

ICS 67.040  
CCS X 69

**QB**

QB/T XXXX.1 202X

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1

Intelligent manufacturing in biological fermentation industry

— Part 1: Control system

XXXX - XX - XX

XXXX - XX - XX

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QB/T XXXX.1 XXXX

GB/T 1.1-2020

1

QB/T XXXX

1

QB/T XXXX

1

2





1

1

2

GB/T 4208-2017

IP

HG/T 20508

HG/T 20513

HG/T 20573

SIS		Safety Instrumented System
UPS		Uninterruptible Power Supply
PID	- -	proportion--integral -differential
I/O		input/output
OSI		opensysteminterconnect
IEEE		(Institute of Electrical and Electronics Engineers)
FF		Fieldbus Foundation
DQ		Design Qualification
IQ		Installation Qualification
OQ		



6.1.7	I/O	I/O	A/D(D/A)
6.1.8	ISO/IEEE		1
Mb/s	( 1 km)		(
TCP/IP )			
6.1.9	I/O		
6.1.10			
6.1.11	( )		
6.1.12			
6.1.13	Modbus OPC		OSI IEEE
6.1.14			
a)			I/O
b)			
c)			
6.1.15		Modbus Profi bus	
6.1.16			
6.1.17	GB/T 19892.1		
6.2			
	HG/T 20508		
6.3			
6.3.1			
6.3.1.1		GB/T 4208-2017	IP21
6.3.1.2			
6.3.1.3			
6.3.1.4			
6.3.1.5		60%	

QB/T XXXX.1 XXXX

6.3.1.6

6.3.1.7 HG/T 20513

6.3.1.8

6.3.1.9

6.3.1.10 UPS

6.3.2

6.3.2.1 I/O 10% 15% 10% 20%

6.3.2.2 I/O

6.3.2.3 I/O

6.3.2.4 (15) TJE M /P<MD34>BDT 1 0 0 1 107478 517.51 Tr( ) TJE M /P<MD35>BDT/B 10.5





b)

c)

d)

5)

6)

7)

8)

9)

10)

11)

12)

b)

ALCOA+

c)

GMP

10

6.4.3.2

a)

b)

c)



10.1.1

/

10.1.2

*Ra* 0.4Ç m 0.8Ç m

316

10.1.3

10.1.4





10.2.7.3

15m 316SS 300  
316LSS

10.2.7.4 pH pH ,  
pH pH 135

10.2.7.5 DO DO DO

10.2.7.6

10.2.7.7

10.2.7.8

10.2.7.9

10.2.7.10 USB 0.001Nx m

10.2.8

10.2.8.1 DN8 DN10 DN15

10.2.8.2

10.2.8.3

10.2.8.4

10.2.8.5

10.3

10.3.1.1

10.3.1.2

10.3.1.3

10.3.1.4

10.4

10.4.1



11.2.6

11.2.7

- a)
- b)

- c)
- d)
- e)
- f)
- g)

11.2.8

- a)
- b)
- c)
- d)
- e)

12

12.1

- a)
- b)
- c)
  
- d)

12.2

- a)
- b)
  
- c)

24h

12.3

(FAT)

- a)

b)

c) ( ) (AI AO DI DO PI 10% )

12.4

12.4.1 (SAT)

a)

b) ( )

c)

d)

e) ( ) (100%)

12.4.2

12.4.3

a)

b)

1)

2) ( FAT )

3) (100%)

4)

5) ( PLC )

6) 72 h

c)

12.5

a) DQ

b) IQ

c) OQ

d) PQ

IQ OQ

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