



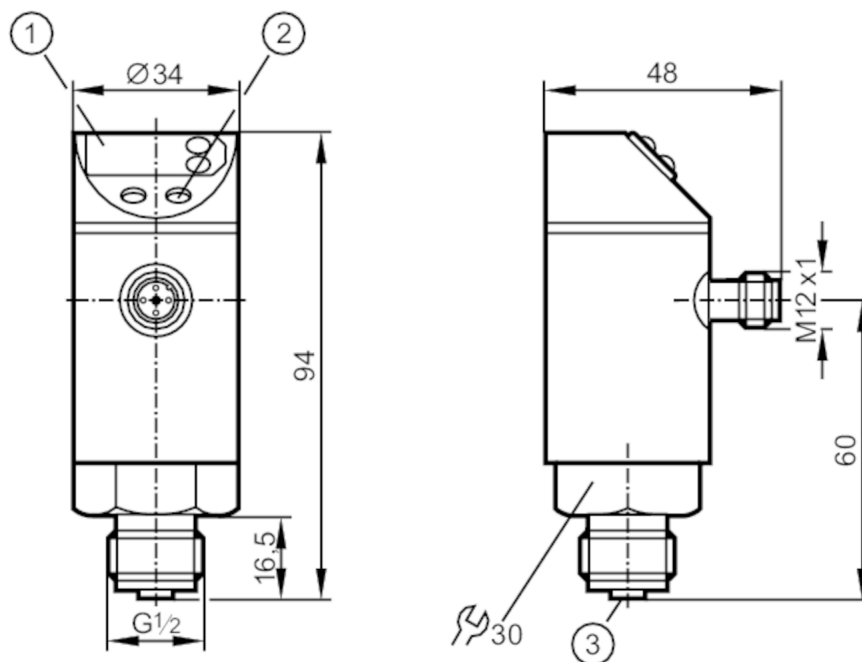
## Evaluation unit with display for PT100/PT1000 temperature sensors

TR-...KDBR12-QFPKG/US/...../V

Article no longer available - archive entry

Alternative articles: TR7439

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



- 1 7-segment LED display
- 2 programming button
- 3 connector for temperature sensor M12 x 1



### Product characteristics

|                              |                                           |              |
|------------------------------|-------------------------------------------|--------------|
| Number of inputs and outputs | Number of digital outputs: 2              |              |
| 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]  | 18...30 DC      |
| Current consumption         | [mA] | < 50            |
| 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: 2 |
|------------------------------|------------------------------|



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| Outputs                                              |                                                                                                                  |                     |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|---------------------|
| Total number of outputs                              | 2                                                                                                                |                     |
| Output signal                                        | switching signal                                                                                                 |                     |
| Electrical design                                    | PNP                                                                                                              |                     |
| Number of digital outputs                            | 2                                                                                                                |                     |
| Output function                                      | normally open / normally closed; (parameterisable)                                                               |                     |
| Max. voltage drop switching output DC [V]            | 2                                                                                                                |                     |
| Permanent current rating of switching output DC [mA] | 250                                                                                                              |                     |
| 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        |
| In steps of                                          | 0.5 °C                                                                                                           | 1 °F                |
| Resolution                                           |                                                                                                                  |                     |
| Resolution of switching output [K]                   | 0.5                                                                                                              |                     |
| Resolution of display [K]                            | 0.5                                                                                                              |                     |
| Accuracy / deviations                                |                                                                                                                  |                     |
| Switch point accuracy [K]                            | ± 0,2                                                                                                            |                     |
| Display accuracy [K]                                 | ± (0,2 + 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 |                     |
| 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) |

# TR7430



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### Mechanical data

|                    |                                                                                  |
|--------------------|----------------------------------------------------------------------------------|
| Materials          | stainless steel (304/1.4301); stainless steel (303/1.4305); EPDM/X; PC; PBT; FKM |
| Process connection | threaded connection G 1/2 external thread                                        |

### Displays / operating elements

|         |                  |                       |
|---------|------------------|-----------------------|
| Display | switching status | 2 x 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

