



PRODUCT BULLETIN

TPB-3010-02-A-1 July 24, 2019

TLV LOW VELOCITY EVAPORATORS: GENERAL SPECIFICATIONS

Engineered for positive low air movement and even temperatures throughout the refrigerated space, while maintaining desired humidity conditions.



1. General:

The unit cooler is to be cULus Approved and is to be located inside of a walk-in refrigerated cooler no colder than 28°F. This unit consists of the casing, evaporator coil, fans and defrost (air, electric or hot gas) system as determined by model. The evaporator systems and electrical control panels are to be housed within a single assembly with fan airflow pattern of blow through design pushing air through the unit cooler and directing it outwards in two opposite directions. All of the component parts, options and accessories will be provided, mounted, piped and wired, as required by the manufacturer.

2. Casing:

Entire unit cooler casing shall be a minimum of 14 gauge aluminum with a textured finish. Cabinet consists of a fixed top panel, two side panels and a hinged bottom panel. Bottom panel shall be manufactured from a single piece of 14 gauge textured aluminum die-formed in a single pass without welded corners. High-density polyethylene fan guards meeting U.L. #94HB flame test rating and shall be affixed to the bottom panel with wellnuts. All components of the casing shall be assembled and cleaned.

3. Coil:

Evaporator coils are constructed using 0.375" OD smooth seamless copper tubes in a staggered pattern mechanically expanded into die-formed fully collared high-efficiency double sine wave aluminum fin. Coils are available in 7 FPI (0.0075" thickness) fin spacing and are supplied with a Schrader valve and 0.25" OD equalizer line brazed on the suction header. The evaporator coil shall be tested for leaks at a minimum pressure of 300 pounds per square inch/gauge (psig) dehydrated and sealed.

4. Fans and Motors:

All motors are open drip-proof PSC type permanently lubricated direct drive 1050 RPM or electronically commutated (EC) type capable of two-speed operation utilizing a single pole double throw (SPDT) thermostat. Fan blades are mill finish 0.050" 5052 H32 grade aluminum complete with aluminum hub with 0.5" bore and 0.25" set screw.

5. Electric Defrost:

Quantity two (2) or four (4) stainless steel defrost heaters, varying with model of 0.375" diameter are inset flush to the face of the coil even with the edge of the fins. Two (2) additional heaters are secured to the inner drain pan mounted at the bottom of each coil bundle. A fixed defrost termination switch is mounted to the end-plate and factory wired to the terminal board.



TLV LOW VELOCITY EVAPORATORS: GENERAL SPECIFICATIONS (cont'd)

Additional Resources:

Products Affected:

TLV – Low Velocity Evaporators: <https://t-rp.com/tlv>

Affected Products Documentation:

TLV Product Data and Specifications: <https://docs.t-rp.com/1073478.pdf>

Related Product Specialist Group:

Evaporators: evaps@t-rp.com 1-844-893-3222 ext. 520

Additional Resources:

Trenton Refrigeration website: <https://t-rp.com>

Trenton Refrigeration Evaporators page: <https://t-rp.com/product-category/evaporators>

Author:

Norman Haimes – Senior Application and Systems Specialist