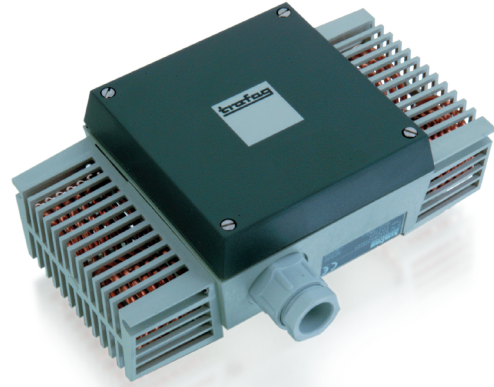


AMBI DUOSTAT

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



Applications

- HVAC
- Refrigeration

Features

- With 2 individual measuring systems
- Protection IP54
- Electrical connection on terminal screw

Technical Data			
Designation of application	Double room thermostat	Switching differential	Adjustable / not adjustable
Measuring range	-30 ... +30 to 0 ... +60°C	Repeatability	± 0.5 % FS typ.
Output signal	Floating change-over contact	Approval	EN60730-1/ EN60730-2-9: Typ 2.B.H

01/2015

Data sheet H72146h

Subject to change

Ordering information/type code

		319 .	XX	XX	XXX	XX	XX
Micro-switch	Small switching differential, not adjustable		10				
	Average switching differential, not adjustable		11				
	With gold plated contacts, not adjustable		21				
	Adjustable standard switching differential		25				
Range	Range [°C]	Operating temperature [°C]					
	-30 ... +30	-30 ... +40			02		
	-20 ... +40	-30 ... +50			06		
	0 ... +30	-30 ... +50			03		
	+10 ... +40	-30 ... +70			04		
	0 ... +60	-30 ... +70			12		
Sensor	Stainless steel (1.4435 / AISI316L)				401		
	Copper				402		
	Copper nickel plated				403		
Fixing ²⁾	Console						19
Accessories	Signal lamp						14
	Set blocking						15
	Railway version (UIC 616)						28
	Outdoor usage (aerated)						44

²⁾ See data sheet H72106

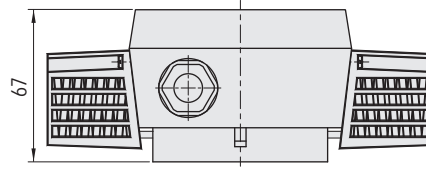
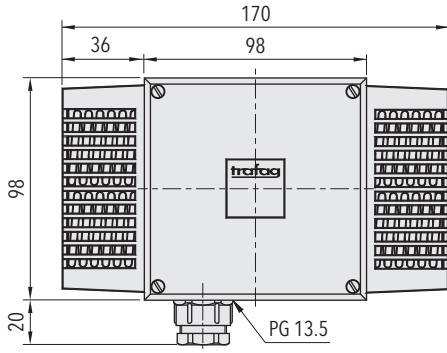
Standard products (extra short lead time)

Product No.	Type Code	Temperature range [°C]	Switching differential [°C]	Operating temperature [°C]
ADS30	319 2503 402 19	0 ... +30	0.7 ... 6	-30 ... +50
ADS33	319 2502 402 19	-30 ... +30	0.7 ... 6	-30 ... +40
ADS60	319 2512 402 19	0 ... +60	0.7 ... 6	-30 ... +70

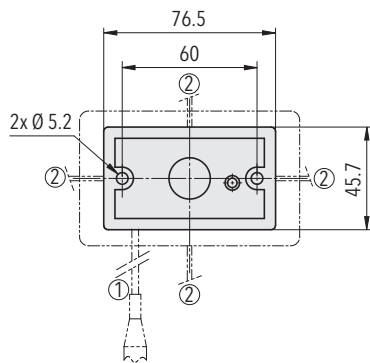
Specifications		
Accuracy	Repeatability	± 0.5 % FS typ.
	Scale accuracy typ.	± 2 % FS typ.
	Switching differential	see table
Environmental conditions	Ambient temperature	see ordering information
	Storage temperature	Range < +40°C: -30...+50°C Range > +40°C: -30...+85°C
	Protection	IP54
	Humidity	Max. 95 % relative
Mechanical Data	Sensor housing	see ordering information
	Filling	Liquid
	Housing	Noryl
	Screwed cable gland	PA, Polyamid
	Installation	any position
	Weight	~ 220 g
Microswitch	Rating	see table
	Resistance of insulation	> 2 MΩ
	Dielectric strength	U ≤ 250V: 1.45 kV U ≤ 500V: 2 kV terminal ground
	Life time (mechanical)	Microswitch 10/11/25: 20 Mio. cycles Microswitch 21: 0.5 Mio. cycles
Electrical connection	Cable gland	PG13.5 Cable-Ø 5...12.5 mm
	Terminal screw	3 x 1...2.5 mm ²

Additional information		
Documents	Data sheet	www.trafag.com/H72146
	Instructions	www.trafag.com/H73170
	Flyer	www.trafag.com/H70960

Dimensions



319.XXXX.XXX.XX.XX

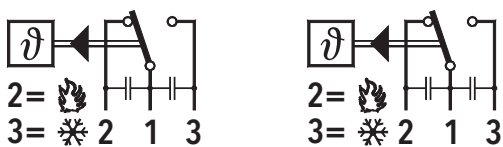


319.XXXX.XXX.19.XX

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

Electrical data switch			
Type	Features	Rating	
		Resistive Load (Inductive Load)	
		AC	DC
10	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
11	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
21	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
25	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



319

Modifications

Index	Date	Description
b	11/2003	redesigned data sheet
c	11/2004	Page 4: rating microswitch 11/25
d	12/2009	Page 2: Sensor „Copper chrome plated“ removed Page 2,3,4: Big switching differential 06 removed
e	06/2010	Page 4: contact rating of microswitch 21 increased from 0.01A to 0.1A (24 AC & 24 DC) Page 4: Switch 21: advise „suitable for intrinsically safe control circuit“ removed because „simple apparatus“ devices are available
f	10/2011	Page 3: Dielectric strength changed to $U \leq 250 \text{ V}: 1.45 \text{ kV}/U \leq 500 \text{ V}: 2 \text{ kV}$
g	04/2012	Phase out type 309
h	01/2015	New layout Page 5: Switch 11 DC rating corrected: old 14V 15(2.5)A, new 14V 15(1.5)A