

INDU LIMISTAT

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



Applications

- Machine tools
- Process technology

Features

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

Technical Data

Designation of application	Industrial thermostat with remote sensor and limiter	Switching differential	Not adjustable
Measuring range	-30°C ... +40°C to +70°C ... +350°C	Repeatability	± 0.5 % FS typ.
Output signal	Floating change-over contact	Approval / conformity	EN60730-1/ EN60730-2-9: Typ 2.B.H

11/2017

Data sheet H72138n

Subject to change

	XXX . XX	XX	XXX	XX	XXXXXXXXXX	XX	XX
Accessories	Signal lamp	14	Condensator over Pin 1-3	13			
	Switchpoint locking	15	Condensators over Pin 1-2 / 1-3	23			
	Switchpoint fixed and sealed upon customer's request	88	Railway version IEC 61373, category 2	28			
	Switchpoint preset upon customer's request, no guarantee on switching accuracy	83	Outdoor application (vented)	44			
	Switchpoint adjustment please indicate when ordering: - Switchpoint [°C]		Capillary tube protection: Flexible metal tube, brass nickel plated	90			
	- Increasing or decreasing		Capillary tube protection: Flexible metal tube 1.4541/V2A	91			
	Condensator over Pin 1-2	12	Capillary tube protection: PVC tube	92			
	Capillary tube length	Capillary tube length up to 5000 mm (no specification required for direct mounting on protection tube) L=XXXX ³⁾					

¹⁾ See data sheet H72114/H72163

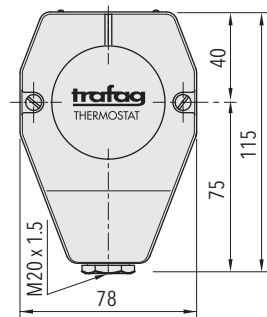
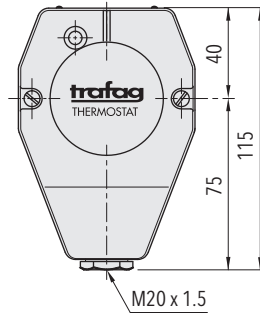
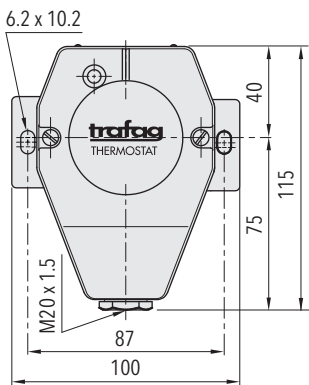
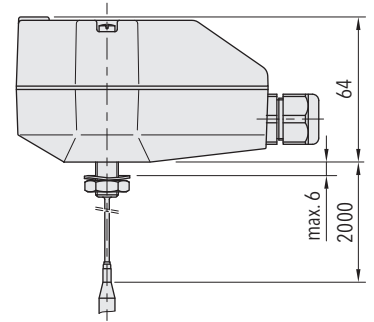
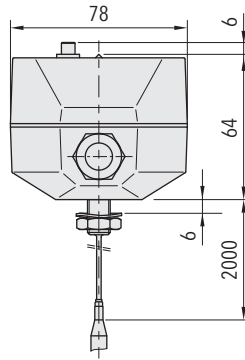
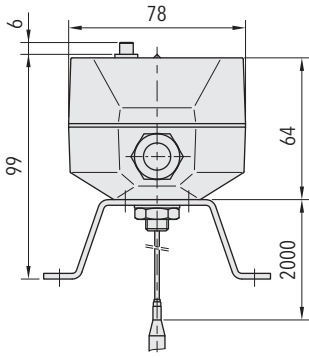
²⁾ See data sheet H72106

³⁾ Overlengths upon request

Standard products (extra short lead time)				
Product No.	Type Code	Sensor material	Temperature range [°C]	Sensor max. [°C]
IS95R	412 1220 322 27	Copper	+5 ... +95	105
IS150R	412 1231 322 27	Copper	+20 ... +150	165
IS230SR	412 1224 121 27	1.4435/316L	+20 ... +230	250
IS350SR	412 1254 121 27	1.4435/316L	+70 ... +350	380

Specifications		
Accuracy	Repeatability	$\pm 0.5\%$ FS typ.
	Scale accuracy typ.	$\pm 2\%$ FS typ.
	Switching differential	See table
	Switching point	Temperature compensated with bimetal switch lever
Environmental conditions	Ambient temperature	Range $\leq +45^{\circ}\text{C}$: $-30\dots+50^{\circ}\text{C}$ Range $+45\dots+250^{\circ}\text{C}$: $-30\dots+70^{\circ}\text{C}$ Range $> +250^{\circ}\text{C}$: $-10\dots+70^{\circ}\text{C}$ (Important: Temperature at sensor may not exceed maximum sensor temperature)
	Storage temperature	Range $< +45^{\circ}\text{C}$: $-30\dots+50^{\circ}\text{C}$ Range $> +45^{\circ}\text{C}$: $-30\dots+85^{\circ}\text{C}$
	Protection	IP65
	Humidity	Max. 95 % relative
	Vibration	5...25 Hz: ± 1.6 mm 25...100 Hz: 4g
	Shock	50g/ 11ms
Mechanical Data	Sensor housing	See ordering information
	Filling	Liquid
	Housing	AlSi9Cu3, coated
	Screwed cable gland	Brass nickel plated
	Installation	Any position
	Weight	~ 950 g
Microswitch	Rating	See table
	Resistance of insulation	$> 2\text{ M}\Omega$
	Dielectric strength	2 kV terminal ground
	Life time (mechanical)	0.3 Mio. cycles
Electrical connection	Cable gland	M20x1.5 Cable- \O 4...10 mm
	Terminal screw	3 x 1...2.5 mm ²

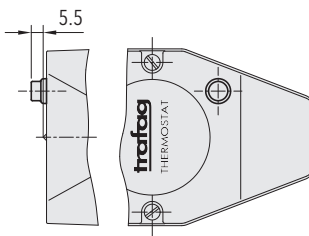
Dimensions



412.12XX.XXX.27...

412.12XX.XXX.10...

410.12XX.XXX.10...



Accessory 14

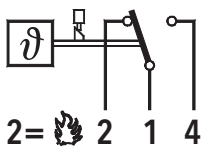
Switching differential typ.

Range	[°C]	-30 ... +40	-10 ... +35	+20 ... +150	+20 ... +230	+40 ... +300
		-10 ... +25	-10 ... +80			+70 ... +350
		0 ... +35	+5 ... +95			
		+15 ... +30	+20 ... +110			
		+10 ... +45				
		+10 ... +80				
Microswitch 12	[°C]	2.0	6.0	7.5	9.0	12.0
Switching differential (fixed value, not adjustable)						

Electrical data switch

Type	Features	Rating	
		Resistive Load (Inductive Load)	
		AC	DC
12	High vibration resistance, medium switching differential	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.3 (0.2) A 125 V, 0.75 (0.4) A 30 V, 15 (1.5) A 14 V, 15 (1.5) A

Electrical Connection



410/412.12

Limiter for increasing temperatures

Additional information

Documents		
	Data sheet	www.trafag.com/H72138
	Instructions	www.trafag.com/H73111
	Flyer	www.trafag.com/H70966