

# APPLICATION NOTE

# EXPLOSIVE HAZARDS LINKED TO FLAMMABLE AEROSOLS AND LIQUIDS

#### **WHAT FAULT**

The use of flammable aerosols or liquids should be risk assessed before use to reduce the likelihood of an explosive hazard being generated. While some flammable gasses do not readily achieve a combustible mixture, others can be extremely combustible. This makes the classification of exposure difficult and judgement of acceptability should be made on a per case basis or identified in the site's risk assessment.

Gas evaporation and diffusion throughout an enclosure will vary depending on factors such as temperature, size of enclosure and the properties of the gas itself. Given the inherit design of a high IP rated enclosure, any flammable gas or liquid that may be inadvertently introduced will not readily disperse. This has the subsequent potential of maintaining pockets of explosive gas and/or associated liquids within an enclosure for extended periods of time. This in itself may not pose any danger, however if the enclosure houses any electrical equipment capable of generating an ignition spark or yielding a sufficiently high temperature, the enclosure could pose an explosive hazard.

Ampcontrol does not recommend the use of flammable aerosols or liquids in the vicinity of high Ingress Protection (IP) enclosures.

### **AMPCONTROL ENCLOSURES TO CONSIDER**

Ampcontrol sell a number or electrical enclosures that are designed to have high ingress protection ratings. Flammable gas and/or liquids should not be used in conjunction with such equipment in order to prevent any potential for a combustible gas mixture build up. These enclosures include, but are not limited

- Rockstarter
- Rockstarter IP Accessories
  - Cable Gauge Break Box
  - **Communications Box**
- Typical IP Rated Sheet Metal Enclosures
  - Substation High Tension Ends and Low Tension Ends
  - **Distribution Control Boxes** 0
  - **Traditional Starter Boxes** 0
  - Lighting Boxes 0
  - Hot Boxes
  - **Junction Boxes**

## WHAT DO I NEED TO DO

It is highly recommended that flammable aerosols and/or liquids are not utilised in conjunction with high ingress protected enclosures. If this cannot be prevented, the affected enclosures should be flushed with air and all liquid residues removed prior to being energised.

## **FIND OUT MORE**

For more information on this product, please contact Ampcontrol Customer Service on +61 1300 267 373 or customerservice@ampcontrolgroup.com or visit the Ampcontrol website: www.ampcontrolgroup.com

### **DISCLAIMER**

While every effort has been made to ensure the accuracy of this document at the date of issue, Ampcontrol assumes no liability resulting from any omissions or errors in this document, and reserves the right to revise content at any time.