AKO D1 Series Temperature Controller User Guide

Contents

AKO D1 Series Temperature Controller

Product Information

Specifications

- **Model:** AKO-D141xx/D101xx
- **Temperature Indication:** Yes
- **Programming Access:** Yes
- **Time for Access:** 5 seconds for set point, 10 seconds for programming

Product Usage Instructions

Accessing Set Point and Programming

To access the set point:

- For AKO-D141xx/D101xx: Press and hold SET for 5 seconds.
- For AKO-D140xx: Press and hold SET for 5 seconds.

To access programming:

- **For AKO-D141xx/D101xx:** Press and hold SET for 10 seconds.
- **For AKO-D140xx:** Press and hold SET for 10 seconds.

Temperature Indication

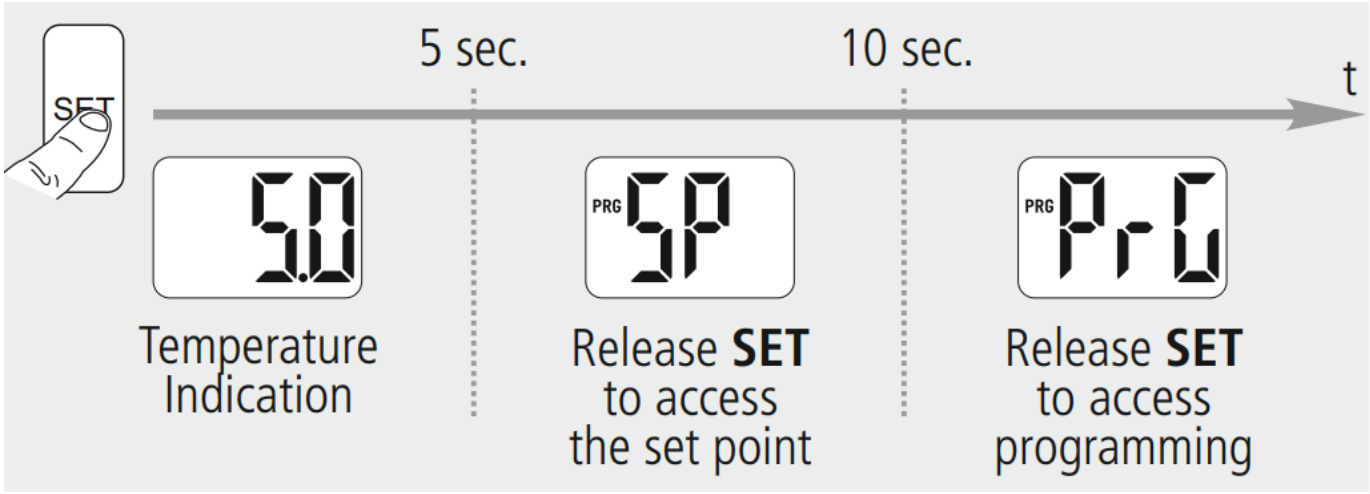
Release SET to access the set point or programming based on the specific model.

FAQ

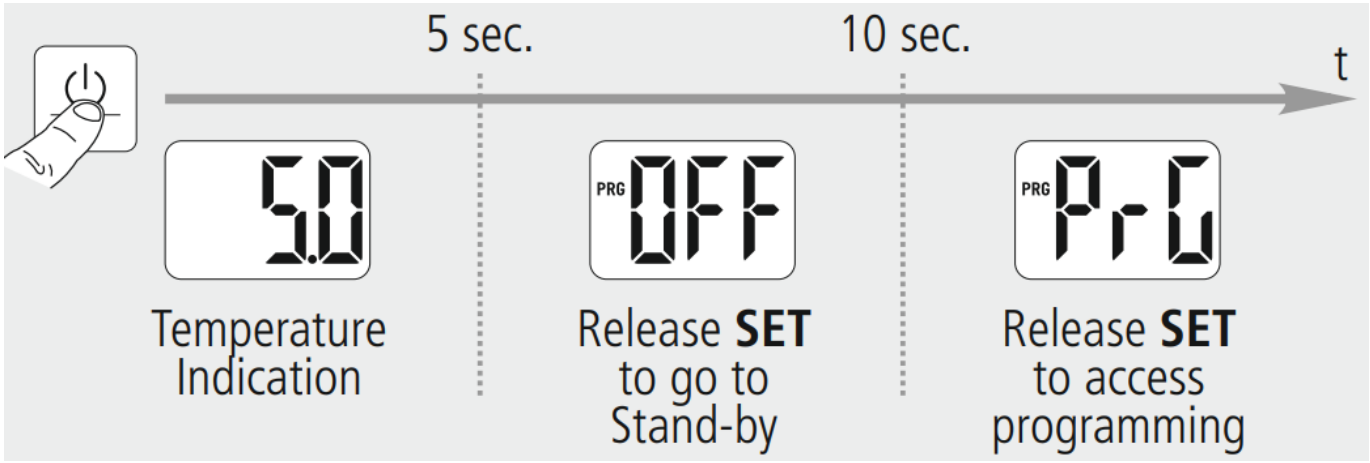
- **Q: How do I enter programming mode?**
  - **A:** To enter programming mode, for AKO-D141xx/D101xx, press and hold SET for 10 seconds. For AKO-D140xx, do the same for 10 seconds.
- **Q: How do I access the set point?**
  - **A:** To access the set point, for AKO-D141xx/D101xx, press and hold SET for 5 seconds. For AKO-D140xx, do the same for 5 seconds.
- **Q: What happens if no key is pressed for 20 seconds?**
  - **A:** The equipment will return to the previous level. If you are on level 3, the changes will not be saved.

Access to set point and programming

AKO-D141xx/D101xx



AKO-D140xx



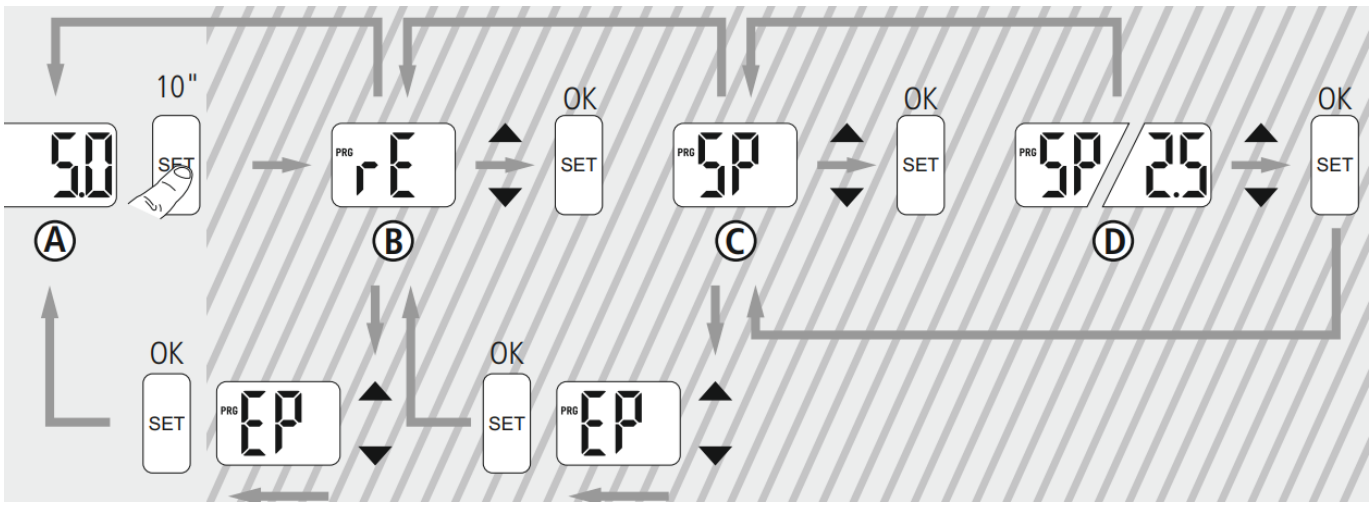
Programming Menu

Programming Menu parameters

After 20 seconds with no key being pressed, the equipment will return to the previous level. If you are on level 3, the changes will not be saved.

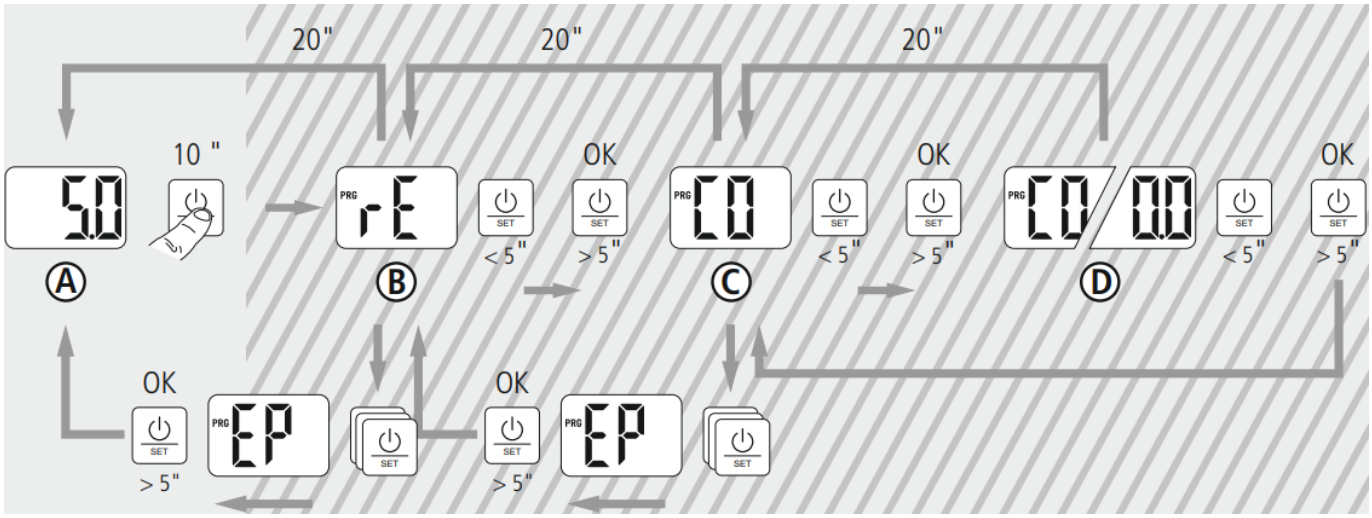
AKO-D141xx/D101xx

PROGRAMMING

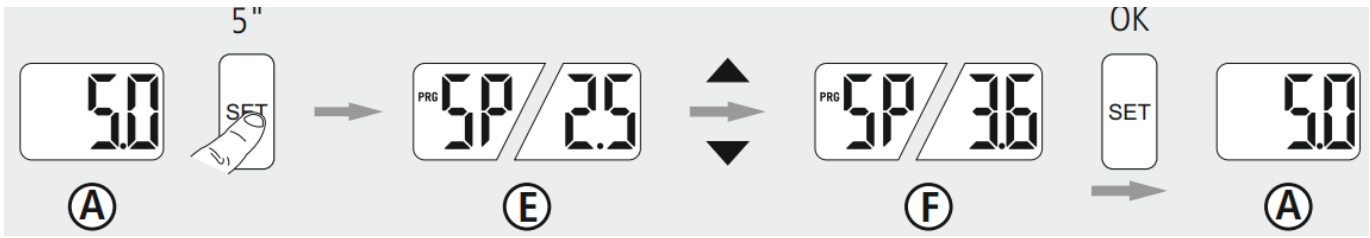


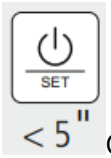
AKO-D140xx

PROGRAMMING



Changeset point



- Change Menu
- Cambiare menu
-  Change Menu
- **A)** Temperature Indication
- **B)** Level 1 Menu
- **C)** Level 2 Parameters
- **D)** Level 3 Values
- **E)** Current Value
- **F)** New Value

Parameters and messages

Table of parameters and messages

- **Def.** column shows factory-set default parameters. Those marked with * are variable parameters depending on the application chosen in the wizard. Unless otherwise stated, temperatures are expressed in °C. (Equivalent velues in °F)

AKO-D14023-C	
AKO-D14012, AKO-D14023	

AKO-D14120, AKO-D14123, AKO-D10123								
Level1		**Menus and description**						
rE	**Leve**	**l 2 Control**						
		Level 3 Description Values	**Min.**	**Def.**	**Max.**			
					99.9	●		
	SP	Temperature Adjustment (Set Point) With NTC (ºC/ºF) (limits depending on probe type) With PTC	-50.0 (-58º F)		(210º F) 150 (302º F)	● ●		
	C0	Calibrating probe 1 (Offset) (ºC/ºF)	-20.0	0.0	20.0	●		
	C1	Probe 1 differential (Histeresis) (ºC/ºF)	0.1	2.0	20.0	●	○	○
				99.9	99.9			
	C2	Upper blocking of the set point With NTC (ºC/ºF) (cannot be set above this value) With PTC	C3	(210 ºF) –	(210º F) 150 (302º F)	● ●		
	C3	Lower blocking of the set point (cannot be set below this value) (ºC/ºF)	-50.0 (-58º F)	-50.0 (-58º F)	C2	●		
	C4	Type of delay for protection of the compressor: **0**=OFF/ON (since the last disconnection) **1**=OFF-ON/ON-OFF (since the last shut-down /start-up)	0	0	1	●		
	C5	Protection delay time (value of the option selected in parameter C4) (min.)	0	0	120	●		
	C6	Status of the COOL relay with probe fault **0**=OFF; **1**=ON; **2**=Average based on the last 24 hours before the probe fault	0	2	2	●		
	EP	Exit to Level 1				●	○	○
dEF	**Leve**	**l 2 DEFROST Control (if P0=0 Direct, Cold)**						
		Level 3 Description Values	**Min.**	**Def.**	**Max.**	●		
	d0	Defrost frequency (Time between two starts) (h.)	0		96	●		
	d1	Maximum defrost duration (**0**=defrost deactivated) (min.)	0	0	255	●		○

	d2	Type of message during defrosting: **0**=Current temperature; **1**=Temperature at start of defrost; **2**=Display dEF message	0	2	2	●	○	○
	d3	Maximum duration of the message (time added at the end of the defrost) (min.)	0	5	255	●		
	EP	Exit to Level 1				●		

AKO-D14023-C								
AKO-D14012, AKO-D14023								
AKO-D14120, AKO-D14123, AKO-D10123								
CnF	**Leve**	**l 2 General status**						
		Level 3 Description Values	**Min.**	**Def.**	**Max.**			
	P0	Type of operation **0**=Direct, Cold;**1**=Inverted, Heat	0	*	1	●		
	P1	Delay of all functions on receiving electrical power (min.)	0	0	255	●		
	P2	Access code (password) functions **0**=Inactive; **1**=Block access to parameters; **2**=Keyboard lock	0	0	2	●	○	○
	P5	Address (only systems with built-in communications)	1	1	255			○
	P7	Temperature display mode **0**= Integer °C **1**=One decimal in ºC **2**=Integer °F **3**=One decimal in °F	0	1	3	●	○	○
	P9	Selection of probe type **0**=NTC; **1**=PTC	0	0	1	●	○	○
	EP	Exit to Level 1						
tid	**Lev**	**el 2 Access and information control**						
		Level 3 Description Values	**Min.**	**Def.**	**Max.**			

	L5	Access code (Password)	0	–	99	●	○	○
	PU	Program version (Information)		–		●	○	○
	Pr	Program revision (Information)		–		●	○	○
	EP	Exit to Level 1				●	○	○
EP	Exit Programming					●	○	○

MESSAGES			
L5	Access code (Password) request	**D**	
dEF	This indicates a defrost is underway. (Only if parameter d2=2)	**D**	**–**
E1	Probe 1 faulty (open circuit, crossover, **NTC**: temp. >110°C or <-55 °C **PTC**: temp. >150 °C or <58 °C) – (equivalent limits in °F)	**D**	**S**
Inl	Setup wizard (See section“Start-up”)	**D**	

- **D:** Displays the message on the display
- **S:** Shows the message in the AKONet software (Only AKO-D14023-C)

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- We reserve the right to supply materials that may be slightly different from those described in our Data Sheets.
- Updated information on our website.
- We reserve the right to supply materials that may vary slightly differ from those described in our technical specifications.
- Updated information can be obtained on our website.

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Documents / Resources

	AKO D1 Series Temperature Controller [pdf] User Guide D14120, D14123, D14012, D14023, D14023-C, D10123, D1 Series Temperature Controller, D1 Series, Temperature Controller, Controller

References

- User Manual