

# CIT 250

## Process Display with Contacts



### Functional range

- ▶ free scalable, two-coloured display
- ▶ five characteristic curve functions selectable (linear, square, square root, user defined or tank volume)
- ▶ switching mode, hysteresis, timing of contacts settable
- ▶ display brightness and filter adjustable

### Product characteristics

- ▶ input 0/4 ... 20 mA, 0/1/2 ... 5/10 V
- ▶ 4-digit LED display
- ▶ transducer supply 24 V<sub>DC</sub>
- ▶ interface RS-485 (Modbus RTU)
- ▶ front panel housing 72 x 36 mm

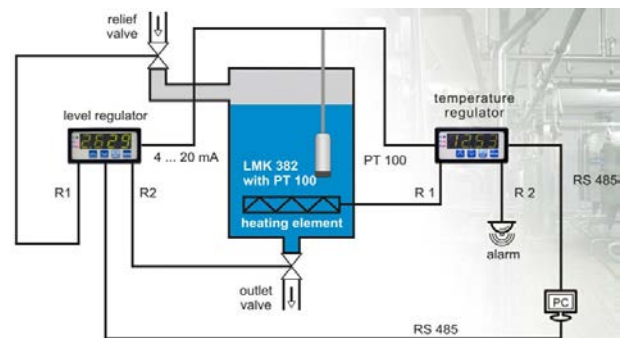
### Optional versions

- ▶ input Pt100 / Pt500 / Pt1000
- ▶ input thermocouple
- ▶ output 1/2 relay / OC
- ▶ 5-digit LED display

### Typical application



combined level and temperature measurement in heated container



<b>Supply</b>	
Supply voltage / power consumption	85 ... 260 V <sub>AC</sub> / V <sub>DC</sub> / max. 4,5 W 16 ... 35 V <sub>AC</sub> / 19 ... 50 V <sub>DC</sub> / max. 4,5 VA
Transducer supply	24 V <sub>DC</sub> + 5%, - 10%, max. 100 mA
<b>Signal input</b>	
Input signal	0/4 ... 20 mA, 0/1 ... 5 V, 0/2 ... 10 V Pt100 / Pt500 / Pt1000 thermocouple K, S, J, T, N, R, B, E, 0 ... 90 mV
Accuracy (25 °C)	± 0,1 % FSO, stability: 50 ppm/°C
<b>Contacts</b>	
Contact	1/2 SPST relay, max. 30 V <sub>DC</sub> / 250 V <sub>AC</sub> , max. 1 A (cos φ 1) 1/2 OC, max. 30 V <sub>DC</sub> , max. 30 mA (cos φ 1), max. 100mW
<b>Display</b>	
Display	standard: LED, red/green, 4 x 13 mm option: LED, green, 5 x 9 mm <sup>1</sup>
Display range	0/4 ... 20 mA, 0/1 ... 5 V, 0/2 ... 10 V: - 999 ... 9999 + decimal point Pt100 / Pt500 / Pt1000: -100,0 ... 600,0°C thermocouple: -200 ... 1370 °C(K), -50 ... 1768 °C(S, R), -210 ... 1200 °C(J), -200 ... 400 °C(T), -200 ... 1300 °C(N), 250 ... 1820 °C(B), -200 ... 1000 °C(E)
<sup>1</sup> Display 5 x 9 mm only with IP65	
<b>Communication</b>	
Communication interface	RS-485 (Modbus RTU), 8N1/8N2, 1200 – 115200 bit/s
<b>Ingress protection</b>	
Standard	IP 40 (front side), IP 20 (case and connectors)
Option	IP 65 (front side with additional sealing frame for panel cut-out) <sup>2</sup> , IP 20 (case and connectors)
<sup>2</sup> IP65 only with display 5 x 9 mm	
<b>Permissible temperatures</b>	
Standard	environment: 0 ... 50 °C, storage: -10 ... 70 °C
Option	environment: -20 ... 50 °C, storage: -20 ... 70 °C
<b>Electrical protection</b>	
Electrical safety	EN 61010-1
EMC	EN 61326-1
CE-conformity	EMC Directive: 2014/30/EU
<b>Housing</b>	
Housing type / dimensions	front panel mounting / 72 x 36 x 107 mm
Material	NORYL-GFN2S E1
Weight	approx. 165 g
<b>Dimensions</b>	

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## Ordering code CIT 250

CIT 250 -    -  -  -

<b>Input type</b>			
0/4 ... 20 mA, 0/1 ... 5 V, 0/2 ... 10 V	8		
Pt100 , Pt500, Pt1000	3		
thermocouple	A		
<b>Number of outputs</b>			
without	0		
1	1		
2	2		
<b>Output type</b>			
without	0		
SPST relay	1		
Open collector	2		
<b>Supply</b>			
16...35 VAC / 19...50 VDC		3	
85...260 VAC / VDC		4	
<b>Special version</b>			
standard		0	0
sealing frame IP65		0	1
operating temperature -20°C...50°C		0	8
IP65 + operating temp. -20...50°C		0	P
customer		9	9
			consult