

**Technical Specifications**

VOLTAGE IN	POWER	IP/IK RATING	OPERATING TEMP.
200 – 240VAC 50/60Hz 190 – 250VDC	62W MP	IP66 / IK09	0 to +50°C



**Compatible with the Coolon App via Bluetooth.** Simply walk up to a compatible luminaire, open the app and press scan. Immediately, you will see a full report on all nearby fittings:

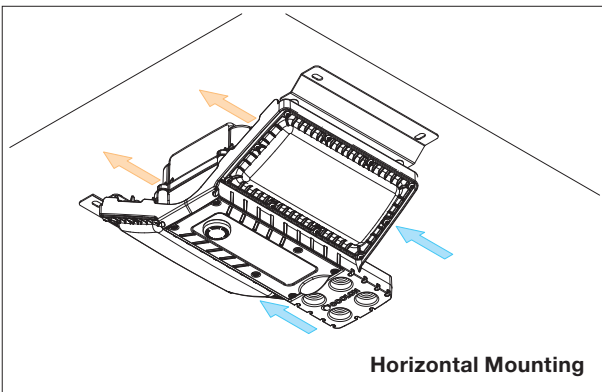
- Power outages experienced by the luminaire
- Charge rates
- Charge capacity
- Battery health



**INSTALLATION INSTRUCTIONS**

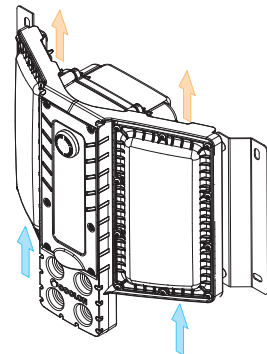
**Step 1**

Choose luminaire position and orientation. When choosing the location of Tunnel Ray luminaire, please ensure that sufficient clearance is allowed for the airflow through the heatsink. Avoid blocking the air vents.



**Vertical Mounting**

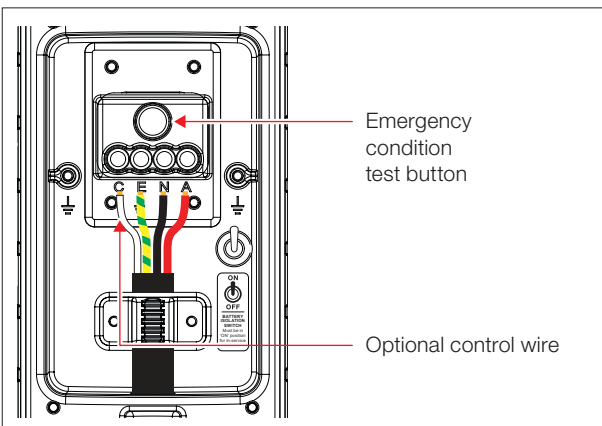
In a vertical mount, mount the TNR in the following orientation to maximize the airflow through the heatsink.



**Step 2**

Remove the junction box lid (6x TX25 Torx captive screws) proceed to connect wires as required. See EMTNR2 operating modes for wiring/operation options.

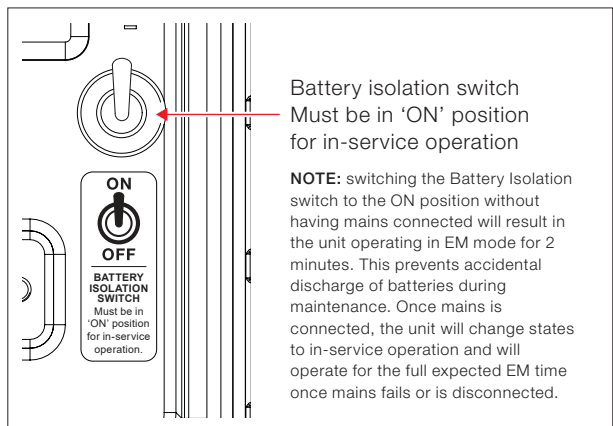
**NOTE:** Housing is earthed internally.



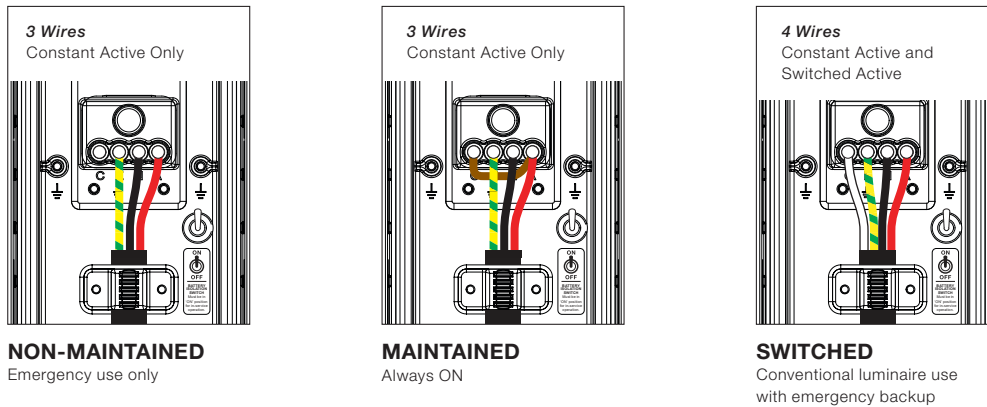
**Step 3**

Put the battery isolation switch into the 'ON' position and reattach the connection cover.

\*Ensure the cover lanyard is not caught between the internal test button and cover.



**EMTNR2 Operating Modes**



OPERATION STATE	ACTIVE	CONTROL	LUMINAIRE STATE	DESCRIPTION
Non-Maintained	ON	N/A	OFF	Luminaire light OFF. Red LED indicator will indicate mains presence with Red Indicator LED ON.
Non-Maintained	OFF	N/A	ON-EM	Luminaire light ON in EM mode (power supplied from battery). Red LED Indicator will not be visible.
Maintained	ON	ON (Link)	ON	Luminaire light ON. Red LED indicator will indicate mains presence with Red Indicator LED ON.
Maintained	OFF	OFF (Link)	ON-EM	Luminaire light ON in EM mode (power supplied from battery). Red LED indicator will not be visible.
Switched	ON	ON	ON	Luminaire light ON. Red LED indicator will indicate mains presence with Red Indicator LED ON.
Switched	ON	OFF	OFF	Luminaire light OFF. Red LED indicator will indicate mains presence with Red Indicator LED ON.
Switched	OFF	ON or OFF	ON-EM	Luminaire light ON in EM mode (power supplied from battery). Red LED indicator will not be visible.

**Emergency Pack Operation**

- Initial installation is performed with mains line de-energized. Active, Neutral, Earth and Control (optional) wires are to be wired and secured in their respective terminals. If no Control wire is present and a Maintained Mode is required, "C" (Control) and "A" (Active) terminals should be bridged by a link (not included). For a non-maintained mode leave "C" terminal unconnected. If the Control wire is present, induced voltage on the Control wire should be no greater than 10V.
- Once mains wires connected, the battery switch must be set to "ON" position. This forces EMTNR2 to enter a "TEST" mode, where it would enable Battery Module to supply power to LEDs for a duration of 2 minutes. This indicates that the battery is functional and is in working order. After 2 minutes the light switches itself OFF. Installer completes the installation by closing the lid and securing it using provided captive screws.
- Once mains power is applied, the RED indicator light is switched ON, indicating a presence of mains power. The unit must be energized for more than 2 minutes before the final commissioning power cycle test. NOTE: that even if the unit is in maintained mode, it still requires power cycle test to be complete before its intended operation.
- Power Cycle Test is done by removing mains power after more than 2 minutes being energized and having a battery switch in a correct "ON" position. Once mains power is removed, EMTNR2 will enter Emergency Mode, and the light will turn ON. Apply the mains power again, and the unit will enter its intended operational mode:
  - If it is wired as "maintained", the light will stay ON and become brighter. RED Indicator Light will come ON, indicating the presence of mains voltage.
  - If EMTNR2 is in non-maintained mode, Red indicator light will come ON and the light will turn OFF.
  - If the battery isolation switch is left in "OFF" position when mains power is applied, the Red Indicator LED will flash.
- Pressing the "TEST BUTTON" on the lid will disconnect the mains simulating a power outage. The Red Indicator LED will stop illuminating and the EMP will operate in emergency mode if the battery isolation switch is in the "ON" position.
- If a Battery Switch is in ON position and mains power is present, the Red Indicator LED will stay ON. Flashing Red light in this case would indicate a problem with emergency luminaire. Contact Coolon if this situation occurs.

## Commissioning Test

Once energized allow up to 10 seconds for the EM controller to go through the self-test procedure. After 16 hours of uninterrupted mains power Coolon Emergency Luminaire is ready for commissioning test. In the absence of mains power the EMTNR2 emergency LED luminaire will operate for a minimum of 2 hours during the commissioning test and 1.5 hours during its service life.

## Battery Replacement Procedure

The EMTNR2 emergency LED luminaire is designed to operate providing specified emergency operating time using the in-built battery for the life of the product. As a result there is no field battery replacement capability.

## Storage Shelf Life

The EMTNR2 has a storage shelf life of up to 12 month when stored at a temperature of  $20\pm 5^{\circ}\text{C}$ .

Storage temperatures outside of  $20\pm 5^{\circ}\text{C}$  but within the prescribed storage temperature limit will result in a decreased product shelf life of up to 6 months.

If the EMTNR2 cannot be commissioned within the prescribed shelf life then it should be put through a charge cycle (see below).

Following a charge cycle, the unit can be stored for a further period appropriate to the storage temperature.

Failure to comply with the above requirements may result in irreparable damage to batteries (EM module) since such a state would permanently alter the battery chemistry, type of failure is not covered by warranty.

The charge cycle procedure is as follows:

1. Connect the unit to mains supply, Control line connection does not need to be made, just A, N, E
2. Turn the battery isolation switch to the ON (connected) position
3. Energise the unit and allow to charge for 16 hours (a red indicator should be observed, the indicator should not flash)
4. Deenergise the unit and disconnect mains supply
5. Turn the battery isolation switch to the OFF (disconnected) position
6. Pack the unit for storage

### IMPORTANT

#### Primary use: commercial and industrial applications.

- Read through this manual before installation
- Handle the product with care
- Class I products must be grounded
- The product must be installed by a suitably qualified person
- Do not stare at operating lamp, may be harmful to the eyes
- Turn OFF the power before installation and maintenance
- Make sure the product is securely installed
- The housing might become hot after operation
- Keep optical face clean

