

# «Simple Apparatus» conformity to ATEX 419

# AMBISTAT

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for the measurement of pressure and temperature.



## Applications

- Potentially explosive atmosphere

## Features

- Compact design
- Rugged housing
- Protection IP65
- Any mounting position possible
- May be used as „simple apparatus“ in zones at risk of explosions

## Technical Data

Designation of application	Industrial room thermostat	Switching differential	Not adjustable
Measuring range	-30°C ... +30°C to 0°C ... +60°C	Repeatability	± 0.5 % FS typ.
Output signal	Floating change-over contact	Approval / conformity	EN60730-1/ EN60730-2-9: Typ 2.B.H EN60079-0, EN60079-11 Zone 1 and 2, 21 and 22

01/2017

Data sheet H72182e

Subject to change

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## Ordering information/type code

		XXX	XX	XX	XXXXXX	XX
<b>Custom build code</b>	Internal adjustment	419				
<b>Microswitch</b>	With gold plated contacts, switching differential not adjustable		71			
<b>Range</b>	<b>Range [°C]</b>	<b>Operating temperature [°C]</b>				
	-30 ... +30	-30 ... +40			02	
	-20 ... +40	-30 ... +50			06	
	+5 ... +35	-30 ... +50			10	
	0 ... +60	-30 ... +65			12	
<b>Sensor / Fixing</b>	Sensor: Copper; Fixation: Bracket (open sensor coil)				522.27	
	Sensor: Copper nickel plated; Fixation: Bracket (open sensor coil)				523.27	
<b>Accessories</b>	Switchpoint locking					15
	Switchpoint fixed and sealed upon customer's request					88
	Switchpoint preset upon customer's request, no guarantee on switching accuracy					83
	Switchpoint adjustment please indicate when ordering:					
	- Switchpoint [°C]					
	- Increasing or decreasing					

### Optional accessories of third party supplier

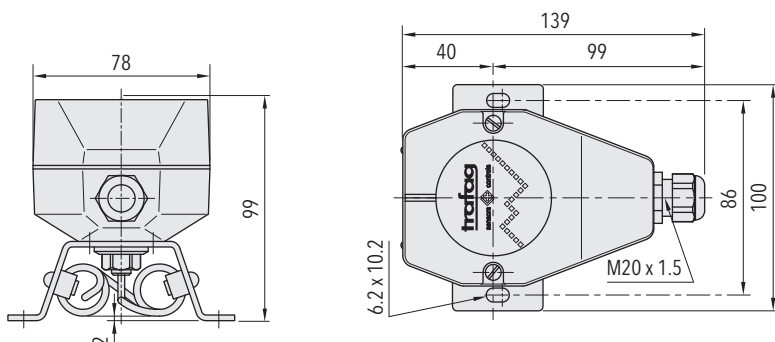
Ex-i barriers are suitable for intrinsically safe applications. The device transmits binary signals from the hazardous area into the safe area.

Ex-i-barriers: 24 VDC $U_0 = 10.5 \text{ V} / I_0 = 13 \text{ mA} / P_0 = 34 \text{ mW}$	ZEN24VDC
Ex-i-barriers: 230 VAC $U_0 = 10.6 \text{ V} / I_0 = 19.1 \text{ mA} / P_0 = 51 \text{ mW}$	ZEN230VAC



**i** Thermostats, when combined with a certified Ex-barrier (see "optional accessories of third party supplier"), can be used as "simple electrical apparatus" in Zone 1 and 2, as well as in Zone 21 and 22, according to IEC/EN 60079-14. These thermostats are not suitable for Zone 0 and Zone 20. Use in safety relevant applications (approved electrical apparatus) is not permitted.

## Dimensions



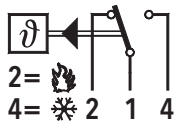
419.71.XX.52X.27.XX

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Specifications		
<b>Accuracy</b>	Repeatability	± 0.5 % FS typ.
	Scale accuracy typ.	± 2 % FS typ.
	Switching differential	0.7°C (not adjustable)
<b>Environmental conditions</b>	Ambient temperature	-30°C ... max. +65°C
	Storage temperature	Range ≤ +40°C: -30 ... +50°C Range > +40°C: -30 ... +70°C
	Protection	IP65
	Humidity	Max. 95 % relative
<b>Mechanical Data</b>	Sensor housing	See ordering information
	Filling	Liquid
	Housing	AlSi9Cu3, coated
	Screwed cable gland	PA, Polyamide, light blue
	Installation	Any position Recommendation: screwage pointing downwards
	Weight	~ 950 g
<b>Microswitch</b>	Rating	See table
	Resistance of insulation	> 2 MΩ
	Dielectric strength	500 V AC terminal ground
	Life time (mechanical)	1 Mio. cycles
<b>Electrical connection</b>	Cable gland	M20x1.5 Cable-Ø 4...10 mm, max. cable length according to EN60079-11
	Terminal screw	3 x 1...2.5 mm <sup>2</sup>

Electrical data switch		
Type	Features	Rating
71	Gold plated contacts	U <sub>0</sub> = 24 V I <sub>0</sub> = 100 mA P <sub>0</sub> = 600 mW

## Electrical connection



Additional information		
<b>Documents</b>	Data sheet	<a href="http://www.trafag.com/H72182">www.trafag.com/H72182</a>
	Instructions	<a href="http://www.trafag.com/H73173">www.trafag.com/H73173</a>
	Flyer	<a href="http://www.trafag.com/H70972">www.trafag.com/H70972</a>