Signal LED 1 — Signal LED 2
Error LED 1 — Error LED 2
+Input 1 — +Input 2
Power contact +24 V — +24 V
Power contact 0 V — 0 V
-Input 1 — -Input 2

Top view   Contact assembly

EL1382 | 2-channel digital input terminal thermistor

The digital EL1382 input terminal analyses the input signal of thermistor sensors with the aid of a current loop and a voltage < 5 V. The EL1382 is a monitoring device for the thermal machine protection of PTC sensors, suitable for the direct monitoring of motors, bearings and equipment. In the process image, the state of the sensor is indicated by one bit each. A further bit reports short-circuits or line interruptions. Red or green LEDs indicate the state of the two input bits.

Technical data	EL1382	ES1382
Connection technology	2-wire
Specification	thermistor PTC
Number of inputs	2
Nominal voltage	24 V (-15 %/+20 %)
"0" signal voltage	≤ 1.5 kΩ
"1" signal voltage	≥ 3 kΩ
Signal "0" release	≤ 1.5 kΩ
Signal "1" excess temperature	≥ 3 kΩ
Sensor voltage	≤ 5 V
Diagnostics	open-circuit monitoring > 12 kΩ, short-circuit diagnostic < 25 Ω
Input filter	30 ms
Distributed clocks	–
Current consumption E-bus	typ. 120 mA
Electrical isolation	500 V (E-bus/field potential)
Bit width in the process image	4 inputs
Special features	monitoring device for thermal machine protection
Weight	approx. 55 g
Operating/storage temperature	-25…+60 °C/-40…+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Pluggable wiring	for all ESxxxx terminals
Approvals/markings	CE, UL