

CIM-SAFE™ SPARK DETECTION SYSTEM

Introduction

The CIM-Safe™ Spark Detection System is designed to prevent fire in grain/seed drying plants and transport systems or elsewhere in industrial grain processing plants. CIM-Safe™ uses easy-to-fit highly sensitive Infrared Sensors to detect sparks and embers that might become the ignition source for a fire or explosion if not detected in time. The sensors are connected to a central control unit that monitors the equipment and gives (acoustic) alarm at a user-set threshold. CIM-Safe™ offers protection of your equipment by providing early warning and can easily be further safety features such as extinguishing systems etc.

Function

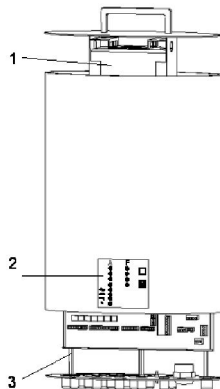
The DC1 control unit, combined with the spark detector, see data sheet 103.12.06, detects sparks or fire in time so it is possible to take action/shutdown before any further damage. The control unit can be used in combination with a detector for darkness or a detector for daylight. Up to 4 sensors can be connected to the DC1 control unit, if more sensors are necessary will additional control units be required.

Construction

The DC1 control unit consists of the following components:

1. Battery holder for back up batteries *
2. Keypad and status LEDs
3. Dipswitches for configuration of DC1, and connection terminals for external components

*Back up batteries is supplied by Cimbria along with the station.



Environment

- Range of surrounding temperature during normal use: -15 °C to 50 °C
- Range of surrounding temperature during storage and transport: -25 °C to 80 °C
- Max. installation above sea level: 2000 meter

Weight

The weight of DC1 control unit is 16,5 kg.

Material

The DC1 cover is made of injection molded brushed aluminium, ensuring optimum protection of the electronics inside as well as easy access to battery and electronic components.

Electrical

- Supply: 230 VAC ± 10 %, 50Hz, power: 70 W
- Fuse: 10 A
- Supply to external components: + 20 VDC / + 24 VDC
- Protection class: IP64

External components

The DC1-9000 can be connected with the following components:

Extended with components	Item number
Spark detector, daylight	101801
Spark detector, darkness	101802
Extinguishing automatics (SA1 - SA4)	10190X0 (X=number of nozzles [1-4])
Guillotine damper	Please contact Cimbria for further info
Bypass flap	Please contact Cimbria for further info
Alarm flash and horn	904001
Control software for PC monitoring	101001
Booster system [Item number (capacity)]	101201 (150 l), 101202 (450 l), 101203 (300 l), 101204 (1000 l)

