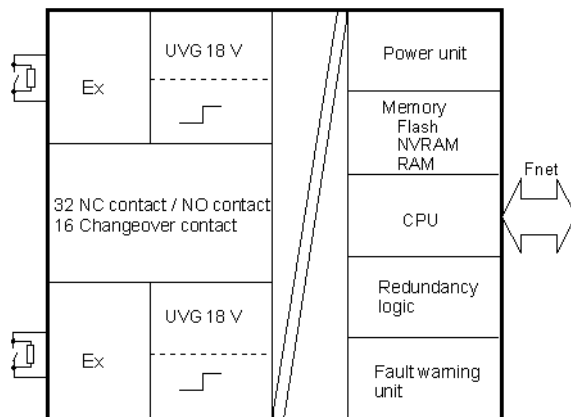


CBI 21 Ex - Binary input module

Features / Applications



- 32 binary inputs divided into two groups each with 16 inputs
- Process current circuits in accordance with EN 50020 with type of protection EEx ib IIC
- Combined installation possible with "Non-Ex-modules" in one module sub-rack
- Signal recording with 1 ms time resolution
- Monitoring of module
- Central galvanic separation of system inputs
- Group-set filter time
- Module is capable of redundancy

The binary input module CBI 21 Ex serves to interrogate max. 32 NAMUR initiators in accordance with DIN 19234.

Technical data

Table: General module related technical data

Supply voltage:	UVG = 8... 9 V (8,2 V typ.) (DIN 19234)	
Input resistance:	RE = 1 kOhm	
Input rated current:	Ir = 3 mA	
Signal input level (-High-):	IeHigh = 2,2 ... 6,5 mA	
Signal input level (-Low-):	IeLow = 0,4... 1 mA	
High / Low - threshold:	IH/L = 1,6 mA	
Breaking threshold:	IeBreak = 0,2 mA	
Galvanic separation:	Central	
Measuring voltage:	250 Veff	
Voltage testing:	1500 Veff (to the system in accordance with EN 50020)	
Max. input voltage:	12 VDC	
Ambient temperature:	0 ... 50 °C (temperature for ventilating the module in the module sub-rack)	
Ex-type of protection intrinsic safety	[EEx ib] IIC	[EEx ib] IIB
Ex-relevant open circuit voltage (individual operation and redundancy operation)	U0 ≤ 12 V	U0 ≤ 12 V
Ex-relevant short-circuit current (individual operation)	I0 ≤ 20 mA	I0 ≤ 20 mA
Ex-relevant short-circuit current (redundancy operation)	I0 ≤ 40 mA	I0 ≤ 40 mA
Ex-relevant connection power (individual operation)	P0 ≤ 60 mW	P0 ≤ 60 mW
Ex-relevant connection power (redundancy operation)	P0 ≤ 120 mW	P0 ≤ 120 mW
maximum permitted outer capacity (individual operation and redundancy operation)	C0 ≤ 1,7 μF	C0 ≤ 8 μF
maximum permitted outer inductance (individual operation)	L0 ≤ 90 mH	L0 ≤ 330 mH
maximum permitted outer inductance (redundancy operation)	L0 ≤ 23 mH	L0 ≤ 87 mH
Voltage supply: -supply voltage: -fuse protection:	Uv1/Uv2 = 20 ... 33 V G-fusible element 5 * 20 3,15 A slow acting T 3,15 H	
Permissible overvoltages:	35 V (for 1 s) 45 V (for 10 ms)	
Current use (reference current; for UV = 24 V):	Iv = 200 mA	
Power loss (for UV = 24 V and coincidence factor 0,75):	Pv = 4,8 W	

Ordering Information

Catalog No.								Description	
72131-4-	0	7	8	8	7	3	1	CBI 21 Ex - Binary input module	
Additional Order Information									
								Former System Packet (Indicate Version)	BA-No. 601
Necessary Accessories:									
72199-4-	0	7	4	5	2	1	2	CI 120 Connection Unit, blue , EExi-Version, Basic 8 TE	
	0	7	4	5	2	0	2	CI 121 Connection Unit, blue , EExi-Version, Redundant 8 TE	
72199-4-	0	7	8	9	4	4	1	Cable Clamps	



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