2015 1674 ≤ 60

2022 8 2023 1 1

1674

2022 5 31

3

1. 1

1.1 1

1.2 1

1.3 1

1.4 5

2. 7

2.1 7

2.2 7

2.3 8

2.4

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3 2015

29 80 2 7

9 16

2 2019 9 1

11

30 2015 5 29 80 2015 7 1

12 44 2015 5

29 80 2015 7 1

55

2015 3 23 79 2015 7 1

14

[2016]8 6] 2016 2 5

15 2015

2022 300 2023 1 1

16 2015

[2015]80 5]8

8

22 ۮ

2020 1 2020 5 30

23 ( ) [2021]8

2021 5 16

24 ۾ ۾

1.2.2. ‼

1 GB50156-2021

2 GB6944-2012

3 GB 12268-2012

4 GB 18218-2018

5 GB 17914 2013

6 GB 55036-2022)

7 GB 55037-2022)

8 GB 50058-2014

9 AQ 3009-2007

10 GB 6441-1986

11 GB/T 13861-2022

12 GB 50016-2014 2018

13 GB 50140-2005

14 GB 50057-2010

15 GB 12158-2006

16 GB/T 50610-2010

17 GB20952-2020

18 GB 50395-2007

19 GB/T 29639-2020

20 GB/T12801-2008

21 GB5083-2023

22 AQ 3010-2022

23 AQ 3018-2008

24 GB30871-2022

25 XF/T 3004-2020

26 AQ 8001-2007

27 GB/T 13869-2017

28 - SH/T 3178-2015

1.2.3.

1 2005 4

2 2002 11

3 2003 7

1.3

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4

5

1.4

1-1

ۑ 1 J 1 м ۴ I ՝Y Ŭ

2

59%

7 76%

1 45%

3

101.2kPa

103.9kPa

96.9kPa

4

540~640mm

694.0mm

242.8mm

174.9mm

5

250.0mm

6

3.8m/s

23m/s

7

28.8d

44d

8

6

1.4m

2.3

2.2m

5.5m 15m

Х ◌ ◌ ◌

71m

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				6	77
				9	36
	1		-	5	25
				3	31
				3	48
	H=11m			5	36
	2		-	5	45
				6	90
				9	33
	1		-	5	8
				3	14
				3	27
	H=11m			5	33
	2		-	5	24
				6	78.5
				9	41.5
	1		-	5	35
				3	41
				3	53.5
	H=11m			5	41.5
	2		-	5	50.5
				7	72
				10.5	42.5

Xئهـ . ـقـ ـ

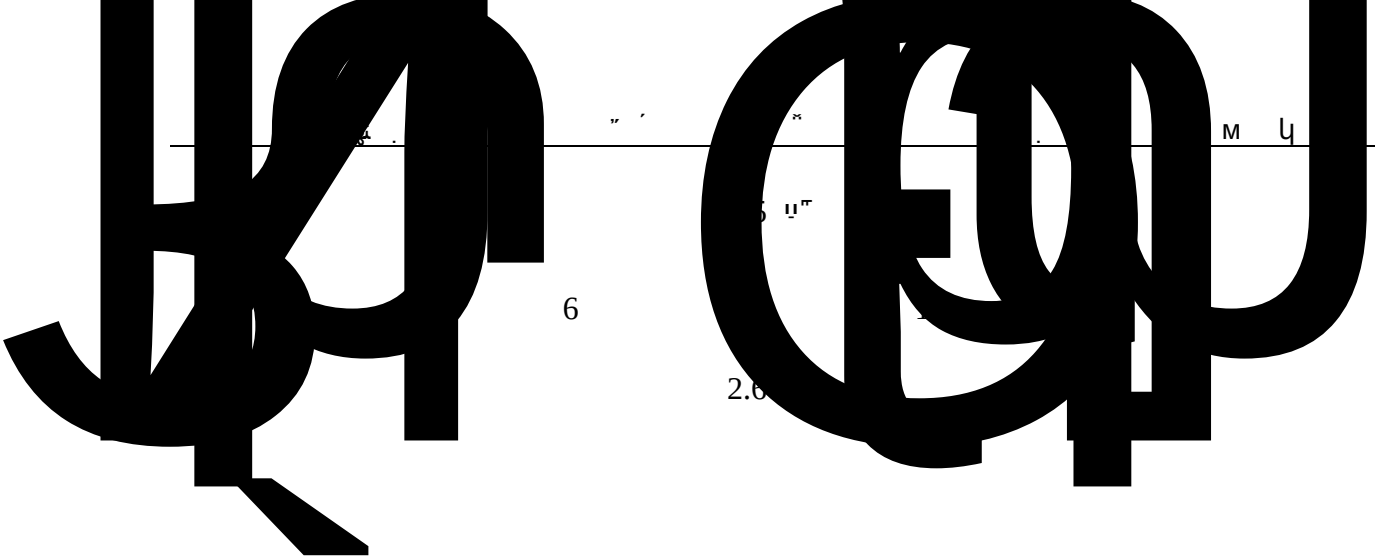
2-2 Ὺ Ѓ ˧ r ЕmЄ

0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	2	5
0.5	0.5	0.5	0.5	-	-	-	-	-	-	-	-	-	-	-	-	2	8
-																	

2.4

2-3

2-3

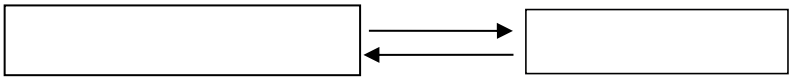


6

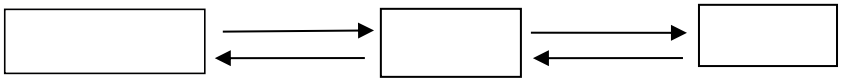
2.6

150Pa

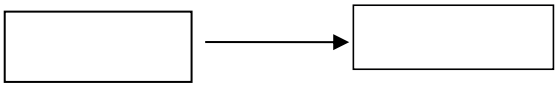
2-2 2-3 2-4 2-5 2-6



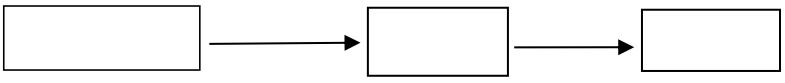
ف 2-2 Ö Л ف



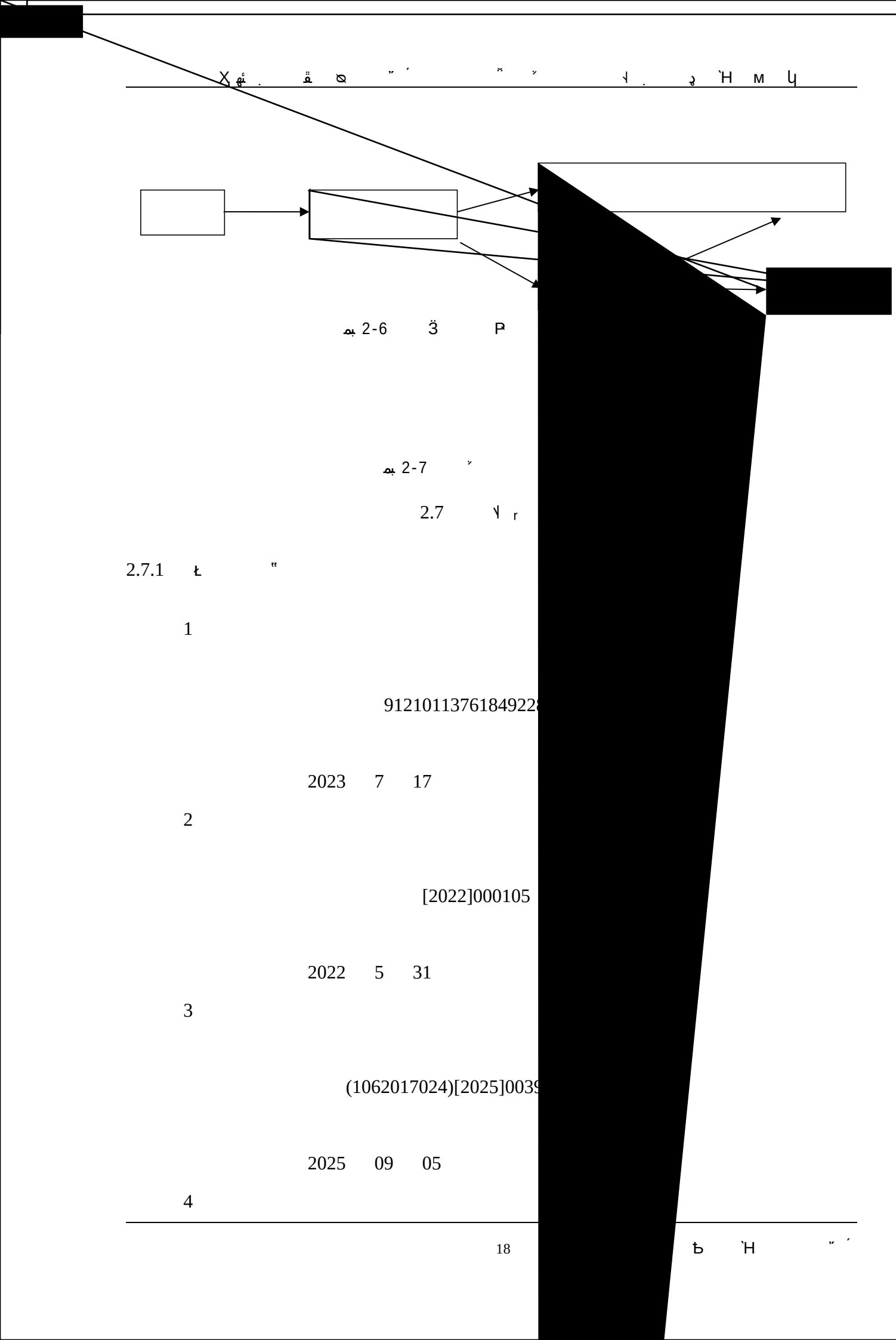
ف 2-3 Ö ˇ ف



ف 2-4 Л ف



ف 2-5 ˇ ف



2-6

2-7

2.7

2.7.1

1

91210113761849228

2023 7 17

2

[2022]000105

2022 5 31

3

(1062017024)[2025]0039

2025 09 05

4

2.7.2 ″ ‟

1

2

a. 5

b.

c.

3

4 5

380/220V TN-S

5

7

12 6

4 2

3. І ч ц

3.1 ч . ц ч

3.1.1 ч . ц ѕ

GB18218-2018ч ⿻ " ѫ ž

1 ˆ

2

3.1.2 ч . ц ч

1 ɗ ď Ď ﻉ

Q_1 Q_2… Q_n—— t

3

3.1.3

23 ≤ 60 3-1

3-1 ۊ ч

1		200t
2		5000t

$60m^3$ 0.75

45t $60m^3$ 0.89 53.4t

S=45/200+53.4/5000=0.23568<1

,

3.2 ۊ ۋ

3.2.1 ۊ ۋ

2* 1B 2

1 - 2 - 2

1630

E10 GB 18351-2017

89 92 95 98 4 =1 0.72 0.775

1.5

5

1 3 30

2 ḿ

3

1000m³

1

2 ( ) ( ) ḑ א ṃ ה

15min

50m

300m

1674

-18 =1 0.87 0.9

282-338

0.6%~7.2%

5 0 -10 60 -20

50 -35 -50 45

Ҳ ۿ ۀ ۅ ۄ ۂ ہ ۃ ۓ ے ۍ ێ ۋ ۊ ۉ ۈ ۇ ۆ

2			
3			
4			
5			
6			

3.3.1

1

Ҳ ۀ ۊ ۅ ۋ ۄ ۂ ۏ ۍ ۑ ۓ ۔ ۘ ۙ ۚ ۛ ۜ ۝ ۞ ۟ ۠ ۡ ۢ ۣ ۤ ۥ ۦ ۧ ۨ ۩ ۪ ۫ ۬ ۭ ۮ ۯ ۰ ۱ ۲ ۳ ۴ ۵ ۶ ۷ ۸ ۹ ۺ ۻ ۼ ۽ ۾ ۿ ܀ ܁ ܂ ܃ ܄ ܅ ܆ ܇ ܈ ܉ ܊ ܋ ܌ ܍ ܎ ܏ ܐ ܑ ܒ ܓ ܔ ܕ ܖ ܗ ܘ ܙ ܚ ܛ ܜ ܝ ܞ ܟ ܠ ܡ ܢ ܣ ܤ ܥ ܦ ܧ ܨ ܩ ܪ ܫ ܬ ܭ ܮ ܯ ݍ ݎ ݏ ݐ ݑ ݒ ݓ ݔ ݕ ݖ ݗ ݘ ݙ ݚ ݛ ݜ ݝ ݞ ݟ ݠ ݡ ݢ ݣ ݤ ݥ ݦ ݧ ݨ ݩ ݪ ݫ ݬ ݭ ݮ ݯ ݰ ݱ ݲ ݳ ݴ ݵ ݶ ݷ ݸ ݹ ݺ ݻ ݼ ݽ ݾ ݿ ހ ށ ނ ރ ބ ޅ ކ ޏ ؀ ؁ ؂ ؃ ؄ ؅ ؆ ؇ ؈ ؉ ؊ ؋ ، ؍ ؎ ؏ ؐ ؑ ؒ ؓ ؔ ؕ ؖ ؗ ؘ ؙ ؚ ؛ ؜ ؝ ؞ ؟ ؠ ء آ أ ؤ إ ئ ا ب ة ت ث ج ح خ د ذ ر ز س ش ص ض ط ظ ع غ ف ق ك ل م ن ه و ى ي ً ٌ ٍ َ ُ ِ ّ ْ ٓ ٔ ٕ ٖ ٗ ٘ ٙ ٚ ٛ ٜ ٝ ٞ ٟ ٠ ١ ٢ ٣ ٤ ٥ ٦ ٧ ٨ ٩ ٪ ٫ ٬ ٭ ٮ ٯ ٰ ٱ ٲ ٳ ٴ ٵ ٶ ٷ ٸ ٹ ٺ ٻ ټ ٽ پ ٿ ڀ ځ ڂ ڃ ڄ څ چ ڇ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ڑ ڒ ړ ڔ ڕ ږ ڗ ژ ڙ ښ ڛ ڜ ڝ ڞ ڟ ڠ ڡ ڢ ڣ ڤ ڥ ڦ ڧ ڨ ک ڪ ګ ڬ ڭ ڮ گ ڰ ڱ ڲ ڳ ڴ ڵ ڶ ڷ ڸ ڹ ں ڻ ڼ ڽ ھ ڿ ۀ ہ ۂ ۃ ۄ ۅ ۆ ۇ ۈ ۉ ۊ ۋ ی ۍ ێ ۏ ې ۑ ے ۓ ۔ ە ۖ ۗ ۘ ۙ ۚ ۛ ۜ ۝ ۞ ۟ ۠ ۡ ۢ ۣ ۤ ۥ ۦ ۧ ۨ ۩ ۪ ۫ ۬ ۭ ۮ ۯ ۰ ۱ ۲ ۳ ۴ ۵ ۶ ۷ ۸ ۹ ۺ ۻ ۼ ۽ ۾ ۿ ܀ ܁ ܂ ܃ ܄ ܅ ܆ ܇ ܈ ܉ ܊ ܋ ܌ ܍ ܎ ܏ ܐ ܑ ܒ ܓ ܔ ܕ ܖ ܗ ܘ ܙ ܚ ܛ ܜ ܝ ܞ ܟ ܠ ܡ ܢ ܣ ܤ ܥ ܦ ܧ ܨ ܩ ܪ ܫ ܬ ܭ ܮ ܯ ݍ ݎ ݏ ݐ ݑ ݒ ݓ ݔ ݕ ݖ ݗ ݘ ݙ ݚ ݛ ݜ ݝ ݞ ݟ ݠ ݡ ݢ ݣ ݤ ݥ ݦ ݧ ݨ ݩ ݪ ݫ ݬ ݭ ݮ ݯ ݰ ݱ ݲ ݳ ݴ ݵ ݶ ݷ ݸ ݹ ݺ ݻ ݼ ݽ ݾ ݿ ހ ށ ނ ރ ބ ޅ ކ ؀ ؁ ؂ ؃ ؄ ؅ ؆ ؇ ؈ ؉ ؊ ؋ ، ؍ ؎ ؏ ؐ ؑ ؒ ؓ ؔ ؕ ؖ ؗ ؘ ؙ ؚ ؛ ؜ ؝ ؞ ؟ ؠ ء آ أ ؤ إ ئ ا ب ة ت ث ج ح خ د ذ ر ز س ش ص ض ط ظ ع غ ف ق ك ل م ن ه و ى ي ً ٌ ٍ َ ُ ِ ّ ْ ٓ ٔ ٕ ٖ ٗ ٘ ٙ ٚ ٛ ٜ ٝ ٞ ٟ ٠ ١ ٢ ٣ ٤ ٥ ٦ ٧ ٨ ٩ ٪ ٫ ٬ ٭ ٮ ٯ ٰ ٱ ٲ ٳ ٴ ٵ ٶ ٷ ٸ ٹ ٺ ٻ ټ ٽ پ ٿ ڀ ځ ڂ ڃ ڄ څ چ ڇ ڈ ډ ڊ ڋ ڌ ڍ ڎ ڏ ڐ ڑ ڒ ړ ڔ ڕ ږ ڗ ژ ڙ ښ ڛ ڜ ڝ ڞ ڟ ڠ ڡ ڢ ڣ ڤ ڥ ڦ ڧ ڨ ک ڪ ګ ڬ ڭ ڮ گ ڰ ڱ ڲ ڳ ڴ ڵ ڶ ڷ ڸ ڹ ں ڻ ڼ ڽ ھ ڿ ۀ ہ ۂ ۃ ۄ ۅ ۆ ۇ ۈ ۉ ۊ ۋ ی ۍ ێ ۏ ې ۑ ے ۓ ۔ ە ۖ ۗ ۘ ۙ ۚ ۛ ۜ ۝ ۞ ۟ ۠ ۡ ۢ ۣ ۤ ۥ ۦ ۧ ۨ ۩ ۪ ۫ ۬ ۭ ۮ ۯ ۰ ۱ ۲ ۳ ۴ ۵ ۶ ۷ ۸ ۹ ۺ ۻ ۼ ۽ ۾ ۿ

Х ф . ق ⌀ ″ ′ 、。〃〄々〆〇〈〉《》「」『』【】〒〓〔〕〖〗〘〙〚〛〜〝〞〟〠〡〢〣〤〥〦〧〨〩〪〭〮〯〫〬〰〱〲〳〴〵〶〷〸〹〺〻〼〽〾〿぀ぁあぃいぅうぇえぉおかがきぎくぐけげこごさざしじすずせぜそぞただちぢっつづてでとどなにぬねのはばぱひびぴふぶぷへべぺほぼぽまみむめもゃやゅゆょよらりるれろゎわゐゑをんゔゕゖ゗゘゙゚゛゜ゝゞゟ゠ァアィイゥウェエォオカガキギクグケゲコゴサザシジスズセゼソゾタダチヂッツヅテデトドナニヌネノハバパヒビピフブプヘベペホボポマミムメモャヤュユョヨラリルレロヮワヰヱヲンヴヵヶヷヸヹヺ・ーヽヾヿㄅㄆㄇㄈㄉㄊ

4. м ۷ ۞ ғ м

4.1 м ۷ ۞ ↔ ɜ

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8

4.2 м

5. ۇ ۋ

7

5-1

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5-1 ۈ

	6		
	7		
	8		
	9		
	10		
	11		
	12		
	13		
	14		
	15		
	16		
	17		
	18		
	1		
	2		
	3		
	1		
	1		
	2 GB/T29639-2020		
	3		
	1		
	2		
	3		

Р ۷ ب

5-3 ب

	1	GB50156-2021 3.0.4		
	2 GB50156 3.0.9	GB50156-2021 3.0.9	30m^3	
	3	GB50156-2021 3.0.25		
	4	GB50156-2021 3.0.27	12	
	1	GB50156-2021 4.0.1		
	2	GB50156-2021 4.0.2		
	3 4.0.4	GB50156-2021 4.0.4		

4.0.4

4

GB50156-2021

4.0.12

5

GB50156-2021

4.0.13

1

GB50156-2021

5.0.1

2

4m

6m 9.5m

8%

GB50156-2021

8%

5.0.2

3

GB50156-2021

5.0.3

4

6

GB50156-2021

5.0.8

7

300m^2

GB50156-2021

5.0.9

8

4.0.4

“ ”

“ ”

		5.0.16		

5-4 Ű

1

GB50156-2021
6.1.1

2

GB50156-2021
6.1.2

3

SF

6.1.4
0.08MPa

GB50156-2021
6.1.4

SF

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GB50156-2021
SH/T3178 6.1.5

SH/T3178

5

$10^9\Omega$

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6. SF

11.2 GB50156-2021

6.1.8

SF

7

GB50156-2021

6.1.9

8

GB50156-2021
6.1.14

13

90%

95%

GB50156-2021
6.1.15

14

GB50156-2021
6.1.16

0.8L/h

15

SF

SH 3022 GB50156-2021
6.1.17

1

GB50156-2021
6.2.1

2

50L/min GB50156-2021
6.2.2

5-50L/min

3

GB50156-2021
6.2.3

4 ґ È

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X ظه ئهـ

		6.3.5		
	6	GB50156-2021 6.3.6		
	7 50mm 1.0 1.2 25mm	GB50156-2021 6.3.7	50mm 25mm	
	8 50mm 100mm 45· T 150mm	GB50156-2021 6.3.8	100mm 45°	

200mm 150mm

ƚ0

200mm

9

4m

GB50156-2021
6.3.9

2m 4m

10 50mm

GB50156-2021 50mm
6.3.10

11

2KPa~3KPa GB50156-2021

1.5KPa~2KPa 6.3.11

12

GB/T8163

4mm

GB50156-2021
6.3.12

4mm

$10^{8}\Omega\cdot m$

$10^{10}\Omega$

100kV

$10^{10}\Omega$

13

GB50156-2021
6.3.13

14

GB50156-2021
6.3.14

	23	GB50156-2021 6.5.4		
	24 6.3 5mm 5%	GB50156-2021 6.5.5		
	25 3.5mm	GB50156-2021 6.5.6	3.5mm	

5-5

	1 2 2 5kg 1 5kg 1 6L 2 2 1 35kg 15m 5 $2m^3$ 2 $2m^3$	GB50156-2021 12.1.1	4 5kg 2 35kg 2 5kg 2 $2m^3$	
	2 GB50140	GB50156-2021 12.1.2	5kg 3 2kg CO_2 2 5kg 5	
	1 0.25m 0.25m	GB50156-2021 12.3.2		

	2	GB50156-2021 12.3.3		
	1	AQ3010-2022 4.4		
	2	AQ3010-2022 4.4		
	3 “ ” ，	XF/T 3004-2020 8.1		
	4 “ ” “ ”	XF/T 3004-2020 8.4		

	3 90min	GB50156-2021 13.1.3	90min	
	4 4.5m 5m 4.5m 3m	GB50156-2021 13.1.4		
	5	GB50156-2021 13.1.5		
	6 LPG LNG CNG	GB50156-2021 13.1.6		
	7 GB50058	GB50156-2021 13.1.7		
	8 IP44	GB50156-2021 13.1.8	IP44	
	1 2	GB50156-2021 13.2.1	2	
	2 4Ω	GB50156-2021 13.2.2		

Xٔ ھئ . ۃ ۄ ˝ ´ ˇ ˘ ۔ ۓ ‘H м

9

GB50156-2021

13.2.11

2

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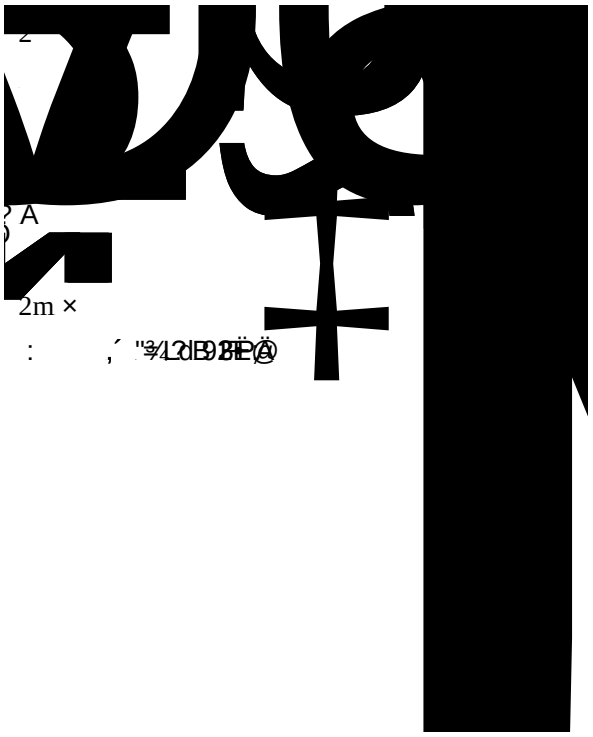
3

5.0.8

Xئهـ . ـقـ ـ


2
A
2m ×
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7

B B

GB50156-2021

GB50016 14.2.11

8

3h GB50156-2021

14.2.12

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GB50156-2021

14.2.13

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5-8

	1			
	2			
	3 “ ”			
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	6			
	7			

	8			
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	10			
	11			
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	13			
	14		UPS	
	15			

16

	16	11	0	5
	20	11	0	9
	176	151	0	25

5-7

176 25 151

1

1		5kg	4	8
2		35kg	1	2
		5kg	-	2
			$2m^3$	$2m^3$
			2	4
3		5kg	-	3
		2kg CO_2	-	2
4		5kg	-	5

6. ՝Н

9 “ “ “

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7

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Х ۼ ۀ ۄ ۅ ۆ ۇ ۈ ۉ ۊ ۋ ی ێ ې ۑ ے ۓ ە ۃ

Xٔ ھ ئ . ۃ ۃ ۂ ۂ ۂ

Ӗ ӳ ӌ ӎ ҷ ↔ ҽ

1. ҳ

3 3m

1.5m 2

ۂ 2 ہ ۃ ↔ ۄ

5. 3

1 0

2

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