



CIT 300

Process Display with Contacts and Analogue Output

Functional range

- ▶ free scalable 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
- ▶ acoustic signal

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 96 x 48 mm

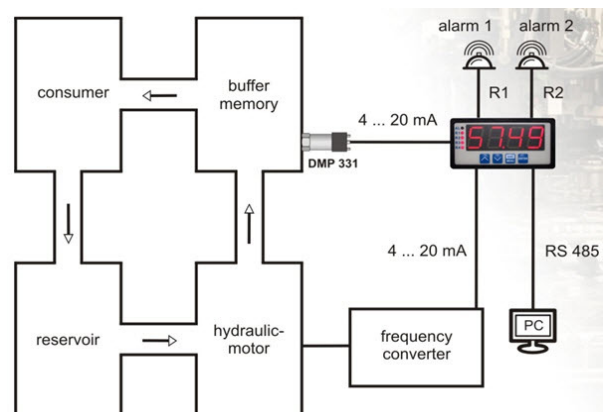
Optional versions

- ▶ input Pt100 / Pt500 / Pt1000
- ▶ input thermocouple, 0 ... 150 mV
- ▶ output 1/2/4 relay / OC
- ▶ output 4 ... 20 mA / 0 ... 10 V
- ▶ wall mounted housing IP67

Typical application

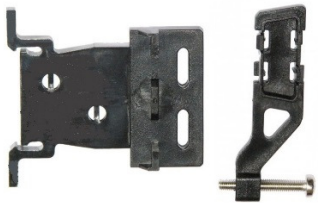



pressure regulation of a hydraulic circuit



Modbus

Supply		
Supply voltage / power consumption	85 ... 260 V _{AC} / V _{DC} / max. 6,5 W 16 ... 35 V _{AC} / 19 ... 50 V _{DC} / max. 6,5 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 universal input ¹ 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 ... 60/75/100/150 mV	
Accuracy (25 °C)	± 0,1 % FSO, ± 0,2% FSO (TC N), ± 0,5 % FSO (TC S, T, R, B), stability: 50 ppm/°C	
¹ universal input only with front panel housing		
Contacts		
Contact	1/2/4 SPST relay, max. 30 V _{DC} / 250 V _{AC} , max. 1 A (cos φ 1) 1/2/4 OC, max. 30 V _{DC} , max. 30 mA (cos φ 1), max. 100mW	
² 4 contacts only with front panel housing without analogue output, 1 contact only with wall mounted housing and analogue output		
Analogue output		
Output signal / load ³	0/4 ... 20 mA active / max. 700 Ω 4 ... 20 mA passive / max. 600 Ω (24V DC) 0/1 ... 5 V, 0/2 ... 10 V active / min. 2000 Ω	
³ analogue output only with 1 contact (wall mounted housing) resp. 2 contacts (front panel housing)		
Display		
Display	LED, red, 4 x 20 mm	
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)	
Communication		
Communication interface	RS-485 (Modbus RTU), 8N1/8N2, 1200 – 115200 bit/s	
Ingress protection		
Standard	IP 65 (front side), IP 20 (case and connectors)	
Option	IP 65 (front side with additional sealing frame for panel cut-out), IP 20 (case and connectors) IP 67 (wall mounted housing)	
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 / 96 x 48 x 107 mm	wall mounted housing / 110 x 80 x 67 mm
Material	NORYL-GFN2S E1	
Weight	approx. 230 g	ca. 350 g
Dimensions		

Accessories	
<p>Hat rail adapter for front panel housing 48 mm Enables mounting on a hat rail TS35.</p> <p>Material number Z900029</p>	
<p>Infrared remote-control IR 1 Enables configuration of CIT 300 with wall mounted housing, without opening the case cover.</p> <p>Material number IR1-1</p>	

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Ordering code CIT 300 panel housing

CIT 300 - 1 - 1 - -

Input type			
0/4 ... 20 mA, 0/1 ... 5 V, 0/2 ... 10 V	8		
Pt100, Pt500, Pt1000	3		
thermocouple	A		
universal (mA, mV, V, RTD, TC)	J		
Number of outputs			
without	0		
2	2		
3	3		
4	4		
Output type			
without	0		
2x / 4x SPST relay	1		
2x / 4x Open collector	2		
2x SPST relay + 1x 0/4...20 mA active	3		
2x Open collector + 1x 0/4...20 mA active	4		
2x SPST relay + 1x 4...20 mA passive	9		
2x Open collector + 1x 4...20 mA passive	A		
2x SPST relay + 1x 0/1...5 V, 0/2...10V	B		
2x Open collector + 1x 0/1...5 V, 0/2...10V	C		
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

Ordering code CIT 300 wall mounted housing

CIT 300 - 1 - 1 - -

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		
2	2		
Output type			
without	0		
2x SPST relay	1		
2x Open collector	2		
1x SPST relay + 1x 0/4...20 mA active	3		
1x Open collector + 1x 0/4...20 mA active	4		
1x SPST relay + 1x 4...20 mA passive	9		
1x Open collector + 1x 4...20 mA passive	A		
1x SPST relay + 1x 0/1...5 V, 0/2...10V	B		
1x Open collector + 1x 0/1...5 V, 0/2...10V	C		
Supply			
16...35 VAC / 19...50 VDC		3	
85...260 VAC / VDC		4	
Special version			
wall mounted housing IP67		5 0 0	
IP67 + operating temp. -20...50°C		5 8 0	
customer		9 9 9	consult

Accessories			
hat rail adapter 48 mm		Z900029	
infrared remote control IR 1		IR 1-1	