

# Thermo Scientific™ Revco™ RDE Series -40°C Ultra-Low Temperature Freezers

- **H-drive hydrocarbon refrigeration system** provides sustainable performance with reliability you can count on
- **Low peak variation** helps ensure sample temperature protection throughout entire cabinet
- **Fast door opening recovery** in as little as 18 minutes
- **Long warm-up time** from -40°C to -20°C in up to 6 hours
- **Four capacities:** 400, 500 and 600 2-inch boxes
- **Decrease storage footprint** up to 25%
- **5-year** standard warranty



## Designed to keep your samples safe

- Worry-free storage; with low peak variation, samples are protected throughout the entire cabinet.<sup>1</sup>
- Secure freezer settings with sample security
- Backed by our Global Service and Support Team

## Limit environmental impact and lower HVAC costs

- Uses as low as 4.4 kWh/day, depending on size
- Less heat emission lowers HVAC costs
- SNAP compliant, natural hydrocarbon refrigerants
- Environmentally-friendly, water-blown foam insulation is compliant with SNAP
- Manufactured in an award-winning, zero-waste-to-landfill facility

## User-friendly and quiet

- New HIC touch screen user interface
- Quiet enough to reside directly in the laboratory; at just 48 dBA, the sound is comparable to a home refrigerator.<sup>2</sup>

1. Typical freezer data based on internal testing with freezer setpoint at -40°C and ambient temperature at 20°C. Performance data varies across freezer size and electrical specifications.

2. All data based on internal data unless otherwise noted. Data on file.

# Dependable storage with operational savings and sustainability

## User-friendly HIC interface and cabinet

- Easy to use: plug in and go; no setup required
- H-drive Information Center (HIC) combines easy-to-read temperature with simple capacitive touch buttons
- Advanced security features: alarm settings, setpoint security passcode, and padlock-compatible doors
- Ergonomic design: single-hand door operation, eye-level display, and shelf-level placement that do not require floor-level loading of racks
- Five inner doors minimize ambient temperature during sample retrieval



## Specifications & Ordering Information



### Upright Freezers (-10°C to -40°C)

General Purpose Model	Capacity		Electrical	Amps / Breaker (Plug type)	Max Shelf Weight lbs. (kg)	Interior Dimensions H x W x D in. (cm)	Exterior Dimensions H x W* x D in. (cm)	Shipping Weight lbs. (kg)
	cu. ft. (L)	Cryoboxes (2 in.)						
RDE40040FA	19.4	400	115V/60Hz	7.2/20 (NEMA 5-20)	165 (75)	51.2 x 23.1 x 28.3 (130.1 x 58.8 x 71.9)	78.0 x 28.3 x 38.5 (198.1 x 71.9 x 97.7)	642 (292)
RDE40040FD	(549)		208-230V/60Hz	3.4/15 (NEMA 6-15)				
RDE50040FA	24.1	500	115V/60Hz	7.5/20 (NEMA 5-20)	205 (93)	51.2 x 28.8 x 28.3 (130.1 x 73.0 x 71.9)	78.0 x 34.0 x 38.5** (198.1 x 86.4 x 97.7)	668 (304)
RDE50040FD	(682)		208-230V/60Hz	4.0/15 (NEMA 6-15)				
RDE60040FA	28.8	600	115V/60Hz	7.5/20 (NEMA 5-20)	245 (111)	51.2 x 34.4 x 28.3 (130.1 x 87.3 x 71.9)	78.0 x 39.6 x 38.5** (198.1 x 100.6 x 97.7)	765 (348)
RDE60040FD	(816)		208-230V/60Hz	4.0/15 (NEMA 6-15)				

\*Allowance for handle and hinge, add 4.2 in (10.7 cm) to cabinet width

\*\*Doorway width clearance is 34.5 in (87.6 cm) for RDE50040 and RDE60040



### Performance Data

General Purpose Model	Energy Consumption* (kW-hr/day)	Peak Variation from -40°C Setpoint (°C)**	1-min Door Opening Recovery to -38.5°C (min)***	Warm-Up Time (-40°C to -20°C) (min)****	Sound (dBA)
RDE40040FA	5.2	+2.6 / -2.2	20	300	49
RDE40040FD	4.4	+3.4 / -1.5	18	314	52
RDE50040FA	5.3	+3.0 / -2.4	24	350	51
RDE50040FD	5.1	+2.2 / -2.2	25	318	48
RDE60040FA	6.0	+1.4 / -2.4	23	384	49
RDE60040FD	5.9	+1.5 / -1.9	25	362	49

\*Energy Consumption: Typical data - internal testing with freezer setpoint at -40°C and 20°C ambient temperature

\*\*Peak Variation from Setpoint: Typical data - internal testing with freezer setpoint at -40°C and 20°C ambient temperature

\*\*\*Door opening recovery: Typical data - internal recovery testing is to -38.5°C. During the door opening all inner and outer doors are opened for 60 seconds.

\*\*\*\*Warm Up Time: Typical data - internal testing with empty freezer setpoint at -40°C and ambient temperature at 20°

For specific model performance data, please refer to the individual technical specification sheet for the desired model.

# Dependable storage with operational savings and sustainability

## User-friendly HIC interface and cabinet

- Easy to use: plug in and go; no setup required
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- Advanced security features: alarm settings, setpoint security passcode, and padlock-compatible doors
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## Specifications & Ordering Information



### Upright Freezers (-10°C to -40°C)

FDA Class II Model	Capacity		Electrical	Amps / Breaker (Plug type)	Max Shelf Weight lbs. (kg)	Interior Dimensions H x W x D in. (cm)	Exterior Dimensions H x W* x D in. (cm)	Shipping Weight lbs. (kg)
	cu. ft. (L)	Cryoboxes (2 in.)						
RDE40040LA	19.4	400	115V/60Hz	7.2/20 (NEMA 5-20)	165	51.2 x 23.1 x 28.3	78.0 x 28.3 x 38.5	642
RDE40040LD	(549)		208-230V/60Hz	3.4/15 (NEMA 6-15)	(75)	(130.1 x 58.8 x 71.9)	(198.1 x 71.9 x 97.7)	(292)
RDE50040LA	24.1	500	115V/60Hz	7.5/20 (NEMA 5-20)	205	51.2 x 28.8 x 28.3	78.0 x 34.0 x 38.5**	668
RDE50040LD	(682)		208-230V/60Hz	4.0/15 (NEMA 6-15)	(93)	(130.1 x 73.0 x 71.9)	(198.1 x 86.4 x 97.7)	(304)
RDE60040LA	28.8	600	115V/60Hz	7.5/20 (NEMA 5-20)	245	51.2 x 34.4 x 28.3	78.0 x 39.6 x 38.5**	765
RDE60040LD	(816)		208-230V/60Hz	4.0/15 (NEMA 6-15)	(111)	(130.1 x 87.3 x 71.9)	(198.1 x 100.6 x 97.7)	(348)

\*Allowance for handle and hinge, add 4.2 in (10.7 cm) to cabinet width

\*\*Doorway width clearance is 34.5 in (87.6 cm) for RDE50040 and RDE60040



### Performance Data

FDA Class II Model	Energy Consumption* (kW-hr/day)	Peak Variation from -40°C Setpoint (°C)**	1-min Door Opening Recovery to -38.5°C (min)***	Warm-Up Time (-40°C to -20°C) (min)****	Sound (dBA)
RDE40040LA	5.2	+2.6 / -2.2	20	300	49
RDE40040LD	4.4	+3.4 / -1.5	18	314	52
RDE50040LA	5.3	+3.0 / -2.4	24	350	51
RDE50040LD	5.1	+2.2 / -2.2	25	318	48
RDE60040LA	6.0	+1.4 / -2.4	23	384	49
RDE60040LD	5.9	+1.5 / -1.9	25	362	49

\*Energy Consumption: Typical data - internal testing with freezer setpoint at -40°C and 20°C ambient temperature

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\*\*\*Door opening recovery: Typical data - internal recovery testing is to -38.5°C. During the door opening all inner and outer doors are opened for 60 seconds.

\*\*\*\*Warm Up Time: Typical data - internal testing with empty freezer setpoint at -40°C and ambient temperature at 20°

For specific model performance data, please refer to the individual technical specification sheet for the desired model.

# Thermo Scientific™ Revco™ RDE Series -40°C Ultra-Low Temperature Freezers

Options (Field installations must be performed by a qualified professional)

Description	Installation	For Model Series		
		RDE40040	RDE50040	RDE60040
<b>LN<sub>2</sub> Backup System</b> Maintains temperature down to -80°C with liquid nitrogen.	Factory	LN4567	LN4567	LN4567
	Field	FLN456LEA* FLN456LED**	FLN456LEA* FLN456LED**	FLN456LEA* FLN456LED**
<b>CO<sub>2</sub> Backup System</b> Maintains temperature down to -67°C with CO <sub>2</sub> .	Factory	CO4567	CO4567	CO4567
	Field	FCO456LEA* FCO456LED**	FCO456LEA* FCO456LED**	FCO456LEA* FCO456LED**
<b>Chart Recorder (Inkless)</b> Seven-day inkless recorder Range: -115° to +50°C (+5°C resolution) Dia.: 6 in. (15.2cm)	Factory	N/A	CR4567	CR4567
	Field	N/A	FCR500LE	FCR600LE
<b>Chart Recorder (Ink)</b> Seven-day ink recorder Range: -100° to +38°C (+2°C resolution) Dia.: 6 in. (15.2cm) <i>Models for RDE40040 are stand alone.</i>	Factory	N/A	CRP4567	CRP4567
	Field	6383-6A* 6383-6D**	FCRP500LE	FCRP600LE
<b>Stainless Steel Freezer Interior</b>	Factory	SS34567	SS34567	SS34567
<b>Twist Lock Plug</b> NEMA L5-20P for 115V/60Hz	Factory	US125V20ATL	US125V20ATL	US125V20ATL
	Field	TL125V20A	TL125V20A	TL125V20A
<b>Twist Lock Plug</b> NEMA L6-15P for 208-230V/60Hz	Factory	US230V15ATL	US230V15ATL	US230V15ATL
	Field	TL230V15A	TL230V15A	TL230V15A
<b>Twist Lock Plug</b> NEMA L6-20P for 208-230V/60Hz	Factory	US230V20ATL	US230V20ATL	US230V20ATL
	Field	TL230V20A	TL230V20A	TL230V20A

\*A = 115V/60Hz (NEMA 5-20 plug)

\*\*D = 208-230V/60Hz (NEMA 6-15 plug)

## Accessories

Description	For Model Series		
	RDE40040	RDE50040	RDE60040
<b>Air Filter (Replacement)</b>	AF34567LE	AF34567LE	AF34567LE
<b>Alarm Delay Module</b> Eliminates nuisance alarms due to intermittent or transitory conditions. (The alarm conditions must exist for a user-defined period before the signal is broadcast.)	6903	6903	6903
<b>Battery Backup (Replacement)</b>	400159	400159	400159
<b>Chart Paper, for Inkless Recorder, 50/Pack</b>	N/A	6185	6185
<b>Chart Paper, for Ink Recorder, 50/Pack</b>	17020	17020	17020
<b>Cryo Gloves, Medium</b>	4425	4425	4425
<b>Cryo Gloves, Large</b>	4426	4426	4426
<b>Seismic Restraint Kits</b>	TF-ULT400	TF-ULT500	TF-ULT600
<b>Shelf Kits: Include One Shelf and Clips</b>	SK400	SK500	SK600