CAHO DIGITAL CONTROLLER WITH TIMER INSTRUCTION MANUAL

■ PANEL DESCRIPTION

ON / OFF	**ON / OFF BUTTON KEY**: Power on/off button key. It is also used to enter each parameter level for setting. **OFF BUTTON KEY:** Is used to stop/halt output. Screen display "OFF", flashing together with the current temperature value alternately. **ON BUTTON KEY:** Output ON. Display SV temperature (flashing) first, then in a few seconds it will display the current temperature after.
TEMPERATURE KEY SETTING TIMER KEY SETTING **UP / DOWN KEY**	**UP KEY**: Is used to increment set value. **DOWN KEY**: Is used to decrement set value.
TIMER RUN/STOP BUTTON	Is used to run and stop timer after setting.
OUTPUT INDICATOR	**LED ON**: OUTPUT ON **LED OFF**: OUTPUT OFF
OUT TIMER INDICATOR	**LED ON**: TIME OUT **LED OFF**: TIME OFF

* Whether the power had directly applied or by pressing the ON/OFF power button, the screen will display the set temperature value (flashing) first, then to be followed by the current temperature value.
* Regardless of what parameter level you are in, if left idle within 5 secs, the display will automatically return to its original operation mode.

■ PARAMETER DESCRIPTION LIST AND SETTING:

A. FOR TEMPERATURE CONTROL PARAMETER

(PRESS AND HOLD ON/OFF BUTTON FOR 5 SECS TO ENTER EACH PARAMETER LEVEL)

	CODE	DESCRIPTION	SETTING RANGE	UNIT	DEFAULT VALUE	REMARKS
LEVEL 1	A1	ALARM1 SET VALUE	LoL~HiL	℃	10	AIF IF SET NO, NO DISPLAY
	A2	ALARM2 SET VALUE	LoL~HiL	℃	20	A2F IF SET NO, NO DISPLAY
LEVEL 2 (PRESS AND HOLD ON/OFF BUTTON FOR 5 SECS)	P	PROPORTIONAL BAND	0~100	%	0	BECOMES ON/OFF CONTROL IF P=0
	Ct	CYCLE TIME	0~100	SEC.	RELAY = 10 SEC SSR = 2 SEC SCR = 0 SEC	PARAMETER NOT AVAILABLE IF P=0
	HYS	HYSTERESIS	0~50%FS	℃	2	AVAILABLE IF P=0
	Pvo	PV OFFSET	-50%~50%FS	℃	0	
	SPo	SV OFFSET	-50%~50%FS	℃	0	
	on	ON/OFF SETTING MODE	1、2、3、4、5		1	REFER TO NOTE (1) - ON/OFF MODE SETTING DESC.
	ton	TIME-ON SELECTION	OFF 、1~300		oFF	REFER TO NOTE (2) - SETTING ton VALUE
	tEd	TIME-END SELECTION	0、1		0	IF tEd = 1 = ON, THE OUTPUT TURNS OFF AUTOMATICALLY.
	db	-	-50~50		0	SETTING NOT AVAILABLE
LEVEL 3 (PRESS AND HOLD ON/OFF BUTTON FOR 5 SECS)	tyP	INPUT SELECTION TYPE	K . J	type	E	
	LoL	LOWEST TEMP. SETTING LIMIT	0-SV	℃	0	
	HiL	HIGHEST TEMP. SETTING LIMIT	SV-400	℃	400	
	FiL	FILTER SETTING	0~100		2	
	ACt	CONTROL ACTION SETTING	H/C		H	H: HEATING C: COOLING
	td1	SV LOOP DISPLAY SETTING	0、5、10、30、60	SEC.	0	
	td2	ALARM DELAY TIME SETTING	0~100	SEC.	0	
	A1F	ALARM1 MODE SETTING	no、Hi、Lo、dFH、dFL		no	REFER TO NOTE (3) - ALARM OUTPUT TYPES
	A2F	ALARM2 MODE SETTING	no、Hi、Lo、dFH、dFL		no	REFER TO NOTE (3) - ALARM OUTPUT TYPES
	A1y	ALARM1 HYSTERESIS SETTING	0~A1	℃	1	
	A2y	ALARM2 HYSTERESIS SETTING	0~A2	℃	1	
	CH	4-20mA OUTPUT HIGHEST SETTING	0~500		470	ONLY APPEARS WHEN Ct=0
	CL	4-20mA OUTPUT LOWEST SETTING	0~500		90	ONLY APPEARS WHEN Ct=0
	uEr	VERSION				

B. EXPLANATORY NOTE:

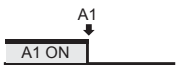
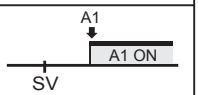
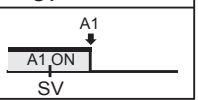
NOTE (1): ON/OFF MODE SETTING DESCRIPTION:

CODE	MODE DESCRIPTION	SCREEN DISPLAY
1	OUTPUT STOP, ALARM OFF	"OFF"
2	OUTPUT STOP, ALARM ON	"OFF"
3	OUTPUT STOP, ALARM OFF	ALL OFF NO DISPLAY
4	POWER ON: OUTPUT STOP, ALARM OFF	SCREEN DISPLAYS "OFF" WHEN POWER ON
5	POWER ON: OUTPUT STOP, ALARM OFF	DECIMAL POINT LIT ON

NOTE (2): Setting the value range for ton

It refers to the difference between the display temperature value and the setpoint value.
For instance:
SV = 100
ton = 1
It indicates that once the temperature reaches 99 degrees celcius, the controller timer will start automatically.

NOTE (3): ALARM OUTPUT TYPES ILLUSTRATION:
(A1F AS EXAMPLE)

CODE	DESCRIPTION TYPE	ILLUSTRATION
no	NO ALARM	NONE
Hi	ABSOLUTE VALUE UPPER LIMIT	
Lo	ABSOLUTE VALUE LOWER LIMIT	
FH	DEVIATION UPPER LIMIT	
dFL	DEVIATION LOWER LIMIT	

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C. FOR TIMER PARAMETER

(PRESS AND HOLD RUN/STOP BUTTON FOR 5 SECS TO ENTER EACH PARAMETER LEVEL)

CODE		DESCRIPTION	SETTING RANGE	UNIT	DEFAULT VALUE	REMARKS
LEVEL 1	Un i	UNIT OF MEASUREMENT	HH.mm、mmmm、SSS	H : Hour m : Min H : Sec	m	10 MINUTES
	rEL	RELAY OUTPUT	A, b	-	A	
	oUt	-	oFF	-	oFF	SETTING NOT AVAILABLE
	SY1	-	0	SEC	0	SETTING NOT AVAILABLE
	SY2	-	0	SEC	0	SETTING NOT AVAILABLE

■ SPECIAL CHARACTER GUIDE

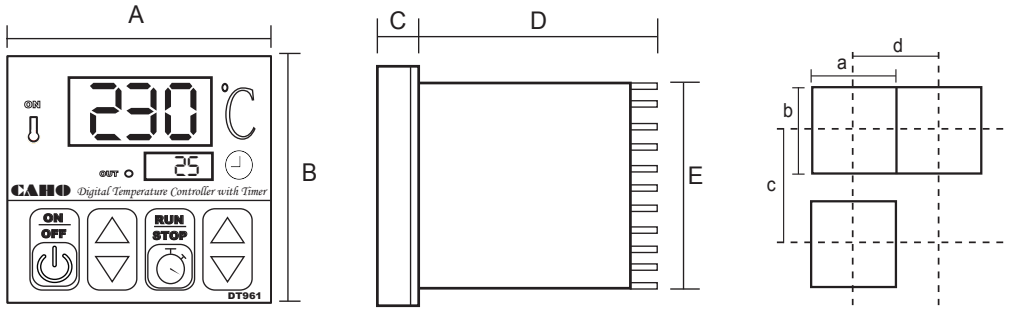
A	B	C	D	E	F	G	H	I	J	K	L	M
A	b	C	d	E	F	G	H	I	J	K	L	M

N	O	P	Q	R	S	T	U	V	W	X	Y	Z
n	o	P	q	r	S	t	U	v	y	H	y	Z

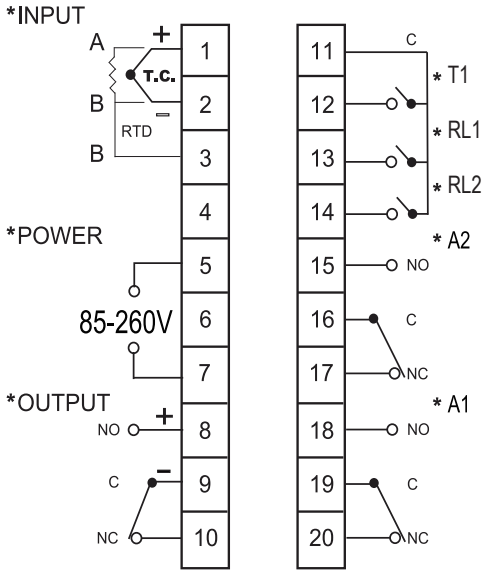
■ DIMENSION

(PANEL CUT-OUT 91*91mm)

MODEL	A	B	C	D	E	a	b	c	d
DT961	96	96	12	85	90	$91^{+0.5}_{0}$	$91^{+0.5}_{0}$	120	110



■ WIRING DIAGRAM



■ ORDERING CODE