

DUO LIMISTAT

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
- Short response time
- Protection IP54
- Electrical connection on terminal screw

01/2015

Data sheet H72142k

Technical Data

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

Subject to change

302 . XX XX XXX XX XXXXXXXX XX XX

Accessories	Signal lamp	14
	Condensator over Pin 1-2	12
	Condensator over Pin 1-3	13
	Condensators over Pin 1-2 / 1-3	23
	Railway version (UIC 616)	28
	Outdoor usage (aerated)	44
	Capillary tube protection: Flexible metal tube, brass nickel plated	90
	Capillary tube protection: Flexible metal tube 1.4541/V2A	91
	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

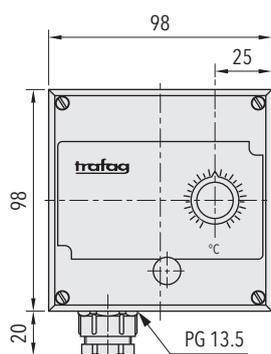
²⁾ See data sheet H72106

³⁾ Overlengths upon request

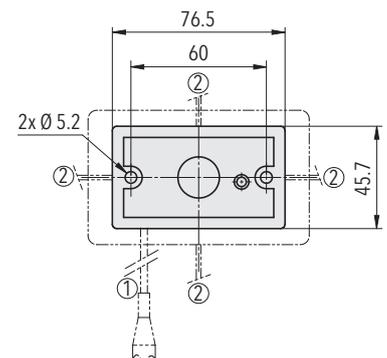
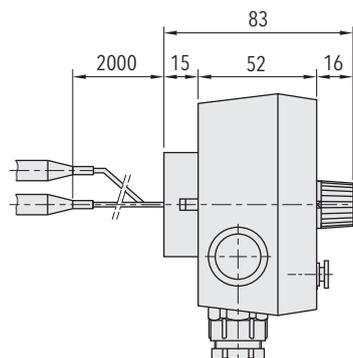
Standard products (extra short lead time)

Product No.	Type Code	Temperature range [°C]	Switching differential [°C]	Measuring range limiter [°C]	Sensor max. [°C]
D95R	302 5836 362 19	+5 ... +95	2 ... 12 (adjustable)	+20 ... +110	105
D150R	302 5842 362 19	+20 ... +150	2.5 ... 16 (adjustable)	+35 ... +175	165
D300R	302 5839 162 19	+40 ... +300	4 ... 40 (adjustable)	+70 ... +350	380

Dimensions



302.XXXX.XXXX.XX...



Fixation 19

Specifications		
Accuracy	Repeatability	$\pm 0.5 \% \text{ FS typ.}$
	Scale accuracy typ.	$\pm 2 \% \text{ FS typ.}$
	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	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	$\sim 620 \text{ g}$
Microswitch	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 12: 0.3 Mio. cycles
Electrical connection	Cable gland	PG13.5 Cable- \emptyset 5...12.5 mm
	Terminal screw	$6 \times 1\dots2.5 \text{ mm}^2$

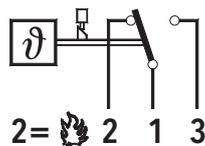
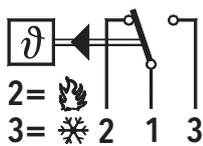
Additional information

Documents	Data sheet	www.trafag.com/H72142
	Instructions	www.trafag.com/H73170
	Flyer	www.trafag.com/H70963

Switching differential typ.						
Range	[°C]	-30 ... +40 -10 ... +25 0 ... +35 +15 ... +30 +10 ... +45 +10 ... +80	-10 ... +35 -10 ... +80 +5 ... +95 +20 ... +110	+20 ... +150	+20 ... +230	+40 ... +300 +70 ... +350
Microswitch 10 Switching differential (fixed value, not adjustable)	[°C]	0.3	0.8	1	1.2	2
Microswitch 11 Switching differential (fixed value, not adjustable)	[°C]	0.7	2	2.5	3	4
Microswitch 12 Switching differential (fixed value, not adjustable)	[°C]	2	6	7.5	9	12
Microswitch 25 Switching differential (adjustable value)	[°C]	0.7 ... 10	2 ... 12	2.5 ... 16	3 ... 32	4 ... 40

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
12	Large switching differential, not adjustable	125 V, 15 (1.5) A 250 V, 15 (1.25) A 500 V, 10 (0.75) A	250 V, 0.3(0.2) A 125 V, 0.75(0.4) A 30 V, 15 (1.5) A 14 V, 15 (1.5) 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



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