

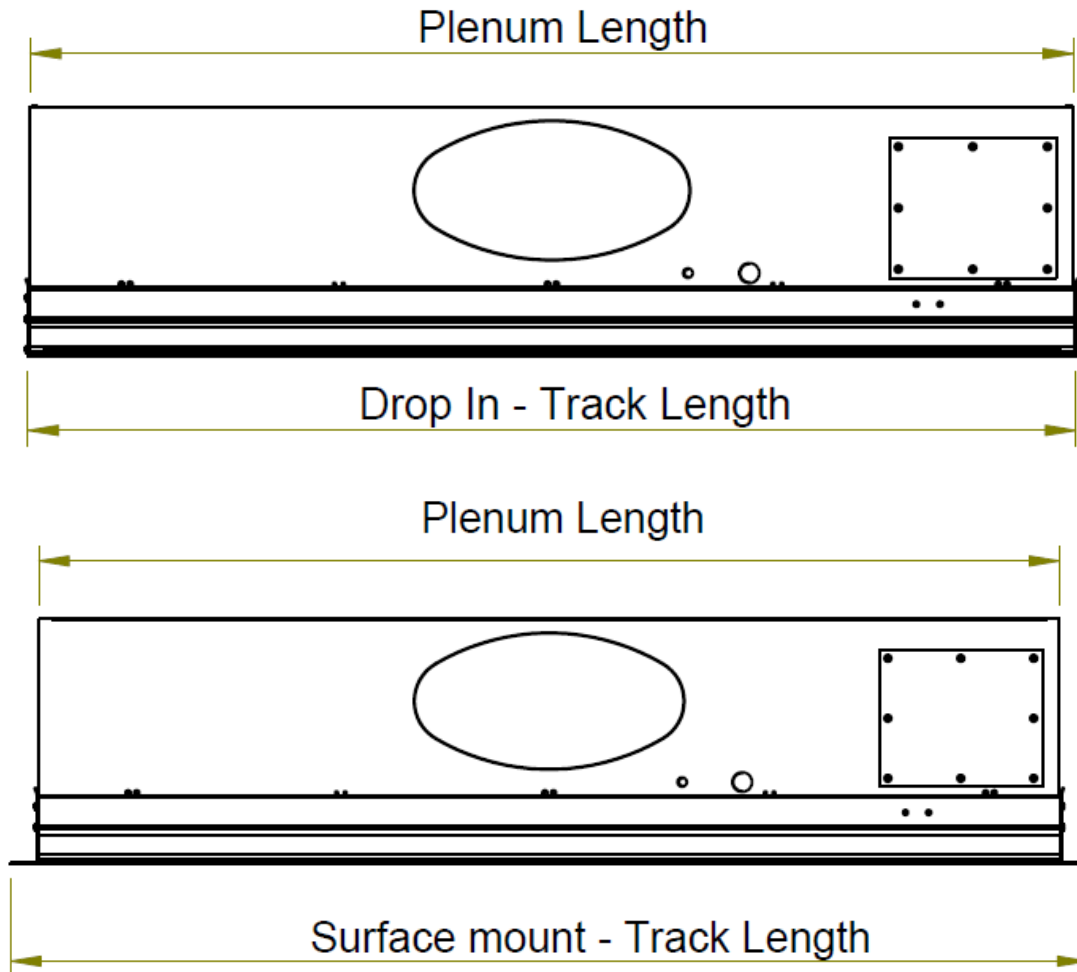
## T<sub>3</sub> Series VAV Diffusers

Digital Diffuser • Steel • Linear

Model: T<sub>3</sub>LN

### Model Configuration

Models are shipped as Secondary Units that will follow the command of a Primary Unit. To make a unit Primary, simply connect a thermostat/controller directly to it.

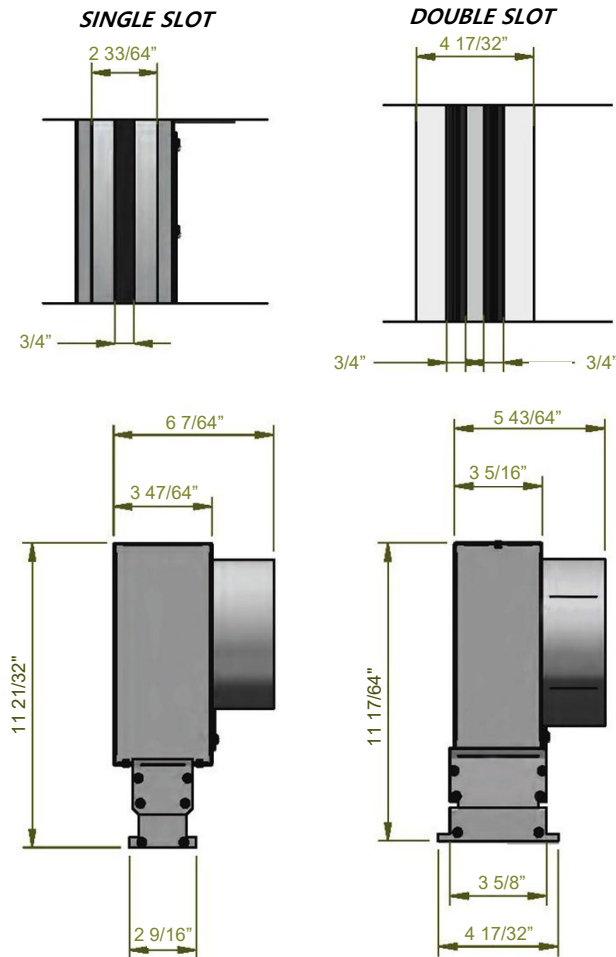


T3LN GENERAL DIMENSIONS (inches)

Nominal Length	Plenum Length	Track Length Single/Double Slot Butt-Join Mounting	Track Length Single/Double Slot Drop-In Mounting (T-Bar Ceiling)	T-Bar Centers	Track Length One Slot Surface Mounting (Plastered Ceiling)	Track Length Two Slot Surface Mounting (Plastered Ceiling)	Ceiling Cut-Out Length Single/Double Slot Surface Mounting (Plastered Ceiling)	Inlet $\varnothing$
24	23 15/64	23 15/64	23 3/4	24	25 3/64	25 53/64	24	6
36	35 3/64	35 3/64	35 3/4	36	36 27/32	37 41/64	36	8
48	46 27/32	46 27/32	47 3/4	48	48 21/32	49 29/64	48	10
60	58 21/32	58 21/32	59 3/4	60	60 15/32	61 17/64	60	12

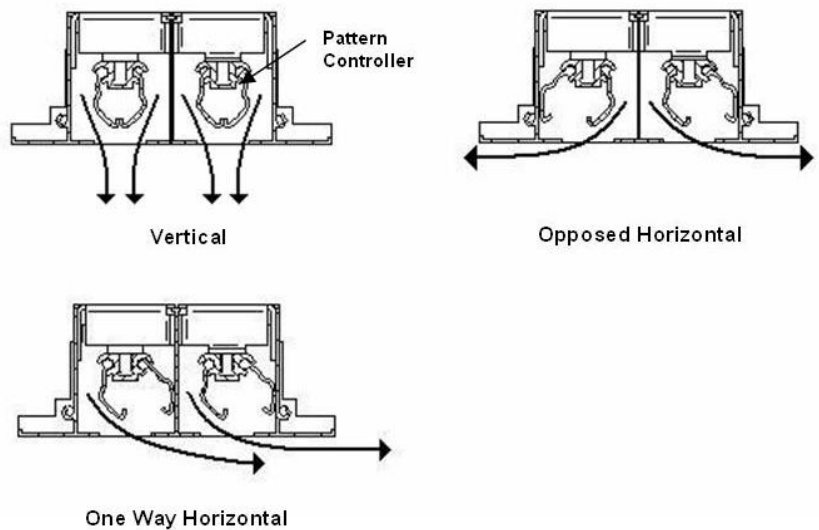
Available Slot Options

**T3LN GENERAL DIMENSIONS**



Airflow Pattern

- Flow direction is set to the required pattern by positioning the pattern controllers as indicated in the diagrams below.
- Adjusting the pattern controller blades is done by inserting a screwdriver through the diffuser slot and levering it to an open or closed position.



## Optional Accessories

Check  if provided.

### Master Communication Module

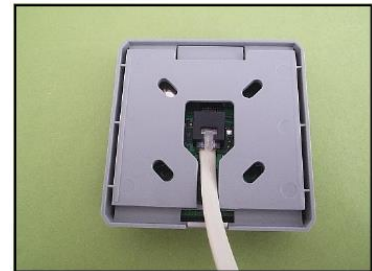
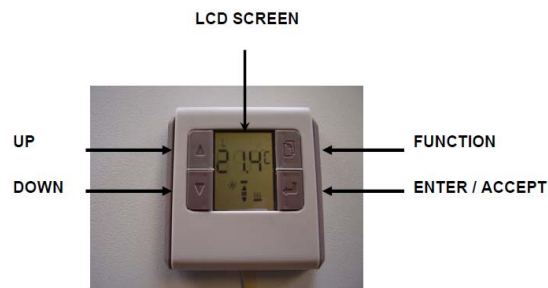
- MCMB1 – Bacnet (TCP/IP)
- MCMB2 – Bacnet (MS/TP)

- Available with BACnet gateway
- MCM Is the central data collection and distribution point for up to 60 VAV field diffusers per module.
- Features four diffuser channel inputs which can accommodate up to 15 diffusers per channel.
- Interface software is designed as a commissioning tool as well as for data monitoring, logging, and fault finding.
- Software is supplied with each shipment.



### Controller / Thermostat

- Each T<sub>3</sub>LN diffuser can be connected to a controller / thermostat. This makes the unit a primary unit, capable of controlling connected secondary units.
- 24VAC RJ-12 control cable connection.
- Room sensor with LCD display
- Provides Setpoint Temperature adjustment & room temp display.
- Interfaces with a USB module in order to interface with software for further functionality.
- Dimensions are 3" x 3 1/4"



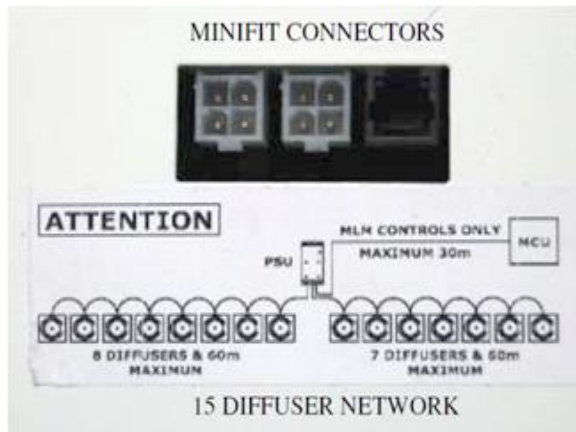
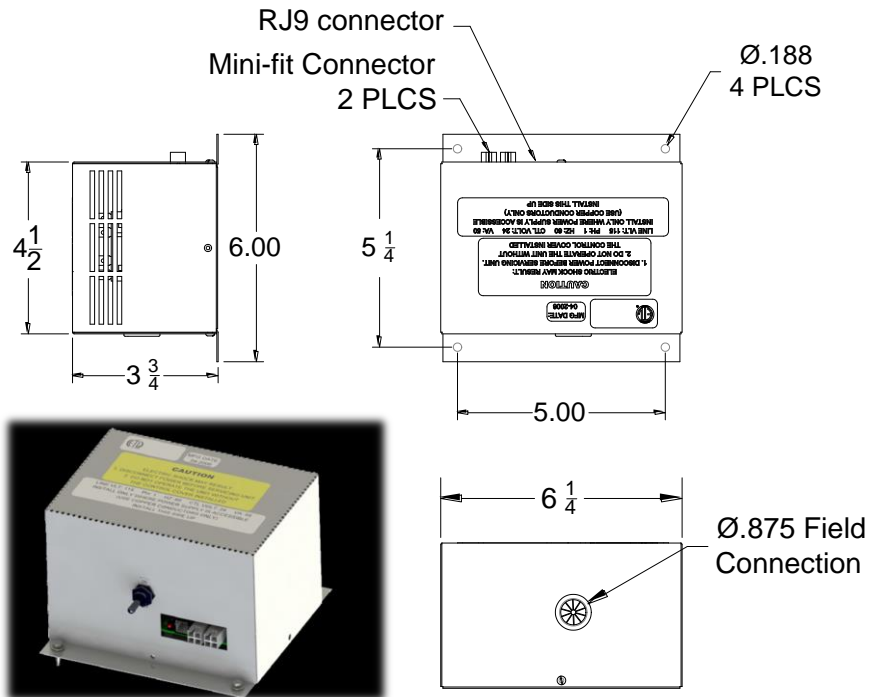
## Optional Accessories

Check  if provided.

### Power Module

- 120/24VAC transformer (T3PM120)
- 208/24VAC transformer (T3PM208)
- 277/24VAC transformer (T3PM277)

- Power conditioner
- One power module is required for every fifteen (15) primary or secondary diffusers without electric reheat or fourteen (14) primary or secondary diffusers with electric reheat.
- 24VAC output to T<sub>3</sub>LN / T<sub>3</sub>LN diffusers.
- Integral circuit protection protects the power module from shorts in the RJ-9 and mini-fit daisy chain cabling.



### Power Module Wiring

- A total of 8 diffusers can be daisy chained off one connector and another 7 diffusers can be daisy chained from the other connector for a total of 15 diffusers.
- An RJ9 female connector is also provided on the power module. This connector allows the communication cable to link the maximum 15 diffuser network to the master communications module (MCM).

## General Description

- The T<sub>3</sub>LN is electronically controlled through a 12V DC actuator capable of varying the supply of cold and warm air into the space by means of regulating a variable aperture damper, linearly in the diffuser.
- Volume control is achieved by opening or closing a set of slotted plates using a patented electric stepper motor, so as to vary the aperture through which the supply air passes. This provides through "VARIABLE GEOMETRY VAV" which effectively maintains air discharge velocity throughout the range of volume control from 100% down to as little as 25%.
- The position of the sliding aperture plate is varied by linear drive actuator mounted on the plate.
- When the zone temperature is 1°F above setpoint, the diffuser is in cooling mode. When the zone temperature is 1°F below setpoint, the diffuser is in heating mode.
- A built-in auto-calibration feature ensures that the volume control damper position is always correct.
- The T<sub>3</sub>LN diffuser is designed to satisfy architectural, as well as, engineering criteria. The strong, clean, unobtrusive lines harmonize with the ceiling, without sacrificing performance. The standard finish is #26 White.
- The volume control section is constructed using corrosion resistant pre-galvanized sheet steel. The extruded aluminum diffuser sections are finished in epoxy powder coated textured white.