

Data Sheet 75.4

Cimbria Fire- and Overheating Alarm Type CW-4



Application

Cimbria's fire and overheating alarm system, type CW-4 is a detector for overheating and fire within the Cimbria continuous flow dryer.

Function

By means of a sensor cable installed across all outlets of the exhaust ducts in the drying zone any undesirable increase in temperature is detected immediately irrespective of its location. The positioning of the sensor cable in the exhaust side of the dryer is based on the fact that any fire hazard always results in high increases of temperature in the exhaust chamber.



In case of alarm the fans and the heat source are automatically stopped and a red lamp at the control panel indicates alarm. The monitoring system is built into a metal box with indicators for operation, fault and alarm as well as a key reverser with on/off and reset functions.

Table 1: Technical data

Dimensions of the box	Height x Width x Depth (240 x 240 x 150 mm)
Weight:	4.8 kg
Mains voltage	220 V AC +/- 10%, 20 mA
Relay output	400 V AC/6A
Sensor cable:	Heat-resistant PVC with flexible metal screen
Diameter of the cable:	4.25 mm
Temperature for the cable:	Constant 100°

Sensor Cable

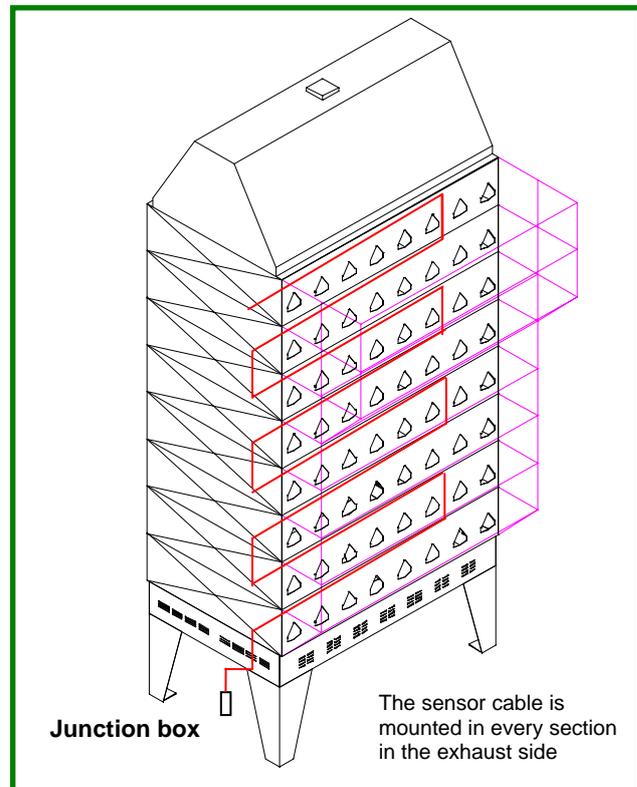
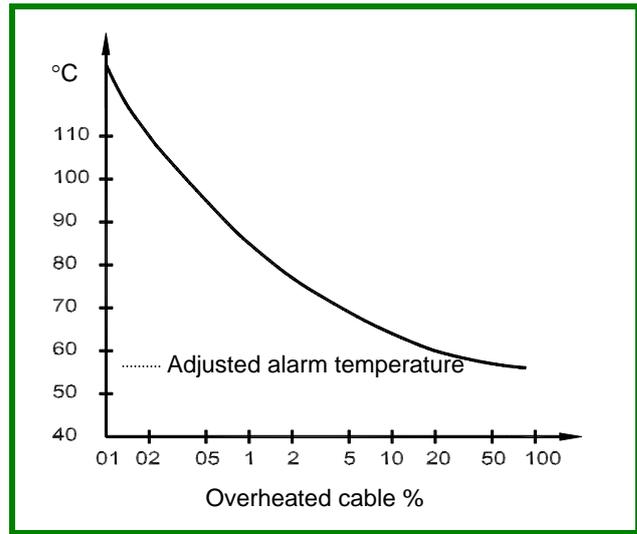
The sensor cable is automatically monitoring for faults such as breaks and bad connections. Faults are indicated with a yellow lamp.

The alarm temperature is pre-set for 55°C +/- 2°. Alteration of the settings should be done by Cimbria Manufacturing only.

Calibration of the system depends on the length of the cable. The cable may only be shortened after consulting Cimbria. Damaged cable may not be re-used.

Diagram 1 shows an example of partial overheating 110°C of only 0.2% of the length of the cable (e.g. 20 cm of 100 meter cable) will result in alarm.

Diagram 1: The temperature of partial overheated sensor cable, which will cause alarm (remaining cable 30°)



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