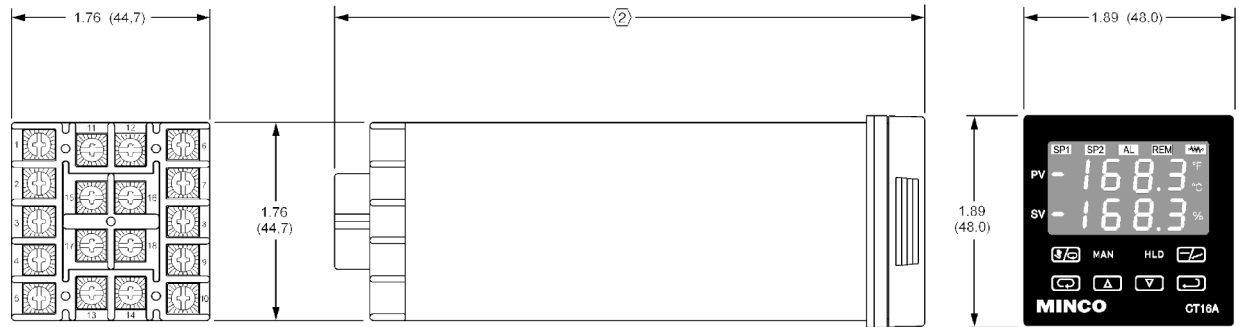


1. How to order CT16A

CT16A	Model Number: CT16A
2	Features: 2 = Standard 3 = Enhanced
0	Alarm: 0 = No 1 = Yes
1	Output A: 1 = SSR 2 = 15 VDC 3 = Relay, NO 4 = Relay, NC 5 = Current 8 = DC SSR
4	Output B: 0 = None 1 = SSR 2 = 15 VDC 3 = Relay, NO 4 = Relay, NC 5 = Current
934	Options: (Leave Blank for none) * These options may not be combined with each other. Option 948 may be combined with only one of the options 934, 936. 934* = Analog retransmission of process variable or set variable, 0 to 20 mADC, scalable (may be programmed for 1 to 5 mA, 4 to 20 mA, etc.). 936* = Analog retransmission of process variable or set variable, 0 to 10 VDC. 948 = 4-Stage set point. One of four pre-set set point values can be implemented via contact closure. 992* = RS-485 serial communications. Allows remote computer to read and write all control parameters. 993* = RS-232 serial communications. Allows remote computer to read and write all control parameters.

CT16A2014-934 ← Sample Part Number

REVISIONS					
REV	DESCRIPTION	DATE	ECO	DR	APPD
B	DEL "12 AND 24V AC/DC OPTIONAL" FROM NOTE 16	05/18/11	1578639	BMP	VQV




CT16A3 front panel shown here

UNLESS OTHERWISE SPECIFIED DIMENSIONS AND TOLERANCES IN INCHES DIMENSIONS IN [] ARE IN MILLIMETERS		INITIALS	DATE	ITEM	REQD	PART/STOCK NO	MATERIAL DESCRIPTION		
ALL DIMENSIONS: ±.03 (0,8)		DR	B.M.P.	10/16/03	TITLE: CT16A TEMPERATURE CONTROLLER SPECIFICATION DRAWING		 www.minco.com COMPANY CONFIDENTIAL PROPRIETARY INFORMATION OF MINCO PRODUCTS, INC. DO NOT DUPLICATE		
		CHK							
		APP	M.W.G.	10/20/03					
		ENGR	K.S.D.	10/20/03					
		PRD	M.C.C.	11/07/03					
MATERIAL:							CT16A	REV B	
FINISH:	NEXT ASSY	CATEGORY	16	F:\AUTOCAD\DWG\CT16A\CT16ASPC-1.DWG					
USED ON	CT16A	INIT. JOB	16-	STOCK NO	SCALE	NONE	DWG SIZE	B	
							CAGE IDENT.	09359	SHEET 1 OF 2

- ② Distance varies depending on options. Maximum distance is 5.24" (133mm).
3. Selectable Inputs:
 RTD: 2 or 3-wire, Minco types PD or PE (100 Ω IEC platinum), PA (100 Ω NIST platinum), PF (1000 Ω IEC platinum), or NA (120 Ω nickel).
 Thermocouple: Type J (factory default), K, T, L, E, R, S, B, C, or N.
 DC Current: 0-20 mA or 4-20 mA (use with Temtran™ transmitters).
 DC Voltage: 0-10 or 2-10 VDC, -10 to 10 mVDC, scalable.
4. Input Impedance:
 Voltage: 5000 Ω.
 Thermocouple: 3 megohms minimum.
 Current: 10 Ω.
 RTD Current: 200 μA.
5. Sensor Break or Short Protection:
 Selectable Output: disabled, average output before fault, or preprogrammed output.
 Adjustable delay: 0.0 to 540.0 minutes.
6. Loop Break Protection:
 Error message is initiated and output is turned off in case of shorted sensor or open heater circuit. Break time adjustable from OFF to 9999 seconds.
6. Cycle Rate: 1 to 80 seconds.
7. Setpoint Range:
 Selectable from -212 to 2320°C (-350 to 4208°F), input dependent.
8. Display:
 Two 4 digit, 7 segment 0.3" high LED displays. Process value red, setpoint value green. °C or °F.
9. Control Action:
 Reverse (usually heating) or Direct (usually cooling); selectable.
10. Ramp/Soak: (CT16A3 only) 16 separate ramp and soak times are adjustable in minutes or seconds from 0 to 9999. When the program has ended, you may choose to repeat, hold, revert to local setpoint, or turn the outputs off.
11. Accuracy: ±0.25% of span ±1 count.
12. Resolution: 1° or 0.1°, selectable.
13. Line Voltage Stability: ±0.05% over supply voltage range.
14. Temperature Stability:
 4 μV/°C (2.3 μV/°F) typical, 8 μV/°C (4.5 μV/°F) max. (100 ppm/°C typical, 200 ppm/°C max.).
15. Isolation:
 Relay and SSR: 1500 VAC to all other inputs and outputs.
 SP1 and SP2 Current and Voltage: 500 VAC to all other inputs and outputs, but not isolated from each other.
 Process Output (Options 934, 936): 500 VAC to all other inputs and outputs.

16. Supply Voltage:
 100 to 240 VAC nom., +10/-15%, 50 to 400 Hz, single phase; 132 to 240 VDC nom. +10/-20%, 5 VA maximum.
17. Operating Temperature Range: -10 to 55°C (14 to 131°F).
18. Memory Backup: Non-volatile memory (no batteries required).
19. Control Output Ratings:
 AC SSR (SPST): 2.0 A combined outputs A and B @ 240 VAC @ 25°C (77°F); derates to 1.0 A @ 55°C (130°F). An SSR is recommended for longer life than a mechanical relay. Use external SSR for higher currents.
 Mechanical Relay: SPST Form A (Normally Open) or Form B (Normally Closed); 3 A resistive, 1.5 A inductive @ 240 VAC; Pilot Duty: 240 VA; 2 A @ 120 VAC or 1 A @ 240 VAC.
 Switched Voltage (isolated): 15 VDC @ 20 mA.
 Proportional current (isolated): 0 to 20 mA, 600 Ω max.
 DC SSR: 1.75 A @ 32 VDC max.
 Alarm Relay, SPST Form A (Normally Open): 3 A @ 240 VAC; 1/10 HP @ 120 VAC.
20. Weight: 227 g (8 oz.).
21. Agency Approvals: UL, cUL, and CE.
22. Front Panel Rating: Type 4X (IP66).

REVISIONS					
REV	DESCRIPTION	DATE	ECO	DR	APPD
B	DEL "12 AND 24V AC/DC OPTIONAL" FROM NOTE 16	05/18/11	1578639	BMP	

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ALL DIMENSIONS: ±.03 (0,8)		DR	B.M.P.	10/16/03	TITLE: CT16A TEMPERATURE CONTROLLER SPECIFICATION DRAWING			 www.minco.com COMPANY CONFIDENTIAL PROPRIETARY INFORMATION OF MINCO PRODUCTS, INC. DO NOT DUPLICATE			
		CHK									
		APP	M.W.G.	10/20/03							
		MATERIAL:		ENGR				K.S.D.	10/20/03	CT16A	REV B
				QA							
FINISH:		PRD	M.C.C.	11/07/03							
NEXT ASSY		CATEGORY 16		F:\AUTOCAD\DWG\CT16A\CT16ASPC-2.dwg			CAGE IDENT.				
USED ON		CT16A	INIT. JOB 16-	STOCK NO	SCALE	NONE	DWG SIZE	B			
							09359	SHEET 2 OF 2			