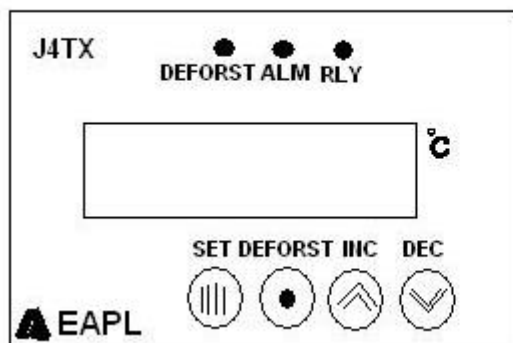




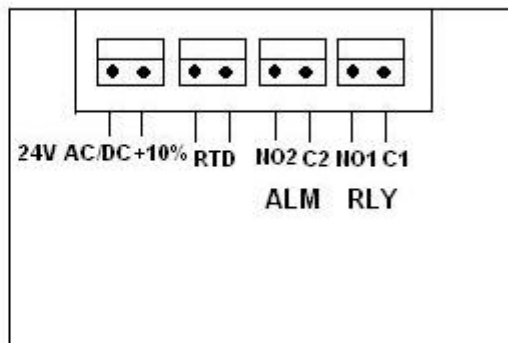
**OPERATING INSTRUCTIONS**  
**Model : J4TX (24V AC/DC & 240V AC)**

OPI No.: OPI/111  
PAGE : 01 of 03  
DATE : 19/01/2009

**FRONT PANEL LAY-OUT**



**BACK PANEL LAYOUT**



J4TX is especially for refrigeration, cold storage & any cooling system application at normal temperature and for Room temperature controlling and heating applications in ovens.

**Input:** PT-100

**Controlling Function:**

**Cooler Type:**

Relay output to drive the compressor if the temperature reaches set+hysteresis, compressor is ON & turned OFF again when the temperature reaches set point value.

**Heater Type:**

Load is ON for Process Value(PV) < Set Value(SV). Load will be OFF for PV>= SV. Load will be ON once again PV <= SV - Hysteresis value set.

**Fault indication of sensor:**

Through 0.56'' Red led display. " SF" on display and all relays are OFF.

**Defrost Function:**

Option for manual or automatic defrost.

**Programming:**

1. Press SET to enter into program mode.
2. Enter the password of 2 Digit code. Factory set Value is 01.
3. Press SET again.
4. If Password is matching with stored one, it will enter into parameter selection mode.
5. Otherwise goes back to run mode.

6. Select Parameters using INC or DEC keys.
7. Press SET again to program the value of the parameter selected.
8. Set Parameter value using INC or DEC keys. programming mode.
9. Press SET again to come back to run mode.

**Programming Parameters:**

Description	Parameter Display	Limit
Set Temperature	----- Prt	>=SPL
Hysteresis	----- HYS	1°C -25.0°C
Function	----- Fun	Cooler Type ----- FnC Heater Type ----- FnH
Alarm High ----- 100.0°C	ALH <i>(should be greater than Set temp)</i>	-99.9°C to 100.0°C
Alarm Low ----- 100.0°C	ALL <i>(should be less than Set temp)</i>	-99.9°C to 100.0°C
Alarm Duration	----- ALd	01 to 99 seconds
Defrost Frequency	----- dFI	00.01 to 99.59 hours
Defrost Duration	----- dFd	01 to 99 minutes
Defrost End Temperature	----- dEt <input type="checkbox"/> <i>(parameter kept for future expansion)</i>	
Minimum Set point Lock	----- SPL	-99.9 °C to 100.0°C
Change Password	----- Pd	00-99
Calibrate	----- CAL	-10.0°C to +10.0°C

- Press Defrost key to start manual Defrost operation, Press again to stop the same.
- RLY LED shall be ON when Control Relay is in ON condition.
- ALARM LED shall be ON when Alarm Relay is in ON condition.
- Manual disabling of Alarm through Decrement key. (Alarm LED indication remains ON).
- Defrost LED is ON, when defrost operation is in progress ALM & RLY LED is OFF.
- During RUN mode pressing of Increment key display SET Temperature.
- Output (Relay) activation delay during startup 15 seconds. Display shows EAPL during this period.

- Calibration option for end user is provided.
- Press 33 in case of password is lost.

Every 5 minutes defrosting Interval is saved. In case of power failure, elapsed time with maximum error of 5 minutes is retrieved.