## Traulsen & Co., Inc.



**Quality Refrigeration** 

# **OWNER'S MANUAL**

## Instructions for the installation, operation and maintenance of all Traulsen:

**RAC37 Air-Curtain Refrigerators** 

This Traulsen unit is built to our highest quality standards. We build our refrigerators, freezers and heated cabinets this way as a matter of pride. This philosophy has made Traulsen the leader in commercial refrigeration since 1938. We thank you for your choice and confidence in Traulsen equipment and we know you will receive many years of utility from this equipment.

All Traulsen units are placed on a permanent record file with the service department. In the event of any future questions you may have, please refer to the model and serial number found on the name tag affixed to the unit. Should you need service, however, call us on our toll free number, 800-825-8220 between 7:30 am and 4:30 pm CST, Monday thru Friday. It is our pleasure to help and assist you in every possible way.

INSTALLER COMPLETE THE FOLLOWING INFORMATION PRIOR TO UNIT INSTALLATION		
INITIAL START DATE:	SERIAL NO	
MODEL TYPE:		
COMPANY/INDIVIDUAL NAME:		
INSTALLER:		

FORM NUMBER TR35741 REV. 5/03

## **TABLE OF CONTENTS**

I. THE SERIAL TAG	Page 1	VI. ELECTRONIC CONTROLLER	
II. RECEIPT INSPECTION	Page 2	a-Control Overview	Page 3
III. INSTALLATION		b-Control Feature: Temp Recall	Page 3
a-Location	Page 2	c-Control Feature: ON/OFF	Page 3
b-Packaging	Page 2	d-Control Feature: On Light	Page 4
c-Clearance	Page 2	e-Control Feature: Cycle Light	Page 4
d-Wiring Diagram	Page 2	f-Control Feature: On Demand Defrost	Page 4
e-Cord & Plug	Page 2	g-Control Feature: Two-Stage Thermostat	Page 4
f-Power Supply	Page 2	H-Control Operating Instructions	Page 4
IV. INTENDED USE		VII. CARE & MAINTENANCE	
a-Overview	Page 2	a-Cleaning The Condenser	Page 5
b-Typical Operating Parameters	Page 2	b-Cleaning The Exterior	Page 5
c-Suggested Pan Sizing	Page 3	c-Cleaning The Interior	Page 5
d-Product Unloading	Page 3	VIII. OTHER	
V. PRODUCT FEATURES		a-Service Information	Page 5
a-Casters	Page 3	b-Spare Parts	Page 5
b-Grips & Handles	Page 3	c-Warranty Registration	Page 5
c-Microprocessor Control	Page 3	IX. TROUBLESHOOTING GUIDE	Page 6-7
d-On Demand Defrost	Page 3	X. WIRING DIAGRAM	Page 8
e-Condensate Evaporator	Page 3	XI. WARRANTY INFORMATION	Page 9
f-Tray Slides	Page 3	XII. INDEX	Page 10
g-Wrap Around Bumper	Page 3		
VI. OPERATION			
a-Air Curtain Operation Overview	Page 4		
b-Normal Temperature Ranges	Page 4		
c-Loading/Unloading The Unit	Page 4		
d-Recommendation Summary	Page 4		

FORT WORTH, TX.				
SERIAL VOLTS	MODEL Hz	РН		
TOTAL CURRENT MINIMUM CIRCUIT MAXIMUM OVERCU LIGHTS HEATERS	AN AN RRENT PROT W/	IPS IPS	AMPS	
REFRIGERANT DESIGN PRESSURE	E	TYPE HIGH	OZ LOW	
REFRIGERANT DESIGN PRESSURE	-	<b>TYPE</b> <b>HIGH</b> 70-60294-00 REV (A)	OZ LOW	

## I. THE SERIAL TAG

The serial tag is a permanently affixed sticker on which is recorded vital electrical and refrigeration data about your Traulsen product, as well as the model and serial number. This tag is located on the upper right interior side wall of all air curtain models.

#### **READING THE SERIAL TAG**

- Serial = The permanent ID# of your Traulsen
- Model = The model # of your Traulsen
- Volts = Voltage
- Hz = Cycle
- PH = Phase
- Total Current = Maximum amp draw
- Minimum Circuit = Minimum circuit required
- Lights = Light wattage
- Heaters = Heater amperage
- Refrigerant = Refrigerant type used
- Design Pressure = High & low side operating pressures and refrigerant charge
- Agency Labels = Designates agency listings

## **II. RECEIPT INSPECTION**

All Traulsen products are factory tested for performance and are free from defects when shipped. The utmost care has been taken in crating this product to protect against damage in transit. All interior fittings have been carefully secured to prevent damage.

You should carefully inspect your Traulsen unit for damage during delivery. If damage is detected, you should save all the crating materials and make note on the carrier's Bill Of Lading describing this. A freight claim should be filed immediately. If damage is subsequently noted during or immediately after installation, contact the respective carrier and file a freight claim. Under no condition may a damaged unit be returned to Traulsen & Co. without first obtaining written permission (return authorization).

## **III. INSTALLATION**

#### III. a - LOCATION:

Select a proper location for your Traulsen unit, away from extreme heat or cold. Allow enough clearance between the unit and the side wall so that the door (s) may open a minimum of  $90^{\circ}$ .

#### III. b - PACKAGING:

Traulsen Air Curtain units are shipped from the factory strapped to a sturdy wooden pallet and packaged in a durable cardboard container. The carton is attached to the wooden skid with the use of large staples. These should first be removed to avoid scratching the unit when lifting off the crate.

To remove the wooden pallet, first if at all possible, we suggest that the cabinet remain strapped to the pallet during all transportation to the point of final installation. The straps can then be removed with a wire cutter and the unit rolled off the skid. Avoid laying the unit on its front, side or back for removal of the pallet.

NOTE: Traulsen does not recommend laying the unit down on its front, side or back. However, if you must please be certain to allow the unit to remain in an upright position afterwards for 24 hours before plugging it in so that the compressor oils and refrigerant may settle.

#### III. c - CLEARANCE:

It is important for the proper operation and longevity of your Traulsen unit that it have adequate provisions for air supply to the compressor. Allow approximately 6-12" between the back grill of the unit and the wall for proper air flow.

#### III. d - WIRING DIAGRAM:

Refer to the wiring diagram for any service work performed on the unit. Should you require one, please contact Traulsen Service at (800) 825-8220, and provide the model and serial number of the unit involved.

## **III. INSTALLATION** (cont'd)

#### III. e - CORD & PLUG:

Traulsen Air Curtain models are supplied with a cord & plug attached. It is shipped coiled at the bottom of the cabinet, secured by a nylon strip. For your safety and protection, all units supplied with a cord and plug include a special three-prong grounding plug on the service cord. Select only a dedicated electrical outlet with grounding plug for power source.

NOTE: Do not under any circumstances, cut or remove the round grounding prong from the plug, or use an extension cord.

#### III. f- POWER SUPPLY:

The supply voltage should be checked prior to connection to be certain that proper voltage for the cabinet wiring is available (refer to the serial tag to determine correct unit voltage). Make connections in accordance with local electrical codes. Use qualified electricians.

Use of a separate, dedicated 20 amp circuit is required. Size wiring to handle indicated load and provide necessary overcurrent protector in circuit (see amperage requirements on the unit's serial tag).

## **IV. INTENDED USE**

#### IV. a - OVERVIEW:

The Air Curtain Refrigerator is more than just a refrigerator. When the door of the unit is closed, it operates as a force air refrigerator with a highly efficient refrigeration system that provides faster "pull down" and "recovery" times. When the door is opened, a series of blower fans create a "wall" of air and areas of pressure, localizing a pattern of air movement across the cabinet opening. This AIR CURTAIN seals itself around objects so that, in effect, the door is both "open" and "closed" at the same time.

For best results, the air curtain was designed for "low profile" food products typical of tray line/assembly line and flight kitchen operations.

#### IV. b - TYPICAL OPERATING PARAMETERS:

The "curtain" is capable of maintaining 45°F temperature or below for approximately 45 minutes. HOW-EVER, actual time your unit will run in this temperature zone depends on many factors, such as, room ambient temperature and humidity levels, the amount of time your unit was allowed to precondition the food(s), food temperatures when placed in the unit, type of food packaging, and profile of foods. It should also be noted that there is a lag time between the "ambient air" temperature in the cabinet and that of the actual product temperature. The food temperature differential can be 10 - 20 degrees F cooler than the temperature indicated by the temperature display.

## **IV. INTENDED USE (continued)**

#### IV. c - SUGGESTED PAN SIZING:

Traulsen has designed this unit to operate with either 18" x 26" or 12" x 20" pans. Generally, 12" x 20" pans block air flow which leads to reduced unit performance. While we strongly recommend the use of 18" x 26" rather than 12" x 20" pans, the latter may still be used. However, when using 12" x 20" pans these should be placed towards the top and bottom of the unit to reduce the total blockage of air flow.

#### IV. d - PRODUCT UNLOADING:

When unloading product from the Air Curtain refrogerator, we recommend that this be done from the top down.

## **V. PRODUCT FEATURES**

#### V. a - CASTERS:

6" high casters are supplied standard for Air-Curtain models. They are attached to 10-gauge stainless steel corner plate reinforcements/stress pads. These are shipped already installed on the unit for immediate use.

#### V. b - GRIPS & HANDLES:

For easy mobility, stainless steel recessed hand grips are provided on the left and right sides. In addition, a 1" welded tubular push/pull handle is attached to the rear of the cabinet.

#### V. c - ELECTRONIC CONTROLLER:

All Traulsen Air Curtain units manufactured after January 2003 include a 2-Stage electronic controller. Units manufactured prior to that date were provided with manual electromechanical controls

#### V. d - ON DEMAND DEFROST:

Traulsen Air-Curtain models are supplied with a momentary defrost cycle. It is located on the front control (see page 4), and by depressing the switch, the unit will momentarily disable the compressor, the coil and the fans. This "On-Demand Defrost" feature allows proper defrosting of the accumulated condensation. Condensate is removed through use of an electric condensate evaporator drain pan.

#### V. e - CONDENSATE EVAPORATOR:

During the "On-Demand Defrost" cycle or the "Off Cycle" of the compressor, the evaporator coil will defrost. The condensate from the evaporator coil flows from the top of the unit down a drain in the back to a condensate pan. Vapor escapes through the back grill. The vapor can sometimes be visible and should be considered a normal operating condition.

Proper attention should be given to defrosting your unit. Every "event" or time the unit is used with the door open, the coil will build-up ice. This reduces the effectiveness of the overall operation of the unit.

## V. PRODUCT FEATURES (cont'd)

#### V. f - TRAY SLIDES:

Ten (10) pairs of removable tray slides are provided standard at 4-1/2" spacing. Additional tray slides may also be purchased for a total of no more than 15 pairs at 3" spacing. Each tray slide can accommodate either one (1) 18"x 26" or one (1) 12" x 20" pan. The tray slides allow for individual pans to be pulled out 3/4 of their length without tipping. In addition, the side wall air ducts are designed with two (2) tabs, which act as a backstop, providing better air flow, which is important to maintaining proper temperatures throughout the cabinet.

#### V. g - WRAP-AROUND PERIMETER BUMPERS:

As the Air-Curtain refrigerator was designed to be mobile, a full perimeter rubber bumper guard is included to protect walls and doors during movement.

## **VI. ELECTRONIC CONTROLLER**

#### VI. a - <u>CONTROL OVERVIEW</u>:

The Traulsen Air Curtain models are supplied standard with an easy to use microprocessor control. It features several important user functions, greatly enhancing the overall utility of the cabinet.

#### VI. b - CONTROL FEATURE - TEMP RECALL:

This feature allows the operator to display either the actual internal cabinet air temperature (default), or the desired "Set-Point" temperature (alternate).

ACTUAL: The factory default setting shows the actual internal cabinet temperature and acts as a digital thermometer. A momentary touch of the TEMP RECALL button will recall the original dial setting. The display will then automatically return the displaying the actual internal cabinet temperature.

SET-POINT: To display the set-point temperature instead of the actual internal cabinet temperature, press and hold the TEMP RECALL button for five (5) seconds. The fourth digit on the display will flash either "S" (SET) or "A" (ACTUAL) to indicate which mode is active. To switch back again, repeat this step holding the TEMP RECALL button for five (5) seconds.

#### VI. c - CONTROL FEATURE - ON/OFF:

This button has two uses, the first is to turn the unit ON and OFF. The second allows for the temperature display to be changed to indicate either degrees Fahrenheit or degrees Celsius.

To change between temperature scales, press and hold the ON/OFF button for five (5) seconds. The display will then switch from "dgF" to "dgC". Repeat this step to change the temperature scale again.

## VI. ELECTRONIC CONTROLLER (cont'd)



## **Control Button Functions**



**DECREASE TEMPERATURE** Press To Decrease Operating Temperature



INCREASE TEMPERATURE Press To Increase Operating Temperature



TEMP RECALL Press To Display Either Actual or Set-Point Temperature



#### ON/OFF

Serves Two Functions, Turns Cabinet ON or OFF And Also Allows You To Change The Temperature Scale From Degrees Farenheit To Celsius As Required.



ON DEMAND DEFROST ON DEMAND DEFROST Press To Initiate On-Demand De-

frost - OR - over-ride a defrost cycle already in progress

VI. d - CONTROL FEATURE - ON LIGHT:

When illuminated the ON light indicates that the power is ON.

#### VI. e - CONTROL FEATURE - CYCLE LIGHT:

When illuminated the CYCLE light indicates that the cabinet is cooling down to the desired SET-POINT temperature. When the refrigeration system is ON, this light will remain illuminated until the cabinet has reached the SET-POINT temperature, and will go OFF at that time.

#### VI. f - CONTROL FEATURE - ON DEMAND DEFROST:

Proper attention should be given to defrosting your unit. Every "event" or time the unit is used with the door open, the coil will build-up ice. This reduces the effectiveness of the overall operation of the unit.

To prevent the build-up of ice on the coil, Traulsen has included an "On-Demand" defrost feature. To initiate an on-demand defrost, simply press the ON-DEMAND DEFROST button. Use this feature after every use. VI. g - <u>CONTROL FEATURE - 2-STAGE THERMOSTAT</u>: A 2-Stage thermostat is provided standard with all Air Curtain units manufactured with an electronic controller (see section VI. a). This allows the user to choose from two operating modes, 1) Standard Operating Mode of 37°F, or 2) Lo-Temp Operting Mode of 32°F.

The latter provides you with the added flexibility of being able to pre-chill products such as milk and juices.

- VI. h CONTROL OPERATING INSTRUCTIONS:
- Pre-chill empty cabinet with door closes to 33°F to 35°F (1°C to 2°C).
- 2) Load cabinet from bottom to top, push trays to rear of wall.
- After loading, close cabinet door and allow inside temperature to re-stabilize between 33°F to 35°F (1°C to 2°C).
- 4) Unload cabinet from top to bottom.

## VII. CARE & MAINTENANCE

## **VIII. OTHER**

#### VII. a - CLEANING THE CONDENSER:

The most important thing you can do to insure a long, reliable service life for your Traulsen is to regularly clean the condenser coil. The condensing unit requires regularly scheduled cleaning to keep the finned condenser clean of lint and dust accummulation. Keeping the condenser clean allows the cabinet to operate more efficiently and use less energy.

To clean the condenser, first disconnect electrical power to the cabinet and remove the front louver assembly. To remove this, remove the four (4) Phillips head screws located on both sides at the top and bottom of the louver assembly. Once the screws are removed, the panel can be removed allowing full access to the front facing condenser. Vacuum or brush any dirt, lint or dust from the finned condenser coil, the compressor and other cooling system parts. If significant dirt is clogging the condenser fins, use compressed air to blow this clear. Care should be taken not to bend any of the condenser fins, as this will reduce performance and compressor life.

Replace louver assembly and the four (4) Phillips head screws which hold it in place.

#### VII. b - CLEANING THE EXTERIOR:

Exterior stainless steel should be cleaned with warm water, mild soap and a soft cloth. Apply with a dampened cloth and wipe in the direction of the metal grain.

Avoid the use of strong detergents and gritty, abrasive cleaners as they may tend to mar and scratch the surface. Do NOT use cleansers containing chlorine, this may promote corrosion of the stainless steel.

Care should also be taken to avoid splashing the unit with water containing chlorinated cleansers, when mopping the floor around the unit.

For stubborn odor spills, use baking soda and water (mixed to a 1 TBSP baking soda to 1 pint water ratio).

#### VII. c - CLEANING THE INTERIOR:

For cleaning stainless steel interiors, the use of baking soda as described in section "VII. b" is recommended. Use on breaker strips as well as door gaskets. All interior fittings are removable without tools to facilitate cleaning.

WARNING: DISCONNECT ELECTRICAL POWER SUPPLY BEFORE CLEANING ANY PARTS OF THE UNIT.

#### VIII. a - SERVICE INFORMATION:

Before calling for service, please check the following:

Is the electrical cord plugged in?
Is the fuse OK or circuit breaker on?
Is the ON/OFF switch in the ON position?
Is the coil defrosted? Push the "momentary defrost" button on the control panel. Allow- ing proper defrosting of the coil will allow proper perfomrance in capacity.

If after checking the above items and the unit is still not operating properly, please contact an authorized Traulsen service agent. A complete list of authorized service agents was provided along with your Traulsen unit. If you cannot locate this, you may also obtain the name of a service agent from the Tech Service page of our website: www.traulsen.com.

If service is not satisfactory, please contact our inhouse service department at:

> Traulsen & Co., Inc. 4401 Blue Mound Road Fort Worth, TX 76106 (800) 825-8220

Traulsen & Co., Inc. reserves the right to change specifications or discontinue models without notice.

#### VIII. b - SPARE PARTS:

Spare or replacement parts may be obtained through a parts supplier or one of our authorized service agents. A complete list of authorized service agents accompanies this manual and is also posted on our company's official website @ www.traulsen.com.

#### VIII. c - WARRANTY REGISTRATION:

For your convenience, the warranties on your new Traulsen unit may be registered with us by one of two methods. Completing the enclosed warranty card (shipped with the unit), or by filling out the on-line warranty registration form located on the Technical Service page of our website (www.traulsen.com).

## **IX. TROUBLESHOOTING GUIDE**

#### **PROBLEM**

- 1. Condensing unit fails to start no hum.
- 2. Condensing unit fails to start hums but trips on overload protector.

3. Condensing unit starts, but fails to switch off of "start" winding.

4. Condensing unit starts and runs, but short cycles on overload protector.

### POSSIBLE CAUSE/REMEDY

- 1. Line Disconnected Reconnect
- 2. Fuse Replace Fuse
- 3. Overload Protection Determine Reason & Correct, Replace If Necessary
- 1. Improperly Wired Check Wiring Against Diagram
- 2. Low Voltage Determine Reason & Correct
- 3. Starting Capacitor Defective Determine Reason & Replace
- 4. Relay Not Closing Determine Reason & Correct, Replace If Necessary
- 5. Compressor Motor Has Winding Open Or Shorted Replace Compressor
- 6. Internal Mechanical Trouble In Compressor Replace Compressor
- 1. Improperly Wired Check Wiring Against Diagram
- 2. Low Voltage Determine Reason & Correct
- 3. Relay Failing To Open Determine Reason & Correct, Replace If Necessary
- 4. Run Capacitor Defective Determine Reason & Replace
- 5. Excessively High Discharge Pressure Check Disharge Shut-Off Valve, Or Insufficient Cooling On Condenser
- 6. Compressor Motor Has Winding Open Or Shorted Replace Compressor
- 7. Internal Mechanical Trouble In Compressor Replace Compressor
- 1. Additional Current Passing Through Overload Protector -Check Wiring Diagram. Check For Added Fan Motors, Pumps, etc., Connected To Wrong Side Of Protector
- 2. Low Voltage To Unit (or unbalanced if three phase) Determine Reason & Correct
- 3. Overload Protector Defective Check Current Replace Protector
- 4. Run Capacitor Defective Determine Reason & Replace
- Excessive Discharge Pressure Check Ventilation, Restrictions In Cooling Medium, Restrictions in Refrigeration System
- 6. Suction Pressure Too High Check For Possibility Of Misapplication. Use Stronger Unit
- 7. Compressor Too Hot (return gas) Check Refrigerant Charge (fix leak) Add If Necessary
- 8. Compressor Motor Has Winding Shorted Replace Compressor
- 5. Condensing unit runs but short cycles on... 1. Overload Protect
  - 1. Overload Protector See #4 Above
  - Thermostat Differential Set Too Close, Widen
    High Pressure "Cut-Out" Due To:

     a) Insufficient Air or Water Supply Check Air or Water
    - Supply To Condenser, Correct b) Overcharge - Reduce Refrigerant Charge
    - c) Air In System Purge
  - 4. Low Pressure "Cut-Out" Due To:
    - a) Liquid Line Solenoid Leaking Replac e
    - b) Compressor Valve Leak Replace
    - c) Undercharge Fix Leak, Add Refrigerant
    - d) Restriction In Expansion Device Replace Device

## IX. TROUBLESHOOTING GUIDE (cont'd)

#### PROBLEM

6. Condensing unit operates for prolonged periods or continuously.

## POSSIBLE CAUSE/REMEDY

- 1. Shortage Of Refrigerant Fix Leak, Add Charge
- 2. Control Contacts Stock or Frozen Closed Clean Contacts or Replace Control
- 3. Excessive Heat Load Placed Into Cabinet Allow Unit Sufficient Time For Removal Of Latent Heat
- 4. Prolonged or Too Frequent Door Openings Plan or Organize Schedule To Correct Condition
- 5. Evaporator Coil Iced Defrost
- 6. Restriction In Refrigeration System Determine Locations & Remove
- 7. Dirty Condenser Clean Condenser
- 8. Filter Dirty Clean or Replace
- 1. Relay Contacts Not Opening Properly Clean Contacts or Replace Relay If Necessary
- 2. Prolonged Operation On Start Cycle Due To:
  - a) Low Voltage To Unit Determine Reason & Correct b) Improper Relay - Replace
  - c) Starting Load Too High Correct By Using Pump Down Arrangement If Necessary
- Excessive Short Cycling Determine Reason For Short Cycling (see #5 above) And Correct
- 4. Improper Capacitor Determine Correct Size
- 1. Improper Capacitor Determine Correct Size & Replace
- Excessively High Line Voltage (110% of rated max) -Determine Reason & Correct
- 1. Incorrect Relay Check & Replace
- 2. Incorrect Mounting Angle Remount Relay In Correct Position
- 3. Line Voltage Too High or Too Low Determine Reason & Correct
- Excessive Short Cycling Determine Reason (see #5 above) & Correct
- 5. Relay Being Influenced By Loose Vibrating Mounting -Remount Rigidly
- 6. Incorrect Run Capacitor Replace With Proper Capacitor
- 1. Control Setting Too High Reset Control
- 2. Inadequate Air Circulation Rearrange Product Load To Improve Air Circulation
- 1. Overcharge of refrigerant Correct Charge
- 2. Evaporator Fan Not Running Determine Reason & Correct
- 1. Restriction In Dehydrator or Strainer Replace Part
- Liquid Shut-Off (king valve) Partially Closed Open Valve Fully
- 1. Loose Parts or Mounting Find & Tighten
- 2. Tubing Rattle Reform To Free Of Contact
- 3. Bent Fan Blade Causing Vibration Replace Blade
- 4. Fan Motor Bearing Worn Replace Motor

7. Start capacitor open or shorted or blown.

- 8. Run capacitor open, shorted or blown.
- 9. Relay defective or burned out.

10. Product zone temperature too high.

11. Suction line frosted or sweating.

12. Liquid line frosted or sweating.

13. Noisy condensing unit.



## XI. WARRANTY INFORMATION

### STANDARD DOMESTIC WARRANTY

TRAULSEN & CO., INC. warrants new equipment to the original purchaser, when installed within the United States against defective material and workmanship for one (1) year from the date of original installation. Under this warranty, TRAULSEN & CO., INC. will repair or replace, at its option, including service and labor, all parts found to be defective and subject to this warranty. The compressor part is warranted for an additional four (4) years. During this period TRAULSEN & CO., INC. will supply replacement compressor(s) if deemed defective, however, all installation, recharging and repair costs will remain the responsibility of the owner.

This warranty does not apply to damage resulting from fire, water, burglary, accident, abuse, misuse, transit, acts of God, attempted repairs, improper installation by unauthorized persons, and will not apply to food loss.

THERE ARE NO ORAL, STATUTORY OR IMPLIED WARRANTIES APPLICABLE TO TRAULSEN, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. TRAULSEN SHALL HAVE NO OBLIGATION OR LIABIL-ITY FOR CONSEQUENTIAL OR SPECIAL DAMAGES, GROWING OUT OF OR WITH RESPECT TO THE EQUIPMENT OR ITS SALE, OPERATION OR USE, AND TRAULSEN NEITHER ASSUMES NOR AUTHORIZES ANYONE ELSE TO ASSUME FOR IT ANY OBLIGATION OR LIABILITY IN CONNECTION WITH THE EQUIPMENT OR ITS SALE, OPERA-TION OR USE OTHER THAN AS STATED HEREIN.

## INTERNATIONAL COMMERCIAL WARRANTY

(for Canadian warranties see domestic US warranty)

**TRAULSEN & CO., INC.** warrants to the original purchaser the Refrigeration Equipment manufactured and sold by it to be free from defects in material and workmanship under normal use and service for a period of one (1) year from date of shipment. Under this warranty, **TRAULSEN & CO., INC.** will reimburse the purchaser for the replacement of any part of said equipment (excluding dryers & refrigerant gas) which then proves to be defective. This warranty is void if said equipment or any part thereof has been subject to misuse, damage in transit, accident, negligence or alteration.

TRAULSEN'S standard warranty does not apply to Export Sales. Rather, for a period of one (1) year from date of original installation not to exceed Fifteen (15) months from date of shipment from factory, TRAULSEN:

will replace, F.O.B. factory, any defective parts normally subject to warranty.

will not cover the cost of packing, freight or labor such costs being the sole responsibility of the dealer.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES EITHER EXPRESSED OR IMPLIED AND CONSTITUTES TRAULSEN'S FULL OBLIGATION AND LIABILITY. WARRANTIES NOT AVAILABLE ON REMOTE MODELS.

## **XII. INDEX**

<b>A</b> Air-Flow, Proper	2	<b>P</b> Packaging	2
B		Pallet, Wooden Pan Sizing	2 3
Bill Of Lading (carrrier's) Bumper, Perimeter	2 3	Power Supply	2
<u>C</u>		<u>R</u> Recovery Times	2
Casters Cleaning	3 3	Refrigerant Return Authorization	2 2
Clearance	2	Return Authorization	2
Compressor Oils	2	<u>S</u>	
Condensate Evaporator	3	Serial Tag	1
Cord & Plug Condenser Clean	2 7	Set-Point Feature	3 5
Clearance	2	Spare Parts Straps, Shipment	2
Cycle Light	4		-
		I	
D		Temp Recall Feature	3-4
Defrost	3	Temperature Control	3
Defrost, Manual On-Demand	3 2	Thermometer, Digital	2 4
Digital Thermometer	2	Thermostat, Two-Stage Tray Slides	4
E		Troubleshooting	6-7
 Electronic Controller	3-4	3	
_		U	
<u>E</u>	2	Unloading, Product	3-4
Freight Damage	2	V	
G		Ŧ	
Grips, Recessed Side	3	<u>w</u>	
		Warranty	5
<u>H</u> Handle, Tubular	2	Warranty, Registration	5 2/8
Handle, Tubulai	3	Wiring Diagram Wrap Around Bumper	2/0 3
l		Wrap Around Bumper	0
- J		X	
		Y	
K		<u>Z</u>	
L		_	
Loading, Product	4		
м			
Microprocessor Control	3-4		
N			
<u>o</u>			
On-Demand Defrost	3		
ON/OFF Feature	3		
Operating Paramaters	2		
Overcurrent Protector	2		

#### HOURS OF OPERATION: Monday thru Eriday 7:30 am 4:30 r

Monday thru Friday 7:30 am - 4:30 pm CST



Traulsen & Co., Inc. 4401 Blue Mound Road Fort Worth, TX 76106 Phone: (800) 825-8220 Fax-Svce: (817) 740-6757 Website: www.traulsen.com