

Digital Thermostat Instruction Manual

Industrial Chillers for Liquids

CE

TX110



TABLE OF CONTENTS

General Instructions 3

Display 3

 View3

 Icons.....3

 Switching Between °C/°F 3

Keypad 3

 Key Combination3

 Quick Menu3

On-Off Cooling Control 3

On-Off Differential Cooling Control (Optional)..... 4

Changing the Setpoint 4

Stand-By Mode of the Machine..... 4

View Alarms on Display and Reset..... 4



GENERAL INSTRUCTIONS

This manual is an integral part of the "Use and Maintenance Manual C17000164" and should be kept with the machine for easy and quick reference.

DISPLAY

View

| Status | Top Screen (Red) | Bottom Screen (Yellow) |
|------------------------|------------------------------|------------------------|
| Adjustment | Adjustment probe temperature | Setpoint |
| Adjustment with alarms | Adjustment probe temperature | Alarm label/setpoint |
| Programming | Variable value | Variable label |

Icons

| Icon | Status | Meaning |
|-------|----------|---|
| °C | On | Degrees celsius |
| | On | Compressor active |
| | Flashing | Delay in compressor start or anti-oscillation delay in progress |
| | On | Unit on stand-by |
| | Flashing | Alarm currently active |
| | On | Resistance function |
| Flow! | Flashing | Flow alarm |
| Menu | On | Signals entry to the "Features Menu" |

AB



When the dot-shaped LED in position "A" is lit, the on-off differential cooling control is active.

When the dot-shaped LED in position "B" is lit, the high-precision cooling control $\pm 1^{\circ}\text{K}$ is active

Switching Between °C/°F

Enter programming using the key combination SET+▼ and navigate to the parameter "CF." Select °C or °F.

When °C is selected, the °C symbol will appear on the display.

When °F is selected, the °C symbol will remain off on the display.

KEYPAD

| | |
|------|---|
| SET | (SET) Allows you to change the setpoint value, access the parameter modification process, confirm the adjusted set value and reset the alarm if resettable (rSt). |
| ▲ | (▲) Allows you to view the configured probe values, scroll through parameter codes and increase the value. |
| ▼ | (▼) Allows you to view the configured probe values, scroll through parameter codes and decrease the value. |
| | (SNOWFLAKE) Turns the machine on and off into stand-by mode. |
| menu | (MENU) Allows you to enter/exit the alarms menu and exit the parameter modification process. |

Key Combination

| | |
|---------|--|
| SET + ▼ | Allows you to access parameter programming (press simultaneously for three seconds). |
| SET + ▲ | Allows you to access parameter programming. |
| ▲ + ▼ | Allows you to lock/unlock the keypad (press simultaneously for three seconds). |

Quick Menu

The quick menu allows you to view setpoint and probe values. Press the ▲ button to access the quick menu.

ON-OFF COOLING CONTROL

During the startup phase, if the value of the variable in red is higher than that displayed in the yellow string, the symbol flashes with a delay upon startup. Subsequently, when the symbol remains a solid light, the machine is in a cooling state.


ON-OFF DIFFERENTIAL COOLING CONTROL (OPTIONAL)

Differential cooling control is available upon request (optional). The thermostat is already set up for this function, you simply need to add the second probe (ambient probe), and change several parameters. This function involves the setpoint of the "dynamic" liquid, where the setpoint temperature of the liquid follows the temperature of the air with a differential set at 2°C lower.

CHANGING THE SETPOINT

- Press the SET key for three seconds
- The flashing setpoint appears
- To change the value, use the keys ▲ or ▼
- To save the new setpoint, press the SET key

STAND-BY MODE OF THE MACHINE

You can put the machine into stand-by mode by pressing the "SNOWFLAKE" key. The display will show the text "OFF" and the LED  will be lit. The cooling functionality is disabled in this mode.

To return to normal mode, press the "SNOWFLAKE" key again.

VIEW ALARMS ON DISPLAY AND RESET

- Press the MENU key.
- The top screen displays the code of the last alarm that was activated, the bottom screen displays its status: "no" if the alarm is still active or "rSt" if the alarm is not still active.
- Further pressing of the ▲ or ▼ key will display the codes for other alarms, if present.
- Press the SET key for three seconds to clear the displayed alarm.

Note: Alarms can only be cleared if the "rSt" icon is displayed. If the "no" icon is displayed, the alarm is still active and therefore cannot be reset.

| Msg. | Cause | Solution |
|-------|-------------------------------|---|
| "P1" | Faulty thermostat probe | <ul style="list-style-type: none"> Check probe connections Faulty probe to be replaced |
| "P2" | Faulty ambient probe | <ul style="list-style-type: none"> Check probe connections Faulty probe to be replaced |
| "P3" | Faulty probe three | <ul style="list-style-type: none"> Check probe connections Faulty probe to be replaced |
| "HA" | High liquid temperature alarm | Raise the high temperature alarm value "ALU" and, during cooling, check the operation of the various motors by measuring the power consumption. |
| "LA" | Low liquid temperature alarm | Call service center |
| "FLU" | Hydraulic circuit alarm | <ul style="list-style-type: none"> Check the hydraulic line safety circuit Check the operating status of the pump (automatic reset rSt) |
| "FLb" | Hydraulic circuit alarm | <ul style="list-style-type: none"> Check the hydraulic line safety circuit Check the operating status of the pump (manual reset rSt) |
| "GAS" | Coolant circuit alarm | <ul style="list-style-type: none"> Check the coolant line safety circuit Check that the air filter is clean, if present (automatic reset rSt) |
| "GAb" | Coolant circuit alarm | <ul style="list-style-type: none"> Check the coolant line safety circuit Check that the air filter is clean, if present (manual reset rSt) |
| "bPd" | Hot gas by-pass alarm | Call service center |

If the operating problem is not resolved, please contact your service center:

TEXA INDUSTRIES S.r.l.

AFTER-SALES SERVICE:

Strada Cà Bruciata, 5
46020 – Pegognaga (MN) – ITALY
Tel. +39 0376 554511
Fax +39 0376 558606
Email: texa.service@nVent.com
Website: www.nVent.com

Italian language: Original instructions.

North America

service@nVent.com
Tel. +1 763 422 2211

Follow the instructions for option one, then option two and option three.

Rest of the World

texa.service@nVent.com
Tel. +39 0376 554511



Our powerful portfolio of brands:

CADDY

ERICO

HOFFMAN

ILSCO

SCHROFF

TRACHTE