

GENERAL NOTES:

1. THE INTERNAL FORCED AIR CIRCULATION SHOWN IS FOR SYSTEM "A" (CLOCKWISE). SYSTEM "B" (COUNTER CLOCKWISE) IS A MIRROR TO SYSTEM "A".
2. HEAT REJECTION TO ATMOSPHERE @ -80 °C:

MAXIMUM i

= 28,000 Btu/hr (8.2 kW) TO WATER  
= 1800 Btu/hr (0.52 kW) TO AMBIENT

MINIMUM

NORMAL OPERATION, 1 SYSTEM @ 75-80%  
= 12,000 Btu/hr (3.5 kW) TO WATER  
< 900 Btu/hr (0.26 kW) TO AMBIENT

AVERAGE - NORMAL OPERATION, 1-2 DOOR OPENING/hr, 1 SYSTEM DEFROST  
= 14,000 Btu/hr (4.1 kW) TO WATER  
= 1,000 Btu/hr (0.29 kW) TO AMBIENT

3. INCLUDES (2) FLOOR ANCHOR BRACKETS. (TO BE INSTALLED BY CUSTOMER)
- WATER REQUIREMENTS:
- PRESSURE DIFFERENTIAL ≈ 20 psi (1.4 bar)

1. CHILLED WATER i

WATER TEMPERATURE ≤ 10 °C  
MAXIMUM FLOW RATE = 3.5 gpm (14 LPM)  
AVERAGE FLOW RATE = 2.0 gpm (8 LPM)

2. WATER CONNECTIONS ARE ½" FNPT.

FOR ULCi UNITS, A ½" MNPT x M20 x 1.5 FEMALE ADAPTER IS PROVIDED.
- MATERIAL HANDLING:
1. CART SYSTEM OPTION:

FEATURES (4) STAINLESS STEEL PRODUCT CARTS, (4) GUIDES, AND (2) FLOOR INSERTS. CARTS INCLUDE (6) SHELVES WITH SWIVEL-LOCKING CASTERS, FORK POCKETS AND CANE PIN FOR SECURING IN FREEZER.

2. PALLET RACK OPTION:

FEATURES (1) STAINLESS STEEL PALLET RACK WITH (1) SHELF. EXTRA SHELVES AVAILABLE.

3. OTHER OPTIONS INCLUDE A SHELVING SYSTEM AND BIORACKING SYSTEM FOR STANDARD CRYORACKS.
- Top view diagram of the unit. Dimensions include: 16½" [421] WATER IN/OUT, 47½" [1204] WATER IN/OUT, 50" [1268] WATER IN TYP, 52½" [1331] WATER OUT TYP, 76¼" [1936] overall height, and 138¼" [3510] overall width.
- SECTION 1-B-B TOP SECTION DETAIL. Dimensions include: 121" [3073] INTERIOR width, 66¼" [1682] exterior height, 62¼" [1579] exterior height, 119" [3023] interior width, and 6" DEEP DOOR JAMB.
- Top view diagram of the unit. Dimensions include: 34½" [879] TYP power cable length, 53¾" [1363] height, 141° door angle, and 223¾" [5684] overall width.
- Section 1-A-A LEFT SECTION DETAIL. Dimensions include: 64" [1626] width, 145¼" [3691] height, 102⅝" [2608] height, 14" [356] MIN CLR, 133¼" [3383] width, 161¼" [4094] width, and 14" [356] MIN CLR.
- Section 1-A-A LEFT SECTION DETAIL. Dimensions include: 12" [305] MIN CLR, 157¼" [3996] MIN CLR, 86⅝" [2199] INTERIOR height, 54" [1372] INTERIOR width, and 1" [25] MIN CLR.
- Top view diagram of the unit. Dimensions include: ½" FNPT CONNECTIONS, 50¼" [1276] HANDLE CENTER, 46" [1168] DOOR OPENING, and 85" [2159] DOOR OPENING.
- i TOTAL FOR BOTH REFRIGERATION SYSTEMS.
- | POWER REQUIREMENTS   |  |              |                                 |  | TOLERANCES<br><br>.x ±.1<br>.xx ±.03<br>.xxx ±.015<br>.xxxx ±.0005<br><br>ANGLE ±1°<br>FRACTIONAL ±1/16<br><br>DIMENSIONS ARE IN <b>INCHES</b><br>UNLESS OTHERWISE SPECIFIED | THIS DOCUMENT CONTAINS PROPRIETARY INFORMATION AND SUCH IS NOT TO BE DISCLOSED TO OTHERS FOR ANY PURPOSE OR USED FOR MANUFACTURING PURPOSES WITHOUT THE WRITTEN PERMISSION OF TRANE TECHNOLOGIES. | SPECIFICATIONS, ULC-328, WATER-COOLED |                            |              |
|----------------------|--|--------------|---------------------------------|--|--|---|---------------------------------------|----------------------------|--------------|
| UNIT                 | ELECTRICAL REQUIREMNTS                                 | BREAKER SIZE | PLUG SPEC                       | RECEPTACLE SPEC  |  |   | SIZE                                  | DWG NO                     | REV          |
| ULC (DOMESTIC)       | 208/240 VAC - 1 PHASE - 60 HZ<br>24 FLA: 2 WIRES + GND | 30A          | NEMA L6-30P, LOCKING PLUG       | L6-30P FEMALE RECEPTACLE/CONNECTOR, 2 L, 1GND                |  |   | B                                     | ULC-328, WATER-COOLED      | 2            |
| ULCi (INTERNATIONAL) | 230 VAC - 1 PHASE - 50HZ<br>24 FLA: 2 WIRES + GND      | 32A          | IEC 60309<br>6 HOUR PLUG, 2P 3W | IEC 60309- 6 HOUR RECEPTACLE/CONNECTOR, 2P 3W (1L, 1N, 1GND) |  |   | DRAWN BY<br>B. IRWIN                  | DRAWN DATE<br>8/18/2025    |              |
|                      |  |              |                                 |  |  |   | APPROVED BY<br>J. HESSLER             | APPROVAL DATE<br>8/18/2025 |              |
|                      |  |              |                                 |  |  |   | REFERENCE<br>N/A                      | SCALE<br>1 / 48            | SHEET 1 OF 1 |