



TCM-ZB-D Series

Zigbee Wireless Lighting Module
Line Voltage Control Module with On/Off & 0-10V Dimming

Intelligent Device
ECOSYSTEM

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)
MTBF:	418,000 Hours at full load and 40°C ambient conditions per MIL-217F Notice 2



- 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
- Daintree ControlScope 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	Description
TCM-ZB-D	Thomas Control Module - ZigBee Wireless Dimming Control

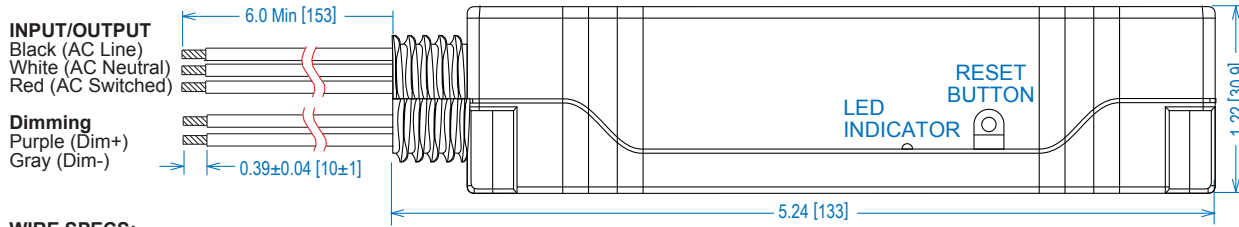
Class 2: US/Canada

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

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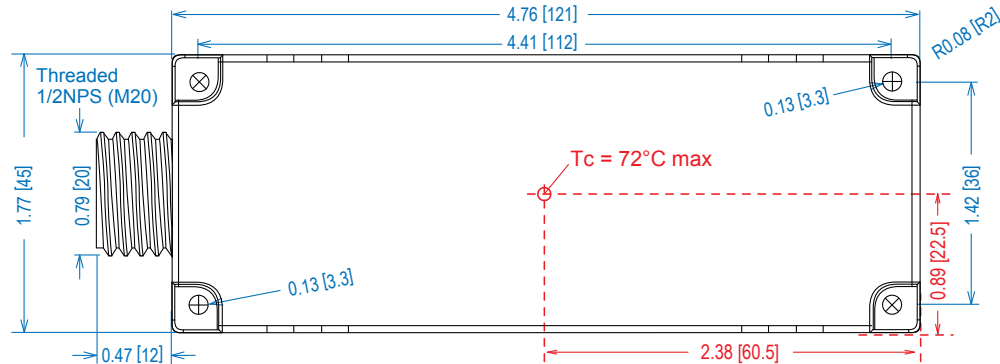


Dimensions

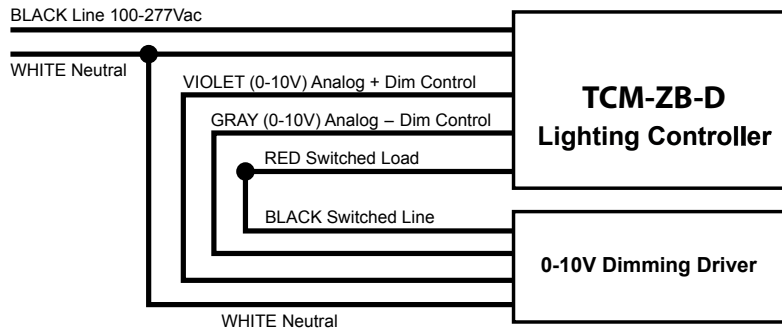


WIRE SPECS:

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



UL Conditions of Acceptability

See website for additional information

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.