

# FIDR-SR FIBDR-SR



## Hazardous area drum and base drum heaters

These Isopad drum and base drum heaters are used to provide medium flow and process temperature in hazardous environments. The special design including a self-regulating heating cable embedded in a solid metal housing ensures the maximum in safety at operating conditions. Using this design an additional temperature limiter is not necessary.

These heaters are designed for standard drum sizes of 200 L and are fully system approved by Baseefa according to the latest standards of ATEX and IECEx.

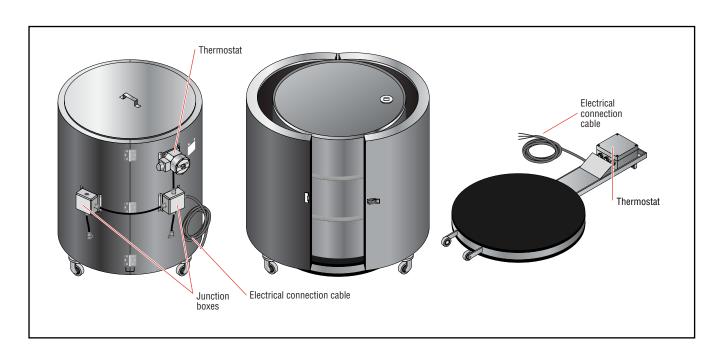
#### **Drum Heater**

The drum heater is made out of a two-pieced metal housing to be opened and closed via hinges and fasteners standing on conductive 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 solid alminium plate carries the heating cable and evenly distributes the temperature to the drum. An electromechanical thermostat regulates the operating temperature. The framework is made out of solid steel and comes with castors for easy transportation.

For ordinary area drum heater systems see our IDR, IBDR/IDR-IBDR-CON datasheet.



	FIDR-SR drum heater	FIDBR-SR base drum heater
Area Specifications		
Area classification	Hazardous area Hazardous area	
Zone	Gas 1,2 Dust 21, 22	Gas 1,2 Dust 21, 22
Temperature class	T2, T4, T6	T2, T4, T6
Ingress protection	IP6X (IP65) IP6X (IP65)	
Electrical protection class	Class I	Class I
Ambient temperature range	-40 to +50°C	-40 to +50°C

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Certifications				
Approvals	System approval by Baseefa	System approval by Baseefa		
Number of certificate	Baseefa08ATEX0280X / IECEx BAS 08.0088X	Baseefa08ATEX0280X / IECEx BAS 08.0088		
Marking	Ex II 2 GD Ex de IIC T2 T6 Ex tD A21 IP6X T240°C T80°C	Ex II 2 GD Ex e iam IIC T2 T6 Ex tD A21 IP6X T240°C T80°C		
Norms	EN, IEC Standard	EN, IEC Standard		
Standard Manufacturing Sizes				
Length	-	1100 mm including castors		
Height	990 mm including castors	75 mm heating surface		
Inner diameter	650 mm	-		
Outer diameter	770 mm	546 mm		
Other dimensions on request				
Heater Construction				
Туре	Self-regulating heating cable	Self-regulating heating cable		
Carrier	Sheet steel	Aluminium plate, anodised black		
Material of thermal insulation	Glass-fibre	Mineral-fibre		
Thickness	50 mm	50 mm		
Outer protection	Sheet steel	Sheet steel		
Paint	Matt black heat resistant and structured blue paint	Structured blue paint		
Fixation and closure type	Quick-snap fastener	-		
Connection				
Junction box (type)	STAHL Series 8118	-		
Ingress protection	IP66	-		
Maximum ambient temperature	−50 to +55°C	_		
Maximum connecting cross section	4 mm <sup>2</sup>	-		
Terminals	8	-		
Glands	4 x M25	-		
Housing material	Polyester glass-fibre reinforced	_		
Connection lead length	2 m	2 m		
Lead cross section	4 mm <sup>2</sup>	2.5 mm <sup>2</sup>		
Maximum operating temperature	180°C	180°C		
Connection lead insulation material	Silicone	Silicone		
Temperature Control				
Thermostat type	RAYSTAT-EX-02	RAYSTAT-EX-03		
Consor tuno	Capillary tube	Pt100 2-wire		
Sensor type		0 to +499°C		
	-4 to +163°C	0 to +499°C		
Controller range	-4 to +163°C	0 to +499°C IP66		

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## FIDR-SR

Technical Data				
Frequency	50-60 Hz	50-60 Hz		
Maximum operating voltage	277 Vac (~1ph)	254 Vac (~1ph)		
Nominal operating voltage	Depending on design	Depending on design		
Nominal power	Depending on design	Depending on design		
Maximum operating temperature	65 to 120°C (depending on heating cable type and temperature class)	65 to 120°C (depending on heating cable type and temperature class)		

### **Options**

Design with other housing materials (e.g. stainless steel). Additional insulated lid for reduction of heat loss. For drum heaters: alternative junction box type JBU-100-L-E with signal lamp for operating status (ON/OFF)

Ordering Information							
Part number	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)
Drum heaters				-			
1235-08230101	200	990	650	770	3930	230	60
1235-08230102	200	990	650	770	3990	230	60
1235-08230103	200	990	650	770	1810	230	60
Base drum heaters							
1235-08240101	200	78	_	546	1150	230	20
1235-08240102	200	78	_	546	1170	230	20
1235-08240103	200	78	=	546	530	230	20
Insulated lid				-			
1235-08021000	200	85	790	798	-	_	20

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

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<sup>(2)</sup> Tolerances ±10% at 230 Vac and +10°C