



Drum Heaters

Drum heating products for melting solids and liquefying viscous materials



Easy and clean handling of viscous media

Many solid or highly viscous media such as bitumen, tar, lacquer/varnish, paint, plastics, resins, waxes, fats, oils, glucose, phenol, and food need to be heated up to be taken out of the drum. Other media are to be kept at a specific temperature over a certain period of time.

Our standard drum-heater range offers useful and attractive options for 110 liter to 205 liter drums and temperature ranges up to 300°C for ordinary and hazardous areas.

High efficiency

By heating the solid or viscous media, they can be taken out of the drum almost completely. As a result the production yield improves as less product is left in the drum.

Tailored heat control

Isopad drum heaters are available as simple, modular or complete, integrated solutions. The drum heaters are available in various configurations. They can be combined with base heaters and insulated lids in the integrated solution to further reduce heat loss or for faster heat up.

All Isopad drum heaters are equipped with thermostats for narrow temperature control and to prevent damage caused by overheating.

Isopad drum and base heaters

The Isopad drum and base heaters are suitable for heating liquids, melting solids and liquefying viscous materials. The drum and base heater set provides a clean, efficient and cost effective solution to the uniform surface heating of standard 205 litre drums.

For ordinary and hazardous areas

The IDR/BDR range is designed for use in ordinary areas, the FIDR range for hazardous areas (zone 1 and zone 2).

Note: The user must limit the temperature of the heating surface below the spontaneous point of any material present.

1 Phase or 3 Phase configurations

Both ranges exist in a 230 V - 1 Phase and a 415 V - 3 Phase configurations.

Solid construction

All units are manufactured in heavy gauge sheet steel with a double skin construction. This houses the electric heating elements, which cover the entire inner surface of both units. The heating elements are backed by 50 mm of high temperature thermal insulation to prevent heat loss through the outer wall.



Our products satisfy the requirements of the relevant European Directives.

Wide product range

The drum and base heater set IDR/M/200 & BDR/200 CON are connected together and temperature control is achieved for both via one thermostat located on the side of the drum heater. The connection set requires only one electrical power supply feed. The combination of a drum and base heater also assures a faster heat up.

Located on the outside of the IDR drum heater is thermostatic controller with a capillary bulb sensor attached to the inner heating surface, which is set at the required inner skin temperature.

The FIDR drum heater has on the outside Ex-certified glands, junction boxes and a dual thermostatic controller with capillary bulb sensors attached to the heating surface. The temperature control is set to the required product temperature and the temperature limit set below the 'T' classification.

The BDR unit is supplied complete with a metal support bracket and thermostatic controller with a capillary bulb sensor attached to the inner heating surface of the BDR unit, which is set at the required surface temperature.

The FBDR unit is supplied complete with a metal support bracket and dual thermostatic controller with capillary bulb sensors attached to the heating surface. The temperature control is set to the required product temperature and the temperature limit set below the 'T' classification.

To further reduce heat loss an un-insulated lid is provided as standard.

A TDR insulated lid with 63 mm of thermal insulation is available as an option for these units to restrict heat loss even further (see Accessories).

Mobile

The drum heaters are fully mobile with castors fitted on the base of the unit.





	IDR/M/200 & BDR/200 CON Drum and Base heater set		IDR/M/200 CON Drum heater	IDR/M/200 Drum heater
Area	Ordinary		Ordinary	Ordinary
Voltage	240 V (1 Phase)		240 V (1 Phase)	415 V (3 Phase + Neutral)
Construction data				
Material	Mild steel		Mild steel	Mild steel
Interior paint/ Heated surface Paint	Heat-resisting matt black		Heat-resisting matt black	Heat-resisting matt black
Exterior paint/ Non-heated surface paint	Hammer finish silver		Hammer finish silver	Hammer finish silver
Heating Element	Glass-insulated 80/20 Nickel/Chrome		Glass-insulated 80/20 Nickel/Chrome	Glass-insulated 80/20 Nickel/Chrome
Securing device	Single toggle and clasp	n.a.	Single toggle and clasp	Single toggle and clasp
Measurement data				
Drum size	205 l		205 l	205 l
Dimensions	Outside Diameter – 775 mm Height – 990 mm Including Castors	Outside Diameter – 560 mm Height – 75 mm	Outside Diameter – 775 mm Height – 990 mm Including Castors	Outside Diameter – 775 mm Height – 990 mm Including Castors
Weight	Approx. 46 kg	Approx. 15 kg	Approx. 46 kg	Approx. 46 kg
Electrical properties				
Voltage	240 V (1 Phase)		240 V (1 Phase)	415 V (3 Phase + Neutral)
Power output	4900 W		4000 W	4000 W
Current	20.4 A nominal (240 V)		16.6 A nominal (240 V)	5.5 A per phase nominal (415 V)
Testing Voltage	1500 V		1500 V	1500 V
Control data				
Thermostat type	TS-C		TS-C	TS-C
Temperature range (adjustable)	50°C - 300°C		50°C - 300°C	50°C - 300°C
Nominal voltage	240 V (1 Phase)		240 V (1 Phase)	415 V (3 Phase + Neutral)
Power switching capacity	6080 VA		6080 VA	6080 VA
Switch type	3 Pole snap action		3 Pole snap action	3 Pole snap action
Switch rating	3 x 16 A (max.)		3 x 16 A (max.)	3 x 16 A (max.)
Switching differential	9 K		9 K	9 K
Mains frequency	50 Hz		50 Hz	50 Hz
Sensor temperature range	-10°C to 330°C		-10°C to 330°C	-10°C to 330°C
Minimum switch life	500,000 Cycles		500,000 Cycles	500,000 Cycles
Ordering details				
Part description	IDR/M/200 & BDR/200 CON 4900W 240V		IDR/M/200 CON 4000W 240V	IDR/M/200 TS/C 4000W 415V 3PH+N
Part No.	931092-000		151746-000	150560-000



BDR/200 C/W TSW/C Base heater	FIDR/200 Drum heater	FIDR/200 Drum heater	FBDR/200 Base heater
Ordinary	Hazardous	Hazardous	Hazardous
240 V (1 Phase)	240 V (1 Phase)	415 V (3 Phase + Neutral)	240 V (1 Phase)
Mild steel	Mild steel	Mild steel	Mild steel
Heat-resisting matt black	Heat-resisting matt black	Heat-resisting matt black	Heat-resisting matt black
Hammer finish silver	Hammer finish silver	Hammer finish silver	Hammer finish silver
Glass-insulated 80/20 Nickel/Chrome	Mineral insulated	Mineral insulated	Mineral insulated
n.a.	Single toggle and clasp	Single toggle and clasp	n.a.
205 l	205 l	205 l	205 l
Outside Diameter – 560 mm Height – 75 mm Support Bracket - (LxWxH) 375 mm x 185 mm x 50 mm Thermostat - (LxWxH) 70 mm x 50 mm x 100 mm	Outside Diameter – 775 mm Height – 990 mm Including Castors	Outside Diameter – 775 mm Height – 990 mm Including Castors	Outside Diameter - 560 mm Height - 75 mm Support Bracket - (LxWxH) 380 mm x 185 mm x 50 mm Thermostat - (LxWxH) 185 mm x 160 mm x 125 mm
Approx. 15 kg	Approx. 66 kg	Approx. 66 kg	Approx. 19.5 kg
240 V (1 Phase)	240 V (1 Phase)	415 V (3 Phase + Neutral)	240 V (1 Phase)
900 W	4000 W	4000 W	900 W
3.7 A nominal (240 V)	16.6 A nominal (240 V)	5.5 A per phase nominal (415 V)	3.7 A nominal (240 V)
1500 V	1500 V	1500 V	1500 V
TSW-C	FST/C Dual (Exd IIB T5)	FST/C Dual (Exd IIB T5)	FST/C Dual (Exd IIB T5)
50°C - 300°C	50°C - 300°C	50°C - 300°C	50°C - 300°C
240 V (1 Phase)	240 V (1 Phase)	415 V (3 Phase + Neutral)	240 V (1 Phase)
6080 VA	3 x 3840 VA	3 x 3840 VA	3 x 3840 VA
3 Pole snap action	3 Pole	3 Pole	3 Pole
3 x 16 A (max.)	3 x 16 A (40 A max.)	3 x 16 A (40 A max.)	3 x 16 A (40 A max.)
9 K	6.25 K	6.25 K	6.25 K
50 Hz	50 Hz	50 Hz	50 Hz
-10°C to 330°C	-40°C to Limiter – 460°C Control – 315°C	-40°C to Limiter – 460°C Control – 315°C	-40°C to Limiter – 460°C Control – 315°C
500,000 Cycles	Limiter – 500,000 Cycles Control – 1000,000 Cycles	Limiter – 500,000 Cycles Control – 1000,000 Cycles	Limiter – 500,000 Cycles Control – 1000,000 Cycles
BDR/200 C/W TSW/C M20 900W 240V	FIDR-200 FST-C-DUAL/ 4KW/240V/1PH	FIDR-200 FST-C-DUAL/ 4KW/415V/3PH+N	FBDR/200 900W 240 V C/W FST/C DUAL
514096-000	141018-000	763068-000	320118-000

Band heaters

The Isopad DHCH range of flexible band heaters is designed to fit around standard 110 and 205 litre drums. The heating element is constructed from multi-stranded, nickel based alloy resistance wire with a fibreglass reinforced silicone rubber outer covering. The DHCH is supplied complete with a built-in, adjustable thermostat with a control range of 10°C to 218°C.

The DHCH band heaters can be fitted in combinations of single, double or triple zones. When a multiple arrangement is used, individual disconnection ensures maximum economy as the level of the drum contents falls.



	DHCH-25	DHCH-23	DHCH-15	DHCH-13
Construction data				
Material	Silicone rubber	Silicone rubber	Silicone rubber	Silicone rubber
Heating element	Multi-stranded nickel-based alloy resistance wire	Multi-stranded nickel-based alloy resistance wire	Multi-stranded nickel-based alloy resistance wire	Multi-stranded nickel-based alloy resistance wire
Measurement data				
Drum size	205 l	110 l	205 l	110 l
Dimensions (L x W)	1677 mm x 102 mm	1384 mm x 102 mm	1677 mm x 102 mm	1384 mm x 102 mm
Weight	Approx. 1.5 kg	Approx. 1.5 kg	Approx. 1.5 kg	Approx. 1.5 kg
Electrical properties				
Voltage	240 V (1 Phase)	240 V (1 Phase)	110 V (1 Phase)	110 V (1 Phase)
Power output	1200 W	1000 W	1200 W	1000 W
Current	5 A nominal (240 V)	4.15 A nominal (240 V)	10.9 A nominal (110 V)	9.1 A nominal (110 V)
Test voltage	2000 V	2000 V	2000 V	2000 V
Control data				
Built-in control	10°C to 218°C	10°C to 218°C	10°C to 218°C	10°C to 218°C
Ordering details				
Part description	DHCH-25 240V	DHCH-23 240V	DHCH-15 110V	DHCH-13 110V
Part No.	791428-000	631912-000	118374-000	450166-000

Accessories

The TDR is an insulated lid that is designed to restrict upward heat loss when used in conjunction with either the IDR or FIDR vertical drum-heating units. The TDR lid is manufactured out of sheet steel, painted with a hammer finish and supplied complete with carrying handles.



Construction data	
Material	Mild steel
External lid surface paint	Hammer finish silver
Internal cover surface paint	Heat resisting matt black
Measurement data	
Dimensions	Inside diameter – 790 mm Outside diameter – 798 mm Height – 85 mm
Weight	Approx. 20 kg
Ordering details	
Part description	TDR
Part No.	463570-000



- Isopad drum and base heaters
- Easy and clean handling of viscous media
- High efficiency
- Tailored heat control

For more information on industrial heat tracing products order our free Technical Databook.



www.isopad.co.uk
www.tycothermal.com
info@tycothermal.com

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Flow Control

Tyco Thermal Controls

We manage the heat you need

Tyco Thermal Controls
Diestsesteenweg 692
B-3010 Kessel-Lo
Phone +32 (0) 16-35 13 82
Fax +32 (0) 16-35 16 34

Tyco Thermal Controls GmbH
Englerstr. 11
D-69126 Heidelberg
Phone +49 (0) 62 21 30 43-0
Fax +49 (0) 62 21 30 43-956

Tyco Thermal Controls
Faraday Road
Dorcan, Swindon
GB-Wiltshire SN3 5HH
Phone 0800.1.696.812
Fax +44 (0) 1793-57 26 29