

Installation and commissioning instructions TK-312

Important safety notes, make sure to follow

The prerequisites for a perfect and safe operation of the evaluation instruments are proper transport, storage and mounting, professional installation and startup, operation as intended and careful maintenance.

These tasks may be performed only by persons possessing the respective necessary technical knowledge and qualifications. The valid European and national regulations for installation of electrical equipment must be observed.

During installation or maintenance always switch the power off. The device should be operated only under the conditions defined in the technical data.

In the event that information contained in these instructions should prove to be insufficient in any way, please contact the manufacturer.

1. Technical data

Supply voltage	24... 230 V AC/DC
Power consumption	Approx. 2 VA, 2 W
Ambient temperature	-20°C ... +60°C
Protective system	Terminal: IP 20; housing: IP 40 according to EN 60 529
Probe supply voltage	10 V DC, max. 2 mA
Input	10 V DC, 2 mA
Outputs	Analogue 0/4... 20 mA (with resistor 500 Ohms at terminal E1,E4: 0/2... 10 V DC)
Connection	Plug-in screw-type terminals
CE-sign	Low-voltage directive (2014/35/EU) / EMV-Directive (2014/30/EU)

2. Description of function

- Input circuit configurable for U, I or rheostatic teletransmitter (TK probes)
- Universal power pack for the supply voltages from 24V ... 230V AC/DC
- Current output (0/4... 20 mA) max. burden max. 500 Ohm.
- Voltage output (0/2... 10 V) connect an resistor at terminal E1, E4 (see point 4 below)

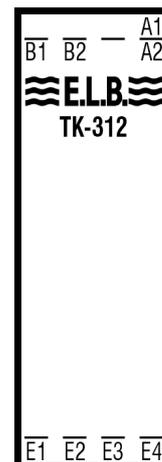
Maintenance / cleaning

When used properly according to the intended purpose the device operates maintenance-free. Cleaning is carried out only with a damp cloth – no detergents or solvents should be used.

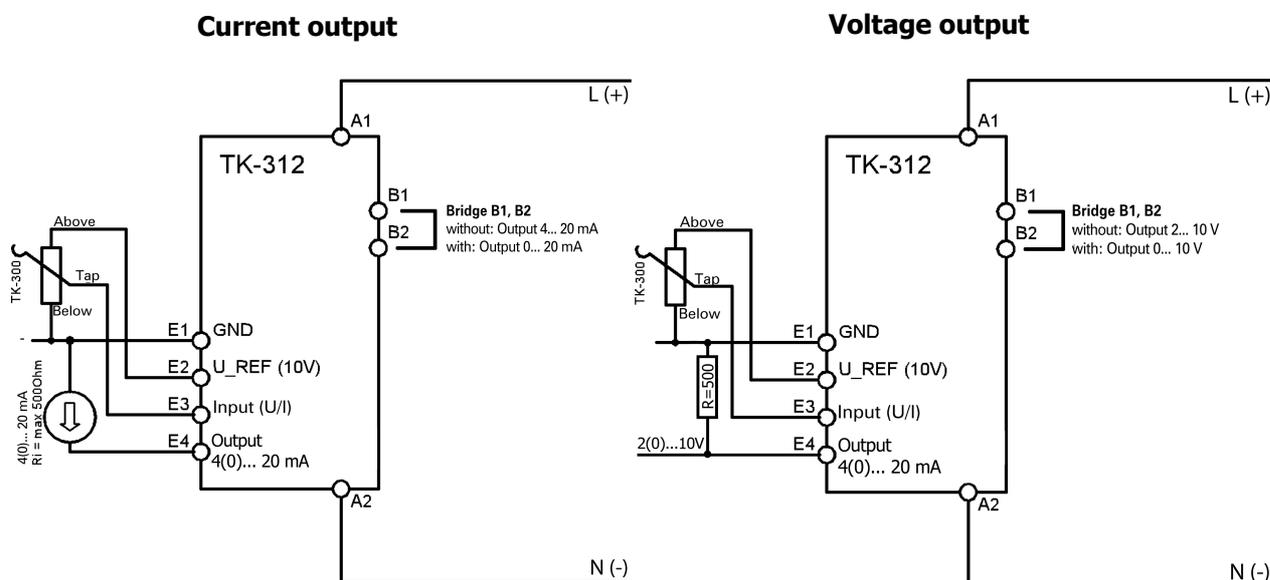
3. Installation and putting into operation

- Mount the measuring transducer in the switch box or switch cabinet on 35 mm C-rails and connect the power supply, relay outputs and sensors as shown in the terminal connection diagram (see point 4 below).
- Connect the measuring transducer correctly to the voltage supply. For permissible supply voltage see type plate.
- Switch on the supply voltage.

Power supply (L, +)	A1
Bridge 0... 20 mA / 0... 10 V	B1
Bridge 0... 20 mA / 0... 10 V	B2
Power supply (N, -)	A2
Ground (GND)	E1 (TK-30x above)
Sensor supply 10 V DC	E2 (TK-30x below)
Analogue-Input	E3 (TK-30x tap)
Analogue-Output	E4



4. Connection examples



5. Dimensions (W x D x H)

TK-312-B...: 22,5 x 114,5 x 99 mm
TK-312-C...: 22,5 x 114,5 x 112 mm