TECHNICAL BULLETIN 20230320

SEISMO VIBRATION/TILT SENSORS

An issue has been identified with the SEISMO range of products that may manifest as incorrect zone resistance readings when connected to CIE. As a result, the CIE will display an abnormal status for the zone that the product is connected to.

AFFECTED PRODUCTS

PRODUCT	SERIAL NUMBERS	PRODUCTION DATES
SEISMOV3	000000001 - 000002091	01/03/2022 - 19/03/2023
SEISMO-ADVANCEV3	000000001-000002734	01/03/2022 – 19/03/2023
SESIMO-ADVANCE-CV3	000000001 - 000000049	01/03/2022 – 19/03/2023
SEISMO-ADVANCE-BKV3	000000001 - 000000096	01/03/2022 – 19/03/2023
SEISMO-ADVANCE-GYV3	000000001 - 000000004	01/03/2022 – 19/03/2023
SEISMO-ADVANCE-B-CV3	000000001 - 000000032	01/03/2022 – 19/03/2023

<u>Only v3 products falling within the above serial ranges are affected</u>. They can be identified from the small label placed on the inside of the lid (1). Larger labels on the outer packaging are also marked with v3 for this line of products (2). For products sealed in bags with these labels, it is prudent to assume they are in the scope of this bulletin if purchased prior to 20/03/2023. V3 PCBs will always have a square potentiometer (3) – older unaffected versions use a round potentiometer.



1. V3 marking on internal product label



2. V3 marking on external packaging label



3. Square potentiometer on PCB

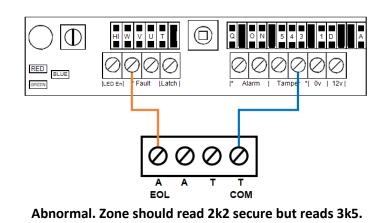
CAUSE OF ISSUE

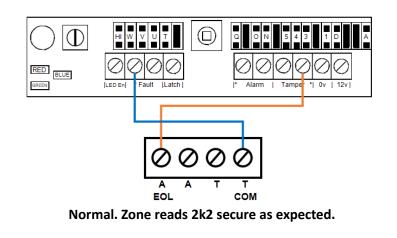
The root cause has been traced to a change to the specification of an onboard ESD protection diode - from bidirectional operation to unidirectional operation. This unidirectional ESD diode will abnormally affect the CIE reading of zone resistance if the polarity of the zone connection is reversed in respect to the diode.

The resistance issue is not detectable with a standard multimeter, but is at the CIE.

REMEDY

This issue is resolvable in situ without any need to return the product for repairs or modification. A reversal of the zone connection wires will restore normal function if this problem is encountered. See below examples of Pyronix TEOL (2k2/4k7/6k8) installations in both normal and abnormal states:





If this remedy does not resolve a resistance issue at the CIE, please contact us for further assistance.

This issue is resolved for ongoing production from 20/03/2023 – products with serial numbers in excess of the above and manufactured beyond the date above will not be affected.