

TSU-4RW-N6 | REF3-VAC\*

# High Performance Undercounter Refrigerator

+2 to +8°C Undercounter Refrigerator

3.0 cu.ft. | 85 L



TSU-4RW-N6 | REF3-VAC

TSU-4RW-N6 | REF3-VAC high performance undercounter refrigerators are designed to meet current and evolving CDC, NSF, and ANSI guidelines for vaccine storage. The TSU-4RW-N6 | REF3-VAC is ENERGY STAR® Certified and capable of maintaining the 5°C setpoint standard for storing vaccines with a +/- uniformity of 3°C to better reduce the risk of freezing vital vaccines and biologics. Built with accessibility in mind, this unit is ADA compliant and engineered with a glass door for easy visibility of stored contents.

#### **Meeting Regulatory Standards**

Current and emerging guidelines from the CDC, NSF, and ANSI involve strict biologics. The TSU-4RW-N6 | REF3-VAC is purpose-designed to meet these evolving guidelines as they pertain to temperature control, uniformity, and required by most equivalent Nationally Recognized Testing Laboratories (NRTL).

#### **Ease of Use and Accessibility**

4RW-N6 | **REF3-VAC** is designed to be spaces, and fits under most tables, cabinets, and lab benches. A convenient glass door provides visibility into the interior of the unit to avoid unnecessary door openings. In the event an open door is forgotten, the self-closing door will product. An optional stacking accessory is available to maximize storage capacity when space constraints become an issue.

#### **Temperature Uniformity Ensures Product Safety**

Strict temperature control keeps stored product within the CDC recommended 2-8°C temperature range for optimal vaccine storage. Many vaccines risk inactivation if allowed to freeze. The TSU-4RW-N6 | **REF3-VAC** is designed to prevent interior temperature from dropping below 2°C at any location empty. By contrast, interior temperatures are engineered to cool back to setpoint temperatures within 15 minutes of a 3 minute door opening.



#### **Display and Monitoring**

An unweighted temperature probe and temperature display in 0.1°C increments give users the most accurate temperature readings-all in real time. Easy-touse touchpad display, and microprocessor controller provide dependable control of interior setpoints, while an electronic key lock prevents accidental setpoint changes.



#### **Security and Alarm Notification**

High and low temperature alarms notify users when temperature excursion events are occurring. Alarm delay time is adjustable to meet different user needs and working conditions. A physical key lock at the top of the unit makes it possible to store important samples and controlled substances.



### **Energy and Sustainability**

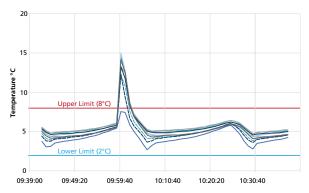
This Energy Star certified undercounter provides energy efficiency and sustainability, without compromising performance. Traditional HFC refrigerants have been replaced with environmentally friendly HC refrigerants to meet Significant New Alternatives Policy (SNAP) guidelines for low global warming and ozone depleting substances.



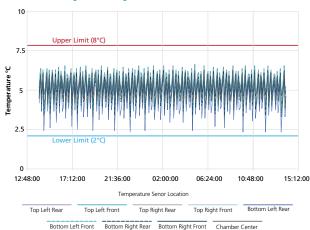




# **Door Opening Recovery, 1 Minute**



## **Uniformity, Steady State, 5°C**



Dimensions	Unit : inch   mm
22.5   572	21.1   537
29.6   752	18.9   480

Model Number		TSU-4RW-N6   <b>REF3-VAC</b>
Exterior Dimensions (W $\times$ D $\times$ H) 1)	inches   mm	22.5 × 22.1 × 29.6   572 × 562 × 751
Interior Dimensions (W $\times$ D $\times$ H)	inches   mm	18.5 × 14.6 × 18.9   471 × 370 × 480
Volume	cu.ft.   liters	3.0   85
Net Weight	lbs   kg	114   52
Performance		
Warranty 2)		2 years parts / labor
Cooling Performance 3)	°C	3 to 7
Temperature Setting Range	°C	3 to 7 in 0.1° increments
Temperature Control Range 3)	°C	2 to 8 in 0.1° increments
Control		
Controller		Microprocessor (one control probe and one monitor probe)
Display		LED
Temperature Set Method		Touchpad
Temperature Sensor		Thermistor
Refrigeration		
Refrigeration System		Single reciprocal type compressor
Compressor	W	(1) 174
Refrigerant		R-600a
Defrost		Automatic cycle
Insulation Material, SNAP Compliant		Rigid polyurethane, foamed-in-place, low GWP (cyclopentane)
Insulation Thickness	inches   mm	Right, left, back, top: 2.0   50 Bottom: 2.2   55
Construction		
Exterior Material		Painted steel
Interior Material		Painted steel with stainless steel floor
Outer Door	qty	1 (glass, self closing)
Key Lock	qty	Standard door lock
Wire Shelves, Vinyl Coated	qty	2 (adjustable)
Shelf Dimension (W × D)	inches   mm	17.3 × 14.0   440 × 355
Max. Load Per Shelf	lbs   kg	26.5   12
Access Port	qty	1 (standard)
Access Port Position		Bottom of back of product
Access Port Diameter	inches   mm	0.6   16
Leveling Feet	qty	4
Alarms (V=Visual, B=Buzzer)		
Power Failure		B (Momentary)
High Temperature		V-B
Low Temperature		V-B
Door Alarm		V-B
Diagnostics		V
Electrical and Noise Level		
Power Supply		115V, 60Hz, 1Ø, NEMA 5-15P, requires NEMA 5-15R receptacle
Options		
Blackout Panel		BPANELTSU
Stacking Kit		TSU-4RW STKBRACKET
Optional Communication System		'
Wireless, Cloud-Based,		LabAlert® Monitoring System
Automatic Data Management		Educater Monitoring System

- <sup>1)</sup> External dimensions of main cabinet only. Depth is 23.6° (600 mm) including the door handle <sup>2)</sup> Current warranty offered at time of printing and may be subject to change; US and Canada only <sup>3)</sup> Air temperature measured at refrigerator center, ambient temperature +24°C, no load

Specifications are subject to change without notice.
Performance data herein is based on independent testing at time of publication

\*TSU-4RW-N6 | REF3-VAC is manufactured by Turbo Air Inc. and distributed by PHC Corporation of North America.



