko



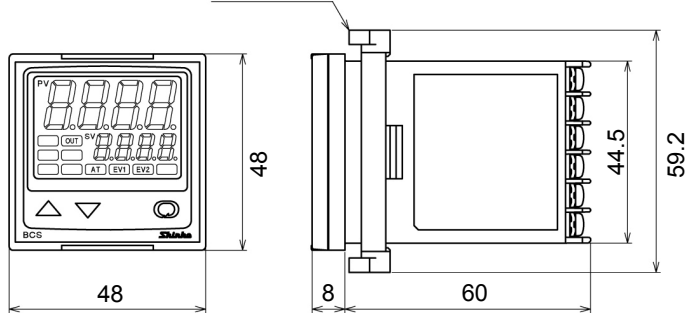
(HQ only)

■ Standard specifications

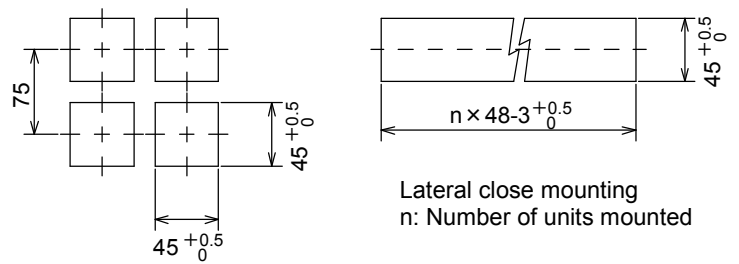
Input	Thermocouple : K, J, External resistance: 100Ω or less RTD : Pt100 3-wire system, Allowable input lead wire resistance: 10Ω or less per wire Rated scale : Refer to the Rated scale		
Accuracy (Setting, Indication)	Thermocouple : Within $\pm 0.3\%$ of each input span ± 1 digit, However, less than 0°C (32°F): Within $\pm 0.4\%$ of each input span ± 1 digit RTD : Within $\pm 0.2\%$ of each input span ± 1 digit		
Control action	<ul style="list-style-type: none"> • PID (with auto-tuning function) • PI action: When derivative time is set to 0. • PD action (with auto-reset function): When integral time is set to 0. • P action (with auto-reset function): When both derivative and integral time are set to 0. • ON/OFF action: When proportional band is set to 0. OUT proportional band(P): 0 to 1000°C or 2000°F (Default value: 10°C) (ON/OFF action when set to 0) With decimal point: 0.0 to 999.9°C or 0.0 to 999.9°F (ON/OFF action when set to 0.0) Integral time(I) : 0 to 1000sec (OFF when set to 0) (Default value: 200sec) Derivative time(D) : 0 to 300sec (OFF when set to 0) (Default value: 50sec) OUT proportional cycle : 1 to 120sec (Default value: Relay contact: 30sec, Non-contact voltage: 3sec) ARW : 0 to 100% (Default value: 50%) ON/OFF hysteresis : 0.1 to 100.0°C (°F) (Default value: 1.0°C) Output high limit, low limit : 0 to 100% (Not available for ON/OFF action) (Default value: Output low limit: 0%, Output high limit: 100%)		
Control output	Relay contact: 1a Control capacity: 3A 250V AC (Resistive load), 1A 250V AC (Inductive load $\cos\phi=0.4$) Electric life: 100,000 cycles Non-contact voltage (for SSR drive): 10 ⁺³ / ₀ V DC, Max. 20mA DC		
Input sampling period	0.5sec	Insulation resistance	10MΩ or more, at 500V DC
Supply voltage	100 to 240V AC, 50/60Hz	Dielectric strength	1.5kV AC for 1 minute Between input terminal and power terminal Between output terminal and power terminal
Allowable voltage fluctuation range	85 to 264V AC	Case, Front panel	Flame-resistant resin (Color: black), Membrane sheet
Power consumption	Approx. 7VA	Mounting	Flush
Ambient temperature	0 to 50°C	External dimensions	48X48X68mm (WxHxD) (Depth of control panel interior: 60mm)
Ambient humidity	35 to 85%RH (Non-condensing)	Weight	Approx. 120g
Attached functions	Sensor correction, Set value lock, Power failure countermeasure, Self diagnosis, Automatic cold junction temperature compensation, Burnout (Overscale), Indication range, Control range, Warm-up indication		
Option	2 Event outputs (A1, A2)		
Accessories included	Mounting frame 1 piece, Instruction manual 1 copy		
Accessories sold separately	Terminal cover		

■ External dimensions (Scale: mm)

Mounting frame



■ Panel cutout (Scale: mm)



Lateral close mounting
n: Number of units mounted



- To ensure safe and correct use, thoroughly read and understand the manual before using this instrument.
- This instrument is intended to be used for industrial machinery, machine tools and measuring equipment. Verify correct usage after consulting purpose of use with our agency or main office. (Never use this instrument for medical purposes with which human lives are involved.)
- External protection devices such as protection equipment against excessive temperature rise, etc. must be installed, as malfunction of this product could result in serious damage to the system or injury to personnel. Also proper periodic maintenance is required.
- This instrument must be used under the conditions and environment described in the manual. Shinko Technos Co., Ltd. does not accept liability for any injury, loss of life or damage occurring due to the instrument being used under conditions not otherwise stated in the manual.

Caution with respect to Export Trade Control Ordinance

To avoid this instrument from being used as a component in, or as being utilized in the manufacture of weapons of mass destruction (i.e. military applications, military equipment, etc.), please investigate the end users and the final use of this instrument. In the case of resale, ensure that this instrument is not illegally exported.

- This catalog is as of Mar 2011 and its contents are subject to change without notice.
- If you have any inquiries, please consult us or our agency.

SHINKO TECHNOS CO., LTD. OVERSEAS DIVISION

Reg. Office : 2-5-1, Senbahigashi, Minoo, Osaka, 562-0035, Japan
 Tel : 81 - 72 - 727 - 6100
 Fax : 81 - 72 - 727 - 7006
 URL : <http://www.shinko-technos.co.jp>
 E-mail : overseas@shinko-technos.co.jp