



TCM Series ZigBee Wireless Lighting Module

TCM-ZB-D Line Voltage Control Module with On/Off & 0-10V Dimming

Electrical Specifications

| | |
|-----------------------------|----------------------------------|
| Input Voltage Range: | 100-277Vac |
| Frequency: | 50/60 Hz Nom. (47-63 Hz Min/Max) |
| AC Relay Switched Current: | ≤9A |
| AC Relay Inrush Current: | ≤60A |
| Input Current Module Power: | ≤0.05A power for control only |
| Wattage: | 800W Max |

Environmental Specifications

| | |
|------------------------|-------------------------------------|
| Maximum Case Temp. | 72°C |
| Operating Temperature: | -5°C to +50°C |
| Storage Temperature: | -40°C to +80°C |
| Humidity: | 5% to 95% |
| Cooling: | Convection |
| Vibration Frequency: | 5 to 55 Hz/2g, 30 minutes |
| Impact Resistance: | 1g/s |
| EMC: | FCC 47CFR Part 15 Class B compliant |
| Weight: | 3.7oz. (105g) |



- 2.4GHz, +20dBm ZigBee transmit power
- ON/OFF and 0-10V Analog Dimming Control, 100mA Sink
- Compatible with LED Drivers & Electronic Ballasts that comply with IEC60929 Annex E2, 0-10V Dimming
- ON/OFF switching up to 277Vac @9A Max
- Stores last dim setting even when driver is powered off by the module
- Dust Proof Design IP50
- ZigBee HA Certified
- Gray 5VA PC ABS Plastic Case
- UL Dry & Damp location rated
- Reset Button for use with recommissioning.
- Designed for one module per luminaire
- UL2043 Plenum Rated for use in ceiling spaces
- 5 year warranty

Controllers

| Model Number | Description |
|--------------|---|
| TCM-ZB-D | Thomas Control Module - ZigBee Wireless Dimming Control |

Class 2: US/Canada

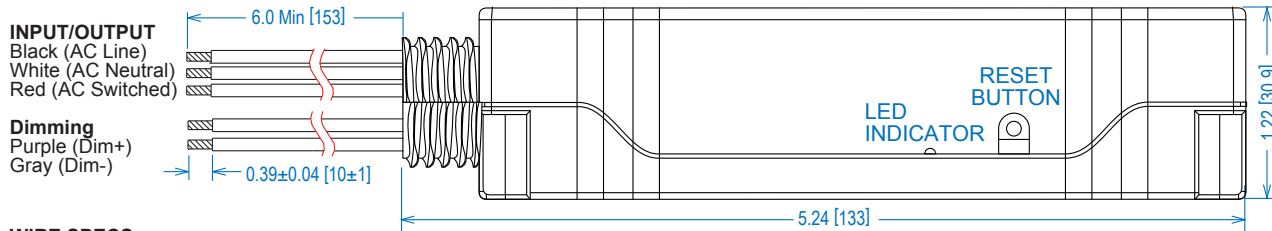


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 Specifications subject to change without notice.

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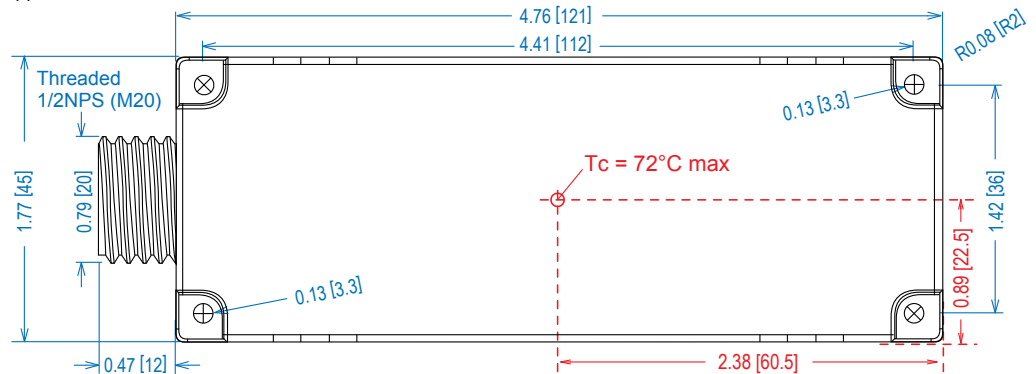


Dimensions - Inches (mm)

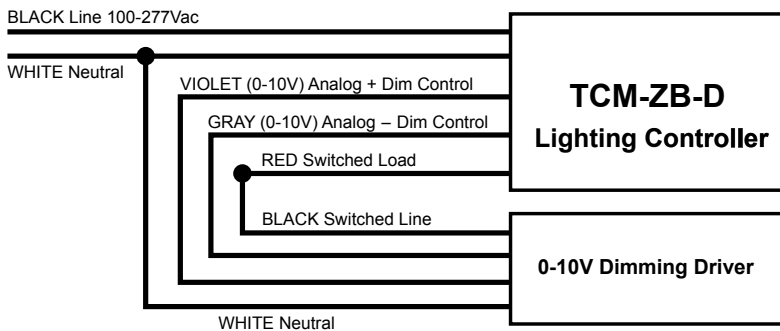


WIRE SPECS:

Input Leads: 18 AWG, rated 600 V, 105C, min.
Output Leads: 18 AWG, rated 600 V, 105C, min.
Dimming Leads: 22 AWG, rated 300 V, 105C, min.
 All wires are stranded with solder dipped ends.



Typical Application Circuit



| Safety Cert. | Standard |
|------------------------------------|--|
| UL/CUL | UL8750 & CAN/CSA C22.2 No. 250.13, UL2043 Plenum Rated |
| CE | EN 61347-1, EN61347-2-13 |
| EMC Standard | Notes |
| Withstand Voltage Relay | Input to Output Across Relay Contacts: 700 Vac |
| Withstand Voltage AC In to Dim Out | Input to DIM: >1750 Vac |
| Dimming Circuit | UL & cUL Isolated Class 2, Dim+ Purple/Dim- Gray |
| FCC Part 15 | Class B |
| EN61000-4-5 | 2kV L-N, 8/20 µsec surge protection |

Reset Operation

Reset Button

The reset button is used to un-join a Zigbee network and reset the TCM-ZB-D to factory defaults. To reset: Press and hold the reset button for 7 seconds. You will hear an internal relay click once reset occurs. The green LED indicator will flash On/Off when not joined to a Zigbee network.

Joined

The green LED indicator will remain ON when TCM-ZB-D has successfully joined a Zigbee network.

UL Conditions of Acceptability

See website for additional information