

Thermo Scientific™ Revco™ RDE Series 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 11 minutes
- **Long warm-up time** from -80°C to -50°C in up to 5 hours
- **Four capacities:** 300, 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.¹
- Secure freezer settings with sample security
- Get Connected with DeviceLink™ Hub (*Coming Soon*)
- Backed by our Global Service and Support Team

Limit environmental impact and lower HVAC costs

- Uses as low as 10.7 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 50 dBA, the sound is comparable to a home refrigerator.²

1. Typical freezer data based on internal testing with freezer setpoint at -80°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 (-50°C to -86°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.)						
RDE30086FA	14.9	300	115V/60Hz	12.6/20 (NEMA 5-20)	125	51.2 x 17.8 x 28.3	78.0 x 23.0 x 38.5	712
RDE30086FD	(422)		208-230V/60Hz	5.6/15 (NEMA 6-15)	(57)	(130.1 x 45.2 x 71.9)	(198.1 x 58.4 x 97.7)	(323)
RDE40086FA	19.4	400	115V/60Hz	13.0/20 (NEMA 5-20)	165	51.2 x 23.1 x 28.3	78.0 x 28.3 x 38.5	687
RDE40086FD	(549)		208-230V/60Hz	5.9/15 (NEMA 6-15)	(75)	(130.1 x 58.8 x 71.9)	(198.1 x 71.9 x 97.7)	(312)
RDE50086FA	24.1	500	115V/60Hz	12.5/20 (NEMA 5-20)	205	51.2 x 28.8 x 28.3	78.0 x 34.0 x 38.5**	734
RDE50086FD	(682)		208-230V/60Hz	5.0/15 (NEMA 6-15)	(93)	(130.1 x 73.0 x 71.9)	(198.1 x 86.4 x 97.7)	(333)
RDE60086FA	28.8	600	115V/60Hz	12.7/20 (NEMA 5-20)	245	51.2 x 34.4 x 28.3	78.0 x 39.6 x 38.5**	820
RDE60086FD	(816)		208-230V/60Hz	6.2/15 (NEMA 6-15)	(111)	(130.1 x 87.3 x 71.9)	(198.1 x 100.6 x 97.7)	(372)

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

**Doorway width clearance is 34.5 in (87.6cm) for RDE50086 and RDE60086



Performance Data

Model Series	Energy Consumption* (kW-hr/day)	Peak Variation from -80°C Setpoint (°C)**	60 Second Door Opening Recovery Time (minutes)	Warm-Up Time (-80°C to -50°C) (minutes)***	Noise Level (dBA)
RDE30086	10.7	+6.9/-3.4	11	248	52
RDE40086	12.5	+5.2/-3.7	16	257	51
RDE50086	12.9	+4.0/-2.9	20	260	50
RDE60086	13.8	+3.9/-3.1	24	297	50

*Energy Consumption: Typical data - internal testing with freezer setpoint at -80°C and 20°C ambient temperature

**Peak Variation from Setpoint: Typical data - internal testing with freezer setpoint at -80°C and 20°C ambient temperature

***Warm Up Time: Typical freezer data based on internal testing with empty freezer setpoint at -80°C and ambient temperature at 20°C

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

Description	Installation	For Model Series			
		RDE30086	RDE40086	RDE50086	RDE60086
LN₂ Backup System Maintains temperature down to -80°C with liquid nitrogen. Models for RDE30086 are stand alone.	Factory	N/A	LN4567	LN4567	LN4567
	Field	FLN300A* FLN300D**	FLN456LEA* FLN456LED**	FLN456LEA* FLN456LED**	FLN456LEA* FLN456LED**
CO₂ Backup System Maintains temperature down to -67°C with CO ₂ . Models for RDE30086 are stand alone.	Factory	N/A	CO4567	CO4567	CO4567
	Field	FCO300A* FCO300D**	FCO456LEA* FCO456LED**	FCO456LEA* FCO456LED**	FCO456LEA* FCO456LED**
Chart Recorder (Inkless) Seven-day inkless recorder Range: -115° to +50°C (+5°C resolution) Dia.: 6 in. (15.2cm)	Factory	N/A	N/A	CR4567	CR4567
	Field	N/A	N/A	FCR500LE	FCR600LE
Chart Recorder (Ink) Range: -100° to +38°C (+2°C resolution) Dia.: 6 in. (15.2cm) Models for RDE30086 and RDE40086 are stand alone.	Factory	N/A	N/A	CRP4567	CRP4567
	Field	6383-6A* 6383-6D**	6383-6A* 6383-6D**	FCRP500LE	FCRP600LE
Stainless Steel Freezer Interior	Factory	SS34567	SS34567	SS34567	SS34567
Twist Lock Plug NEMA L5-20P for 115V/60Hz	Factory	US125V20ATL	US125V20ATL	US125V20ATL	US125V20ATL
	Field	TL125V20A	TL125V20A	TL125V20A	TL125V20A
Twist Lock Plug NEMA L6-15P for 208-230V/60Hz	Factory	US230V15ATL	US230V15ATL	US230V15ATL	US230V15ATL
	Field	TL230V15A	TL230V15A	TL230V15A	TL230V15A
Twist Lock Plug NEMA L6-20P for 208-230V/60Hz	Factory	US230V20ATL	US230V20ATL	US230V20ATL	US230V20ATL
	Field	TL230V20A	TL230V20A	TL230V20A	TL230V20A

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

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

Accessories

Description	For Model Series			
	RDE30086	RDE40086	RDE50086	RDE60086
Air Filter (Replacement)	AF34567LE	AF34567LE	AF34567LE	AF34567LE
Alarm Delay Module 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	6903
Battery Backup (Replacement)	400159	400159	400159	400159
Chart Paper, for Inkless Recorder, 50/Pack	N/A	N/A	6185	6185
Chart Paper, for Ink Recorder, 50/Pack	17020	17020	17020	17020
Cryo Gloves, Medium	4425	4425	4425	4425
Cryo Gloves, Large	4426	4426	4426	4426
Seismic Restraint Kits	TF-ULT300	TF-ULT400	TF-ULT500	TF-ULT600
Shelf Kits: Include One Shelf and Clips	SK300	SK400	SK500	SK600