

# Danfoss ERC113D Programming Instruction



**STOP! All work detailed in these instructions must be done by a qualified technician.**



**Subject:** DanfossERC 113D Universal Programming Instructions  
**Date:** February 28, 2024  
**Models / Parts Affected:** Temperature Control (with Display) Kit P#848244  
**Voltages:** All Voltages

## Overview

Universal DanfossERC 113D Temperature Control (with Display) Kit contains all components potentially required for repairing a temperature control failure. Use of components will vary by repair.

The replacement control is preprogrammed for universal use and **may require changes to parameter settings based on model type and application.**

*Some component operations may change with new universal settings.*

**GDM/T-23DT/TCR/TMC/TUC REFRIGERATORS ONLY: No programming changes needed**

## Other Instructions

Follow the links/QR codes for digital copies of instructions associated with this kit.

112D Cover Page  
P#848289



113D Cover Page  
P#848246



Wiring  
P#848245



Mounting  
P#848284



112D Programming  
P#836831



113D Programming  
(this document)

## Before You Begin

If adjusting the set point to 41°F (5°C) or greater, place the provided hazardous food warning label below the serial label inside the appliance as shown in fig. 1. This label notifies users the appliance has been set to maintain a temperature above outside NSF perishable food storage guidelines.

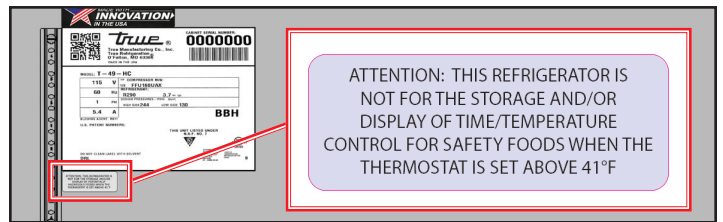


Fig. 1. Hazardous food warning label intended location.

## Installation

**TOAM-72 ONLY: Verify the third defrost probe's operation. If operating correctly reuse the probe. If operating incorrectly, please see "TOAM-72 Only — Third Defrost Probe" section (pg. 4).**



**CAUTION!** Electrical shock or burn hazard. Powering off an electronic control does Not remove power from all components. Unplug the unit or turn off the power supply before installation.



**CAUTION!** Sharp edges. Take care when installing, cleaning, servicing, and/or maintaining the equipment.

## Control Program Structure

Parameters are arranged in parameter groups according to their purpose (see fig. 2a). For example, all fan operations are found within the **FAn** parameter group (see fig. 2b).

For more information on navigating the control programming, please see "Adjust Parameters" section.



Parameter Group

Parameter

Parameter Setting

Fig. 2a. Control program organization.



Fig. 2b. Navigating the program structure to reach parameter setting **FAo**.

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Defrost / Back /  
Show °F or °C



Power /  
Okay



Set Point /  
Up Arrow



Set Point /  
Down Arrow



Compressor Running



Evaporator Fan Running



Appliance in Defrost





Alarm

## Unlock Control

1. Press any button to show the current lock status.



2. If the display shows **unL**, proceed to "Enter Password" section.  
If the display shows **Loc**, press **and hold** the back button  and the up arrow  until the display shows **unL**.

**NOTE: The control will lock after 60 seconds of inactivity.**



3. Proceed to "Change System of Measure," "Enter Password," or "Adjust the Set Point" sections.

## Change System of Measure

The display can show the temperature in either Fahrenheit or Celsius.

1. Unlock the display. See "Unlock Control" section.
2. Press the back button .



## Enter Password

**NOTE: After three (3) consecutive incorrect password entries, the control will lock for 15 minutes.**

1. Push **and hold** both the up  and down  arrows until the display shows **PAS**.



2. Wait for the display to show **000**.



3. Press the down arrow until the display shows **989**.



4. Press okay  to show **PS2**.

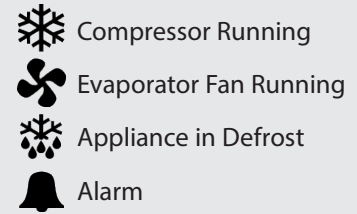
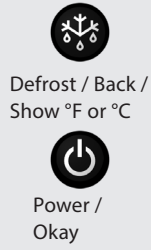


5. Wait for the display to show **tHE**.



6. Proceed to "Adjust Parameters" or "Adjust Set Point" sections.

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## Adjust Parameters

**⚠ See table 1 (next page) for required parameter adjustments before proceeding.**

The figures show how to, in the parameter group **FAn**, change the parameter **FcT** to the parameter setting **FAo** (also shown in fig. 3). This setting change may Not be required for your application.

**NOTE: Incorrect parameter settings can lead to improper appliance operation and unsafe product temperatures.**

1. Unlock the control. See "Unlock Control" section.  
**NOTE: The control will lock after 60 seconds of inactivity.**
2. Enter the password and enter the programming. See "Enter Password" section.



3. Press the up or down arrow as needed to show the desired parameter group.



4. Press okay to select the parameter group.



5. Press the up or down arrow as needed to show the desired parameter.



6. Press okay to select the parameter.

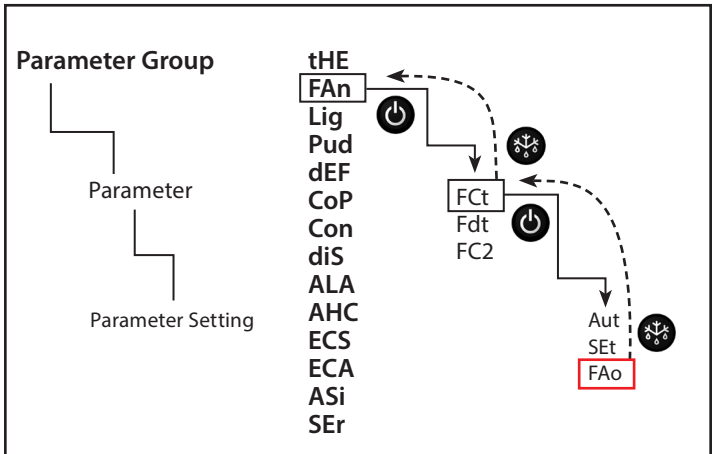


Fig. 3. Navigating the control program parameters and settings.

7. Press the up or down arrow as needed to show the desired parameter setting.



8. Press okay to select the parameter setting. The display will return to the selected parameter.



9. Press the back button to return to the selected parameter group. Repeat steps 3-8 as needed to adjust parameter settings per table 1 (next page).



10. Exit the programming.
  - Press the back button twice (x2) OR
  - Leave the control inactive for 30 seconds

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## Parameter Setting Adjustments

Table 1 shows how to alter the universal control program to fit your specific model and application.

Locate your model type, and then change the parameter settings to the values shown. For instructions on changing parameter settings, see "Adjust Parameters" section.

**\*FREEZER MODELS ONLY: Be sure to change duA before adjusting any other parameter setting.**

**i** After changing the programming, be sure to adjust the set point for the application per table 2.

## TOAM-72 ONLY — Third Defrost Probe

Verify the third defrost probe's operation. If operating correctly reuse the probe.

If operating incorrectly, remove a tooth (see fig. 4) from a provided defrost probe.

For an additional defrost probe, in the USA or Canada, please contact our parts department at 800-424-8783 or [PartsInquiries@TrueMfg.com](mailto:PartsInquiries@TrueMfg.com). For all other locations, please see the contact information (last page).

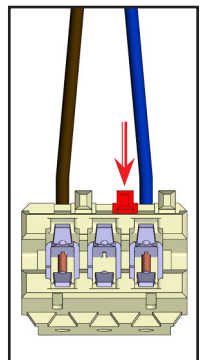


Fig. 4. Remove the center tooth.

Table 1. Required Parameter Setting Changes by Model

Model Type	THE				FAN				DEF								COP		ASI			
	SPr	dIF	duA*	Fct	dII	dAI	dIT	dAT	Ftd	doC	dEr	dE2	dt2	dSo	Cst	S3A	S4A	diC	o2C	o4C		
CPT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
FLM (Freezer) (1 Cond Unit)	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	
FLM (Freezer) (2 Cond Unit)	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	
GDM	-	-	du2	-	-	-	-	-	12°F (-11.1°C)	-	-10°F (-23.3°C)	-	-	-	-	-	-	-	-	-	-	
GDM (Refrigerator)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GDM (Wine)	-	-	-	FAo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
GDM (Freezer) (1 Cond Unit)	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	
GDM (Freezer) (2 Cond Units)	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	
GDM-LTF (1 Cond Unit)	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-40°F (-40°C)	-	-	-	-	-	-	-	-	-	-	
GDM-LTF (2 Cond Unit)	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-40°F (-40°C)	-	-	-	-	-	-	-	-	-	-	
Glass Chillers	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	
STA/STG/STR (SPEC Refrigerator)	-	-	-	-	120	-	-	-	-	-	5°F (-15°C)	-	-	-	-	-	-	-	-	-	-	
STA/STG/STR (SPEC Wine)	-	-	-	FAo	120	-	-	-	-	-	5°F (-15°C)	-	-	-	-	-	-	-	-	-	-	
STA/STG/STR (SPEC Freezer) (1 Cond Unit)	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	
STA/STG/STR (SPEC Freezer) (2 Cond Unit)	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	EUA	dCo	-	-	-	
T-Series (Refrigerator)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
T-Series (Freezer) (1 Cond Unit)	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	
T-Series (Freezer) (2 Cond Unit)	-	-	du2	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	



# Danfoss ERC113D Programming Instruction

**Table 1. Required Parameter Setting Changes by Model**

Model Type	Parameter Group	Parameter	THE			FAN			DEF										COP	ASi						
			SPr	dIF	duA*	FcI	dII	dAI	dIT	dAt	Ftd	dDC	dEt	dE2	dt2	dSo	CSt	S3A		S4A	dIC	o2C	o4C			
T-23DT (Refrigerator Section) (Freezer Section)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
			-	-	du2	-	-	-	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-
TBR		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TBR (Wine)		-	-	-	FAo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TCF		-	-	du2	-	-	-	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	-
TCGG		-	-	-	-	-	-	75	90	-	-	-	-	180	-13°F (-25°C)	-	-	-	-	-	-	-	-	-	-	-
TCR		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TDM		-	-	-	FAo	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TDM-CW		-	-	-	FAo	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TFP		-	3°F (1.7°C)	-	FAo	-	3	2	-	-	-	-	-	-	10°F (-12.2°C)	-	-	-	-	-	-	-	-	-	-	-
TGN (Refrigerator)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TGN (Refrigerator)		-	-	du2	-	-	-	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	-
THAC		-	-	-	FAo	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TMC		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOAM-30/36		-	-	-	FAo	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOAM-48		-	-	-	FAo	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TOAM-72		-	-	-	FAo	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TPP		-	3°F (1.7°C)	-	FAo	-	3	2	-	-	-	-	-	-	10°F (-12.2°C)	-	-	-	-	-	-	-	-	-	-	-
TRCB		-	-	-	FAo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TSU		-	3°F (1.7°C)	-	FAo	-	3	2	-	-	-	-	-	-	10°F (-12.2°C)	-	-	-	-	-	-	-	-	-	-	-
TUC (Refrigerator)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TUC (Wine)		-	-	-	FAo	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TUC (Freezer)		-	-	du2	-	-	-	-	-	-	-	-	0°F (-17.8°C)	-	-	-	-	-	-	-	-	-	-	-	-	-
TUFADA		1	-	du2	-	-	8	-	-	-	-	-	0°F (-17.8°C)	240	-	-	-	-	-	-	-	-	-	-	-	-
TURADA		1	-	-	-	-	8	-	-	-	-	-	-	240	9°F (-12.8°C)	-	-	-	-	-	-	-	-	-	-	-
TUWADA		1	-	-	FAo	-	8	-	-	-	-	-	-	240	9°F (-12.8°C)	-	-	-	-	-	-	-	-	-	-	-

Continue to next page



# Danfoss ERC113D Programming Instruction



Defrost / Back /  
Show °F or °C



Power /  
Okay



Set Point /  
Up Arrow



Set Point /  
Down Arrow



Compressor Running



Evaporator Fan Running



Appliance in Defrost



Alarm

## Adjust the Set Point (After Programming)

Changing the set point adjusts the appliance operation to keep optimal product temperature. See table 2 for factory-recommended temperature set point adjustments based on model.

**NOTE: Adjust the temperature set point after making programming adjustments.**

**NOTE: The best set point for your application may vary from the factory-recommended setting.**

1. Unlock the control. See "Unlock Control."

**NOTE: The control will lock after 60 seconds of inactivity.**

2. Press the up  or down  arrow to show the current setting.



3. Press the up or down arrow until the display shows the desired set point.



4. Leave the display inactive until it shows the current appliance temperature.



**Table 2. Factory-Recommended Temperature Set Points**

Model	Set Point
CPT	No further changes required
FLM (Freezer) (1 Cond Unit)	No further changes required
FLM (Freezer) (2 Cond Unit)	No further changes required
GDIM	18°F (-7.8°C)
GDM (Refrigerator)	No further changes required
GDM (Red Wine)	55°F (12.8°C)
GDM (White Wine)	45°F (7.2°C)
GDM (Freezer) (1 Cond Unit)	No further changes required
GDM (Freezer) (2 Cond Units)	No further changes required
GDM-LTF (1 Cond Unit)	-15°F (-26.1°C)
GDM-LTF (2 Cond Unit)	-15°F (-26.1°C)
Glass Chillers	4°F (-15.5°C)
STA/STG/STR (SPEC Refrigerator)	No further changes required
STA/STG/STR (SPEC Red Wine)	55°F (12.8°C)
STA/STG/STR (SPEC White Wine)	45°F (7.2°C)
STA/STG/STR (SPEC Freezer) (1 Cond Unit)	No further changes required
STA/STG/STR (SPEC Freezer) (2 Cond Unit)	No further changes required
T-Series (Refrigerator)	No further changes required
T-Series (Freezer) (1 Cond Unit)	No further changes required
T-Series (Freezer) (2 Cond Unit)	No further changes required
T-23DT	No further changes required
TBR	34°F (1.1°C)
TBR (Red Wine)	55°F (12.8°C)
TBR (White Wine)	45°F (7.2°C)
TCF	No further changes required
TCGG	No further changes required



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**Table 2. Factory-Recommended Temperature Set Points**

Model	Set Point
TCR	No further changes required
TDM	38°F (3.3°C)
TDM-CW	55°F (12.8°C)
TFP	34°F (1.1°C)
TGN	No further changes required
THAC	38°F (3.3°C)
TMC	No further changes required
TOAM	38°F (3.3°C)
TPP	34°F (1.1°C)
TRCB	No further changes required
TSSU	34°F (1.1°C)
TUC (Refrigerator)	No further changes required
TUC (Red Wine)	55°F (12.8°C)
TUC (White Wine)	45°F (7.2°C)
TUC (Freezer)	No further changes required
TUFADA	No further changes required
TURADA	No further changes required
TUWADA	55°F (12.8°C)

## Questions or Concerns

For more information, please contact our Technical Service team. See contact information below.

### Contact Us

#### North America – USA, Canada & Caribbean

**Warranty Phone:** +1 855 878 9277  
**Warranty Fax:** +1 636 980 8510  
**Warranty Email:** WarrantyInquiries@TrueMfg.com  
**Technical Phone:** +1 855 372 1368  
**Technical Email:** Service@TrueMfg.com  
 7:00am-6:00pm CST Monday-Friday;  
 8:00am-12:00pm Saturday

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