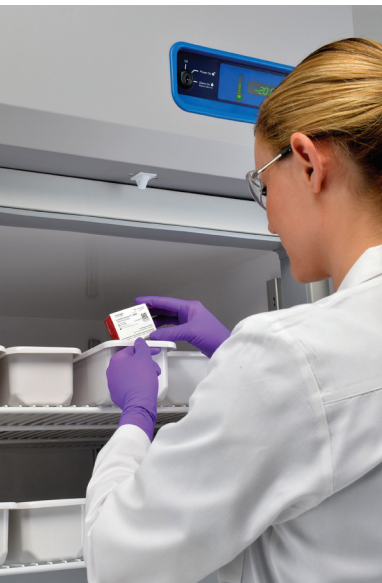


# TSX Series high-performance manual defrost $-20^{\circ}\text{C}$ freezers



Thermo Scientific™ high-performance manual defrost freezers are designed to prevent slight and intermittent temperature variations that occur due to coil warming during an automatic defrost cycle. Our enzyme freezers also come with enzyme bins.

TSX Series high-performance manual defrost freezers feature:

- Cold-wall convection cooling and temperature uniformity
- Compatibility with GMP Clean Room Class A and ISO 6 (ISO EN 14644-1) standards with appropriate pre-installation
- Four 2" casters for easy movement and lockable front casters
- Self-closing doors with  $90^{\circ}$  stoppage to assist with inventory loads
- See pages 15–21 for options and accessories



Thermo Scientific™  
TSX 23 cu. ft.  
freezer

## TSX Series high-performance manual defrost $-20^{\circ}\text{C}$ freezers

Cat. No.	Temp. range (setpoint)	Capacity cu. ft. (liters)	Electrical (plug)	Doors	Basket Drawers	Defrost	Certification	Interior dimensions D x W x H in. (cm)	Exterior dimensions D x W x H in. (cm)	Shipping weight lbs. (kg)
TSX2320FA	$-25^{\circ}\text{C}$ to $-15^{\circ}\text{C}$ ( $-20^{\circ}\text{C}$ )	23.3 (659)	115V, 60Hz (NEMA 5-15)	1 solid	4 (0)	manual	UL, cUL	28.5 x 24.0 x 58.0 (72.3 x 61.0 x 147.3)	38.9 x 28.0 x 78.5 (99.0 x 71.1 x 199.4)	459 (208)
TSX2320FD			208-230V, 60Hz (NEMA 6-15)							438 (199)
TSX3020FA	$-25^{\circ}\text{C}$ to $-15^{\circ}\text{C}$ ( $-20^{\circ}\text{C}$ )	29.2 (827)	115V, 60Hz (NEMA 5-15)	1 solid	4 (0)	manual	UL, cUL	28.5 x 30.0 x 58.0 (72.3 x 76.2 x 147.3)	38.9 x 34.0 x 78.5 (99.0 x 86.4 x 199.4)	483 (219)
TSX3020FD			208-230V, 60Hz (NEMA 6-15)							483 (219)

## TSX Series high-performance manual defrost $-20^{\circ}\text{C}$ enzyme freezers

TSX2320EA	$-25^{\circ}\text{C}$ to $-15^{\circ}\text{C}$ ( $-20^{\circ}\text{C}$ )	23.3 (659)	115V, 60Hz (NEMA 5-15)	1 solid	9 (45)	manual	UL, cUL	28.5 x 24.0 x 58.0 (72.3 x 61.0 x 147.3)	38.9 x 28.0 x 78.5 (99.0 x 71.1 x 199.4)	514 (233)
TSX2320ED			208-230V, 60Hz (NEMA 6-15)							493 (224)
TSX3020EA	$-25^{\circ}\text{C}$ to $-15^{\circ}\text{C}$ ( $-20^{\circ}\text{C}$ )	29.2 (827)	115V, 60Hz (NEMA 5-15)	1 solid	9 (45)	manual	UL, cUL	28.5 x 30.0 x 58 (72.3 x 76.2 x 147.3)	38.9 x 34.0 x 78.5 (99.0 x 86.4 x 199.4)	552 (251)
TSX3020ED			208-230V, 60Hz (NEMA 6-15)							552 (251)