

UDC

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JGJ 342-2014

J 1894-2014

Technical specification for evaporative cooling
refrigeration system

2014-09-01

2015-03-01

Technical specification for evaporative cooling
refrigeration system

JGJ 342 - 2014

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2 0 1 4

Technical specification for evaporative cooling
refrigeration system
JGJ 342 - 2014

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3.3.1

2014 9 1

09

2010

([2010]43

4 . 5 . 1 . 2 . 3 .
6 .

30

100013)

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1	1
2	2
3	3
3.1	3
3.2	iH t	3
3.3	4
3.4	7
3.5	7
4	9
4.1 -	9
4.2	9
4.3	10
5	11
5.1 ~*	11
5.2	11
5.3	12
5.4	14
6	15
6.1	15
6.2	15
6.3	16
6.4	17
	19
	20
	21

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1

1.0.1

1.0.2

1.0.3

2

2.0.1 evaporative cooling refrigeration system

2.0.2 evaporative cooling all-air air conditioning system

2.0.3 7°C evaporative cooling air-water air conditioning system

2.0.4 evaporative cooling air handling unit

2.0.5 indirect evaporative cooling chiller

3

3.1

3.1.1.1

1

2

3.1.1.2

3.1.1.3

3.1.4

3.2

3.2.1

3.2.1

3.2.1

°c)	18 24	24 28
)	>30	<70
m/s)	<0. 20	<1. 00

1

2

0.5°C 1.5°C

3.2.2

3.2.3

GB 50736

3.2.4

GB 50736

3.3

3.3.1

3.3.2

1

2

3

4

3.3.3

3.3.4

1

2

3

2.2 m/s 2.8m/s,

50%

70%;

4

3.3.5

1

GB

50736

2

GB 50189

3.3.6

3.3.7

3.3.8

3.3.9

1

2

3

3.3.10

1

GB 50736

2

3.3.1.1

1

2

4°C;

2°C

3.3.1.2

GB 50736

3.3.1.3

GB 50050

1

2

3.3.1.4

GB 50736

3.3.1.5

GB 50736

3.3.1.6

GB 50736

3.3.1.7

3.3.1.8

1

2

3.3.19

GB 50016

3.4

3.4.1

GB 50118

3.4.2

GB 50118

3.4.3

3.4.4

GB 50118

3.4.5

GB 50736

3.5

3.5.1

3.5.2

3.5.3

3.5.4

4

4.1

4.1.1

4.1.2

4.2

4.2.1

1

2

3

4

5

4.2.2

1

2

3

4

4.2.3

1

2

3

4.2.4

4.3

4.3.1

1

2

4.3.2

1

GB

50016

2

JGJ 141

4.3.3

4.3.4

1

2

3

4

5

5

5.1

5.1.1

5.1.2

5.1.3

5.1.4

5.1.5

5.1.6

5.1.7

GB 50303

5.2

5.2.1

GB 50243

JGJ 141

5.2.2

5.2.3

1

2

± 20mm ;

3

4

5

6

7

8

9

1 0

1 1

GB/T 14294

5 . 3

5 . 3 . 1

GB 50243

5 . 3 . 2

5 . 3 . 3

DiV100

DN100

5 . 3 . 4

20mm 50mm

5.3.5

5.3.6

5.3.7

1

2

3

GB/T 12220

1. OMPa

5.3.8

5.3.9

5.3.10

1

2

20mm;

3

2%

30mm;

4

5

6

7

8

9

1 0

1 1

1 2

1 3

5 . 4

5 . 4 . 1

GB 50726

GB 50727

5 . 4 . 2

5 . 4 . 3

5. 4. 4

1

800mm

2

2m

6

6.1

6.1.1

6.1.2

6.2

6.2.1

1

2

6.2.2

1

2h

70°C

80°C;

2

2h

70X

75V;

3

2h

4

5

6

7

6.2.3

1

2

10%

15%;

3

10%;

4

5

6

6.2.4

6.3

6.3.1

1

2

3

4

5

6

7

8

9

6.3.2

1

2

3

4

5

6

7

6.4

6.4.1

6.4.2

6.4.3

1

1

1)

“ ”

“ ”

2)

“ ”

“ ”

“ ”

3)

“ ”

“ ”

4)

“ ”

2

”

.....

”

“

.....

”

GB 50016

GB 50050

GB 50118

GB 50189

GB 50243

GB 50303

GB 50726

GB 50727

GB 50736

GB/T 12220

GB/T 14294

JGJ 141

JGJ 342 - 2014

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2014 9 1 537

1	24
2	25
3	26
3.1	—	26
3.2	27
3.3	28
3.5	40
4	42
4.1	42
4.2	42
4.3	43
5	44
5.1	—	44
5.2	45
5.3	46
5.4	.....	49
6	.....	50
6.1	.....	50
6.2	.....	51
6.3	.....	51
6.4	.....	51

1

1.0.1

“ ”

CFCs

1.0.3

2

2.0.1

2.0.4

2.0.5

3

3.1

3.1.1

GB 50178

14°C 15°C

16°C

3 . 1 . 2

50736

GB 5749

GB

3 . 1 . 3

3 . 1 . 4

2008

3 . 2

3 . 2 . 1

GB 50736

GB 50736

3.2.2

GB/T 18883

GBZ 1

GB 50325

3.2.3

1:

1

3.2.4

GB 50736

50h

50h

50h

50h

3.3

3.3.1

GB 50736

GB 50736

3.3.2

(

3.3.3

3.3.4

22°C

50ho

— • 1
- d N O

1

2

1) *h'w^ho, d'w^doi*

2)

3) 100%

W
<=>

1) *hw > ho dyf^do*

2)

3) 100%

(

+

1) /iw "o dw^doi

2)

3) 100%

()

1) dw do;

2)

3) 100%

∞
= 0
()

* => z zj

(+

- 1) /iw "N
- 2)
- 3) 100%

TO
df

↔

+

- 1) /iw n dw>d'r
- 2)
- 3)

+

)

3

0 = 100%

$$\frac{dh}{du} = \frac{du}{-M^W}$$

4 > = 100%

$$, \quad + \quad N$$

$$-^{\circ}$$

dD
 Ad

+

$O = 100\%$

$\frac{du}{W}$ do

$O = 100\%$

+

$\nabla = 100\%$

$$+ \frac{W}{7} \frac{M}{N} \frac{A}{M} \frac{<}{t} = 100\%$$

3.3.5

GB 50189

3.3.6

3.3.7 3.3.8

3.3.9

GB/T 14295

GB 50365

10prn 100pm

10pm

l/im 10pm

3.3.10

3.3.11

15°C

14°C
16°C

	Fe	mg/L	<0.3	<1.0	<0.3	<1.0
so ₂-(	SO	mg/L	<250	<500	<250	<500
		mg/L	<0.5	<1.0	<5	<10
	COD	mg/L	<3	<5	<30	<100
		CFU/mL	<100	<100	—	—
		/mL	—	—	—	<1X10 ⁵
	P	mg/L	—	—	—	<1.0
		mg/L	—	—	—	<0.5

3.3.14

3.3.15

GB/T 8175

1

GB/T 8175

2

GB/T 8175

3

4

5

0.8m

3.3.1 6

3.3.1 8

3 . 5

3.5.1

1

2

3

4

5

6

7

8

9

3. 5. 3

4

4.1

4.1.1

+

+

4.1.2

4.2

4.2.1

4.2.2

4.2.3

4.3

4.3.1

4.3.2

JGJ 141

5

5.1

5.1.1

5.1.3

5.1.4

5.1.5

1

2

;

3

4

5

6

7

8

9

1 0

5°C;

0°C

5 . 1 . 6

5 . 2

5 . 2 . 2

5 . 3

5.3 . 2

3

5.3 . 3

DiV100mm

5 . 3 . 4

15m

1/2

2 3

5

5.3 . 6

(mm)	15	20	25	32	40	50	70	80	100	125	150	200	250	300	
<i>U</i>	1.5	2.0	2.5	2.5	3.0	3.5	4.0	5.0	5.0	5.5	6.5	7.5	8.5	9.5	
(m)	2.5	3.0	3.5	4.0	4.5	5.0	6.0	6.5	6.5	7.5	7.5	9.0	9.5	10.5	
				300 (mm)					300 (mm)						
1				2.0MPa										200kg/m ³	
2	1^			L2											

1.0 MPa
1.5
0.6 MPa,
1.0min
0.02 MPa,

1.0min
60min

1.5

1.0MPa
0.5MPa

0.5MPa

1.5

AP

AP

1		1.0MPa
1.5	0.6MPa;	
1.0MPa,	0.5MPa;	
2		1.5
	1.15	
3		2h

5.3.7

GB/T 12220

5min		1.5
	1.1	
	6	
	6	

S)

(mm)

<50	15	15
65-200	30	15
250-450	60	30
>500	120	60

20m

5.3.10

U

5.4

5.4.2

5.4.3

5.4.4

800mm

2m

6

6.1

6.1.1

GB 50242

GB 50243

6.1.2

7

7

0. IV

1Pa

2%

2hPa

1%

GB/T 1236—2000

0. 25m/s

0.5

0.5dB (A)

0.1s

6.2

6.2.1

GB 50243

6.2.4

GB 50016

GB 50045

6.3

6.3.1

GB 50243

6.4

6.4.1

15112.23994
10.00