# PIPE CURING HEATING BLANKET Installation & Operation



Supplied by Merlin Industrial Products Ltd - +44(0)1752 690622 - sales@mipl.uk



## Table of contents

| Table of contents             | 2 |
|-------------------------------|---|
| Product warranty              | 2 |
| Introduction                  | 3 |
| Important safety instructions | 3 |
| Installation                  | 4 |
| Thermostat options            | 5 |
| Operating the controller      | 5 |
| Technical specifications      | 6 |
| Standard models               | 7 |
| Related product ranges        | 8 |

## **Product warranty**

We warrant that this product will be free from defects in materials and workmanship for a period of one year (up to 1600 hours of use) from the date of shipment. If this product proves defective during its warranty period the manufacturer will either repair the defective product without charge for parts and labor, or provide a replacement in exchange for the defective product.

This warranty shall not apply to any defect, failure or damage caused by improper use or improper or inadequate maintenance and care.



#### Introduction

Our heating blankets are designed for fast and secure curing and joining of adhesive-bonded joints in PE and GRE pipes and fittings.

Requiring 230 V (Option for 120V) alternating current, the blankets are quickly and easily applied and connected. They provide thermostatically controlled heat, ensuring maximum joint strength and reliability.

We have heating blankets for pipesizes varying from 1 to 40 inch (25 -1000 mm) controlled by either a fixed thermostat or by an external digital controller with with a PT100 sensor and variable temperature threshold (0-200°C).

## Important safety instructions

- Only use for intended pipe size. See the blanket for diameter.
- Always inspect the blanket and electrical connections before use.
- Install the blanket on the pipe before connecting the power.
- Make sure to fasten the heating blanket firmly around the pipe.
- The thermostat or sensor is build in where the cable exits the blanket. If this part is not in contact with the material being heated, the blanket will not function properly and may overheat.
- Do not cover the heating blanket up while in operation.
- Never handle the blanket while in operation.
- Do not step on the blanket or create sharp folds in it.
- Always disconnect the blanket and let it cool before handling.
- Never immerse the heating blanket into liquids.
- Do not make cuts in the blanket and keep sharp objects away.
- Do not lift or hold the blanket by the cable.
- The heating blanket should never be left unattented while in operation.
- Disconnect the heating blanket when not in use.
- Do not try to repair damaged or faulty heating blankets. All repairs must be done by the manufacturer.



## Failure to read, understand, or follow the above safety instructions may result in injuries or fire hazard.



#### PIPE CURING HEATING BLANKET

## Installation

#### **Unpacking and inspection**

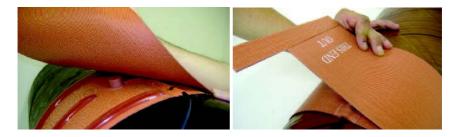
Unpack the heating blanket and place it on a clean and dry surface. Perform an inspection to look for transport damage. Do not use the heater if it is damaged!

#### Power

The power connection must be adequate rated to electrically support the voltage and power of the heater. Follow all local electrical codes for proper connections.

#### Installation on the pipe

- 1. Check the diameter of the pipe and verify that the blanket is the right size (Pipe size is noted on the blanket).
- 2. Place the heating blanket around the pipe and fasten it with zip ties.
- 3. Check that the fit is secure.
- 4. Make sure that the overlap is done so the text "THIS END OUT" is on the outside and visible. The rubber spacers should be between the blanket layers. See pictures below for correct overlap.
- 5. Connect the heating blanket to the controller.
- 6. Connect the controller power cable to power supply and turn on the power.
- 7. If using a controller box, adjust the controller for the desired pipe surface temperature (The temperature can also be changed during use).







## PIPE CURING HEATING BLANKET

## Thermostat options

#### **Fixed thermostat**

Heating blankets with fixed thermostats have one or two build in bimetal thermostats, that power on and off the heating element to keep the temperature at a predetermined temperature (+/- 5°C).



#### Variable thermostat

Heating blankets with variable thermostat have a build in temperature sensor and an external controller box, where the desired temperature can be adjusted





## Operating the controller

Adjust to the desired temperature by pressing the up and down arrows.

When the desired temperature is shown on the display press OK to confirm.

When the heating element is active, the dot in the lower right corner of the display will be lit.

Refer to the DigiTherm Controller manual for details on adjusting the temperature rampup and timer functions and for technical specifications.



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### **Technical specifications**

**Application areas** Heat curing adhesive-bonded joints in pipes and fittings.

**Working temperatures** 0-200 °C (+/- 5°C).

**Environmental classification** IP64 (heating blanket).

#### **Operation conditions (Controller)**

Min: -20 °C. Max: 200 °C (Heating blanket). Max: 60 °C (Controller).

15% - 80% relative humidity.

**Material** Silicone (Heating blanket).

**Controller** Part number: 19-2674.

**Sensor** Bi-metal thermostat or PT100.



#### Standard models

| ltem#  | Size       | Pipe size (Ø)      | Power   | Thermostat /<br>Sensor |
|--|------------|--------------------|---------|------------------------|
| 18-2454  | 80x350mm   | 1-2" (25-50mm      | ) 125W  | Fixed 160°C            |
| 18-2454A   | 80x350mm   | 1-2" (25-50mm      | ) 125W  | PT100                  |
| 18-2455  | 110x550mm  | 3-4" (75-100mm     | ) 250W  | Fixed (160°C)          |
| 18-2455A   | 110x550mm  | 3-4" (75-100mm     | ) 250W  | PT100                  |
| 18-2456  | 140x880mm  | 6-8" (150-200mm    | ) 285W  | Fixed (160°C)          |
| 18-2456A   | 140x880mm  | 6-8" (150-200mm    | ) 285W  | PT100                  |
| 18-2457  | 200x1350mm | 10-12" (250-300mm  | ) 950W  | Fixed (180°C)          |
| 18-2457A   | 200x1350mm | 10-12" (250-300mm  | ) 950W  | PT100                  |
| 18-2458  | 300x1700mm | 14-16" (350-400mm  | ) 1460W | Fixed (180°C)          |
| 18-2458A   | 300x1700mm | 14-16" (350-400mm  | ) 1460W | PT100                  |
| 18-2459  | 300x1900mm | 18-20" (450-500mm  | ) 1850W | Fixed (180°C)          |
| 18-2459A   | 300x1900mm | 18-20" (450-500mm  | ) 1850W | PT100                  |
| 18-2461  | 300x3050mm | 28-32" (700-800mm  | ) 2700W | Fixed (180°C)          |
| 18-2462  | 300x3670mm | 32-36" (800-900mm  | ) 1680W | Fixed (180°C)          |
| 18-2463  | 300x3670mm | 36-40" (900-1000mm | ) 3200W | Fixed (180°C)          |
| 19-2674 External DigiTherm digital controller (0-200°C). |            |                    |         |                        |

All above models are for 230V. Please contact us if you need models for 110V or for other special specifications.



## **Related product ranges** from Kuhlmann Electro-Heat

**Drum heaters** for food stuff



#### Insulation jackets



Drum heaters



**IBC** heaters



#### Silicone drum heaters



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