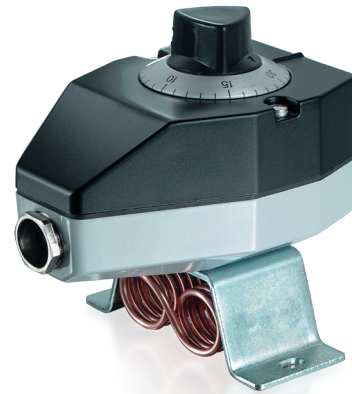


# INDU AMBISTAT

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



## Applications

- HVAC

## Features

- Compact design
- Rugged housing
- Protection IP65
- Any mounting position possible

## Technical Data

Designation of application	Industrial room thermostat	Switching differential	Adjustable / 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

02/2022

Data sheet H72116n

Subject to change

## Ordering information/type code

		XXX	XX	XX	XXXXXX	XX
<b>Custom build code</b>	External adjustment	409				
	Internal adjustment	419				
<b>Microswitch</b>	Small switching differential, not adjustable		10			
	Average switching differential, not adjustable		11			
	With gold plated contacts, switching differential not adjustable		21			
	Adjustable standard switching differential		25			
<b>Range</b>	<b>Range</b> [°C]	<b>Operating temperature</b> [°C]				
	-30 ... +30	-30 ... +40			02	
	-20 ... +40	-30 ... +50			06	
	+5 ... +35	-30 ... +70			10	
	0 ... +60	-30 ... +70			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 <sup>1)</sup>					15
	Switchpoint fixed and sealed upon customer's request <sup>1)</sup>					88
	Switchpoint preset upon customer's request, no guarantee on switching accuracy <sup>1)</sup>					83
	Switchpoint adjustment please indicate when ordering:					
	- Switchpoint [°C]					
	- Increasing or decreasing					
	Railway version IEC 61373, category 2					
Outdoor application (vented)						44

<sup>1)</sup> Only with type 419, internal adjustment

## Standard products (extra short lead time)

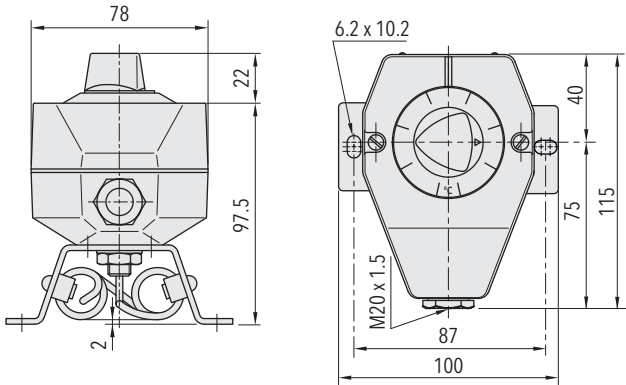
Product No.	Type Code	Temperature range [°C]	Switching differential [°C]	Operating temperature [°C]
IA33	409 2502 522 27	-30 ... +30	0.7 ... 6 (adjustable)	-30 ... +40
IA35	409 2510 522 27	+5 ... +35	0.7 ... 6 (adjustable)	-30 ... +50
IA60	409 2512 522 27	0 ... +60	0.7 ... 6 (adjustable)	-30 ... +70
IAS33	419 2502 522 27	-30 ... +30	0.7 ... 6 (adjustable)	-30 ... +40
IAS35	419 2510 522 27	+5 ... +35	0.7 ... 6 (adjustable)	-30 ... +50
IAS60	419 2512 522 27	0 ... +60	0.7 ... 6 (adjustable)	-30 ... +70

Specifications		
<b>Accuracy</b>	Repeatability	$\pm 0.5\%$ FS typ.
	Scale accuracy typ.	$\pm 2\%$ FS typ.
	Switching differential	See table
<b>Environmental conditions</b>	Ambient temperature	see ordering information
	Storage temperature	Range $\leq +40^\circ\text{C}$ : $-30 \dots +50^\circ\text{C}$ Range $> +40^\circ\text{C}$ : $-30 \dots +85^\circ\text{C}$
	Protection	IP65
	Humidity	Max. 95% relative
<b>Mechanical Data</b>	Sensor housing	See ordering information
	Filling	Liquid
	Housing	AlSi9Cu3, coated
	Screwed cable gland	Brass nickel plated
	Installation	any position
	Weight	$\sim 950$ g
<b>Microswitch</b>	Rating	See table
	Resistance of insulation	$> 2\text{ M}\Omega$
	Dielectric strength	$U \leq 250\text{V}$ : 1.45 kV / $U \leq 500\text{V}$ : 2 kV terminal ground
	Life time (mechanical)	Microswitch 10/11/25: 20 Mio. cycles Microswitch 21: 0.5 Mio. cycles
<b>Electrical connection</b>	Cable gland	M20x1.5 Cable- $\varnothing$ 4...10 mm
	Terminal screw	3 x 1...2.5 mm <sup>2</sup>

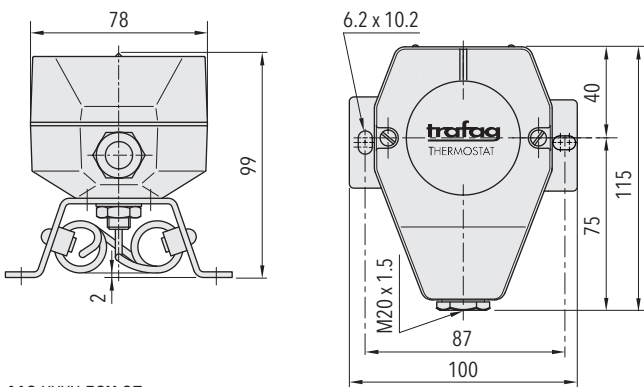
### Additional information

<b>Documents</b>	Data sheet	<a href="http://www.trafag.com/H72116">www.trafag.com/H72116</a>
	Instructions	<a href="http://www.trafag.com/H73111">www.trafag.com/H73111</a>
	Flyer	<a href="http://www.trafag.com/H70964">www.trafag.com/H70964</a>

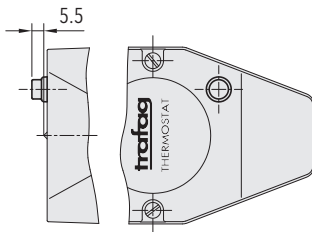
## Dimensions



409.XXXX.52X.27...



419.XXXX.52X.27...

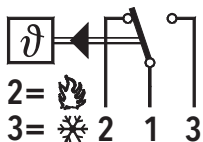


Accessory 14

Switching differential typ.		
<b>Range</b>	[°C]	-30 ... +30 -20 ... +40 +5 ... +35 0 ... +60
<b>Microswitch 10</b> Switching differential (fixed value, not adjustable)	[°C]	0.3
<b>Microswitch 11</b> Switching differential (fixed value, not adjustable)	[°C]	0.7
<b>Microswitch 21</b> Switching differential (fixed value, not adjustable)	[°C]	0.7
<b>Microswitch 25</b> Switching differential (adjustable value)	[°C]	0.7 ... 6

Electrical data switch			
Type	Features	Rating	
		Resistive Load (Inductive Load)	
		AC	DC
<b>10</b>	Small switching differential, not adjustable	125 V, 10 (1.5) A 250 V, 10 (1.25) A	250 V, 0.2 (0.02) A 125 V, 0.4 (0.03) A 30 V, 2 (1) A 14 V, 15 (2.5) A
<b>11</b>	Average switching differential, not adjustable	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.25(0.03) A 125 V, 0.5(0.05) A 30 V, 6 (1.5) A 14 V, 15 (1.5) A
<b>21</b>	Gold plated contacts, not adjustable	24 V, 0.1(0.1) A 12 V, 1 (1) A 5 V, 2 (2) A	24 V, 0.1(0.1) A 12 V, 1 (1) A 5 V, 2 (2) A
<b>25</b>	Adjustable standard switching differential	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.25(0.03) A 125 V, 0.5(0.05) A 30 V, 6 (1.5) A 14 V, 15 (2.5) A

## Electrical Connection



409 / 419