

# Intelligent heating optimizes power consumption and improves safety.

## In Brief

- Pointwise self-regulation
- Pointwise temperature limiting
- Rapid warm-up
- Up to 100 % surface coverage
- One component system
- Functionality independent of form

## Get Going

Conflux offers consulting services and technical know how. Contact us to get your customized solution.

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## Introduction

Conflux AB, based in Kista, Sweden, markets, sells, produces and develops intelligent polymer heating materials. Conflux AB has been researching and developing intelligent heating materials since 1996 and today holds a worldwide patent for the ZPZ foil and a pending worldwide patent for the ZPI foil. These two products possess inherent characteristics which are unique in the market.

## Benefits

Conflux's ZPZ/ZPI solutions consume the same or less energy compared to other heating technologies. Conflux intelligent heating has an inherent temperature limiting giving a safe product without regulatory and safety circuitry. Due to the inherent safety and self-regulation of the ZPZ/ZPI foil there are many cases where additional control and guiding electronics can be eliminated. With the Conflux intelligent heating technology you are offered inherent properties that add value to your solution.

## How it Works

The Conflux intelligent heating foils are electric, self-regulating heating elements based on the intelligent SIP compound. The designed structure consists of one or two copper sheets separated by a SIP core. This structure enables the current to pass between the copper layers through the SIP compound. The SIP and heating foil features ensure optimized energy consumption by saving power for only when and where you need it.



## Product Specification

### Pointwise Self-regulation

Every point on the foil surface reacts independently to its surroundings.

### Pointwise Temperature Limiting

The foils predefined maximum temperature is never exceeded.

### Dynamic Power Distribution

The foil adjusts its heating power to its surroundings.

### Rapid Warm-up

Our foils warm up faster than any other flexible heater.

### Up to 100% Surface Coverage

This means that the entire surface generates heat and reacts to its surroundings.

### Functionality Independent of Form

Our foils can be designed very easily to match all types of shapes or forms.

## Technical Specification

### Wide Range of Applications

Conflux intelligent heating materials are already being used in industries, such as automotive, medical, sensors, telecom and more.

### Wide Range of Voltage

Up to 400 V AC/DC

### Wide Range of Operating Temperatures

20 – 70 °C

### Wide Range of Power

Up to 20 W/cm<sup>2</sup>

## Want to know more? Contact Us:

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