

# IDR IBDR IDR-IBDR-CON



# Drum and base drum heaters

These types of Isopad drum and base drum heaters are used to provide medium flow and process temperature in ordinary environments. The special design including a high powered resistance heating cable embedded in a solid metal housing ensures the maximum on power output at operating conditions. These heating units can be used for higher temperatures and faster heat up times. These heaters are designed for standard drum sizes of 200 liter.

## **Drum Heater**

The drum heater is made out of a twopieced metal housing to be opened and closed via hinges and fasteners standing on special castors. The solid design ensures stable operation even on unlevel surfaces. The metal housing carries the heating cable and evenly distributes the temperature to the drum. A mechanical thermostat regulates the operating temperature. Each drum heater includes a lid. To reduce heat loss at top it is recommended to use our insulated lid.

### **Base Drum Heater**

The base drum heater is a perfect addition to the the drum heater to prevent heat loss from below. A metal housing carries the heating cable and evenly distributes the temperature to the drum. An aluminum

casted mechanical thermostat regulates the operating temperature by achieving a maximum on safety during operation.

### **Drum and Base Drum Heater Unit**

A combination of a drum and base drum heater was created to just use a single control mechanism. The Base drum heater can be connected to the drum heater and is thereby controlled by one thermostat. This unit was designed for drum sizes of 200 liter.

For hazardous area drum heater systems see our FIDR-SR/FIBDR-SR datasheet.



	IDR drum heater	IDBR base drum heater	
Area Specifications			
Area classification	Nonhazardous, ordinary area	Nonhazardous, ordinary area	
Ingress protection	IP52	IP52	
Electrical protection class	Class I	Class I	
Ambient temperature range	−20 to +40°C	−20 to +40°C	
Standard Manufacturing Sizes			
Height	980 mm including castors 75 mm heating surface		
Inner diameter	650 mm	-	
Outer diameter	770 mm	570 mm	
Other dimensions on request			

Heater Construction					
Туре	Resistance heating cable	Resistance heating cable			
Material	Various alloys	Various alloys			
Material of heater insulation	Glass-silk	Glass-silk			
Carrier	Woven glass-silk	Woven glass-silk			
Material of thermal insulation	Glass-fiber	Mineral-fiber			
Thickness	50 mm	50 mm			
Outer protection type	Sheet steel	Sheet steel			
Paint	Matt black heat resistant and hammer trimite silver-grey	Matt black heat resistant and hammer trimite silver-grey			
Fixation and closure type	Quick-snap fastener	-			
Lead Connection					
Connection length	2 m	3 m			
Cross section	2.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>			
Maximum operating temperature	80°C	80°C			
Insulation material	PVC	Armoured PVC			
Temperature Control					
Thermostat type	TS-C	TSW			
Sensor type	Capillary tube	Capillary tube			
Controller range	50 to 300°C	50 to 300°C			
Ingress protection	IP52	IP65			
Maximum ambient temperature	−25 to +40°C	−20 to +80°C			
Housing dimension (LxWxH)	110 x 110 x 90 mm	170 x 150 x 100 mm			
Housing material	Thermoplast PS	Aluminium cast			
Technical Data					
Frequency	50-60 Hz	50-60 Hz			
Nominal operating voltage	230 / 400 Vac (~1ph / ~3ph)	230 Vac (~1ph)			
	4000 W	900 W			
Nominal power					

Alternative controller setting range 0°C to +43°C or +30°C to +110°C

Additional insulation-lid for reduction of heat loss (see order information accessories)

Ordering Information									
Part number	Description	For standard sizes (Ltr)	Height <sup>(1)</sup> (mm)	Inner diameter <sup>(1)</sup> (ID) (mm)	Outer diameter <sup>(1)</sup> (OD) (mm)	Nominal power <sup>(2)</sup> (W)	Nominal voltage (Vac)	Weight (kg)	
151746-000	Drum heater	200	990	650	770	4000	230 ~1ph	46	
150560-000	Drum heater	200	990	650	770	4000	400 ~3ph	46	
514096-000	Base drum heater	200	-	_	-	900	230 ~1ph	20	
931092-000	Drum and base drum heater combination	200	-	_	-	4900	230 ~1ph	60	
1235-99900673	Drum and base drum heater combination	200	-	-	-	4900	400 ~3ph	60	
463570-000	Insulated lid	200	85	790	798	_	_	20	

<sup>(1)</sup> Tolerances according to DIN ISO 2768 c

<sup>(2)</sup> Tolerances ±10%