



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_{DC}
- ▶ interface RS-485 (Modbus RTU)
- ▶ front panel housing 72 x 36 mm

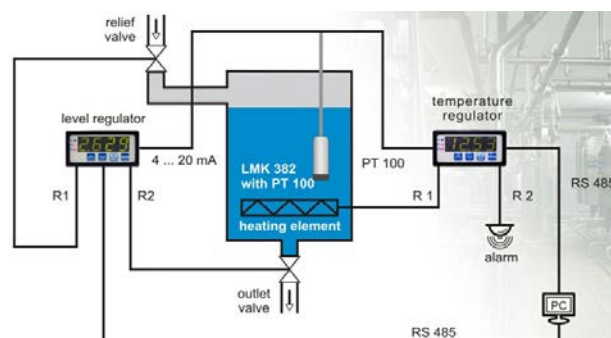
Optional versions

- ▶ 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



Supply	
Supply voltage / power consumption	85 ... 260 V _{AC} / V _{DC} / max. 4,5 W 16 ... 35 V _{AC} / 19 ... 50 V _{DC} / max. 4,5 VA
Transducer supply	24 V _{DC} + 5%, - 10%, max. 100 mA
Signal input	
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
Contacts	
Contact	1/2 SPST relay, max. 30 V _{DC} / 250 V _{AC} , max. 1 A (cos φ 1) 1/2 OC, max. 30 V _{DC} , max. 30 mA (cos φ 1), max. 100mW
Display	
Display	standard: LED, red/green, 4 x 13 mm option: LED, green, 5 x 9 mm ¹
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)
¹ Display 5 x 9 mm only with IP65	
Communication	
Communication interface	RS-485 (Modbus RTU), 8N1/8N2, 1200 – 115200 bit/s
Ingress protection	
Standard	IP 40 (front side), IP 20 (case and connectors)
Option	IP 65 (front side with additional sealing frame for panel cut-out) ² , IP 20 (case and connectors)
² IP65 only with display 5 x 9 mm	
Permissible temperatures	
Standard	environment: 0 ... 50 °C, storage: -10 ... 70 °C
Option	environment: -20 ... 50 °C, storage: -20 ... 70 °C
Electrical protection	
Electrical safety	EN 61010-1
EMC	EN 61326-1
CE-conformity	EMC Directive: 2014/30/EU
Housing	
Housing type / dimensions	front panel mounting / 72 x 36 x 107 mm
Material	NORYL-GFN2S E1
Weight	approx. 165 g
Dimensions	

Ordering code CIT 250

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