

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.

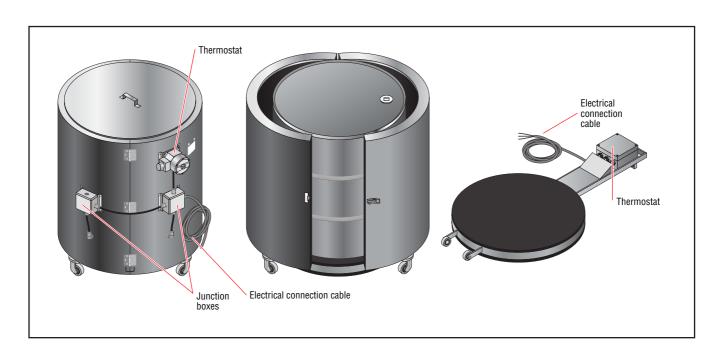
Drum Heater

The drum heater is made out of a twopieced 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		

Page 3-4 of 6 THERMOCOAX www.thermocoax.com E422 11/12

Approvals Number of certificate Baseefa08ATEX0280X / IECEX BAS 08.0088X Marking Ex II 2 GD Ex de IIC T2 T6 Ex tD A21 IP6X T240°C T80°C Norms EN, IEC Standard Standard Manufacturing Sizes Length — Height — Height — Height — Outer diameter Other dimensions on request Heater Construction Type Self-regulating heating cable Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and structured blue paint Fixation and closure type Connection Junction box (type) STAHL Series 8118 Ingress protection Maximum ambient temperature —50 to +55°C Maximum connecting cross section 4 mm² Explored temperature And the maximum and temperature Polyester glass-fibre reinforced Connection tended length 2 m Lead cross section 4 mm² Maximum operating temperature Head cross section 4 mm² Maximum operating temperature Head cross section 4 mm² Maximum operating temperature Hease assertance Explose the Lead cross section 4 mm² Maximum operating temperature Height 2 m Maximum operating temperature Height 2 m Lead cross section A mm² Maximum operating temperature Height 2 m Lead cross section Lead cross section A mm² Maximum operating temperature Height 2 m Lead cross section Lead cross section A mm² Maximum operating temperature Height 2 m Lead cross section Lead cross section A mm² Maximum operating temperature Height 2 m Lead cross section A mm²	System approval by Baseefa Baseefa08ATEX0280X / IECEX BAS 08.0088. Ex II 2 GD Ex e iam IIC T2 T6 Ex tD A21 IP6X T240°C T80°C EN, IEC Standard 1100 mm including castors 75 mm heating surface - 546 mm Self-regulating heating cable Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel Structured blue paint -	
Marking Ex II 2 GD Ex de IIC T2 T6 Ex tD A21 IP6X T240°C T80°C Norms EN, IEC Standard Standard Manufacturing Sizes Length — Height 990 mm including castors Inner diameter 650 mm Outer diameter 770 mm Other dimensions on request Heater Construction Type Self-regulating heating cable Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and structured blue paint Fixation and closure type Ouick-snap fastener Connection Junction box (type) STAHL Series 8118 Ingress protection IP66 Maximum ambient temperature —50 to +55°C Maximum connecting cross section 4 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	Ex II 2 GD Ex e iam IIC T2 T6 Ex tD A21 IP6X T240°C T80°C EN, IEC Standard 1100 mm including castors 75 mm heating surface - 546 mm Self-regulating heating cable Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
T240°C T80°C Norms EN, IEC Standard Standard Manufacturing Sizes Length — Height 990 mm including castors Inner diameter 650 mm Outer diameter 770 mm Other dimensions on request Heater Construction Type Self-regulating heating cable Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	IP6X T240°C T80°C EN, IEC Standard 1100 mm including castors 75 mm heating surface - 546 mm Self-regulating heating cable Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
Standard Manufacturing Sizes Length	1100 mm including castors 75 mm heating surface - 546 mm Self-regulating heating cable Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
Length 990 mm including castors Inner diameter 650 mm Outer diameter 770 mm Other dimensions on request Heater Construction Type Self-regulating heating cable Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	75 mm heating surface - 546 mm Self-regulating heating cable Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
Height 990 mm including castors Inner diameter 650 mm Outer diameter 770 mm Other dimensions on request Heater Construction Type Self-regulating heating cable Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	75 mm heating surface - 546 mm Self-regulating heating cable Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
Inner diameter 650 mm Outer diameter 770 mm Other dimensions on request Heater Construction Type Self-regulating heating cable Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	546 mm Self-regulating heating cable Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
Outer diameter 770 mm Other dimensions on request Heater Construction Type Self-regulating heating cable Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	Self-regulating heating cable Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
Heater Construction Type Self-regulating heating cable Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	Self-regulating heating cable Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
Heater Construction Type Self-regulating heating cable Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
Type Self-regulating heating cable Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
Carrier Sheet steel Material of thermal insulation Glass-fibre Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	Aluminium plate, anodised black Mineral-fibre 50 mm Sheet steel	
Material of thermal insulation Thickness 50 mm Outer protection Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	Mineral-fibre 50 mm Sheet steel	
Thickness 50 mm Outer protection Sheet steel Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	50 mm Sheet steel	
Outer protection Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	Sheet steel	
Paint Matt black heat resistant and 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 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²		
paint Fixation and closure type Connection Junction box (type) Ingress protection Maximum ambient temperature Maximum connecting cross section Terminals Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section Quick-snap fastener Authorized STAHL Series 8118 IP66 —50 to +55°C 4 mm² 4 mm² 7 events and authorized Authorized	Structured blue paint –	
Connection Junction box (type) Ingress protection Maximum ambient temperature -50 to +55°C Maximum connecting cross section 4 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length Lead cross section STAHL Series 8118 IP66 A mm² Terminals 8 Clands 4 mm² A mm²	-	
Junction box (type) STAHL Series 8118 Ingress protection IP66 Maximum ambient temperature -50 to +55°C Maximum connecting cross section 4 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²		
Ingress protection IP66 Maximum ambient temperature -50 to +55°C Maximum connecting cross section 4 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²		
Maximum ambient temperature -50 to +55°C Maximum connecting cross section 4 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	_	
Maximum connecting cross section 4 mm² Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	_	
Terminals 8 Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	_	
Glands 4 x M25 Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm²	_	
Housing material Polyester glass-fibre reinforced Connection lead length 2 m Lead cross section 4 mm ²	-	
Connection lead length 2 m Lead cross section 4 mm ²	_	
Lead cross section 4 mm ²	_	
	2 m	
Maximum operating temperature 180°C	2.5 mm ²	
	180°C	
Connection lead insulation material Silicone	Silicone	
Temperature Control		
Thermostat type RAYSTAT-EX-02	RAYSTAT-EX-03	
Sensor type Capillary tube	Pt100 2-wire	
Controller range -4 to +163°C		
Ingress protection IP65	0 to +499°C	
Maximum ambient temperature —40 to +60°C	0 to +499°C IP66	
Housing material Aluminium		

E422 11/12 www.thermocoax.com THERMOCOAX Page 3-5 of 6

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 ⁽¹⁾ (mm)	Inner diameter ⁽¹⁾ (ID) (mm)	Outer diameter ⁽¹⁾ (OD) (mm)	Nominal power ⁽²⁾ (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	

⁽¹⁾ Tolerances according to DIN ISO 2768 c

Page 3-6 of 6 THERMOCOAX www.thermocoax.com E422 11/12

⁽²⁾ Tolerances ±10% at 230 Vac and +10°C