

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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[http //www. cabp. com. cn](http://www.cabp.com.cn)

[http //www. china- building. com. cn](http://www.china-building.com.cn)

537

JGJ 342 - 2014      2015    3    1  
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
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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℃ 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

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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)  $h'w^{\wedge}ho, d'w^{\wedge}doi$

2)

3) 100%

$W$   
 $\Leftrightarrow$

1)  $hw > ho \quad dyf^{\wedge}do$

2)

3) 100%

(

+

1) /iw "o dw^doi

2)

3) 100% ( )

1) dw do;

2)

3) 100%

$\infty$   
( )

\*=> z zj

( +

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

TO  
df

↔

+

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

+

)

3

0 = 100%

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

4 &gt; = 100%

$$, \quad + \quad N$$

$$-^{\circ}$$

$dD$   
 $Ad$

+

$O = 100\%$

$\frac{du}{W}$        $do$

$O = 100\%$

+

$\nabla = 100\%$

$$+ \frac{W}{7} \left( \frac{M}{N} \right)^{\frac{A}{M}} \left( \frac{M}{t} \right)^{\frac{A}{M}} = 100\%$$

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 <sub>2</sub> -(	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 <sup>5</sup>
	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



AP

AP

1

1.5

1.0 MPa,

2

3

5.3.7

GB/T 12220

5min

1.1

6

6

(mm)

<50

65 200

250 450

>500

15

30

60

120

1.5

1.0 MPa

0.6 MPa;

0.5 MPa;

1.5

1.15

2h

S)

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