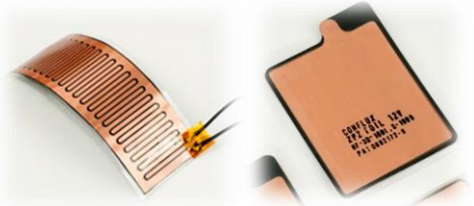


## The Conflux PTC heating foil

We have a desire - heating shall be safe and easy.

- No risk of overheating – automatically switches off point by point
- Fast heating - high power without high temperatures
- Energy optimizing – heats only when and where needed
- Eliminates regulating electronics
- Handles fast changes in heat load
- Thin and flexible



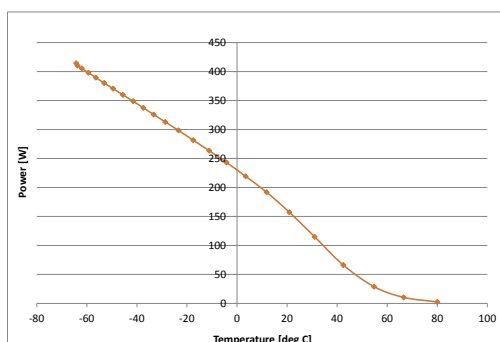
### A unique heating technology

The Conflux heating foils strive to automatically bring your application to a desired temperature and keep it there, regardless of how the surrounding conditions change.

Just connect it and you are ready to go. It will never overheat, anywhere.

It is especially useful for applications requiring:

- Fast heating and deicing - high power when it is cold.
- Dynamic heat loads – when the surrounding conditions changes fast
- Limited energy available, e.g. battery powered applications. It switches off automatically where and when no additional heat is needed.
- To never exceed your safety temperature – nowhere.
- No control by thermostat or electronics – self adjusting point by point.



*Example of the relation between the ambient temperature and heating foil power emission.*

### Simplifies your design process

The Conflux heater can be designed over a wide parameter space. Hence, you can focus on your product design and geometrical constraints, still finding a heater with optimal thermal properties. The Conflux foil is thin and flexible, and fits in most applications without requiring additional space.

### Optimal energy use

100% of the Conflux foil's surface is active. Every point on the foil surface is independently temperature limiting. Thus, the foil only heats where it is cold, and only when it is cold which optimizes the power consumption.

### High power

The Conflux foil can be designed to produce heat over a wide power range. Note that even a high power heater will never be warmer than the safety temperature, anywhere. Not even if it separates from the object it heats or is covered with insulation.

### Stable to voltage variations

A Conflux heater is stable to voltage variations. It produces a similar amount of power over a wide voltage range due to the strong PTC effect.

Contact us and design your optimal heating solution today.

## Conflux standard heaters

Ordering details – Please ask us for a quotation on larger volumes.

| Article no. | Adaptable to curved surfaces*<br>A / F | Voltage<br>12 / 48 V | Temperature<br>C/W | Size<br>S/M |
|-------------|--|----------------------|--------------------|-------------|
| A12WS       | Adaptable                              | 12                   | Warm               | Small       |
| A48WS       | Adaptable                              | 48                   | Warm               | Small       |
| F12WS       | Flat                                   | 12                   | Warm               | Small       |
| A12WM       | Adaptable                              | 12                   | Warm               | Medium      |
| A48WM       | Adaptable                              | 48                   | Warm               | Medium      |
| F12WM       | Flat                                   | 12                   | Warm               | Medium      |

\*The adaptable heater shall only be formed over a surface with a radius greater than 50 mm.

To order, please provide us with:

- Article numbers
- Number of pieces
- Name
- Company
- Delivery address
- Telephone number
- Email address

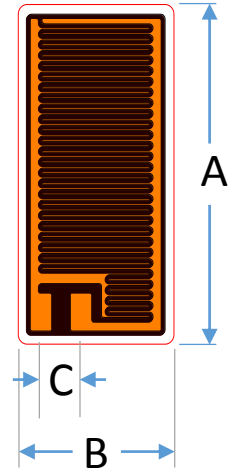
The delivery conditions are FCA Järfälla, Sweden, (Incoterms 2011).

Please send your order information to [info@conflux.se](mailto:info@conflux.se)

## Technical specifications

| Size   | A [mm] | B [mm] | C [mm] | t [mm] |
|--------|--------|--------|--------|--------|
| Small  | 70     | 35     | 9      | 0.35   |
| Medium | 140    | 70     | 9      | 0.35   |

| Voltage | Min Voltage [V] | Nom Voltage [V] | Max Voltage [V] |
|---------|-----------------|-----------------|-----------------|
| 12      | 8               | 12              | 24              |
| 48      | 18              | 48              | 50 AC / 70 DC   |



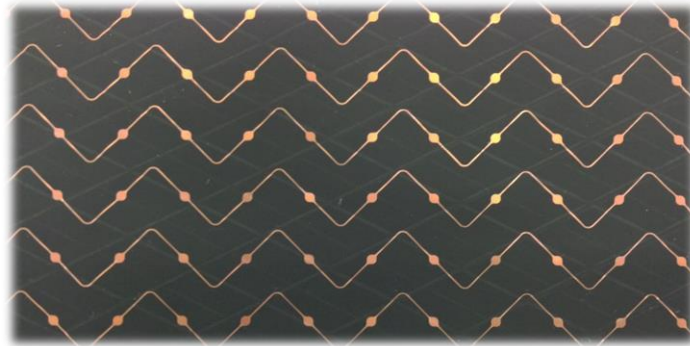
| Flexibility | Min radius of curvature [mm] |
|-------------|------------------------------|
| Adaptable   | 50                           |
| Flat        | 200                          |

| Safety temperature | T <sub>safety</sub> °C |
|--------------------|------------------------|
| Warm               | 65                     |

### Standard heaters:

|                         |                        |
|-------------------------|------------------------|
| AC/DC voltage           | Yes/Yes                |
| Nominal voltage         | 12 / 48 V              |
| Temperature range       | -60 to 70°C            |
| Max ambient temperature | 80°C                   |
| Foil thickness          | 0.35 mm                |
| Encapsulation           | PET/PE                 |
| Connection              | Prepared for soldering |
| RoHS Compliant          | Yes                    |

## Tailor your optimal heater



Tailor the optimal heater for your application:

Design parameters of your choice:

- Safety temperature (30-80°C)
- Power at different temperatures
- Power emission (0.01 – 5 W/cm<sup>2</sup> at -30 °C)
- Operating voltage (5 – 400 V, DC or AC)
- Shape and dimension  
(a single heater is max 190 x 580 mm<sup>2</sup>)
- Power distribution over the surface

Please send your inquiries to [info@conflux.se](mailto:info@conflux.se)

Contact us to help you design your optimal heating solution today!