



# SPARK DETECTION SYSTEM CIM-SAFE™

## GENERAL

Brand	Cimbria
Designation	Spark Detection System
Model	CIM-Safe™
Use	Industry
Application	Sends an alarm to the operator and shuts down the dryer to prevent a fire from developing.

## 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.

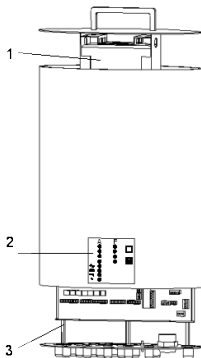
The control unit can be used in combination with a detector for darkness or a detector for daylight. Up to 4 sensors can be connected to the DC1 control unit, if more sensors are necessary will additional control units be required.

## 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: 2 000 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)

