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TRANSPORT AND STORAGE

- Cabinets must be transported and stored in an upright position.
- During transport, Cabinets must be protected from water and direct sunlight.
- Cabinet lids must be covered with tar paper to protect the cabinet from sunlight during loading, transport and unloading.
- Forklift tines should be set more than 32” apart to avoid damage to control panel and motor tray.
- Cabinets should only be lifted from the back and never from the front or sides.
- Novum Cabinets are heavy, so take appropriate care when lifting or moving.
- Cabinets should only be lifted or moved when empty and using equipment appropriate to lifting heavy goods.

<table>
<thead>
<tr>
<th>Model</th>
<th>Packed Dimensions (LxWxH)</th>
<th>Unpacked Dimensions (LxDxH)</th>
<th>Un-packed Weight lbs. (Empty)</th>
<th>Packed Weight lbs.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aran 805L/806L</td>
<td>88” x 39” x 45”</td>
<td>87” x 33” x 38”</td>
<td>388</td>
<td>490</td>
</tr>
<tr>
<td>Aran 605L/606L</td>
<td>69” x 39” x 45”</td>
<td>67” x 33” x 38”</td>
<td>321</td>
<td>410</td>
</tr>
<tr>
<td>Arran 706L</td>
<td>83” x 39” x 45”</td>
<td>77” x 33” x 38”</td>
<td>397</td>
<td>485</td>
</tr>
<tr>
<td>Burren 808L / 809L</td>
<td>88” x 39” x 45”</td>
<td>87” x 33” x 38”</td>
<td>375</td>
<td>485</td>
</tr>
<tr>
<td>Burren 608L / 609L</td>
<td>69” x 39” x 45”</td>
<td>67” x 33” x 38”</td>
<td>375</td>
<td>485</td>
</tr>
<tr>
<td>Burren 708L / 710L</td>
<td>83” x 39” x 45”</td>
<td>77” x 33” x 38”</td>
<td>350</td>
<td>440</td>
</tr>
<tr>
<td>Burren Mor</td>
<td>88” x 39” x 80”</td>
<td>87” x 33” x 80”</td>
<td>900</td>
<td>950</td>
</tr>
<tr>
<td>601L / 610L</td>
<td>69” x 31” x 41”</td>
<td>67” x 29” x 34”</td>
<td>227</td>
<td>265</td>
</tr>
<tr>
<td>401L / 410L</td>
<td>50” x 31” x 41”</td>
<td>48” x 29” x 34”</td>
<td>175</td>
<td>197</td>
</tr>
<tr>
<td>603L / 604L</td>
<td>69” x 31” x 41”</td>
<td>67” x 29” x 34”</td>
<td>230</td>
<td>287</td>
</tr>
<tr>
<td>403L / 404L</td>
<td>50” x 31” x 41”</td>
<td>48” x 29” x 34”</td>
<td>180</td>
<td>210</td>
</tr>
</tbody>
</table>

CABINET INSTALLATION REQUIREMENTS

- After delivery, allow 6-12 hours before plugging in. This allows the Lubricating Oil to settle in the Compressor
- Remove packaging and re-cycle packing material responsibly.
- Mount accessories, i.e. fit internal dividers and spacing required. Only use original Novum accessories to avoid possible damage to the Cabinet. Do not hang any baskets on the outside of the Cabinet which could prevent the lid from closing.
- Install on a smooth, dry and level surface.
- Operate Cabinet for 12-24 hours prior to merchandising.
- If installed against a wall allow 4” for air circulation
**Stand alone / Single-row line-up installation**

When the case is installed as stand-alone unit against a wall a minimum distance of 4” must be maintained between the back of the case and the wall to ensure air can enter the back of the case (Figure 2).

![Air Intake](image1)

**Figure 2**

**Back-to-back installation**

If two Aran cases are to be installed back to back, a ventilation panel must be fitted to ensure adequate airflow. These are simply clipped into place (Fig 4). When an end of aisle case is fitted to an island configuration, an end of aisle ventilation kit must be fitted (Figure 3).

![End of Aisle Ventilation Kit](image2)

**Figure 3**
VENT SYSTEM

Top Vent

- Position cabinets back to back 250mm apart.
- Drop vent panel into factory fitted receiving brackets. (See Figure 4)

End Panel

- Secure End wall brackets to back panel using screws provided.
- Push panel gently into brackets.
**706L Xtreme Vent.**

- Assemble 706L Vent system. (Figure 5)
- Secure to back panel using screws provided.
REQUIREMENTS FOR ELECTRICAL CONNECTIONS

- **Never** use multiple adaptors.
- Allow 20Amp current protection per Cabinet, or 30Amp for the Burren Mor cabinet.
- Connect to 110v / 60Hz
- All Novum plug-in Cabinets must be earthed.
- Power supply must conform to Manufacturers Rating Plate located top left side of back panel
- Damaged electrical components must be replaced with manufacturer approved replacements and **NEVER** repaired.
- Cabinet must be turned off and unplugged prior to cleaning and maintenance.
- The appliance is fitted with double capped LED Lamps, and must be replaced by identical Lamps only. These replacement Lamps must be fitted by a qualified Electrician / Service Engineer

**EXAMPLE OF A RATING PLATE**

For other models, please refer to Rating Plate affixed to the Appliance

**Climate Class 3 Conditions:** Maximum Temperature: 25°C, Relative Humidity 60%

All Cabinets must be wired as per international standards.

<table>
<thead>
<tr>
<th>US Rating</th>
<th>Europe Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Brown</td>
</tr>
<tr>
<td>Live</td>
<td>Live</td>
</tr>
<tr>
<td>Light grey, white or silver</td>
<td>Blue</td>
</tr>
<tr>
<td>Neutral</td>
<td>Neutral</td>
</tr>
<tr>
<td>Green</td>
<td>Green</td>
</tr>
<tr>
<td>Earth</td>
<td>Earth</td>
</tr>
</tbody>
</table>

Notes:
- If you are in any doubt concerning the electrical connection of your Novum Conservator we recommend that you contact a qualified Electrician.
- If the Supply Cord is damaged, it must be replaced by Novum, its Service Agent or similarly qualified persons in order to avoid a hazard.
**PRODUCT LOADING**

- Novum Cabinets are Conservators in nature and can be used to store and display previously frozen food. Novum cabinets are NOT freezers and should NEVER be used to freeze food. NEVER merchandise product above the red load limit sticker.
- As soon as the Cabinet has reached a storage temperature of below -18°C (as indicated by the Electronic Controller display), it can be loaded with Frozen Foods up to a maximum of the Load Limit line.
- Do not load the Cabinet with non-frozen foods or try to freeze products in the Cabinet.
- Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance

**STARTING**

- Plug in, the Electronic Controller will light up and display a temperature. The unit will be pre-set with the correct operation for the Class 3L1 Conservator (i.e. 25°C Ambient Air and 60% Relative Humidity).
- Should adjustment or re-setting of the Storage temperatures be required on the Electronic Controller, then follow the Instructions as shown in Appendix 1.

**CARE AND MAINTENANCE**

Your Novum Conservator does not require any specialist maintenance.

To ensure trouble free operation of your Novum Cabinet, the following routine should be instituted.

- Periodically inspect the Air filter at the back of your Cabinet and clean as necessary. Monthly inspection is recommended.
- Periodically inspect the finned Condenser(s) for dust build up and remove with a non-metallic Brush. The Condenser(s) are located at the rear of the Cabinet. Monthly inspection is recommended.
- Inspect the area behind Cabinets periodically and remove any debris.
- Clean the exterior and exterior plastic components of your Novum Cabinet with a mild detergent. (Never use bleach or abrasive material)
- Use proprietary glass cleaner with soft cloth to clean glass lid and front. (Never use abrasive materials to clean glass)

**KEEP THE FILTER AREA CLEAN**

![Image of a filter area]

Note! Always unplug your Conservator before beginning any maintenance work.
**DEFROSTING**

**Manual Defrosting**

For Novum Cabinets fitted with a manual defrost system, the following procedure should be followed:

- Remove frozen food to a suitably refrigerated area.
- Unplug Cabinet and open lid.
- When frost has melted and cleaning has been complete, use a clean, dry cloth to mop up excess condensate from the inside of the Cabinet.
- For units fitted with Drain Plugs, place a shallow tray below drains and remove Drain Plug. The condensate will then drain through the drain hole and into the tray.
- When condensate has drained, replace drain plug and re-connect Cabinet to electrical supply and then allow Cabinet to re-freeze.
- For units without Drain Plugs, condensate should be mopped clean.
- When digital display on the Electronic Controller displays -18°C, it is then safe to re-merchandise the Cabinet.

Note: Best practice demands that all Cabinets should be thoroughly cleaned three or four times per year.

**Automatic Defrosting**

For Novum Cabinets fitted with an automatic defrost system:

- Defrost Cycle will start and finish automatically – at Factory set intervals.
- No intervention is required as the Frost melts and the Water then flows through the Drain Channels, which is then evaporated in the Burn-off Tray (no fixed Land Drains required).
- All Drain Channels and Burn-off Tray should be cleaned and disinfected periodically.
TROUBLESHOOTING

Lighting: Switch for Light is mounted on the Control Panel.

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CHECK AS Follows</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cabinet fails to Operate</td>
<td>• Power supply conforms with installation instructions – Ref: page 1</td>
</tr>
<tr>
<td></td>
<td>• Power cable is undamaged.</td>
</tr>
<tr>
<td></td>
<td>• Socket is powered.</td>
</tr>
<tr>
<td></td>
<td>• Check fuse (UK &amp; Ireland only)</td>
</tr>
<tr>
<td></td>
<td>• Circuit breaker is closed.</td>
</tr>
<tr>
<td>Excessive Frost build-up</td>
<td>• Ensure that product is merchandised at or below the red load limit indicator.</td>
</tr>
<tr>
<td></td>
<td>• Check that gasket is undamaged or distorted.</td>
</tr>
<tr>
<td></td>
<td>• Check that the gasket is sealing (no gaps )</td>
</tr>
<tr>
<td></td>
<td>• Ensure that product being merchandised is frozen and packaging is dry before merchandising.</td>
</tr>
</tbody>
</table>

POWER FAILURE

If an interruption to power supply occurs, the following steps are recommended.
• Remove product from Cabinet and place in low temperature cold room.
• If no cold room is available cover product with polystyrene or heavy cardboard and do not open lid for the duration of the interruption to power.
• During interruption to power supply plug cabinet out and leave unplugged until power supply is restored. (power surges at the moment of restoration of power supply can damage compressors and electrical system)

SPARE PARTS & BROCHURES

Please refer to Novum Website www.novum.ie for a full listing of available Spare Parts and brochure for each model. Orders may be placed by e-mailing spareparts@novum.ie

DISPOSAL OF CABINET

As this Cabinet contains Cyclopentane as a blowing agent, it cannot therefore be disposed of through the normal / domestic channels. Please contact your Local Authority for special disposal arrangements.
Appendix One - Electronic Controller

The Dixell XR-60CX is a fully configurable electronic refrigeration controllers. All parameter values are reprogrammable and are stored in the non-volatile memory. The controller uses two levels of programming that can be accessed through the keypad. The first level is the user level. It gives access to six settings — temperature differential, defrost cycle intervals, defrost termination temperature, draining time, defrost fan delay and fan stop temperature. The second level is the service level. It allows access to all other parameters. It is recommended that changes in this level be made only by a qualified technician.

Front Panel Commands

<table>
<thead>
<tr>
<th>BUTTON</th>
<th>COMMAND</th>
</tr>
</thead>
<tbody>
<tr>
<td>SET</td>
<td>To display target set point; in programming mode it selects a parameter or confirm an operation</td>
</tr>
<tr>
<td></td>
<td>(DEF) To start a manual defrost</td>
</tr>
<tr>
<td></td>
<td>(UP): To see the max. stored temperature; in programming mode it browses the parameter codes or increases the displayed value</td>
</tr>
<tr>
<td></td>
<td>(DOWN): To see the min stored temperature; in programming mode it browses the parameter codes or decreases the displayed value</td>
</tr>
<tr>
<td></td>
<td>To switch the instrument off, if onF = off</td>
</tr>
<tr>
<td></td>
<td>Not enabled</td>
</tr>
</tbody>
</table>

Use of LEDs

<table>
<thead>
<tr>
<th>LED</th>
<th>LED MODE</th>
<th>FUNCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>🥶</td>
<td>ON</td>
<td>Compressor enabled</td>
</tr>
<tr>
<td>🥶</td>
<td>Flashing</td>
<td>Anti-short cycle delay enabled</td>
</tr>
<tr>
<td>🥶</td>
<td>ON</td>
<td>Defrost enabled</td>
</tr>
<tr>
<td>🥶</td>
<td>Flashing</td>
<td>Drip time in progress</td>
</tr>
<tr>
<td>🥶</td>
<td>ON</td>
<td>Fans enabled (XR60CX only)</td>
</tr>
<tr>
<td>🥶</td>
<td>Flashing</td>
<td>Fans delay after defrost in progress (XR60CX only)</td>
</tr>
<tr>
<td>🥶</td>
<td>ON</td>
<td>An alarm is occurring</td>
</tr>
<tr>
<td>🥶</td>
<td>ON</td>
<td>Continuous cycle is running</td>
</tr>
<tr>
<td>🥶</td>
<td>ON</td>
<td>Energy saving enabled</td>
</tr>
<tr>
<td>°C/F</td>
<td>ON</td>
<td>Measurement unit</td>
</tr>
<tr>
<td>°C/F</td>
<td>Flashing</td>
<td>Programming phase</td>
</tr>
</tbody>
</table>
Max. & Min. Temperature Memorization

HOW TO SEE THE MIN. TEMPERATURE
1. Press and release the DOWN key.
2. The “Lo” message will be displayed followed by the minimum temperature recorded.
3. By pressing the DOWN key again or by waiting 5 seconds the normal display will be restored.

HOW TO SEE THE MAX. TEMPERATURE
1. Press and release the UP key.
2. The “Hi” message will be displayed followed by the maximum temperature recorded.
3. By pressing the UP key again or by waiting 5 seconds the normal display will be restored.

HOW TO RESET THE MAX AND MIN TEMPERATURE RECORDED
1. Hold press the SET key for more than 3 seconds, while the max. or min temperature is displayed. (rSt message will be displayed)
2. To confirm the operation the “rSt” message starts blinking and the normal temperature will be displayed

Main Functions

HOW TO SEE THE SET-POINT
1. Press and immediately release SET key: the display will show the set point value
2. Push and immediately release the SET key or wait 5 seconds to display the probe value again

HOW TO CHANGE THE SET-POINT
1. Push SET for more than 2 seconds to change the set-point value
2. The value of the set-point will be displayed and the °C or °F LED starts blinking
3. To change the set value push UP or DOWN arrows within 10 seconds
4. To memorize the new set point value push SET key again or wait 10 seconds

HOW TO START A MANUAL DEFOST
Push DEF key for more than 2 seconds and a manual defrost will start.

HOW TO CHANGE A PARAMETER VALUE
To change a parameter value:
1. Enter the Programming mode by pressing the SET + DOWN keys for 3 seconds (the °C or °F LED starts blinking)
2. Select the required parameter. Press SET to display its value.
3. Use UP or DOWN to change its value
4. Press SET to store the new value and move to the following parameter

To exit: Press SET + UP or wait 15 seconds without pressing a key

NOTE: The set value is stored even when the procedure is exited by waiting the time-out to expire.

The Hidden Menu

The hidden menu includes all the parameters of the instrument.

HOW TO ENTER THE HIDDEN PARAMETERS
1. Enter the Programming mode by pressing the Set + DOWN keys for 3 seconds (the °C or °F LED starts blinking).
2. Release the keys, then push again the Set+DOWN keys for more than 7 seconds. The Pr2 label will be displayed immediately followed from the HY parameter.

NOW YOU ARE IN THE HIDDEN MENU
3. Select the required parameter.
4. Press the SET key to display its value
5. Use UP or DOWN to change its value.
6. Press SET to store the new value and move to the following parameter.

To exit: Press SET + UP or wait 15 seconds without pressing a key.

NOTE 1: If no parameter is present in Pr1, after 3 seconds the “noP” message is displayed. Keep the keys pushed until the Pr2 message is displayed.

NOTE 2: The set value is stored even when the procedure is exited by waiting the time-out to expire.

HOW TO MOVE A PARAMETER FROM THE HIDDEN MENU TO THE FIRST LEVEL AND VICE VERSA
Each parameter present in the HIDDEN MENU can be removed or put into “THE FIRST LEVEL” (user level) by pressing SET + Down.

In HIDDEN MENU when a parameter is present in First Level the decimal point is on.

HOW TO LOCK THE KEYBOARD
1. Keep the UP + DOWN keys pressed for more than 3 seconds.
2. The “POF” message will be displayed and the keyboard will be locked. At this point it will be possible only to see the set point or the MAX o Min temperature stored
3. If a key is pressed more than 3 seconds the “POF” message will be displayed.

To unlock the keyboard
Keep the UP + DOWN keys pressed for more than 3 seconds, until the “Pon” message is displayed.

The continuous cycle
When defrost is not in progress, it can be activated by holding the UP key pressed for about 3 seconds. The compressor operates to maintain the ccS set point for the time set through the Cct parameter.
The cycle can be terminated before the end of the set time using the same activation key UP for 3 seconds.

The on/off function
With “onF = off”, pushing the ON/OFF key, the instrument is switched off. The “OFF” message is displayed. In this configuration, To switch the instrument on, push again the ON/OFF key.

WARNING: Loads connected to the normally closed contacts of the relays are always supplied and under voltage, even if the instrument is in stand by mode.
Appendix Two - Warranty Information

For full warranty information, please refer to warranty card sent with unit.

Novum USA, Inc.’s Standard Limited Warranty

Parts and Labor - One Year:
Novum USA, Inc. warrants to the original purchaser, the equipment by it to be free from defects in material and workmanship under normal use and service within 15 months from the date of original shipment from the plant, or 12 months from date of installation, whichever occurs first.

The warranty does not include any material which has been subject to misuse, neglect, damage in transit, accident, negligence or alteration.

The warranty does not include the cost of labor for the initial installation, start-up, correction of improper installations, misapplications, repairs caused by abuse and negligence, modifications, normal adjustments, drive time to and from repair site and recovery of gas.

No claims can be made against this warranty for spoilage of product.

General Conditions:
Novum USA, Inc. recommends that the installation, inspection and start-up of refrigeration equipment be performed by a qualified refrigeration technician.

Novum USA, Inc. makes no other express or implied warranty, and no person or representative of the seller is authorized to add to the sellers liabilities in connection with its products other than what is expressed.

Warranties listed here are for equipment located inside the continental United States and Canada.

Novum USA, Inc. must be contacted prior to any service work being commenced.
All parts charges are subject to approval by Novum USA, Inc.

All claims must contain the following information:
• The model and serial number of the equipment
• The date of equipment failure and place of installation
• The name and address of the agency which performed the service work
• A complete description of the equipment failure, circumstances relating to the failure, parts replaced and itemized list.

Novum USA, Inc. shall not be held liable for any default or delay in performance caused by any contingency cause beyond its control.

Warranties do not include any food or business loss and transportation charges to and from Novum USA, Inc.’s plant.

All equipment is designed to operate in and environment of 77°F and 60% relative humidity.
Four (4) year extended compressor warranty - $150.00 per unit. Covers compressor parts only.
Appendix Three - Terms of Sale

Delivery

Shipping and delivery date is approximate. Seller will not be held liable for failure to deliver due to strikes, suppliers’ delays, changes requested by the buyer or any causes beyond its control.

Shipment

When possible the requested carrier will be used. Novum USA, Inc., however, reserves the right to ship via any responsible carrier. Shipping charges are payable by the consignee and any claims arising as to such charges shall be resolved by the carrier and consignee.

Damage

Claims for damage in transit must be made by the consignee with the carrier. Novum USA, Inc. assumes no responsibility for damages in transit.

Taxes

Federal, state, city sales or use taxes are not included with these prices.

Cancellations

Buyer shall compensate seller for special items not normally stocked. Buyer shall also compensate seller for special labor, material costs, special engineering etc. on all cancelled orders.

Returned Goods

No product may be returned unless authorized in writing by Novum USA, Inc. If return of product is so authorized, consignee shall be required to pay a handling charge of minimum of fifteen percent (15%) of the invoice price. Product must be returned in original factory crate, freight prepaid and shall not have been used and must be in the same condition as originally shipped by Novum USA, Inc.