Quality Refrigeration

OWNER'S MANUAL

Instructions for the installation, operation
and maintenance of Traulsen:

RMC Milk Cooler

RMC34, RMC49 & RMC58 Models

* For equipment produced after 10-2020 only

This Traulsen unit is built to our highest quality standards. We build our refrigerators and freezers 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, call us on our toll free number, 800-825-8220 between 7:30 am - 4:30 pm CST, Monday thru Friday. You may also log onto www.traulsen.com for further information. 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 TR35944 (REV. 10-01-20) P/N 375-60324-00

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I. THE SERIAL TAG

I. a - SERIAL TAG & LOCATION

The serial tag is a permanently affixed label 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 in the left interior compartment on all standard milk cooler models.

I. b - READING THE SERIAL TAG

- Model = The model # of your Traulsen unit
- (S/N) Serial Number = The permanent ID# of your Traulsen unit
- Refrigerant SYS1= System 1 Refrigerant type used and refrigerant charge
- Design Pressure= System 1 High and Low Pressure
- Refrigerant SYS2= System 2 Refrigerant type used and refrigerant charge
- Design Pressure= System 2 High and Low Pressure
- Volts = Voltage
- Hz = Cycle
- Total Current = Maximum amp draw
- Min Circuit Amps = Minimum circuit ampacity
- Agency Labels = Designates agency listings

  This unit is listed to UL 471, CSA 120 and NSF 7 by an approved NRTL.

  Consult the factory or unit data plate for approval information.
- Components = Component Ratings

Traulsen

4401 Blue Mound Rd.
Ft. Worth, TX 76106
800-825-8220

MODEL: MODELO: MODELE:	
S/N:	

SCAN FOR SERVICE INFO

REFRIGERANT / REFRIGERANTE / RÉFRIGÉRANT	
SYS1 (REFM):	
Hi Press. (PRESH):	
Lo Press. (PRESL):	
SYS2 (REFA):	
Hi Press. (PRESH):	
Lo Press. (PRESL):	

Input Power (ELIN) - FOR INDOOR USE ONLY

(Symbol 1) (Alt Safety / Other 1)	(Symbol 2) (Alt. San / Other 2)	(Symbol 3) (Alt. En. / Other 3)	(Symbol 4) (WEEE)
(Symbol 5) (Safety)	(Symbol 6) (Sanitation)	(Symbol 7) (Energy)	(Symbol 8) (Customer QR Code / Other 4)

Device/Part Number: PartNum	(UL/NSF Notes)

COMPONENTS / COMPOSANTS / COMPONENTES			
COMP AMPS:		EVAP FAN AMPS:	
COND FAN AMPS:		LIGHT WATTS:	
DEF HTR AMPS:		CTRL AMPS:	
DOOR HTR AMPS:		MIN AMPS:	
MAX AMPS:			

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II. RECEIPT INSPECTION

II. a - 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.

You should carefully inspect your 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 the damage. A freight claim should be filed immediately. If damage is subsequently noted during or immediately after installation, contact our customer care team to file a freight claim. There is a five(5) day limit to file freight damage with the carrier. Under no condition may a damaged unit be returned to Traulsen without first obtaining written permission (return authorization). You may contact Hobart/Traulsen customer care at 800-333-7447 to request a return or file a claim.

III. INSTALLATION

III. a - LOCATION

Select a proper location for your unit, away from extreme heat or cold.

III. b - PACKAGING

Your Traulsen unit is shipped from the factory bolted to a sturdy wooden pallet in stretch wrapped material.

Most exterior stainless steel surfaces have a protective vinyl covering to prevent scratching during manufactur- ing, shipping and installation. After the unit is installed in place of application peel, remove and discard the covering from all surfaces.

To remove the wooden pallet, first if at all possible, we suggest that the cabinet remain bolted to the pallet dur- ing all transportation to the point of final installation. The bolts can then be removed with a 1/2" socket wrench. Avoid laying the unit on its back for removal of the pallet.

NOTE: Traulsen does not recommend laying the unit on its back. If you must, please allow the unit to remain in an upright position for 24 hours before plugging it in so that the compressor oils and refrigerant may settle.

III. c - INSTALLING LEGS OR CASTERS

Casters are installed at the factory but will require adjust- ment upon installation.

To adjust the legs or casters, loosen the two bolts and move leg or caster to desired location, spacing between leg or caster not to exceed 48 inches. Leg or caster on each end of the unit can not exceed 8 inches from the end of the cabinet.

III. INSTALLATION (continued)

III. c - INSTALLING LEGS OR CASTERS (cont'd)

Fig. 1

III. d - CORD & PLUG:

All self-contained models are shipped standard with a NEMA 5-15P plug and 9 foot cord . Select only a dedicated electrical outlet 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. e - 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, see page 1). Make connections in accordance with local electrical codes. Use qualified electricians.

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

IV. OPERATION

IV. a - TOP DOOR LATCH

To adjust the latch on the top door turn the safety screw on each side clockwise to tighten and counter-clockwise to loosen.

Fig. 2

IV. b - OPERATION DISPLAY INDICATORS

Milk Coolers do not require manual defrosting. However, manual defrost option is available on the control, if required.

During normal operation, the display shows either the temperature measured or one of the following indications:

dEF	Defrost in progress
oFF	Controller in stand-by
cL	Condenser clean warning
do	Door open alarm
E1	Probe T1 failure
E2	Probe T2 failure
E3	Probe T3 failure

IV. c - MILK COOLER OPERATION

During normal operation, a milk cooler continuously circulates above-freezing cabinet air through the evaporator coil. An Off-Cycle defrost occurs every 8 hours for a maximum length of 50 minutes to melt any frost which may accumulate on the coil during the compressor "ON" cycle. With standard holding milk coolers, high relative humidity is also maintained to prevent dehydration of stored product.

IV. d - REFRIGERATING PRODUCT

Milk Cooler models will satisfactorily refrigerate an assorted load of food items. Allow space between articles to permit free air circulation. Do not overload at any one time with warm food products and expect immediate results. A certain amount of time is required to remove heat from items before operating temperatures can be attained. The system is designed for storage of refrigerated product.

Opening the door will increase the temperature in the cabinet and will require a certain amount of time to recover. Also, after peak service periods or after warm product is loaded, the milk cooler will require a certain amount of time for the temperature to return to the normal operating range.

V. CARE AND MAINTENANCE

V. a - CLEANING THE CONDENSER/FILTER

The most important thing you can do to insure a long, reliable service life for your Traulsen is to regularly clean the condenser coil and or filter.

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

To clean the condenser/filter, first disconnect electrical power to the cabinet and remove the system side cover.

Proceed to vacuum or brush any dirt, lint or dust from the finned condenser coil/filter, the compressor and other cooling system parts. If significant dirt is clogging the condenser fins or filter, use compressed air to blow this clear. To replace the system side cover reverse the process.

V. b - REPLACING THE DOOR GASKETS

To remove the gasket to be replaced, grasp it firmly by one corner and pull it out. Before attempting to install a new gasket, both the unit and the gasket itself must be at room temperature. Insert the four corners first by using a rubber mallet (or hammer with a block of wood).

After the corners are properly inserted, work your way towards the center from both ends by gently hitting with a mallet until the gasket is completely seated in place (see figure below for proper gasket placement).

NOTE: The gasket may appear too large, but if it is installed as indicated above it will slip into place.

Top Door Gasket

Front Door Gasket

Fig. 3

NOTE: System gasket attached with screw.

V. CARE AND MAINTENANCE (continued)

V. c - CLEANING THE CABINET SURFACES

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

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, such as bleach, 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 or spills, use baking soda and water (mixed to a 1 tbsp baking soda to 1 pint water ratio).

A stainless steel polish is recommended for shining of unit

The unit is equipped with a drain for cleaning the inside of the unit.

VI. WIRING DIAGRAM

VI. a - WIRING DIAGRAM

NOTE: Refer to the wiring diagram below for any service work performed by a qualified technician.

VII. CONTROL BASICS

Your new Milk Cooler is equipped with a digital control, which precisely regulates operation. It is supplied from the factory completely ready for use and is located next to the refrigeration system underneath the cover.

VII. a - INFORMATION MENU

The information available in this menu is:

t1	Instant probe 1 temperature
t2 *	Instant probe 2 temperature
cnd **	Compressor working weeks

* displayed only if enabled (see Configuration Parameters)
** displayed only if ACC > 0

Access to menu and information displayed:

- Press and immediately release button i.
- With button ▼ or ▲ select the data to be displayed.
- Press button i to display value.
- To exit from the menu, press button ✖ or wait for 10 seconds.

Initiate Stand-By:
Keeping the button ⏻ pressed for 3 seconds allows the controller to be put on a standby or output control to be resumed (with **SB**=YES only).

Locking the Keypad:
The keypad lock avoids undesired, potentially dangerous operations, which might be attempted when the controller is operating in a public place. In the INFO menu, set parameter **LOC** = YES to inhibit all functions of the buttons. To resume normal operation of keypad, adjust setting so that **LOC** = NO.

VII. b - ADJUSTING CABINET SETPOINT

Setpoint display and modification:

- Press button i for atleast a half second to display the setpoint value.
- While keeping the i button pressed, use button ▼ or ▲ to set the desired value (adjustment is within the minimum **SPL** and the maximum **SPH** limit).
- When button i is released, the new value is stored.

VII. c - INITIATING A DEFROST

Automatic defrost:
Defrost starts automatically as soon as the time set with parameter **DFT** has elapsed.

- Timed defrost: With **DFM** = TIM defrosts take place at regular intervals when the timer reaches the value of **DFT**. For example, with **DFM** = TIM and **DFT** = 36, a defrost will take place every 6 hours.
- Optimized defrost: With **DFM** = FRO the timer is only increased when the conditions occur for frost to form on the evaporator, until the time set with parameter **DFT** is matched. If the evaporator works at 0°F, defrost frequency depends on the thermal load and climatic conditions. With setpoints much lower than 0°F, defrost frequency mainly depends on the milk cooler operating time.
- Defrost time count backup: At the power-up, if **DFB** = YES, the defrost timer resumes the time count from where it was left off before the power interruption. Vice versa, with **DFB** = NO, the time count re-starts from 0. In stand-by, the accumulated time count is frozen.

Manual or remote defrost start:
It's possible to manually start a defrost, by pressing button ❄ for 2 seconds.
Defrost type. Once defrost has started, Compressor and Defrost outputs are controlled according to parameter **DTY**. If **FID** = YES, the evaporator fans are active during defrost.
Defrost termination. The actual defrost duration is influenced by a series of parameters.

- Time termination: **T2** = NO and **T3** different from 2EU: the evaporator temperature is not monitored and defrost will last as long as time **DTO**.
- Temperature monitoring of one evaporator: **T2** = YES and **T3** different from 2EU. In this case, if the sensor **T2** measures the temperature **DLI** before the time **DTO** elapses, defrost will be terminated in advance.

VII. CONTROL BASICS (continued)

VII. c - INITIATING A DEFROST (cont'd)

Resuming thermostatic cycle:

When defrost is over, if **DRN** is greater than 0, all outputs will remain off for **DRN** minutes, in order for the ice to melt completely and the resulting water to drain. Moreover, if probe **T2** is active (**T2** = YES), the fans will re-start when the evaporator gets to a temperature lower than **FDD**; Vice versa, if probe **T2** is not active (**T2** = NO) or after defrost has come to an end, such condition does not occur by end of the time **FTO**, after **FTO** minutes have elapsed the fans will be switched on anyway.

Caution: if **DFM** = NON or **C-H** = HEA all defrost functions are inhibited; if **DFT** = 0, automatic defrost functions are excluded.

VII. d - CONFIGURATION PARAMETERS

Parameter Configuration:

- To get access to the parameter configuration menu, press button ⏻ and i for 5 seconds.
- With button ▼ or ▲ select the parameter to be modified.
- Press button i to display the value.
- By keeping button i pressed, use button ▼ or ▲ to set the desired value.
- When button i is released, the newly programmed value is stored and the following parameter is displayed.
- To exit from the setup, press button ✖ or wait for 30 seconds.

VII. e - TECHNICAL DATA

Power supply

TRL-002....W 100-240Vac ±10%, 50/60Hz, 3W

Relay output max loads (240Vac)

	TRL-002..S/T..-.	TRL-002..Q/R..-.
Compressor	16A resistive 12 FLA 48 RLA	12A resistive 12 FLA 48 RLA
Evap. Fan	16A resistive 4 FLA 12 RLA	8A resistive 4 FLA 12 RLA
Defrost	16A resistive 4 FLA 12 RLA	16A resistive 4 FLA 12 RLA
Auxiliary loads 1	7A resistive	7A resistive
Auxiliary loads 2	7A resistive	7A resistive

Input

NTC 10KΩ@25°C LAE Part No. SN4...

Measurement Range

<0.5 within the measurement range

Operating Conditions

-10... +50°C; 15%...80% r.H.

CE (Approvals and Reference Norms)

EN60730-1; EN60730-2-9; EN55022 (Class B); EN50082-1

VII. CONTROL BASICS (continued)

PAR	RANGE	DESCRIPTION
SPL	-58..SPH	Minimum limit for SP setting.
SPH	SPL...180°	Maximum limit for SP setting.
SP	SPL... SPH	Setpoint (value to be maintained in the room).
C-H	REF; HEA	Refrigerating (REF) or Heating (HEA) control mode.
HY0	1...10°	Thermostat OFF -> ON differential.
HY1	0...10°	Thermostat ON -> OFF differential.
CRT	0...30min	Compressor rest time. The output is switched on again after CRT minutes have elapsed since the previous switchover. We recommend to set CRT=03 with HY0<2.0°.
CT1	0...30min	Compressor/Heater output run when probe T1 is faulty. With CT1=0 the output will always remain OFF.
CT2	0...30min	Compressor/Heater output stop when probe T1 is faulty. With CT2=0 and CT1>0 the output will always be ON. Example: CT1=4, CT2= 6: In case of probe T1 failure, the compressor will cycle 4 minutes ON and 6 minutes OFF.
DFM	NON; TIM; FRO CRN	Defrost start mode **NON** : defrost function is disabled (the following parameter will be FCM). **TIM** : regular time defrost. **FRO** : the defrost time count is only increased when the conditions occur for frost to form on the evaporator (optimized time increase). **CRN** : defrost is based off of compressor run time (time is based off of DAT).
DFT	0...250	Time interval among defrosts in x10 minutes. When this time has elapsed since the last defrost, a new defrost cycle is started. Each number is multiplied by 10 minutes. 0-250 indicates 0-2500 minutes.
DAT	0…100 hours	Frost accumulation timeout.
DFB	NO/YES	Defrost timer backup. With DFB=YES, after a power interruption, the timer resumes the count from where it was left off with ±30 min. approximation. With DFB=NO, after a power interruption, the defrost timer will re-start to count from zero.
DLI	-58...180°	Defrost end temperature.
DMD	0…30min	Minimum defrost duration.
DTO	1...120min	Maximum defrost duration.
DTY	OFF; ELE; GAS	Defrost type OFF: off cycle defrost (Compressor and Heater OFF). ELE: electric defrost (Compressor OFF and Heater ON). GAS: hot gas defrost (Compressor and Heater ON).
DSO	OFF; LO; HI	Defrost start optimization OFF : no optimization. LO : defrost waits until the compressor cut-out. HI : defrost waits until the compressor cut-in.
SOD	0...30 min	Start optimization delay.
DPD	0...240sec	Evaporator pump down. At the beginning of defrost, defrost outputs (determined by DTY) are OFF for DPD seconds.
DRN	0...30min	Pause after defrost (evaporator drain down time).

VII. CONTROL BASICS (continued)

PAR	RANGE	DESCRIPTION
DDM	RT; LT; SP; DEF	Defrost display mode. During defrost the display will show: **RT**: the real temperature; **LT** : the last temperature before defrost; **SP** : the current setpoint value; **DEF** : “dEF”.
DDY	0...60min	Display delay. The display shows the information selected with parameter DDM during defrost and for DDY minutes after defrost termination.
FID	NO/YES	Fans active during defrost.
FDD	-58...180°	Evaporator fan re-start temperature after defrost.
FTO	0...120min	Maximum evaporator fan stop after defrost.
FCM	NON; TMP; TIM	Fan mode during thermostatic control. **NON** : The fans remain ON all the time; **TMP** : Temperature-based control. The fans are ON when the compressor is ON. When the compressor is turned OFF, the fans remain ON as long as the temperature difference Te-Ta is greater than FDT. The fans are turned ON again with FDH differential. (Te = Evaporator temperature, Ta = Air temperature); **TIM** : Timed-based control. The fans are ON when the compressor is ON. When the compressor is OFF, the fans switch ON and OFF according to parameters FT1, FT2,FT3
FDT	-12...0°	Evaporator-Air temperature difference for the fans to turn OFF after the compressor has stopped.
FDH	1...12°	Temperature differential for fan re-start.
		Example: FDT = -1, FDH=3. In this case, after the compressor has stopped, the fans are OFF when Te > Ta - 1 (FDT), whereas the fans are ON when Te < Ta - 4 (FDT-FDH).
FT1	0...180sec	Fan stop delay after compressor/heater stop. See Fig. 2
FT2	0...180	Timed fan stop in x10 seconds. With FT2=0 the fans remain on all the time.
FT3	0...180	Timed fan run in x10 seconds. With FT3=0, and FT2 > 0, the fans remain off all the time.
ATM	NON; ABS; REL	Alarm threshold management. **NON** : all temperature alarms are inhibited (the following parameter will be ACC). **ABS** : the values programmed in ALA and AHA represent the real alarm thresholds. **REL** : the alarm threshold is obtained by the sum of setpoint, thermostat differential and ALR/AHR.
ALA	-58... 180°	Low temperature alarm threshold.
AHA	-58... 180°	High temperature alarm threshold.
ALR	-12... 0°	Low temperature alarm differential. With ALR=0 the low temperature alarm is excluded.
AHR	0... 12°	High temperature alarm differential. With AHR=0 the high temperature alarm is excluded.
ATI	T1; T2; T3	Probe used for temperature alarm detection.
ATD	0... 120 min	Delay before alarm temperature warning.
ACC	0...52 weeks	Condenser periodic cleaning. When the compressor operation time, expressed in weeks, matches the ACC value programmed, “CL” flashes in the display. With ACC=0 the condenser cleaning warning is disabled and CND disappears from Info Menu.
IISM	NON; MAN; ECO; DI	Switchover mode to second parameter set **NON** : inhibition to use the second parameter group (the following parameter will be SB). **MAN** : button switches the two parameter groups over. **ECO** : automatic switchover to the second parameter group, when ECO conditions are detected. **DI** : switchover to the second parameter group when DIx input is on.
IISL	-58... IISH	Minimum limit for IISP setting.
IISH	IISL... 180°	Maximum limit for IISP setting.
IISP	IISL... IISH	Setpoint in mode 2.
IIH0	1... 10°	Thermostat OFF->ON differential in mode 2.

VII. CONTROL BASICS (continued)

PAR	RANGE	DESCRIPTION
IIH1	0... 10°	Thermostat ON->OFF differential in mode 2.
IIDF	0...250	Time interval among defrosts in mode 2 in x10 minutes.
IIFC	NON; TMP; TIM	Fan control in mode 2. See FCM.
ECS	1...5	Controller sensitivity for the automatic switchover from Group I to Group II (1=minimum, 5=maximum).
ECS	1…5	Controller sensitivity for the automatic switchover.
EPT	0...240 min	Eco pull-down time. Only with IISM=ECO. Group I parameters are used in regulation for at least EPT minutes. See Fig.3
SB	NO/YES	Stand-by button enabling.
DSM	NON; ALR; STP	Door switch input mode: **NON** : door switch inhibited **ALR** : when DIx=DOR and the digital input is on, an alarm is generated after ADO minutes **STP** : when DIx=DOR and the digital input is on, in addition to the alarm, the fans are immediately stopped and the compressor is stopped after CSD minutes.
DAD	0...30 min	Delay before door open alarm warning.
CSD	0...30 min	Compressor/heater stop delay after door has been opened.
D1O	NON; DOR; ALR; IISM; RDS	DI1 digital input operation **NON** : digital input 1 not active. **DOR** : door input. **ALR** : when the input is on, an alarm is generated (if AHM=STP, the compressor is stopped and the defrosts are suspended). **IISM** : when the input is on, the controller will use group 2 parameters. **RDS** : when the input is on, a defrost is started (remote control).
D1A	OPN; CLS.	DI1 digital input activation. **OPN** : on open **CLS** : on close
D2O	See D1O	DI2 digital input operation. See D1O.
D2A	OPN; CLS.	DI2 digital input activation. **OPN** : on open **CLS** : on close
PSL	-58…158	Minimum setpoint adjusted via potentiometer.
PSR	0…15	Range of setpoint adjusted via potentiometer.
LSM	NON; MAN; ECO; DI1; DI2; DI3.	Light control mode **NON** : light output not controlled. **MAN** : light output controlled through button (if OAx=LGT). **ECO** : lights activated/deactivated following the ECO state. **DIx** : lights activated/deactivated following the DIx state.
LSA	OPN; CLS	Light activation (only with LSM=ECO or LSM=DIx). **OPN** : lights on with DIx open or ECO mode deactivated. **CLS** : lights on with DIx closed or ECO mode activated.
OT1	0…600 sec	Activation time of OA1
OT2	0…600 sec	Pause between OA1 activation

VII. CONTROL BASICS (continued)

PAR	RANGE	DESCRIPTION
OA1	NON; LGT; 0-1; 2CU; 2EU; ALO; ALC	AUX 1 output operation NON : output disabled (always off). LGT : output enabled for light control. 0-1 : the relay contacts follow the on/standby state of controller. 2CU : output programmed for the control of an auxiliary compressor. 2EU : output enabled for the control of the electrical defrost of a second evaporator. ALO : contacts open when an alarm condition occurs. ALC : contacts make when an alarm condition occurs.
2CD	0...120 sec	Auxiliary compressor start delay. If OAx=2CU the auxiliary output is switched on with a delay of 2CD seconds after the main compressor has cut-in. Both compressors are turned off at the same time.
OS1	-12.5..12.5°	Probe T1 offset.
T2	NO/YES	Probe T2 enabling (evaporator).
OS2	-12.5..12.5°	Probe T2 offset.
T3	NON; DSP; CND; 2EU	Auxiliary probe T3 operation **NON** : probe T3 not fitted. **DSP** : temperature T3 to be displayed. **CND** : condenser temperature measurement. **2EU** : second evaporator temperature measurement.
OS3	-12.5..12.5°	Probe 3 offset.
AHM	NON; ALR; STP;	Operation in case of high condenser alarm **NON** : high condenser alarm inhibited. **ALR** : in case of alarm, “HC” flashes in the display and the buzzer is switched on. **STP** : in addition to the alarm symbols displayed, the compressor is stopped and defrosts are suspended.
AHT	-50...110°	Condensation temperature alarm (referred to T3 probe).
TLD	1...30 min	Delay for minimum temperature (TLO) and maximum temperature (THI) logging.
TDS	T1; 1-2; T3	Selects the temperature probe to be displayed. **T1** : probe T1 **1-2** : the AVG-weighted average between T1 and T2 **T3** : probe T3
AVG	0...100%	The relative weight of T2 on T1 (if TDS = 1-2) Example 1: T1 = -5°, T2 = -20°, AVG = 100%. The displayed temperature will be -20° (T1 has no effect) Example 2: T1 = -5°, T2 = -20°, AVG = 60%. The displayed temperature will be -14.
SCL	1°C; 2°C; °F	Readout scale. **1°C** : measuring range -50…110°C (0.1°C resolution within -9.9 ÷ 19.9°C interval, 1°C outside) **2°C** : measuring range -50 … 110°C **°F** : measuring range -55 … 180°F
SIM	0...100	Display slowdown.
ADR	1...255	TRL-002 address for PC communication.
NPR	0…1	Setup programmed.
STT	0…255	Setup traceability.

VII. CONTROL BASICS (continued)

VII. f - COMPONENTS AND WIRING DIAGRAM

Indications:

- Thermostat output
- Fan output
- Defrost output
- II° Activation of 2nd patameter set
- Alarm
- ▲M Manual activation / Increase button
- ✕⏻ Exit / Stand-by button

Control Wiring Diagram:

VIII. SERVICE/WARRANTY INFORMATION (continued)

VIII. a - TROUBLESHOOTING GUIDE

FIND YOUR PROBLEM HERE	REMEDY
1. Condensing unit fails to start.	a.Check if cord & plug has been disconnected. b.Check control temperature setting.
2. Condensing unit operates for prolonged periods or continuously.	a.Are doors closing properly? b.Dirty condenser or filter. Clean properly. c.Evaporator coil iced. Needs to defrost. See instructions for setting a manual defrost cycle on section VII.c.
3. Food compartment is too warm.	a.Check door(s) and gasket(s) for proper seal b.Perhaps a large quantity of warm food has recently been added or the door was kept open for a long period of time, in both cases, allow adequate time for the cabinet to recover its normal operating temperature. c.Control setting too high, readjust per instructions on section VII.b. d.Check that condensing coil is clean.
4. Food compartment is too cold.	a.Perhaps a large quantity of very cold or frozen food has recently been added. Allow adequate time for the cabinet to recover its normal operating temperature. b.Adjust the control to a warmer setting, see section VII.b.
5. Condensation on the exterior surface.	a.Check door alignment and gaskets for proper seal. b.Condensation on the exterior surface of the unit is perfectly normal during periods of high humidity.
6. Compressor hums but does not start.	a.Call for service.
7. No power to unit	a.Check if cord & plug has been disconnected. b.Check power supply breaker.

VIII. SERVICE/WARRANTY INFORMATION (continued)

VIII. b - 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 condenser coil clean?
- [ ] Is the power switch on?

If after checking the above items and the unit is still not operating properly, please contact an authorized Traulsen service agent:
4401 Blue Mound Road Fort Worth, TX 76106
(800) 825-8220.

Traulsen reserves the right to change specifications or discontinue models without notice.

VIII. c - SPARE PARTS INFORMATION

To purchase replacement parts or to speak to service support for Traulsen units please contact our Ft. Worth facility by phone at 800-825-8220 or fax to 817-740-6748 (parts) or 817-740-6757 (service).

Note: When calling for spare parts or service support, please make sure you have model and serial number of unit available.

VIII. d - WARRANTY REGISTRATION:

The warranties for your new Traulsen unit may be registered with us by by completing warranty information online, via our website www.Traulsen.com. Click on the Warranty Registration tab under the Service tab. You may also register your product by calling us directly at 800-825-8220.

VIII. e - WARRANTY STATEMENT

TRAULSEN EQUIPMENT WARRANTY

U.S. Domestic Warranty

For sales of Traulsen refrigeration equipment ("Equipment") within the United States, Traulsen warrants to the original purchaser of the Equipment ("Purchaser") that Traulsen will convey the Equipment free and clear of all liens, security interests, and encumbrances created by, through or under Traulsen. Traulsen further warrants that for a period of three (3) years from the later of either (a) the date of delivery to the common carrier or (b) the date of installation (the "Domestic Warranty Period") but in no event, shall the Domestic Warranty Period commence later than 3 months from the date of delivery to the common carrier unless otherwise agreed upon by the parties in writing, under normal use and given proper installation and maintenance as determined by Traulsen, the Equipment: (a) will conform to the specifications as provided by Traulsen ("Specifications") and (b) will be free from substantial defects in material and workmanship.

The warranty period for compressors shall extend for an additional two (2) years beyond the Domestic Warranty Period. In the case of a nonconforming compressor, Traulsen shall provide a replacement compressor; however, all installation, recharging, and repair costs shall be the responsibility of Purchaser. In the case of a nonconforming part, Purchaser must return the part to Traulsen within 30 days from the date of repair. Failure to return a claimed defective part to Traulsen within the 30 days will waive the right to the warranty claim.

Additionally, Traulsen provides a lifetime warranty on the housing of cam-lift hinges and the workflow handles. In the case of a non-conforming housing for cam-lift hinge or workflow handle, Traulsen shall provide a replacement part; however, Purchaser shall be responsible for any other replacement costs, including but not limited to installation and labor.

The Domestic Warranty does not apply to: (a) consumable components or ordinary wear items; (b) components that are removable without the use of tools including but not limited to gaskets, shelf pins, and light bulbs; (c) use of the Equipment components or parts not supplied by Traulsen or specified by Traulsen in the Operator's Manual as set forth on Traulsen's website; or (d) damage resulting from fire, water, burglary, accident, abuse, misuse, transit, acts of God, terrorism, power surges, improper installation, or repairs or installation by unauthorized third parties. Additionally, the Equipment is intended only for commercial use and should not be used by consumers or households or in any non-commercial application. This Domestic Warranty does not apply to, and shall not cover, any Equipment that is installed or used in any way in any residential or non-commercial application. No warranties, express or implied, are provided to any residential, consumer or non-commercial purchaser or owner of the Equipment.

For Traulsen units purchased for use with a condenser provided by a third-party, this standard warranty will apply only to those components contained within the unit to the point of connection of the refrigeration lines leading to the third-party condenser.

In the event of a breach of the warranties set forth above (the "Domestic Warranty"), Traulsen will, at Traulsen's option and as Purchaser's sole remedy, repair or replace, including labor costs, any nonconforming Equipment, provided that (a) during the Warranty Period Traulsen is promptly notified in writing upon discovery of the nonconformance with a detailed explanation of any alleged deficiencies; (b) Traulsen is given a reasonable opportunity to investigate all claims; and (c) Traulsen's examination of any alleged defective part confirms such alleged deficiencies and that the deficiencies were not caused by misuse, neglect, improper installation, unauthorized alteration or repair or improper testing. Traulsen reserves the right to, at its request, require Purchaser shall ship the alleged defective part to Traulsen for inspection and confirmation of defect. No Equipment may be returned without Traulsen's approval.

Purchaser is solely responsible for determining if Equipment is fit for a particular purpose and suitable for Purchaser's application. Accordingly, and due to the nature and manner of Traulsen's Equipment, Traulsen is not responsible for the results or consequences of use, misuse, or application of its Equipment.

THIS DOMESTIC WARRANTY SETS FORTH THE EXTENT OF TRAULSEN'S LIABILITY FOR SALES WITHIN THE UNITED STATES. EXCEPT AS SET FORTH ABOVE, TRAULSEN MAKES NO WARRANTY OR REPRESENTATION OF ANY KIND, EXPRESS OR IMPLIED (INCLUDING NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE). IN NO EVENT WILL TRAULSEN'S LIABILITY IN CONNECTION WITH THE AGREEMENT OR SALE OF THE EQUIPMENT EXCEED THE PURCHASE PRICE OF THE EQUIPMENT AS TO WHICH THE CLAIM IS MADE. IN NO EVENT SHALL TRAULSEN BE LIABLE FOR ANY LOSS OF USE, LOSS OF PRODUCT, LOSS OF PROFIT, OR ANY OTHER INDIRECT, INCIDENTAL, SPECIAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THIS WARRANTY EVEN IF TRAULSEN HAS BEEN NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES.

TRAULSEN
4401 BLUE MOUND RD.
PHONE 1 (800) 825-8220
Website: www.traulsen.com
FT. WORTH, TX 76106
FAX-MKTG. 1 (817) 624-4302

NOTES:

HOURS OF OPERATION:
Monday thru Friday 7:30 am - 4:30 pm CST

Quality Refrigeration

Traulsen
4401 Blue Mound Road Fort Worth, TX 76106
Phone 800.825.8220 Fax 817.740.6757
traulsen.com

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