

Safety Alert

Orion

SA2409 - Low Voltage Distribution Box Overheating

18/07/2024

Since 2017 Orion has experienced several failures in our in-house designed Low Voltage (LV) distribution boxes, most of the failures have occurred at the Phase Connection Block (PCB). PCBs are a reducing termination block which in our solution is situated at the lower left-hand side of the distribution box.

Following investigations when these events occurred it has been observed that the failure could have been due to several reasons, i.e., improper installation practices, prolonged exposure to high moisture levels, or instances of water submergence affecting the connection block's integrity.

Learning:

It was concluded in February 2022 that our use of the PCB has made installation difficult, and unsuitable for future use on the network.

To address the failures, a solution was developed to remove the PCB from all new installations and replace it with a reducing termination.

What we'd like you to do:

- Send this Safety Alert out to your staff and contractors for awareness and learning.
- Communicate to your teams asking for them to be vigilant around installation methods and identifying signs of overheating

What we're doing:

- Orion has recently developed a new distribution box which aims to elevate the PCB. This will reduce water ingress compared to the current design where they are situated below ground level.
- The new distribution box has been designed to allow greater airflow and increased clearance between components. This helps to reduce the heating effects within the box and not allow moisture to accumulate.



For more information contact Orion at info@oriongroup.co.nz or call 0800 363 9898