CIT 400

Process Display with Contacts, Analogue Output and Ex-approval

Functional range

- free scalable display
- linearisation via max. 32 free selectable supporting points
- switching mode delay of the relay inputs and outputs, parameterizable calibration
- simulation / testing mode

Product characteristics

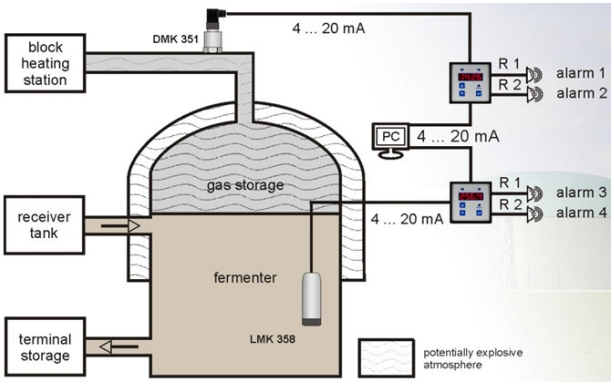
- input signal: 4 ... 20 mA
- 4-digit LED display
- housing variant: front panel or hat rail
- 2 or 4 limit value relays and 1 alarm relay
- scalable analogue output

Optional versions

- supply voltage 230 V_{AC}
- Ex-approval

Typical application

pressure and level monitoring



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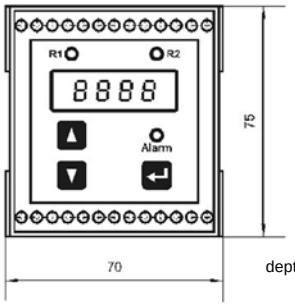
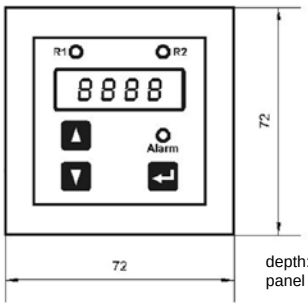
Signal output		
Output signal, permissible load	0/4 … 20 mA, max. 500 Ω, galvanically insulated	
Signal input		
2-/ 3-wire-system	4 … 20 mA (in front panel housing only 2-wire-system)	
Load	R_i = 50 Ω; input current max. 75 mA without damage; protected by poly-switch	
Supply		
Supply voltage AC-device	standard: 230 V_{AC}, 50/60 Hz others on request	
	IS-protection (optional): 100 … 240 V_{AC}, 50/60 Hz	
Supply voltage DC-device	standard: 24 V_{DC} ± 10 % others on request	
	IS-protection (optional): 18 … 36 V_{DC}	
Power consumption	standard: approx. 4 VA option: approx. 6 VA	
Contacts / Alarm relay		
Contacts	standard: 2 independent relay contacts (floating SPDT) option: 4 independent relay contacts (floating SPDT)	
Alarm relay	1 relay contact (floating SPDT with hat rail housing; floating NO with front panel housing); notifies broken line and over-current	
Switching voltage	max. 230 V_{AC}	
Switching current	max. 5 A (cos φ 0.9)	
Sensor supply		
DC device	V_S – 3 V	IS-protection (optional): approx. 14.5 V @ 20 mA
AC device	approx. 14 V @ 20 mA; approx. 20.5 V @ 4 mA	
Sensor current limit		
Standard	approx. 32 mA	
Ex-protection (optional)	linear limit, electronic limit approx. 37 mA	
Electrical protection		
Short-circuit protection	permanent - galvanic insulation of the contacts against measuring circuit and power supply	
Reverse polarity protection	DC device: no damage, but also no function	
EMC	emission and immunity according to EN 61326	
Electrical connection		
Standard	with fixed terminal clamp ; clamp section 2.5 mm^2	
Housing		
	front panel housing	hat rail housing
Material	Noryl	ABS
Ingress protection	housing: IP 40 / IP 65 [1] clamps: IP 20	housing: IP 40 clamps: IP 20
[1] *IP 65 can be reached by an additional, front sided sealing with a flexible transparent protection cover (available as accessory)*		
Miscellaneous		
Display	4-digit 7-segment-LE display, red; digit height 10 mm; digit with 7.5 mm; range of indication -1999 ... 9999; accuracy 0.2 % ± 1 Digit	
LEDs	contacts: green alarm: red	
Permissible temperatures	electronics / environment / storage: -20 ... 60 °C	
Weight	AC-device: approx. 450 g DC-device: approx. 300 g	
Explosion protection (optional) – only in combination with 2 contacts and 1 alarm relay		
Approval AX13-CIT 400	IBExU05 ATEX 1097 X II (1)G [Ex ia Ga] IIC II (1)D [Ex ia Da] IIIC	
Safety technical maximum values	U_o = 25.2 V, I_o = 84.8 mA, P_o = 535 mW; IIC: C_o = 107 nF; L_o = 5.7 mH	
Permissible temperatures	environment: -20 ... 40 °C	
Dimensions (in mm)		

hat rail mounting



depth: 110 mm

front panel mounting



depth: 110 mm
panel cut-out: 68 x 68 mm

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BD|SENSORS pressure measurement

Ordering code CIT 400

CIT 400 PH0 - □ - □ - □ - □ - □ - □□□

Type of construction								
hat rail or wall mounting	H							
front panel mounting	F							
customer	9							consult
Output								
2 independent relay outputs		2						
4 independent relay outputs [1]		4						
Ex-protection								
without Ex protection			S					
with Ex protection			E					
Supply								
without Ex-protection								
24 V_{DC}				3				
115 V_{AC}				4				
230 V_{AC}				5				
customer				9				
with Ex-protection								
100 … 240 V_{AC}				6				
18 … 36 V_{DC}				8				
Version								
BD SENSORS					B			
neutral					N			
customer					9			consult
Special version								
standard						0	0	0
customer						9	9	9 consult

not possible in combination with IS-version

01.06.2013

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