

## TRAULSEN TECHNICAL BULLETIN

#### PRODUCT SERVICE DEPARTMENT

FORT WORTH, TX 76137

# **DANFOSS CONTROL**

#### Introduction:

This technical bulletin is to inform the field of the function of the Danfoss electronic control. This control is found on Traulsen compact refrigerator, freezer, prep table, and milk cooler units.

## **Danfoss control parameters:**

**COMPACT FREEZER (ULT)** 

SET POINT RANGE: -10 to +5 F

SET POINT: -3.0 F

DEFROST TYPE: **ELECTRIC** 

DEFROST TERM: 35.06 F MIN DEF INTERVAL: 3.0 HOURS

MAX DEF INTERVAL: 4.0 HOURS

DEFROST TIME: 15 MIN MINIMUM

35 MIN MIAXIMUM

**COMPRESSOR ON:** 

FAN ON DELAY; 30 SEC

**COMPRESSOR OFF:** 

FAN OFF DELAY: 0.0 SEC

FAN ON: 5 SEC

FAN OFF: 55 SEC

DEFROST: EVAP FAN OFF

DRIP OFF TIME: 1 MIN

FAN DELAY AFTER DEF: 3 MIN **COMPACT REFRIGERATOR (UHT)** 

SET POINT RANGE: 29 to 37 F

SET POINT: 32.0 F

DEFROST TYPE: OFF CYCLE

DEFROST TERM: 39.9 F

MIN DEF INTERVAL: 2 HOURS

3 HOURS MAX DEF INTERVAL:

DEFROST TIME: 20 MIN MINIMUM

**45 MIN MAXIMUM** 

**COMPRESSOR ON:** 

FAN ON DELAY; **30 SEC** 

COMPRESSOR OFF:

FAN OFF DELAY: 45 SEC

FAN ON: 5 SEC

FAN OFF: 55 SEC

DEFROST: EVAP FAN ON

DRIP OFF TIME: 0.0 SEC

FAN DELAY AFTER DEF: 0.0 SEC

#### **MILK COOLER**

SET POINT RANGE: 30 to 38 F

SET POINT: 32.0 F

DEFROST TYPE: OFF CYCLE

DEFROST TERM: 39.9 F

DEFROST TIME:

MIN DEF INTERVAL: 2 HOURS

MAX DEF INTERVAL: 3 HOURS

20 MIN MINIMUM

**45 MIN MAXIMUM** 

**COMPRESSOR ON:** 

FAN ON DELAY; 30 SEC

**COMPRESSOR OFF:** 

FAN OFF DELAY: 45 SEC

FAN ON: 5 SEC

FAN OFF: 55 SEC

DEFROST: EVAP FAN ON

DRIP OFF TIME: 0.0 SEC

FAN DELAY AFTER DEF: 0.0 SEC PREP TABLE (UPT & UST)

SET POINT RANGE: 29 to 37 F

> 32.0 F SET POINT:

DEFROST TYPE: OFF CYCLE

DEFROST TERM: 39.9 F

MIN DEF INTERVAL: 2 HOURS

MAX DEF INTERVAL: 3 HOURS

> DEFROST TIME: **20 MIN MINIMUM**

**45 MIN MAXIMUM** 

**COMPRESSOR ON:** 

FAN ON DELAY; EVAP FAN ALWAYS ON

**COMPRESSOR OFF:** 

FAN OFF DELAY: EVAP FAN ALWAYS ON

FAN ON: EVAP FAN ALWAYS ON

FAN OFF: EVAP FAN ALWAYS ON

DEFROST: EVAP FAN ALWAYS ON

DRIP OFF TIME: EVAP FAN ALWAYS ON

FAN DELAY AFTER DEF: **EVAP FAN ALWAYS ON** 



## **DAFOSS SENSOR OHM VALUES**

Sensor	Temperature	Ohm value
Cabinet sensor (S1)	32 Degrees	16.00 Ω
Coil Sensor (S2)	32 Degrees	16.00 Ω
Spindle (S3)	N/A	30-4k Ω (slight tolerance)

Note: If the red light starts flashing on the Danfoss controller that means that there is a sensor failure.

## To start manual defrost:

- 1. Turn unit off and make sure the spindle is all the way in the left position.
- 2. Turn unit on and wait for the blower to come on.
- 3. Turn spindle all the way to the right position for 3 seconds (Mississippi).
- 4. Turn spindle all the way to the left position for 3 seconds (Mississippi).
- 5. Turn to the middle position and wait for unit to go into manual defrost.

### **Contact Traulsen Technical Service:**

If further assistance is needed feel free to contact Traulsen Technical Service at 800-825-8220 between the hours of 7:30am – 11:30am CST & 12:30pm – 4:30pm CST.