

Technical Bulletin (Safety Alert)



ENGINEERING

Use of ICAR Capacitors in uninterruptable power supply (UPS) systems

Bulletin No. 001

August 2019

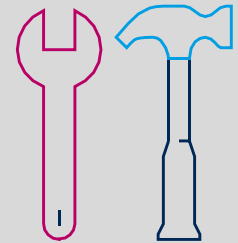
Introduction

This Safety Alert is aimed at:

All users of industrial uninterruptable power supply (UPS) systems including, but not limited to, the chemical industry, energy industry, offshore oil and gas production and other users of high capacity electrical capacitors in industrial equipment.

Affected capacitors are known to be found in some models of UPS systems manufactured by Vertiv Infrastructure, previously trading as Emerson or Chloride.

As noted above, affected capacitors may also be found in other industrial equipment and users of such equipment should use the information in this safety alert to assess the ongoing risk of using this equipment and the need to consider further risk control measures.



Background

In 2018 a fire occurred in an industrial UPS system manufactured by Vertiv Infrastructure, previously known as - Emerson / Chloride. The fire was caused by the dangerous failure of ICAR branded polypropylene capacitors located in the UPS unit which carry out AC voltage waveform correction.

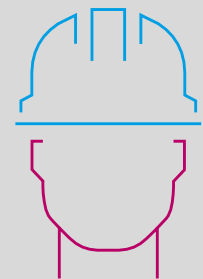
Enquiries by the Health and Safety Executive have found that another ICAR branded polypropylene capacitor was responsible for a similar UPS system fire in 2011.

Both models of affected capacitors were made by ICAR of Monza, Italy.

The model numbers are:

ICAR LNF-P3B-200-27 (2018 incident)

ICAR LNF-P3X-200-38 (2011 incident)



Key issues

Potential Danger From:

- Fire and any consequential issues arising from the possible loss of power to connected equipment

Action Required:

- Dutyholders are advised to take a precautionary approach and consider prompt replacement of both capacitor models.
- Dutyholders are also advised to review ventilation and cooling requirements for UPS systems.

Further guidance from;

http://www.hse.gov.uk/safetybulletins/icarcapacitors.htm?utm_source=twitter&utm_medium=social&utm_campaign=icar-alert&utm_content=06-08

