



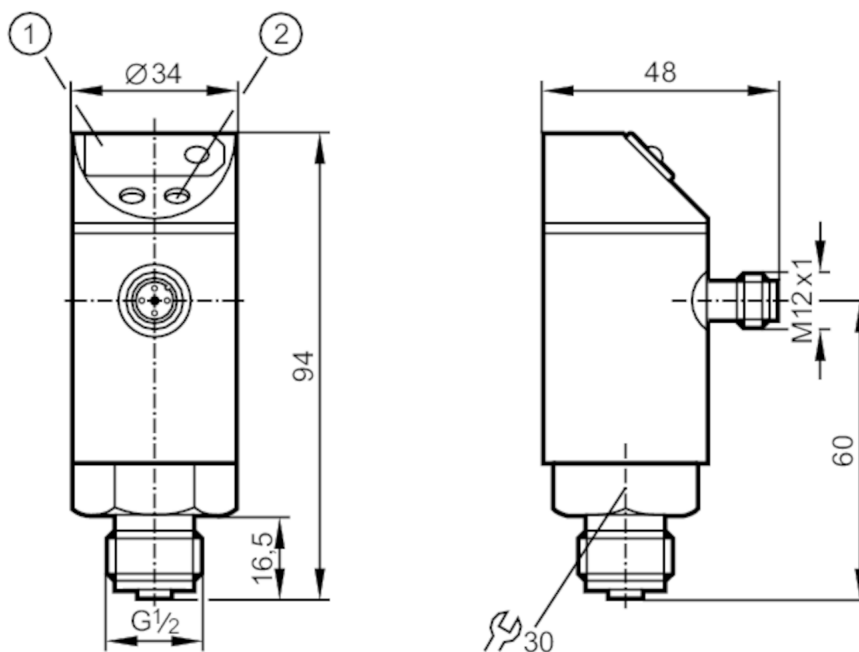
Evaluation unit with display for PT100/PT1000 temperature sensors

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

Article no longer available - archive entry

Alternative articles: TR2439

When selecting an alternative article and accessories please note that technical data may differ!



- 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]	(Ub - 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	
Operating conditions		
Ambient temperature [°C]	-25...70	

TR2430



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temperature sensors

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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; coding: A; Contacts: gold-plated



Connection

