

TR2430

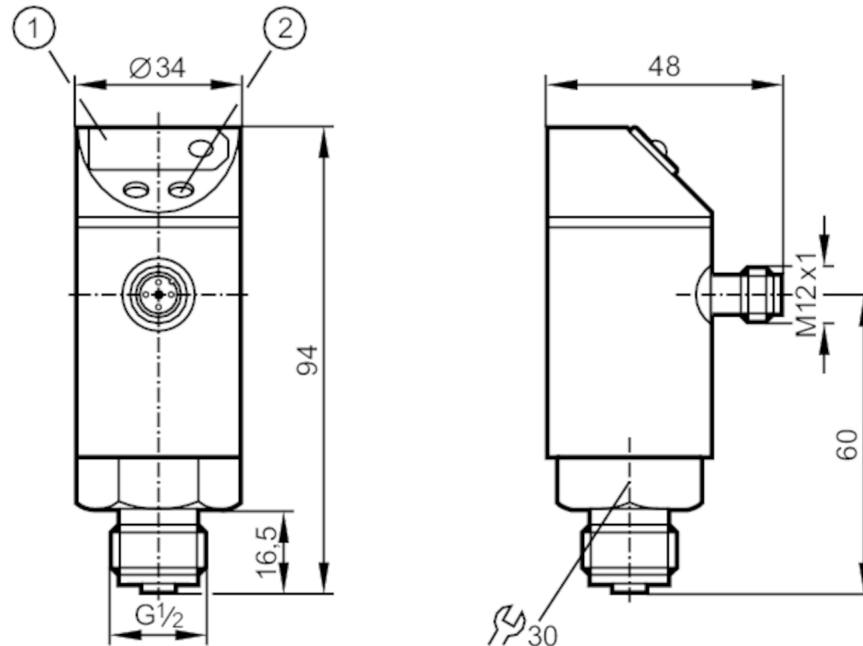


Evaluation unit with display for PT100/PT1000 temperature sensors

TR-...KDBR12-MFPKG/US/...../V

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- 1 7-segment LED display
- 2 programming button



Product characteristics

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1	
Measuring range	-40...150 °C	-40...302 °F
Process connection	threaded connection G 1/2 external thread	

Application

Special feature	Gold-plated contacts
Application	for temperature sensors TS/TT

Electrical data

Operating voltage	[V]	20...30 DC
Current consumption	[mA]	< 66
Min. insulation resistance	[MΩ]	100; (500 V DC)
Protection class		III
Reverse polarity protection		yes
Power-on delay time	[s]	1.5
Integrated watchdog		yes

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 1; Number of analogue outputs: 1
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Outputs		
Total number of outputs		2
Output signal		switching signal; analogue signal; (configurable)
Electrical design		PNP
Number of digital outputs		1
Output function		normally open / normally closed; (parameterisable)
Max. voltage drop switching output DC	[V]	2
Permanent current rating of switching output DC	[mA]	250
Number of analogue outputs		1
Analogue current output	[mA]	4...20
Max. load	[Ω]	(U _b - 10 V) x 50
Analogue voltage output	[V]	0...10
Min. load resistance	[Ω]	2000
Short-circuit protection		yes
Type of short-circuit protection		pulsed
Overload protection		yes
Measuring/setting range		
Measuring range		-40...150 °C -40...302 °F
Set point SP		-39.5...150 °C -39...302 °F
Reset point rP		-40...149.5 °C -40...301 °F
Analogue start point		-40...140 °C -40...284 °F
Analogue end point		-30...150 °C -22...302 °F
In steps of		0.5 °C 1 °F
Resolution		
Resolution of switching output	[K]	0.5
Resolution of analogue output	[K]	0.125
Resolution of display	[K]	0.5
Accuracy / deviations		
Switch point accuracy	[K]	± 0,2 / ± 0,36
Precision analogue output	[K]	± (0,2 / 0,36 + 0,4%)
Display accuracy	[K]	± (0,2 / 0,36 + ½ Digit)
Temperature drift per 10 K	[K]	0.1
Response times		
Max. measuring/display cycle	[ms]	200
Software / programming		
Adjustment of the switch point		programming button
Parameter setting options		hysteresis / window; normally open / normally closed; min/max memory reset; Display unit; zero-point calibration; analogue output selectable and scalable

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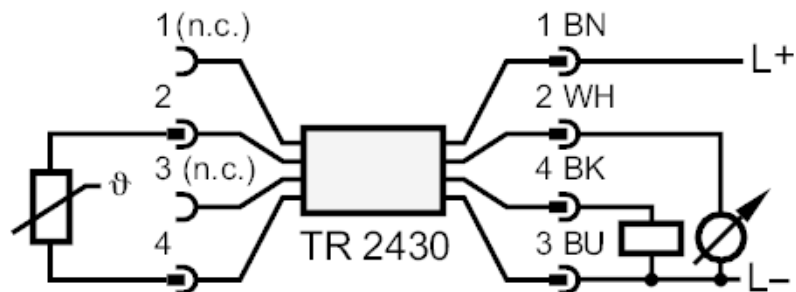
Operating conditions		
Ambient temperature	[°C]	-25...70
Storage temperature	[°C]	-40...85
Protection		IP 67
Tests / approvals		
EMC	DIN EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	DIN EN 61000-4-4 Burst	2 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance	DIN IEC 68-2-27	50 g (11 ms)
Vibration resistance	DIN EN 60068-2-6	20 g (10...2000 Hz)
Mechanical data		
Materials	stainless steel (1.4301 / 304); stainless steel (1.4305 / 303); EPDM/X; PC; PBT; FKM	
Process connection	threaded connection G 1/2 external thread	
Displays / operating elements		
Display	switching status	LED, red
	function display	7-segment LED display
	measured values	7-segment LED display
Remarks		
Remarks	n.c. = not used	
Pack quantity	1 pcs.	

Electrical connection

Connector: 1 x M12; Contacts: gold-plated



Connection



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