
54

2015

1674

≤ 60

1.	.....	1
1.1	.....	1
1.2	.....	1
1.3	.....	5
1.4	.....	6
2.	.....	7
2.1	.....	7
2.2	.....	7
2.3	.....	8
2.4	.....	13
2.5	.....	13
2.6	.....	13
2.7	.....	15
3.	.....	18
3.1	.....	18
3.2	.....	19
3.3		

1.

1.1

1.2

1.2.1.

1								2021	9	1
2								2021	4	29
3						591		2013	12	7
645										
4						708		2019	4	1
5					2025					
14	34	2025	5	28						
6									53	
		103			2022	11	9			
7									3	2015
5	29			80		2015	7	1		
8										

16	2008	2	1						
	9					2	2019	9	1
	10								
30	2015	5	29		80	2015	7	1	
	11						44		

36

<

2017 5 2017 9 13

37

[2016]11 2016 7 6

38

2018 21

2018 8 31

1.2.2.

1

GB50156-2021

2

GB 6944-2025

3

GB 12268-2025

4

GB 18218-2018

5

GB 17914-2013

6

GB 55081-2023

7

GB/T 50966-2025

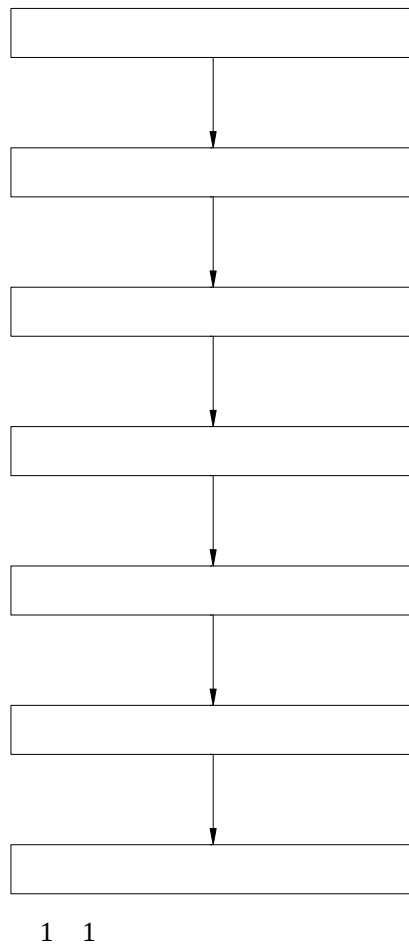
8

GB 50058-2014

9

AQ 3009-2007

10



2-1

m

/				7	17	
				10.5	54	
				5	22	
				5	47	
				7	54	
				3	18	
				6	17	
				9	54	
				3	22	
				5	47	
				6	54	
				5	68	
				7	58	
				10.5	31	
				5	32	
				5	5.2	
				7	12	

2-2				m								/			
	0.5	0.6	0.5	0.6	-	-	-	-	-	-	-	-	-	-	-
	0.5	0.6	0.5	0.6	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	-	3	38
	-	-	-	-	-	-	-	-	-	-	-	-	-	2	48
	4	7	3	6.5	4	14.5	3.5	14.7	5	13.8	5	14.7	5	5	11



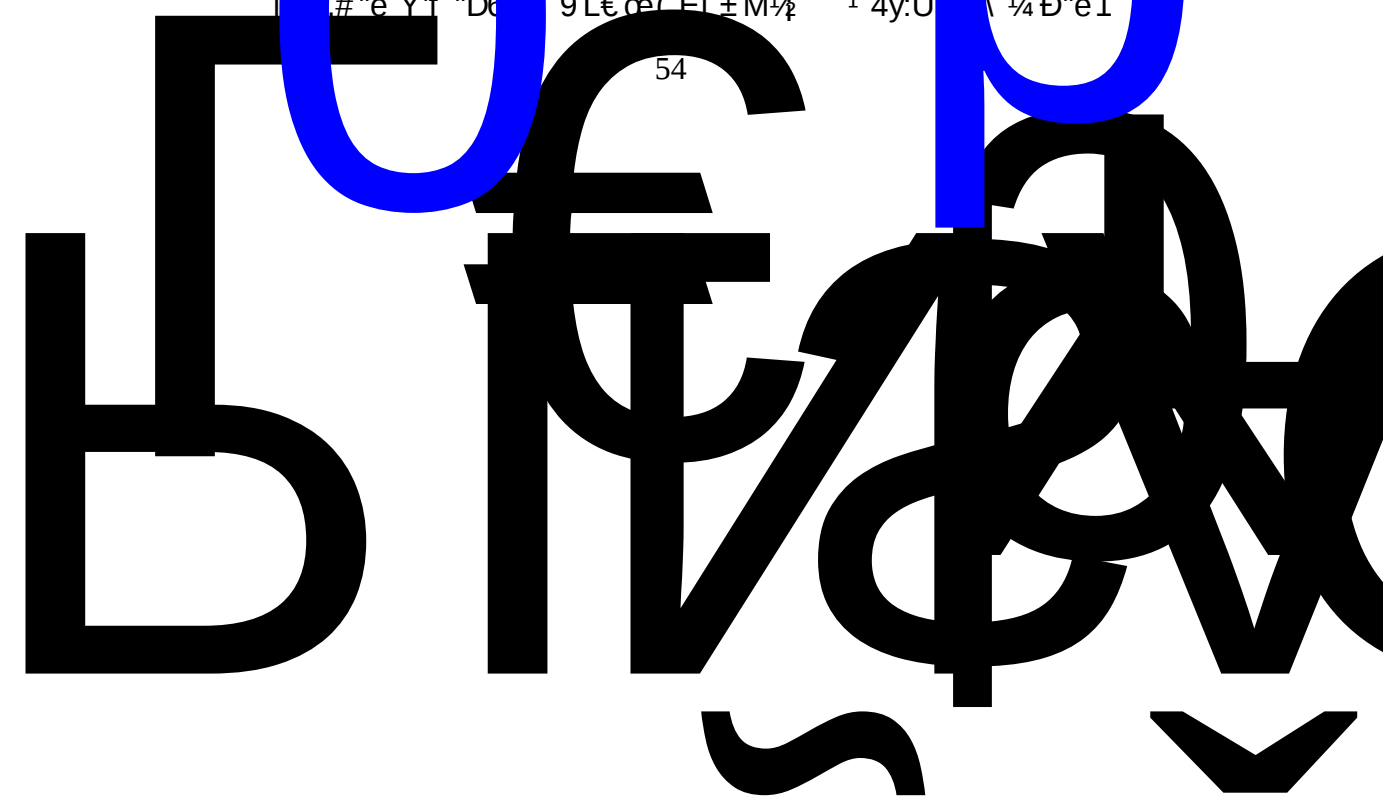
1210321MA0TWI

2021.4.8.1

Ä2

1. # "é Y'f "D6 9 L€ œ(Fí ± M½ 1 4ÿ:U \ ¼ Đ"é1

54





$$\frac{Q_1 + Q_2 + \dots + Q_n}{3} \leq 60 \quad 3-1$$

3.1.3

$$23 \leq 60 \quad 3-1$$

3-1		
1		200t
2		5000t

$$\frac{90}{200} + \frac{26.7}{5000} = 0.45534 < 1$$

3.2

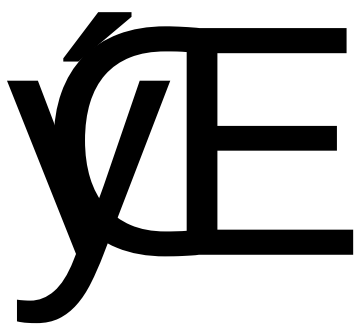
3.2.1

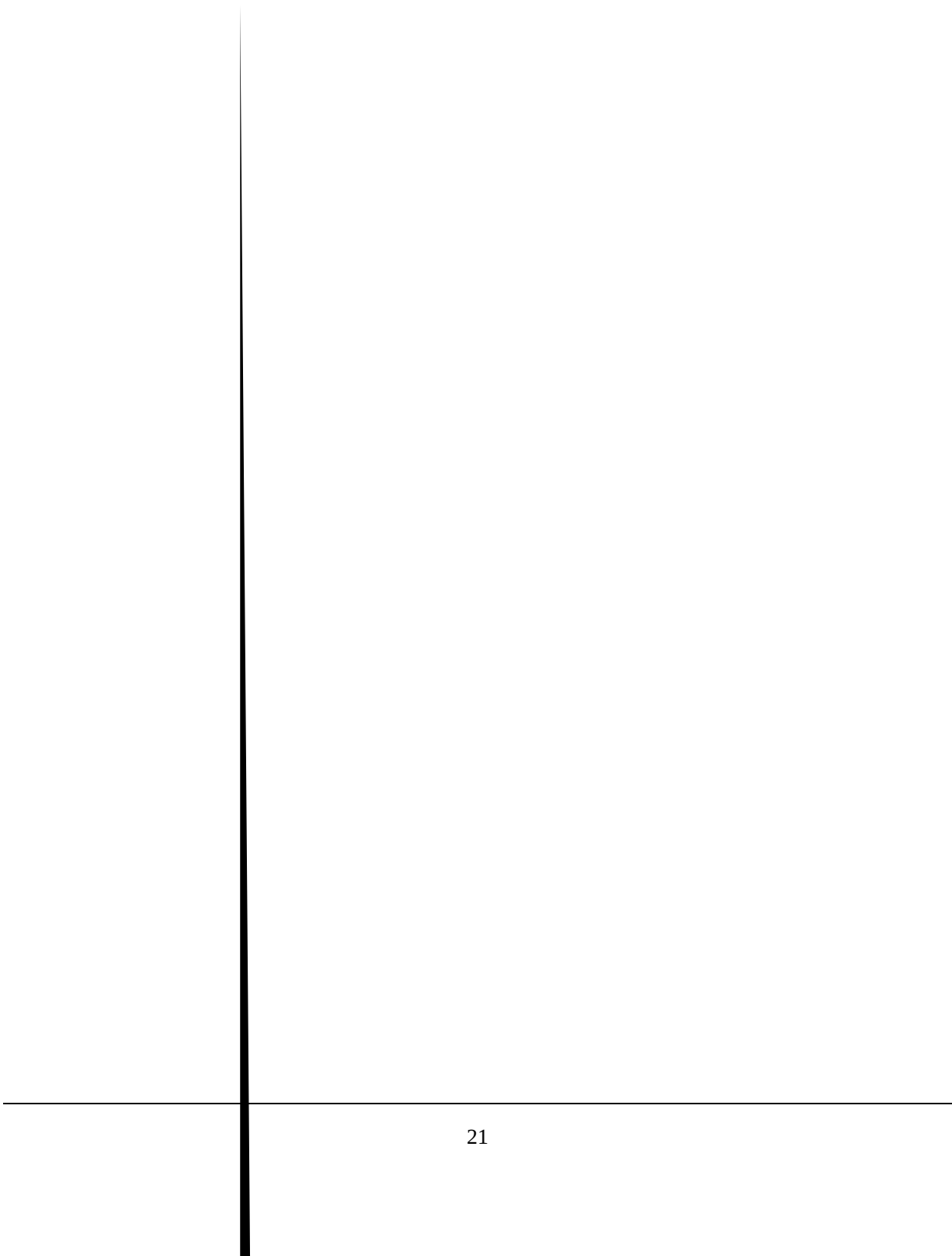
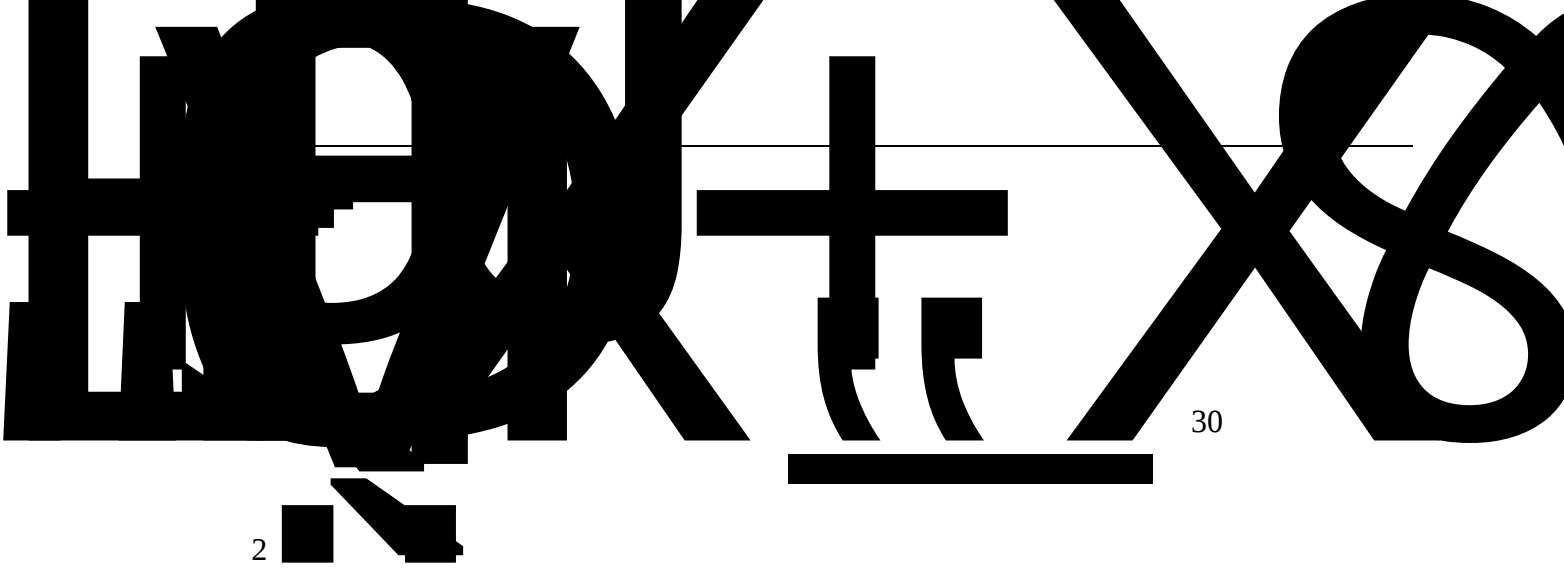
$$\frac{1}{1630} \leq \frac{2^*}{2} \leq \frac{1B}{2}$$

$$\frac{95}{98} \leq \frac{E10}{B} \leq \frac{92}{3}$$

4 -46 1.4 7.6% 415 530
0.813MPa

PC-TWA()(mg/m³) 300

1 
2 ° "é



1674

-18 =1 0.87 0.9
282-338

5 0 -10 55 -20
50 -35 -50 45

15min

10

3.2.2

1

2

3

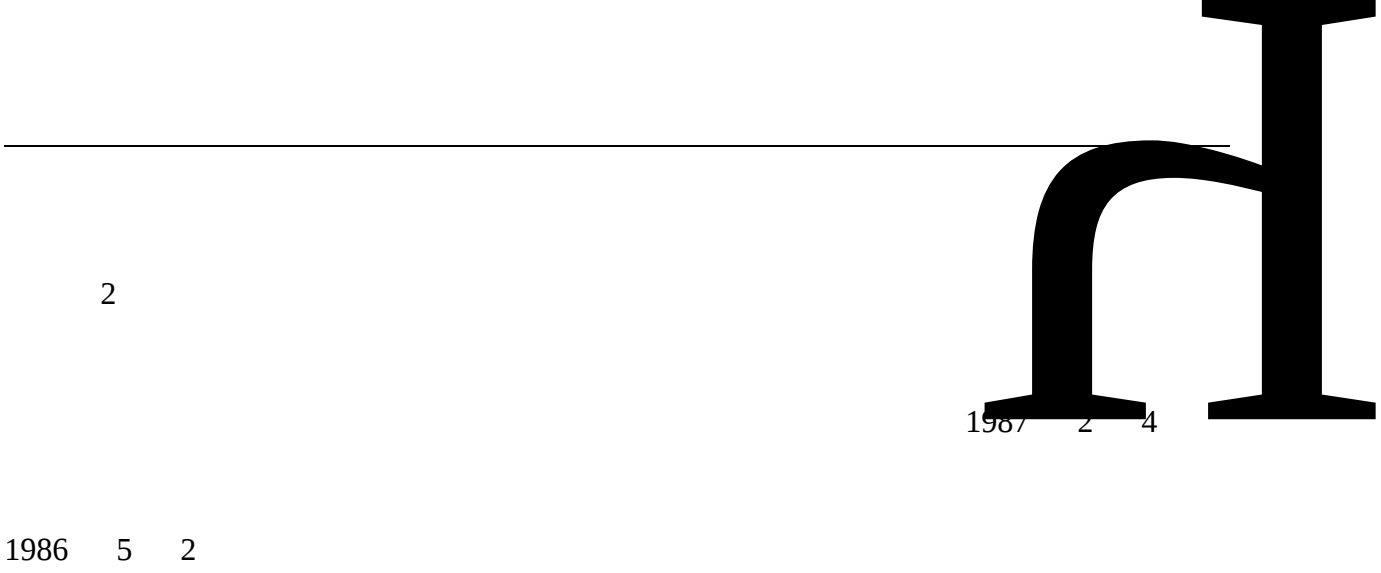
4

3.3

3-2

3-2

1



3.3.2

1

2

3

3.3.3

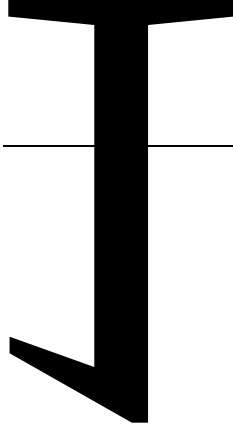
3.3.4

3.3.5

3

3.3.6

đö:m



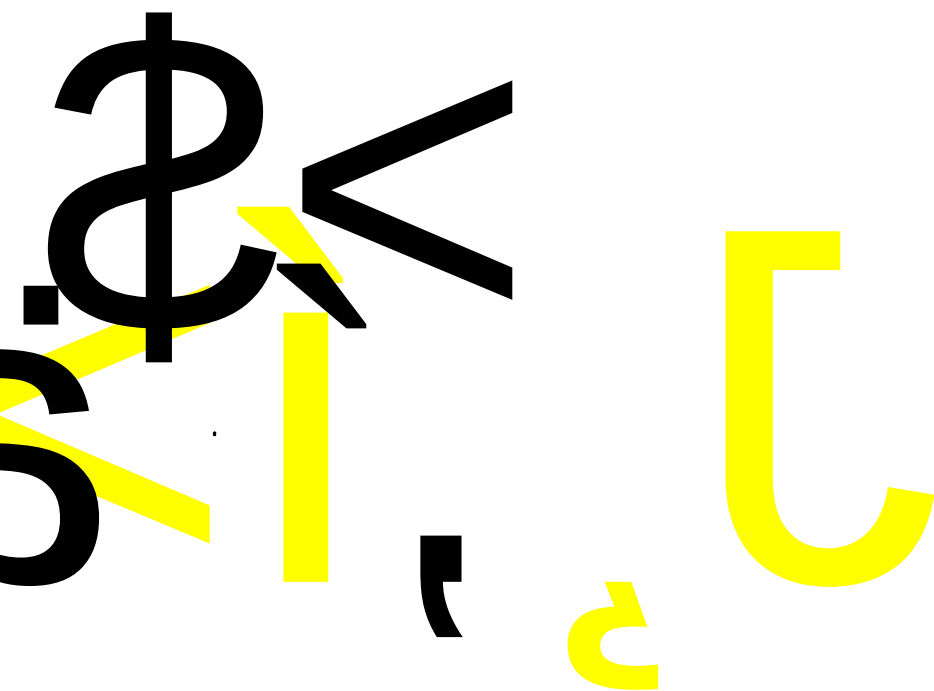
4.

4.1

5.

8

5-1



11

12

13

14

15

16

17

18

1

2

3

1

1

GB50156-2021

3.0.25

4

Ê

	90%	GB50156-2021 6.1.15		
	95%			
	14	GB50156-2021 6.1.16		
	0.8L/h			
	15			
	3022 SH	GB50156-2021 6.1.17	FF	
	1	GB50156-2021 6.2.1		
	2	GB50156-2021 6.2.2	5-50L/min	
	50L/min			
	3	GB50156-2021 6.2.3		
	4	GB50156-2021 6.2.4		
	5	GB50156-2021 6.2.5		
	1	GB50156-2021 6.3.1		
	2			

22

100mm

4mm

200mm

FF

GB50156-2021

6.5.3

„ETILAB 3D - V

10mm

30mm

23

GB50156-2021

6.5.4

24

6.3

5mm

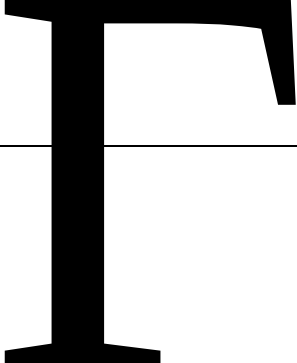
GB50156-2021

6.5.5

5%

25

	GB50156-2021 6.6.1
2	GB50156-2021 6.6.2
3	GB50156-2021 6.6.3
4	GB50156-2021 6.6.4
5	Ê GB50156-2021 Å 1\ 6.6.5 ¨ Q7
6	



5-5

1

2

2 5kg

1 5kg

1 6L

2 2

1 35kg

15m

5

2m³

2 2m³

3

3/4

3

GB13495.1 GB15630

AQ3010-2022

4.4

2

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5-6

1			GB50156-2021 13.1.1	
2	380/220V		GB50156-2021 13.1.2	380/220V
3	90min		GB50156-2021 13.1.3	90min
4				
	4.5m	5m	GB50156-2021 13.1.4	
	4.5m			
3m				

	8	IP44	GB50156-2021 13.1.8	IP45
	1		GB50156-2021 13.2.1	FF
	2			
	2	4	GB50156-2021 13.2.2	
	3	LPG	GB50156-2021 13.2.4	
	4		GB50156-2021 13.2.6	
		0.65mm 0.5mm 0.7mm		
	5		GB50156-2021 13.2.7	
	6		GB50156-2021 13.2.8	

7 380/220V

380V

TN-S

TN-C-S

GB50156-2021

	1	GB/T50115-2019 3.0.3		
	2	GB/T50115-2019 6.1.3		
	3	GB 50395-2007 5.0.3		
	4	GB 50395-2007 5.0.5		
	1	GB50343-2012 5.1.2		
	1	GB50156-2021 13.5.1		
	2. 1 2	GB50156-2021 13.5.2		
	3.	GB50156-2021 13.5.4		

	5-7		
1			
	140kw		
		GB50156-2021	
2m		14.1.3	
2			
	12		
	5		
		GB50156-2021	
		14.1.4	
300cm ² /m ²	2		
3			
		GB50156-2021	
		14.1.5	

	GB50009				
	GB50011				
3		0.15 0.2m 1.2m	14.5.19		
				1.5m	
0.6m			GB50156-2021	0.2m	
			14.2.3		
				0.6m	
		100mm			
	0.5m				
4			GB50156-2021		
			14.2.7		
5			GB50156-2021		
			14.2.9		
6					
		300m ²	GB50156-2021		
			14.2.10		
7					
	B				
			GB50156-2021		
	GB50016		14.2.11		
8					

	10			
	25m	5.0.13		
	3.0h	GB50156-2021 14.2.14		
	11	GB50156-2021 14.2.15		
	12	GB50156-2021 14.2.16		
	1	GB50156-2021 14.3.1		

5-8

1

2

“ ”

3

16

17

18

19

		3		
		4		

5-9

1

1		8kg		8
2		35kg		2
		8kg		2
				2m³
				5
3		8kg		7
		5kg CO₂		5
2 5kg 2 2 2 GB50156-2021 12.1.1 2 1 5kg 2 5kg GB 50140-2005 1 6L 2				

6.

1

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“ ” “

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GB 30871-2022



6

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7

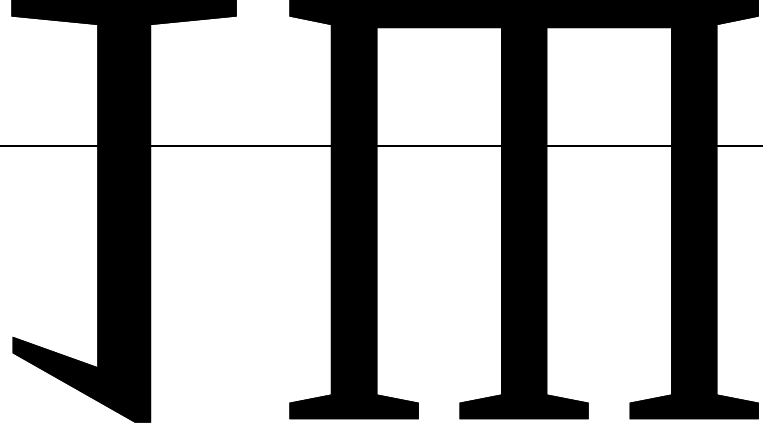
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7.

GB50156-2021



1.

GB50058-2014

1 0

2 2 1

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- 1.
 - 2.
 - 3.
 - 4.
 - 5.
 - 6.
 - 7.
 - 8.
 - 9.
 - 10.
 - 11.