

SERIES WHI INDUSTRIAL HEATING MANTLES

$T_{max} = 450^{\circ}C$

With respect to its basic structure, this heating mantle series corresponds to the mantles for laboratory applications. However, because of the size the devices are mechanically reinforced by a sturdy carrier basket. Four eyebolts, which are movably connected to the support ring, are used as mounting fixtures.

- outer jacket made of PTFE or aluminium coated glass fabric (as desired)
- hand crocheted heating unit made of glass silk

Device features

- terminal box
- connecting cable with 10-pole industrial plug (2.0 m)

Accessories ▶ Page 11

- controller WRT171 for regulating the heating zones



Volume (l)**	Flask Ø (mm)	Power (W ±10%)	Heating zones	Base opening Ø (mm)	Article No. 230 VAC	Price (€)	Delivery Code
10	280	1600	3	60	WHI3X280-230XK450-0010XXXX	on request	C
20	350	2400	3	60	WHI3X350-230XK450-0020XXXX		C
20	365	2400	3	60	WHI3X650-230XK450-0020XXXX		C
50	490	4500	3	80	WHI3X490-230XK450-0050XXXX		C
50	510	4500	3	80	WHI3X510-230XK450-0050XXXX		C
100	610	6000	4	100	WHI4X610-230XK450-0100XXXX		C
200	750	9000	5	120	WHI5X750-230XK450-0200XXXX		C
200	760	9000	5	120	WHI5X760-230XK450-0200XXXX		C

*115 V on request
** other volumes on request

SERIES WHIS SAFETY HEATING MANTLES

$T_{max} = 300^{\circ}C$

This safety heating mantle, which offers up to 5 heating zones, is combined with a Winkler WRT172 controller for temperature control to a maximum of 300 °C. This protects the glass flasks against stress. In the event of excessive stress there is a danger of glass flask breakage.

- outer jacket made of PTFE or aluminium coated glass fabric (as desired)
- hand crocheted heating unit made of glass silk

Device features

- terminal box
- connecting cable with 10-pole industrial plug (2.0 m)
- cable with sensor plug (2.0 m)
- one temperature sensor per heating zone
 - **standard:** thermocouple Typ K (NiCr-Ni)
 - **option:** thermocouple Typ J (Fe-CuNi)
 - **option:** RTD Pt 100

Accessories ▶ Page 11

- controller WRT172 for regulating the heating zones



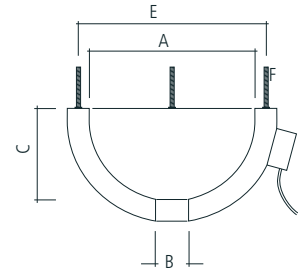
Volume (l)**	Flask Ø (mm)	Power (W ±10%)	Heating zones	Base opening Ø (mm)	Article No. 230 VAC	Price (€)	Delivery Code
10	280	1600	3	60	WHI3S280-230DK300-0010XXXX	on request	C
20	350	2400	3	60	WHI3S350-230DK300-0020XXXX		C
20	365	2400	3	60	WHI3S365-230DK300-0020XXXX		C
50	490	4500	3	80	WHI3S490-230DK300-0050XXXX		C
50	510	4500	4	80	WHI3S510-230VK300-0050XXXX		C
100	610	6000	4	100	WHI4S610-230VK300-0100XXXX		C
200	750	9000	5	120	WHI5S750-230FK300-0200XXXX		C
200	760	9000	5	120	WHI5S760-230FK300-0200XXXX		C

*115 V on request
** other volumes on request

Delivery code: **A**= from stock, subject to prior sale; **B**=3 weeks; **C**=6 weeks

A Flask Ø*	B Base opening	C Height*	E Screw to screw*	F Screw
280	to be specified if non-standard	150	315	4 x M12
350		190	398	4 x M12
365		200	405	4 x M12
490		265	555	4 x M12
510		275	575	4 x M12
610		325	670	4 x M12
750		395	825	4 x M12
760		400	830	4 x M12

All dimensions in mm



Schematic structure of an industrial heating mantle

CONTROLLER WRTI71 FOR INDUSTRIAL HEATING MANTLES

Controller series WRTI71 is employed for operating industrial heating mantles.

- table-top controller in a powder coated, robust metal housing with high chemical resistance
- aluminium front plate

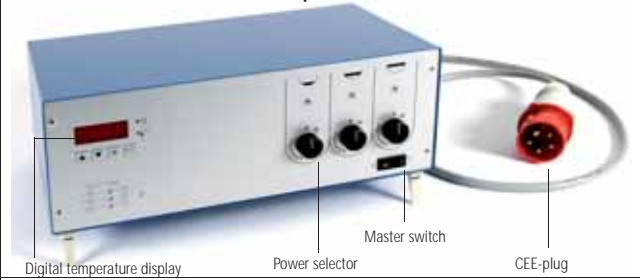
Device features

- master switch
- digital temperature display for lowest heating zone
- 3 to 5 power selectors with control status display for each heating zone
- with CEE-plug 16A for three-phase current connection 3×230V/50Hz (cable length 1.5 m)
- multipole, plug-in device outlet for industrial heating mantle connection

Dimensions (mm)

w 400 × h 180 × d 250

Controller WRTI7103 with three power selectors



Zones to be heated	Article No. 230 VAC	Price (€)	Delivery code
3	WRTI7103-230XK000	on request	C
4	WRTI7104-230XK000		C
5	WRTI7105-230XK000		C

CONTROLLER WRTI72 FOR SAFETY HEATING MANTLES

Controller series WRTI72 incorporates a safety system that limits the temperature of the different heating zones to 300 °C.

- table-top controller in a plastic coated, robust metal housing with high chemical resistance
- aluminium front plate

Device features

- master switch
- digital temperature display for media temperature
- 3 to 5 power selectors with control status display for each heating zone
- with CEE-plug 16A for three-phase current connection 3×230V/50Hz (cable length 1.5 m)
- Multipole, plug-in device outlet for industrial heating mantle connection

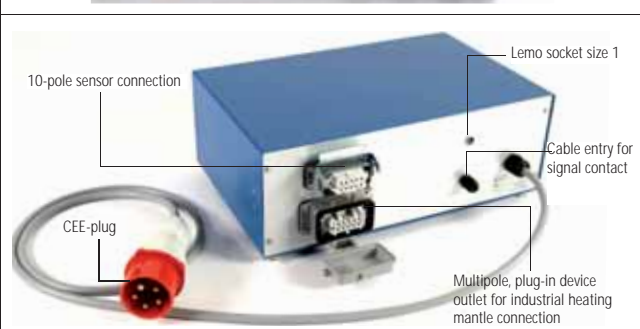
Additional features of WRTI72 device

- 10-pole sensor connection
- Cable entry for signal contact to permit temperature monitoring
- Lemo socket size 1; 4-pole; assignment in accordance with NAMUR (connection for external sensor to measure the media temperature)
- The overall control takes place via the freely selectable medium temperature $T_{max} = 300\text{ °C}$
- The temperature is limited by built-in temperature controllers
→ 300 °C for each zone being heated

Dimensions (mm)

w 400 × h 180 × d 250

Controller WRTI7203 with three power selectors



Zones to be heated	Article No. 230 VAC	Price (€)	Delivery code
3	WRTI7203-230XK000	on request	C
4	WRTI7204-230XK000		C
5	WRTI7205-230XK000		C