

Replacement options for Freezers/Fridge for WHO

High Performance Refrigerators

Name	VWR® Stand	VWR® Stand	VWR® Stand	VWR® Standard	Thermo Scien
Cat. No.	76498-986	76498-988	76498-990	76169-589	TSX3005SAF
Operating Temperature (ce	1...10 °C	1...10 °C	1...10 °C	1...10 °C	2...8 °C
Defrost	Cycle Defrost	Cycle Defrost	Cycle Defrost	Cycle Defrost	Automatic
Shelves/Drawers	Five adjustabl	Five adjustabl	Five adjustabl	Three adjustable	Four shelves
Door Type	1 Solid swing	1 Solid swing	1 Solid swing	1 swing solid doc	Solid
Type	Upright	Upright	Upright	Upright	Upright
Refrigerant Type	R290	R290	R290	Natural Refrigera	R290
Electrical	115 V, 60 Hz,	115 V, 60 Hz,	115 V, 60 Hz,	115 V	115 V, 60 Hz,
Energy Consumption kW	0.345	0.345	0.345	0.345	1.725
Weight kg	77	95	104	141	177
Interior Dimensions:					
Width mm	483	667	629	508	762
Depth mm	425	530	527	756	723
Height mm	1619	1486	1657	1988	1473
Exterior Dimensions:					
Width mm	600	781	781	635	864
Depth mm	619	727	737	756	960
Height mm	1854	1721	1896	2007	1994
Capacity cu. ft.	14	17	20	16	29.2
Additional features	Microprocessc	Microprocessc	Microprocessc	Adjustable opera	Whisper quiet
Description	Standard labc	Standard labc	Standard labc	Performance Tou	N/A
Environmentally Preferabl	Energy Efficie	Energy Efficie	Energy Efficie	N/A	Up to 40% les
Price	\$4,049.09	\$4,269.30	\$4,759.19	\$7,794.56	\$6,125
Rebate	Non participat	Non participat	Non participat	Non participating	Not on Energy
Net Price	\$4,049.09	\$4,269.30	\$4,759.19	\$7,794.56	\$6,125

High Performance Freezers

Name	PHCbi - MDF-	PHCbi - MDF-U731-PA	Name	VWR® Stand:
Energy Star Partner	PHC Corporat	PHC Corporation of North A	Model	
Product Type	High Performε	High Performance Freezer	Cat. No.	76177-832
Peak Temperature Variance	9.39	8.56	Operating Temp	-15...-25 °C
Product Form Factor	Upright	Upright	Temperature ran	-15...-25 °C
Door Opening Orientation	Right, Swingir	Right, Swinging	Defrost	Manual Defro:
Number of Internal Ports a	0	0	Shelves/Drawers	Six fixed shelv

Defrost Type	Manual	Automatic	Door Type	1 Solid swing
Refrigerant Type	R-404A	R-404A	Type	Upright
Installed Accessories	shelves only,	shelves only, no additional e	Refrigerant Type	R290
Energy Consumption (kWh)	2.89	6.55	Electrical	115 V, 60 Hz,
Total Volume (cubic feet)	23.8	21.86	Energy Consum	0.4025
Total Number of Doors	1	1	Weight kg	75
Number of glass doors	0	0	Interior:	
Number of solid doors	1	1	Width mm	482
Number of Drawers or She	5	4	Depth mm	445
Depth (in)	32.75	33	Height mm	1619
Height (in)	74.25	74.13	Exterior:	
Width (in)	30.25	30.25	Width mm	600
ENERGY STAR Certified	Yes	Yes	Depth mm	619
Date Available on Market	4/1/12	4/1/12	Height mm	1854
Date Certified	5/18/17	5/18/17	Capacity cu. ft.	14
Markets	United States	United States, Canada	Additional featur	Microprocessc
ENERGY STAR Unique ID	2296325	2296326	Description	VWR® Stand:
Price	\$10,554.60	\$10,554.60	Environmentally	Energy Efficie
Rebate	\$1,200	\$600	Environmental C	N/A
Net Price	\$9,354.60	\$9,954.60	Price	\$3,708.47
			Rebate	Non participat
			Net Price	\$3,708.47

Ultra Low-Temperature Freezers

Name	PHCbi - MDF-	PHCbi - MDF-	PHCbi - MDF-	PHCbi - MDF-DU!	PHCbi - MDF-
Energy Star Partner	PHC Corporat	PHC Corporat	PHC Corporat	PHC Corporation	PHC Corporat
Product Type	Ultra-Low Ten	Ultra-Low Ten	Ultra-Low Ten	Ultra-Low Tempe	Ultra-Low Ten
Peak Temperature Variand	23.29	16.52	26.74	16.9	15.72
Product Form Factor	Upright	Upright	Upright	Upright	Upright
Door Opening Orientation	Swinging	Swinging	Swinging	Swinging	Swinging
Number of Internal Ports a	1	1	1	1	1
Defrost Type	Manual	Manual	Manual	Manual	Manual
Refrigerant Type	R-170	R-290	R-170, R-290	R-170, R-290	R-170
Installed Accessories	None	N/A	None	None	None
Energy Consumption (kWh)	0.29	0.3	0.31	0.35	0.37
Total Volume (cubic feet)	25.93	30.1	25.74	18.75	18.78
Total Number of Doors	3	3	3	3	3
Number of glass doors	0	0	0	0	0

Number of solid doors	3	3	3	3	3
Number of Drawers or She	3	3	3	3	3
Depth (in)	36.5	34.19	33.75	35	36.5
Height (in)	78.38	77	77.25	78.56	78.5
Width (in)	40.63	45.25	40.62	31.25	31.13
ENERGY STAR Certified	Yes	Yes	Yes	Yes	Yes
Date Available on Market	12/14/18	12/1/19	9/1/17	3/1/18	12/14/18
Date Certified	11/28/18	1/30/20	8/31/17	4/24/18	11/28/18
Markets	United States	United States	United States	United States, C:	United States
ENERGY STAR Unique ID	2330320	2354277	2318824	2318826	2330321
Additional Model Names and/or Numbers:					
Price	\$22,413.30	\$25,282.95	\$22,413.30	\$18,855.90	\$18,855.90
Rebate	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
Net Price	\$20,413.30	\$23,282.95	\$20,413.30	\$16,855.90	\$16,855.90

Energy Star Certified Options

Name	Thermo Fisher Scientific - TSX3005SA
Energy Star Partner	Thermo Fisher Scientific LLC
Product Type	High Performance Refrigerator
Peak Temperature Variance	3.17
Product Form Factor	Upright
Door Opening Orientation	Swinging,Right
Number of Internal Ports and	1
Defrost Type	Manual
Refrigerant Type	R290
Installed Accessories	Device Link
Energy Consumption (kWh/d	4.41
Total Volume (cubic feet)	27.8
Total Number of Doors	1
Number of glass doors	0
Number of solid doors	1
Number of Drawers or Shelve	4
Depth (in)	30.5
Height (in)	75.75
Width (in)	34
ENERGY STAR Certified	Yes
Date Available on Market	4/1/19
Date Certified	4/19/19
Markets	United States, Canada
ENERGY STAR Unique ID	2337033
Additional Model Names and	N/A
Price	\$9,700
Rebate	\$800
Net Price	\$8,900

VWR® Standard Series Manual VWR® Standard TSX Series Hi ,

76498-984	75836-238	TSX1230FA
-15...-25 °C	-15...-25 °C	76320-234
-15...-25 °C	-15...-25 °C	-30 °C
Manual Defrost	-15...-25 °C	-15...-35 °C
Six fixed shelves	Manual Defrost	Automatic Defrost
	Six fixed shelves	Four shelves

1 Solid swing door, right hinge	1 Solid swing	Solid doors
Upright	Upright	Upright
R290	R290	R290
115 V, 60 Hz, 6 Amps, 1/2 HP	115 V, 60 Hz,	115 V, 60 Hz, 15 A
0.69	0.69	1.725
86	95	N/A
663	657	508
572	552	554
1480	1651	1331
781	781	619
727	737	790
1721	1896	1854
17	20	11.5
Microprocessor temperature control	Microprocessor	Whisper quiet ,
VWR® Standard Series Manual	VWR® Standard	TSX series high ,
Energy Efficient, Safer Human	Energy Efficient	Energy Efficient ,
N/A	N/A	Energy Star; I ,
\$4,160.39	\$4,197.90	\$9,928.80
Non participating company	Non participating	\$600
\$4,160.39	\$4,197.90	\$9,328.80

Thermo Fisher Scientific - TSX60086A

Thermo Fisher Scientific LLC

Ultra-Low Temperature Freezer

16.36

Upright

Right, Swinging

2

Manual

R-170, R-290

Chart recorder, water-cooled option

0.39

28.67

1

0

	1
	3
	36
	77.87
	39.5
Yes	
	7/31/17
	2/22/22
United States, Canada	
	2301340
,TSX60086D,; ,TSX60086V,	
	\$31,141.97
	\$2,000
	\$29,141.97

Potential \$75 rebate for recycling freezers/fridge

Specified Rebates (masssave)	Partici
Equipment Type:	Customer Incentive:
Equipment Type:	Name
Lab-Grade High Performance Refrigerators ≥6 and <25 c \$600/unit	DOT Scientific Grainger
Lab-Grade High Performance Refrigerators ≥25 and <44 , \$800/unit	LabRepCo, LI MidSci
Lab-Grade High Performance Refrigerators ≥44 cu.ft. \$1,200/unit	NuAire PHC Corporat
Lab-Grade High Performance Freezers ≥6 and <22 cu.ft. \$600/unit	Stirling Ultracc Thermo Fisher
Lab-Grade High Performance Freezers ≥22 cu.ft. \$1,200/unit	Biomedical Sa
Ultra-Low Temp Freezers >6 cu.ft. \$2,000/unit	

Qualifying Equipment (masssave):

The cold storage lab equipment incentive offering uses the ENERGY STAR® product

List: <http://www.energystar.gov/productfinder>

es (Cape Light Compact)

Participating Distributors

	Phone #	Website
:	810-744-1478	dotscientific.com
	781-680-0005	grainger.com
_C	800-521-0754	labrepco.com
	415-361-7132	midsci.com
	800-328-3352 x516	nuaire.com
ion of North America	347-820-4869	phcd.com/us/biomedical
old	603-303-2387	stirlingultracold.com
r Scientific	201-638-1231	thermofisher.com
les Consultant	617-833-1112	biomed-sales.com

s list to determine the eligibility of various types, makes, and models of efficient, labora

itory grade refrigerators and freezers