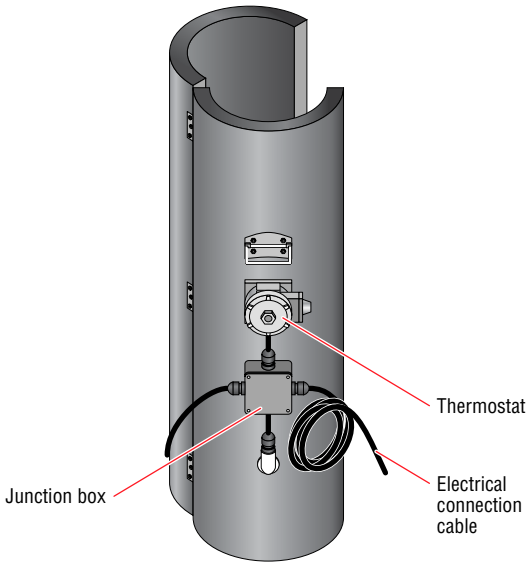
Hazardous area gas bottle heaters

Gases today are usually supplied in metal bottles and whilst the removal of the gas is no problem in many applications, in the case of higher-quality gases the cylinder needs to be heated to guarantee complete removal of all of the gas. The heaters keep the bottles free from ice, maintain a constant pressure within the bottle, and enable the gas to be kept at an optimum processing temperature.

In hazardous area conditions additional safety is recommended.

These gas bottle heaters are designed to control gaseous media within their classified area and temperature class. These heaters are fully system approved by Baseefa according to the latest standards of ATEX and IECEx. They can be used in hazardous or nonhazardous, ordinary areas. A solid metal housing provides full protection against external forces. Self regulating heating cables ensure safe operation within the several temperature classes additionally controlled by a mechanical thermostat for maintaining individual required gas temperature. Quick-snap fasteners and castors provide ease of installation around the gas bottle.



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

Certifications	
Approvals	System approval by Baseefa
Number of certificate	Baseefa08ATEX0280X / IECEx BAS 08.0088X
Marking	Ex II GD Ex de IIC T2 ... T6 Ex tD A21 IP6X T240°C ... T80°C
Norms	EN, IEC Standard

Standard Manufacturing Sizes	
Height	750, 1130, 1350, 1400 mm
Inner diameter	150, 214, 239, 328 mm
Outer diameter	250, 314, 339, 428 mm
Other dimensions available on request	

Heater Construction	
Type	Self-regulating heating cable
Carrier	Sheet metal steel
Material of thermal insulation	Glass-fibre
Thickness	40 mm
Outer protection	Sheet metal 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
Maximum operating temperature	180°C
Connection lead insulation material	Silicone

Temperature Control	
Thermostat (type)	RAYSTAT-EX-02
Sensor type	Capillary tube
Controller range	–4 to +163°C
Ingress protection	IP65
Maximum ambient temperature	–40 to +60°C
Housing material	Aluminium

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

Options

Design with other housing materials (e.g. stainless steel)
Alternative junction box type JBU-100-L-E with signal lamp for operating status (ON/OFF)