1

ZF11C-252(L)/T4000-50 U % S T U V W X Y Z [\ ] V W 0 X Y ZF11C-252 U GIS ZQ

2

2.1 [\ 6 K]

ZF11C-252 U GIS ^ > / * + _ ` a b I c ( d e f g h " = # i d e Q p j r k l ' ZF11C-252 U GIS = J K m 5 I d e = ` 2 n o I ` 2 " # p q I r K " # 2 s I L SF_6 % S t n 7 0 u v w Q

ZF11C-252 U GIS 9 x y z { I N | } ~ • ! Z [I" r ~ • Z [I#$! Z [I $%&' { I $ i &' { I()*+, { I N- ./0 I l 01 (6 2 ~ 345 7 6 p 7 5 A 89 : $: ` 0 2 s [ ; \<= ` 0 0 > Q

ZF11C-252 U GIS ?@ v /A N B <% 50 Hz # i C : $ [; $ { \ ] A K DEF $ i G 252 kV = $ H?I 8 A J ^ K # i : $: 8 = # i $ { 7 5 \ 1 [;) L A A @ K SF_6 % S MN = T U OP 6 QROPS J : $:T W U U) AVWC : $?I m ;XY I P Y L Z[$ % I \ = P] I ~ • 0 z I ! 1^ 6 _` $` 7 Q

2.2 J K ab 6 m 5

c 1-1 d e J K m 5

de	f Y		g }	p q h
1	^ _ i >			@ v / @A
2	jkX % lm	n # % l		+ 40
		no % l		- 30
		npqlr	K	25
3	st		m	2 000

c 1-1Vu Z d e J K m 5

de	f Y		g }	p q h
4	vwxyzm		w/m^2	1 000
5	{| 7}			!
6	~• m		mm	10
7	! $		m/s	34
8	" m	qB 3" m "# h	%	95
		$ B 3" m "# h		90
9	! %& m V h "' $m Z		m/s^2	AG5
10	>D `(z 8 = Z; t u))* 64 H(z w >' + = ., $ i =- h		kV	1.6
11	^ _i >+. C/ O = 0&12 L 34 I 3567 6) 89: =;< Q			

3

GB/T 191-2008	9 _=>?@AB
GB 311.1-2012	T UC; ,L 6 mD F E I FG 6 HG
GB/T 775.2-2003	T UIJK 0L , 2 6 mD $ %JK 0L
GB/T 20840.1-2010	&' { , 1 6 mD r K " # 2 s
GB/T 20840.3-2013	&' { , 3 6 mD $M> $ i&' { = N l " # 2 s
GB/T 20840.2-2014	&' { , 2 6 mD $ %&' { = N l " # 2 s
GB 1984-2014	# i < % y z {
GB 1985-2014	# i < % ~ • Z [6 ! Z [
GB/T 3222.1-2006	O8 ab PO = Q r I _` RST , 1 6 mD 6 p p` RST 0L

4

4.1 y z { G q > rs Ag y k AC m B t u tu t 2U 4 v y z { w K n g ~ = x2 _ P >QR y 3 4 A t u z U A{ z $ % Z y PHz ,EF { z Z y $ % |} 50 kA Q

4.2 d e = UV 8 ~ O # A y z { UV• 1 oD 10000 ! A N | } ~ • ! Z [I" r ~ • Z [6 #$! Z [UV• 1 oD 10000 ! A e " 2 ~ #$ Q

4.3 N | } ~ • ! Z [I" r ~ • Z [6 #$! Z [\ s) L %& ' = h Y % y v A(m) C ($ 2U 4 6 $ 2tuU 4 A v 6 3 4 w K xf M 3 4 A * 2 + m ", Q

4.4 d e = T U h " # A- K st # m 2000m L W 0 ! . Q > (T U JK p q # G Ag 2 s = n # / Q

4.5 EF bc) d % S i Ho A0 y z { % y EF bc) d % S i HG 0.6MPa A A 7 1 > (% y = EF bc) d % S i H # G 0.4MPa Q 234 D 56 % S J K A 78 l y % S 9 X Q

4.6 y z { C K * + _ ` a b = U U) tuU 4 A t u , F Q

5

: d e r K 6 m = " # p q ; c 1-2, ([<7 5 = " # p q) ^ _ J K ` a b < 4 8 k l Q

c 1-2 GIS r K " # p q

de	{ = f Y		g }	p q h
1	EF $ i		kV	252
2	EF >?		Hz	50
3	EF $ %	m @/0	A	4 000
		` /0		3 150/4 000/5 000
4	EF { A | >BC $ i V 1 min (D h Z V B 3 ! Z		kV	460
5	EF, $ EFBC $ i V s G 1.2/50H s l h Z V B 3 ! Z		kV	1 050

c 1-2Vu Z GIS r K " # p q

6	EF { ABC $%			kA	50
7	EF { zJ u A 2			s	3
8	EF I h BC $%			kA	125
9	)* 64 H(z{ A |>BC $ i			kV	2
10	. 0 $ij $ i			!V	500
11	PO h "			dB	110
12	SF_6 % S i H V 20K c i Z	y z {y	MPa	EFh	0.6
				N % i H "	0.52#0.015
				n o z P i H "	0.50#0.015
		7J %y		EFh	0.4
				N % i H "	0.35#0.015
				no z P i H "	0.33#0.015
13	L% ~y SF_6 % S M %?		%/N	0.3	
14	SF_6 % S " m	y z { %y	< K O h	10^{-6}	P 150
			> • QR h		P 300
		7J % y	< K O h		P 250
			> • QR h		P 500
15	W 6 X $		S ' $ i	kV	460 V 1 min Z
			JK $ i		1.2´ 252/$\sqrt{3}$
			L% ~y	pC	P 5
			L g % T U 5		P 3
			1 (		P 5
16	T $ $U		4 H(z	V	DC 220
			)*(z	V	AC 220 A DC 220

NB m.

NB ..

c 1-2Vu Z GIS r K " # p q

18	A W " # p q	y z { X W S	\Y i H	MPa	0.80
			Z • JK i H V5 min Z	MPa	1.05
			[\ JK i H	MPa	] 1.84
		7 J7 5 X W S	\Y i H	MPa	0.60
			Z • JK i H V5 min Z	MPa	0.78
			[\ JK i H	MPa	] 1.38
		7 J7 5 ^ 9 W S	\Y i H	MPa	0.60
			Z • JK i H V10 min Z	MPa	1.20
			[\ JK i H	MPa	] 2.1
	x D Z • JK B J e 8 l W EF i H (c i 20K) = SF_6 % S e M A 7 O M? + U 0.5Pa.cm^3/sQ				
19	A W_ ^ 7}				IP4XW
20	J K•			N	] 30
21	e " j #			N	] 20
x D ` c @ ) i H 0 a A _ ` A b c @) i H w c A _ ` Q					

1 SF_6

SF_6 % S + d ;c 1-3 2 s Qe i { 8 J K = f % 6 l SF6 % S f J K = f % Ag ^ # hf A 7 7 ` + d ;c 1-4 = 2 s Q

c 1-3 SF_6 % S 7 ` Ag

{ =	i A
bc) d (SF_6) % (m/m)	] 99.9
X % % (m/m)	P 0.05
j c) k (CF_4) % (m/m)	P 0.05
l m (W HF Y) ppm(7 ` m q)	P 0.3
8 h o c) 6 (W HF Y) ppm(7 ` m q)	P 1.0
m 6 n ppm(7 ` m q)	P 10
h m (H_2O) 10^{-6}(V/V)	P 8
o O	p 6JK. o

c 1-4 # hf 7 ` Ag

{ =	i A
h m %(V/V)	] 99.9

2 SF_6

2.1 L ^Hl

h SF_6 6L ^ SF_6 H 9xyp d=7`; z = SF_6 % S ^. o = AR 7 {A . | n} = 1^ ~• A!)y v | u A" 2r! N#$ • Q

CC%X $ 6 $R u K = SF_6 % S A& dp 6 m m o6 A(' m o6 1 ! () = %* A S + 3 $ S,- (-p =./ A2 ' m o6 0 (%12 (31 (456 } h m& \G78 . 67)A)9 m o6 { : = SF_6 % S = ab 8 | u A A; | w< W 06 p~• ~ • _ ^ Q

2.1.1 " 2L { } = (z & >? O %* = E@{ : = SF_6 % S A$; | J K- A == (4B%C {R D L E = _o u c A W 1^ FDG ?I Q

2.1.2 HIJ K = K I 6L S W+ MR SF_6 % S N { A: J K 1^ LK A" ( )R 9 { : SF_6 % S {A A OHI J Q

2.1.3 2 x y % $ P p A+ MDQ45 6R w4B A E F DS Q | u B+ :' TUV A) | u A 2 x y 1 J W 6 n) ^XY {2 'Z[Q) | u A \]I wX^ AW+ M_ y A F _ J XY {2 'Z[Q

2.2 SF_6 % S = t s

\ ]> • %` 8L ^ 1a 2b " Ac )d' m 5 0a 2 ~ • e " Q )e " %` 8 Ae g 2 ~ • SF_6 % S = t n Q h f = * (C % $ R u K = SF_6 % S ^. o . / = Ac C % Z y B SF_6%%%

3.2.4 3 > (=Qf)2 =6 e I | c ~ • H q LI f v L! = l = | c I6 e A 2 ~ • H q &} J LIK Q

3.2.5 | uA L Z = MN 6O Z = 3 k 2 LA X# QL P 0Q f 3f)2 ~ • 1" | u Q

!

RSTUVW .....
1 XY .....
2 Z[\] .....
3 ^_`a .....
3.1 bcd^_ .....
3.2 bcd=efgh .....
3.3 ijk^_ .....
3.4 lmn_=efgh6op^_ 1
3.5 qHrs .....
4 bcd=tuRv .....
4.1 wxyz .....
4.2 bcd=Rv .....
4.3 Rv{o .....
4.4 |56$}~• .....
5 ! = SF_6%"# h .....
6 bcd $%& = '(.....
6.1 y) .....
6.2 *+,- .....
6.3 *+. c$ / .....
6.4 yzbcdqH 0 c .....
6.5 *+1 f 23 L 45 .....
6.6 n 67 f '(.....
7 $% 6 89 .....
7.1 89 Ly :;<=> .....
7.2 89 Ly :2 yzW ? = => 1
7.3 y : 0 @LTUVW .....
7.4 A y6 89 = B"CD 1
8 $%qH 0 c EF .....
9 tu G%0 @.....
9.1 G%.....
9.2 G%HI = JK .....
9.3 SF_6%" ` L .....
10 SF_6%" y) 0 @.....
11 tu ,-# h M*+ .....
11.1 ,-# h .....
11.2 ,-*+NO .....
12 3 SF_6%" L# PQ = R+ST 2

13 M SF_6%" • U2 =TUVW 2
13.1 VWXY .....
13.2SF_6%" = #Z .....
13.3 [+ = SF_6O) .....
14 K \]^ =bcd _ Ke B 6 `a 25
15 (b I1 cMdeNO .....
15.1 (b .....
15.2 1 c .....
15.3 de .....
16 fghi 0 j .....

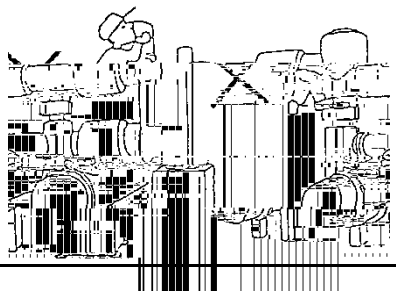
252kV %"klmnop w q`ar GISst # H`a A$ Huv #A tw RSJKA `3TUVW x%EF QJK `ay&z{|}~• p EF Qp EF 8K !"#$%&' y# 6 ()*+ y# Q

"#$%&'

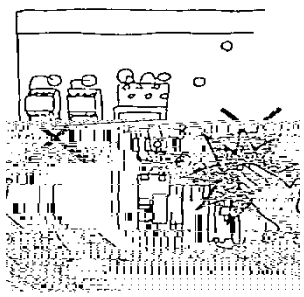
, tw RSJKAp EF - 6 *./- JK 01 K 23
&'3 456 . 7 A 89:;<=>? = &'@A Q
BC3 456 . 7 A DE89:;<=>? = &'@A Q
TU 3 456 . 7 A 8FGHI = JK<L A `a Iv Z I
Mn! = N< A OP u Q

B C

, 6 S QR GIS
S T y : UV0W A 6 S QR GISQ
DEFG # # XY Q

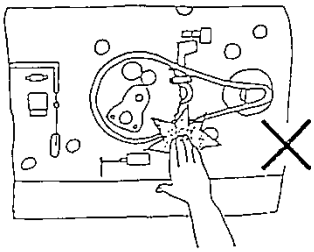


, 6 SU Z $% 8= [H. cQ
DE\]^_ $ ` I a U $Q

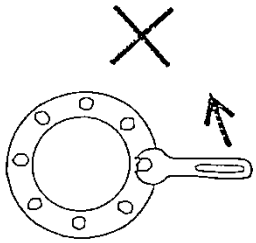


`( )

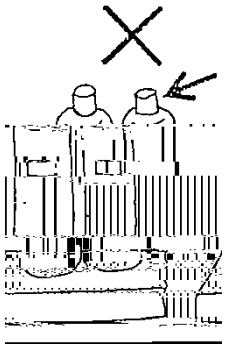
, 6 S bc= U Z ef8= $ def Q
DE89:Jgh< Q



, 6 S i 1 %" j o# = kl u me 5Q
S 6 S i 1 ef8 n 5% " j o# = kl Q
oe = HI 8 J i 1 = kl u me 5 p% A
9:Jgh< Q



, 6 S q U i 1 r H s d= G t %u Q
savwJgh< Q

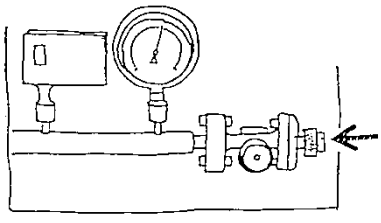


( )

, x xy "2 A SG- z %A J| { %| 5
} 18%~22%Q
456 G- z %A y " o G ~ SF_6 = Q %2 A
89:•{ <Q

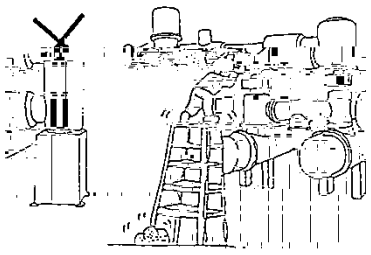


, RvI ! v 2{N "#$% %6 SF_6%"
& G t %u # ' %0 ()* 1 $ +, sQ
4] ' %#$% %6 SF_6%"& * T
, sA , s DE8 -. p A 9:Jg
h< Q

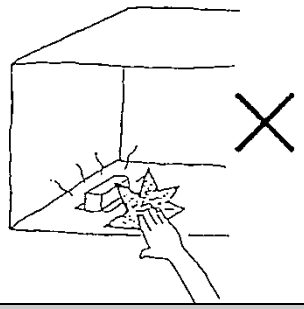


$ %

, 6 S]6 / K ={0 x% # %f 0 Q
DE89:Jg & # # 1 Yh< Q



, 6 S 2 •K 3 U Z 45 dQ
S 6 S 2 • U Z n_x8= 45 dQ
DE8 -6 < Q

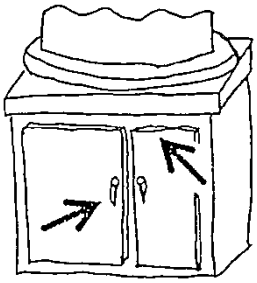


$ %

S y :2 45]S * 1n 5 - = , s 2 A 7 J| oe =% "HI
t m(A) x%7 fQ
89 oe = HI DE8 . p , sA 9:Jgh< Q

$ + I 8: - =TUVW

tw RSJK% "klmnop w q`ar GISsA
: TU 01 VW 3
, ; S < S qp = Q
S y : (VKSq = 7 fn_x=x ; Q
89 DE8 x x > ,u Q



, ? 5 @A PqHd]V 2 # B ef CD Q
S EF GISG8 # B ef CD An_x
8= ? 5 @A PqHd]V 2 # B ef
CD Q
89 89: x o ^PQ



!"#$%
&'()*+

!"#$%&'()*+,-./0

1 78

ZF11C-252 Ls [GISKbcd G- @K w SF6 %" \] =ij L E A B (\^ =wb E I A _M (lm 71 n_A ` K abcd : ^_A B (^_ f e ly : 0 f 6 E %I gh )u `aQbcd B" `a 413

Aij tN k 3 $% h1

lk bcd M K V m D no 7 f=lm 71 n_A l m lm 71 n_ D0U p $% h1 A j tN k bcd - q I Yq L r 4 s 1 ; Yq 7 fQ tuv 1 pw " / lRSI Db x N k 1 f y <L = A - qy < Vz D 1 { 6 [B 3mSQ

Bi B (\] =wb L E

ijk ` K |7 x = } 1 s E j ijk^_A B (\] =wb L E Q

Ci Db L #

lm 7 fn_A t /*+lmn_= S~ !yV AL E • - Db An 6 ! } " 10000 # Q

Di $% [

3 v 1 ST x% \c ` & A ' [w7 f (Q y 2] n_x - 4 v wB ( )* I +%, 5 = -. sAJ 7 f $% [/' [Q

Ei tuRv 01

ZF11C-252 Ls [GIStV uno =9 d 1 n $ 2 tuA78bcd 3 C] 4 o < : % ",-# h6` L 5 ' efAtu 2 • M 7 6 n 53•RvA1 { !!R A 78 w tu D e ;< Q

2 9:;<

bcd= 9 K Z[\] N :; 2-1I ; 2-23

; 2-1 \] V <;

W ?	Z[\]	1 f
9 K $ H	252	kV
9 K =>	50	Hz

; 2-3 lmn_ P S Z[\]

BG	W ? Q R	1 f	\ ] N
1	$n 9 K $ H	V	DC/AC220,DC110
2	$n 9 K (>	W	640
3	9 K $ H 1 S E 23	s	F 15
4	Yq $ TU9 K $ H	V	DC220/110
5	- q $ TU9 K $ H	V	DC220/110
6	VW $ / 9 K $ H	V	AC220
7	VW $ / 9 K (>	W	100
8	Yq $ TU %w	mm	5E 0.2
9	Yq $ TU %w	mm	2.5E 0.5
10	- q $ TU %w	mm	3E 0.2
11	- q $ TU %w	mm	0.9E 0.1
12	PXY - Z[M\] 3 ^	mm	1.5E 0.2

3 =>?@

ZF11C-252 Ls [GIS=bcd e - _` " IijkLlm 71 n_ u me 5 ! : A] ^_ - ! : V u<t =9v 1 n A a (no %kAtuRv 2 6] * v6 # hAbcd^ _ : U 2-2Q

3.1 ./0=>

1. $?b ^ d x 2. bcdv Mx 3. cd x

4. lmn_ x 5. n_x x

U Q

3.2 ./0ABCDE

lm 71 n_ U p H 7 lm (A e t = E +=1 ~ f A U p oW XY I~ f I kl g f I W11U " $1 A j t - I Yq 7 fA78N k bcd U p $% h1 j t y hV 1 Q

3.3 FGH=>

tu ijk _i U " v M I 1U " v M I kl jk y I kl gf v M l e - ! : Q t u ijk _ kl mn v o K] p p s - A_ _ kl gf v MW 11U " v M x%- Yq $1 Q

3.4 IJK>ABCDELMN=>

3.4.1 Yq S E 7 f

q bcd Yq 7 f^ r 2r : U 2-3sA) f w q " S E $n r 3-7s • U A S E $n 12 Tf 24 0

U 2-3 lm 71 3

4 ./0AST12

bcd %4 2 A3 C] 4 o 5 ' Y 2 Qt fB $ + 6tuRvA U K f t ZF11C-252Ls [GIS8 V u! :n 5A M7 6 n 5 ! : V ut 3 + 9v $ + QtuRv 2 A 3]S " 3 + - = - 9v 4 * w3• 5 D Q B" Rv h 6 413

4.1)UVW

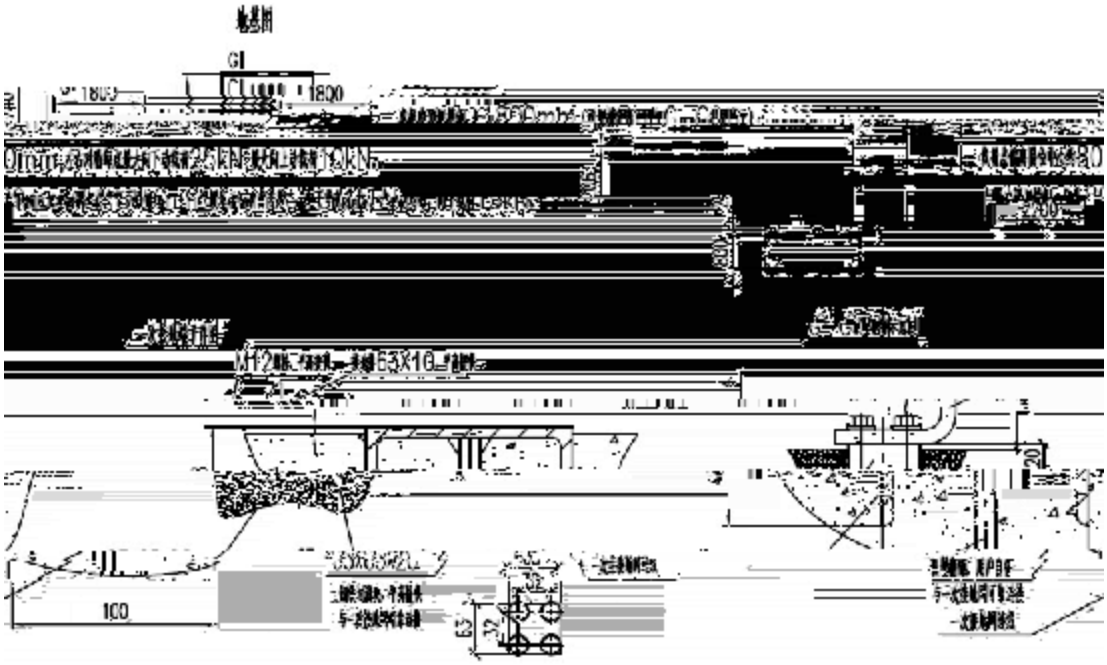
7 w9vx (A_ , q n MW=vx 1 I q nRvK ! 8 1 I q n _ Ke B 8 1 9:; 3 ! e 5I q nRvK ! L q n _ Ke B G8 < S6 <= A_ yz ! = /] > LJK E F G8 ? Y de Yy = ST Q4F t(! e 5 @) =N A L ! F e 6 ? Y de Yy y # A _] wx (10B y oU O H 9 4 Q

4.2 ./0A12

$ 2 Rvtu=bcd9v 1 n]% 4 2 3 C 5 ' Y 2 Alm 71 n_6bcd 3 C3 • <t A 6]S tu 5 t A 3] , 1 ~ AB RvQ

4.3 12XM

Rv{o\ C U I GIS3{o=fK I lRvK{ D kl = E ` 0 @: U 2-4Q



U 2-4 Rv{o\ C U

4.4 YZL[\]^

F |v= j 5 G $dRv] ZF11C-252 Ls [GIS - = G %• "- Abcd%k j 5 G $d= 9 KHIt 0.6MPa A H (I> 0 4FJK =; G $} M j 5 G $d=• 0 ' [~ = Q

5 _`A SF_6 !"aE

! Rv < : (A]Sx% %"# hA _ B bcd%k] 4 o 3 C x%# hA _ !] $ +pw 8 L G (0.02MPa M 0.03MPa = SF_6 %" A> 0 tu D0 2 •3bcd G SF_6 %" " 9 KHI Q

6 ./0bcdAef

bcd] N x $%& Af 01 yzA _ _~ O EF = XK N Q

6.1 Vg

, XKG x 9 K SF_6 %"r 20@A ; Hs (A _ x% tuy) Ay) , p EF , 11 P >Y0 @x% A H j o r=) %> _ ? Y ST Q

6.2 hijk

, tu ,-*+X w (0 @: p EF , 12 P) 3bcd o SF_6 %" : ,+x%*+ A% " 8 ,- : + _ ? Y Z[Q 5= ST Q

6.3 hil/[m

bcd # BYq f Z A U0 100A2 ? $? A P . c$ / 6 [B 100N R Q

6.4 VW./0OPn/

bcd Y I -7 f V # A k _ &]d _ &] V # x

6.5 hioCpqrst

bcd %4 2 3 C3 45 6 23x%w*+ _ 5 t S Y 2 Au TU 6) *+ AV ({ I 5 t - I Yqy <L 5 D Q

6.6 KuvCef

bcd] 9 K SF6 %H = @A1 A , ; 2-4 8 XK =0 @L #] x% n 67 f '(_ E WK Q

; 2-4 n 67 f '(XY

'(BG	- Yq 0 Z $ H %		7 f XY	'(#]	a T
	- q	Y q			
1	100	100	Y I -	5	
2	65	-	-	5	
3	-	85	Y	5	
4	110	110	Y I -	5	
5	30	-	-	3	6E - q

7 bcLwx

_ B h tu Q 5=)HA ! =p " L 71 n_8= n 5 VW 6E tu [" Q4 ( ]S _U O H 9 4 \ _ J " tuy : Q

VW # E 3 S 1 { 6) %A 9 3]K<89 Ly :71 n_6(q v 1 =n 6 e - QT w JK = B K 89 WA7 [: = ;< _ M w q`a =$! 6n 6 ! k q Q

7.1 wxrVyz{|}

7.1.1 B / ;] y

l B / l ;x%r ,B = , ; ^> $ _ B" @A s %JKs A _ `a H ;& N ATU `a (b 6 JK Q

7.1.2 A y

l AV # A3 71 n_ x% tuy : A y 2 DE (H 8 23 c $Q

7.1.3 [:

~ O 1 Y Q 5 2 !]S d 4 [: 3

7.1.3.1 , $! 3 bcd ~ e ` 8 cwb 20# Q

7.1.3.2 , n 6 ! 3 bcd 1 f ~ 10000# Q

7.2 wxrVypVW~•A|}

7.2.1 Wf

7.2.1.1 yz g c G8 (; r N A L ; r hi A j' @k (• # = ; r CDG8<= Q

yz ;< 3 B / ;] yl A y6 [: Q

7.2.1.2 yz•{ ' r0s 6$} l • " G8 i 1 Q

yz ;< 3 A y6 [: Q

7.2.1.3 yz 71 n_ H f Z $ G8J J Q

yz ;< 3 B / ;] yl A y6 [: Q

7.2.1.4 yz _ `a bcd 7 f #]Q

yz ;< 3 B / ;] yl A y6 [: Q

7.2.2 p "

7.2.2.1 yzbcd= %w 6 m wG8 ? Y XK N Q

yz ;< 3 [: Q

7.2.2.2 n z - [o Q

yz ;< 3 [: Q

7.2.2.3 *+ P . c$ / G8Y 2 Q

yz ;< 3 A y6 [: Q

7.2.2.4 n zj o Z Q

yz ;< 3 [: Q

7.2.3 71 n_

7.2.3.1 3 71 n_= v 1 e -x% pq Q

yz ;< 3 B / ;] yI A y6 [: Q

7.2.3.2 yz 71 n_ G8) > Q

yz ;< 3 B / ;] yI A y6 [: Q

7.2.3.3 f o kl Q

yz ;< 3 A y6 [: Q

7.2.3.4 71 n_ rs L H | f v Z yzQ

yz ;< 3 A y6 [: Q

7.2.4 SF_6 %"

7.2.4.1 yz HI ;& $ = J JL Q

yz ;< 3 B / ;] yI A y6 [: Q

7.2.4.2 SF_6 %",-*+ Q

yz ;< 3 A y6 [: Q

7.2.4.3 3 * t e - = SF_6 %" y) Q

yz ;< 3 A y6 [: Q

7.2.5 qH ST

7.2.5.1 SF_6 HI t K N = J JL Q

yz ;< 3 A y6 [: Q

7.2.5.2 uv w qU "i 1 Q

yz ;< 3 A y6 [: Q

7.2.5.3 *+ qH . c kl $ / Q

yz ;< 3 A y6 [: Q

7.2.5.4 45 d Nw G8JK Q

yz ;< 3 A y6 [: Q

7.2.5.5 H qH . cI; G . cef G8JK Q

yz ;< 3 B / ;] yI A y6 [: Q

7.2.5.6 h ~ L p ~ . c G8JK Q

yz ;< 3 A y6 [: Q

7.3 Vy ! r "#$ ~

7.3.1 yz j 5 G $d= 1 f N

j 5 G $d 3xy yz , 6E 5 ' (z Q Q 5), { 6 Y 2 A 9 N d 45 : Q

7.3.2 7 f '(

7.3.2.1] 9 K SF_6 %"HI I 9 K | H I 9 K7 f$ H 1 3bcd x% 3 #1 - I 1 Y 7

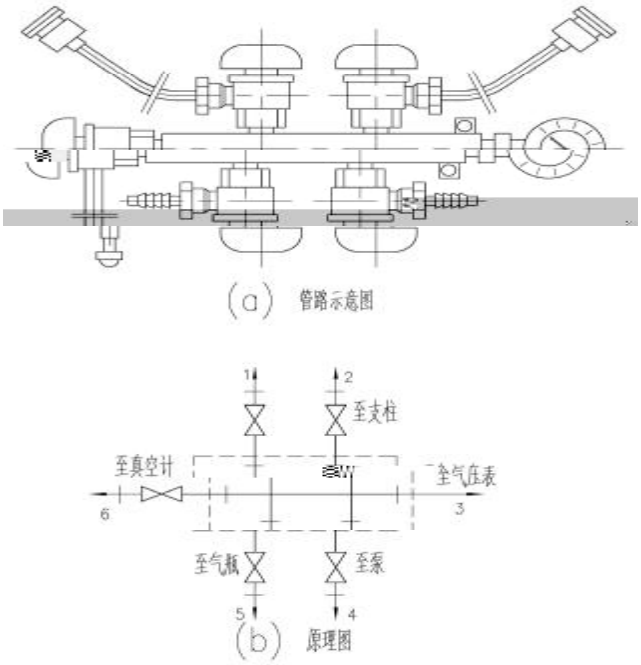
f6 2 # - -0.3s- Y -7 fA I # 7 f y3S (2min~2.5min= 233 + Q

F1+2 12 T Tf 36 0DG(*+) Tj /1+2 12 T TD (7.3.^>(23) Tj /7+4 12 T Tf 36 00)(<L) Tj /F1+1 12 Tf 24 0 T !(*+) Tj //F
0 TNW(lm) Tj /F1+2 12 T Tf 36 00 (z) Tj /F1+2 12 T Tf 24 0 Q Q(23) Tj /F1+1 12 Tf 24 0 TQ(23) Tj /7+4 12 Tf 12 0
91<L2399ZYYqD237nY=0nq=71n71YIDYlm
7.3.3 q lm 71 n_= 1+q 5 2 9 f 1 3 6 8 5 n 7 (1) Tj /F1 12 Tf 24 0 T
(23) Tj /F1+1 12 Tf 24 0 T?
7.3.3 %f<L) Tj /F1+1 12 Tf 24 0 Ta6 TD (%) Tj /F1+2f 12 0 TDeff6

9 ST) ! !

9.1) !

bcdRv (G SF_6%" L8 +$ %2 A D K 2-7a > = _ K G %v ZG %A) v Z %c~ U 0 j : U 2-7bQ78(5 u u ; - , qH - } %I *} %5 6 G %A _M (V b We H =% H ; Q



U 2-7 G %v Z

9.1.1]6 C - } %x 2 • G %= @A1 A7 G %0 @t 3

qpG %v Z = u ; 1I 4I 6A 7 w u ; 2I 5A u ; 5 M SF_6%. y3 K /0 c ~ = A 12 7 w% . u ; AK I . w u ; 2 - >~= /0 c 3 V ' = s o • " AJ _ K G %v Z L c c8= %%' %x G ~ SF_6%" A H (qp %. u ; A F) s o • " Mj 5 G $d= G % • " 3• () 7 w% . u ; G %S 9 KHI A qp %. u ; Abw~•A F j 5 G $d=• " K ' , o = A _ K W4 F j 5 G $d 4 - Q

9.1.2] 7 - } %(G %= @A1 A7 G %0 @t 3

! = g c %k] Rv ({N 7 - } %A3 WA ! C ["[: (G %& L N 7 - } %A y 2 - } %6 G %L JK _ K G %v Z A70 @t 3

!"#$%

!"#$% &'()*+	ZF11C-252(L)/T4000-50 !"#$%&'()*+,-./0	0PG.412.983-2	
	123-456	, 20 -	. 27-

5= XK N Q

10.2.3 C *+ P V ef) %E ; A9 Q 7 _ F M) # (q =~• k R f o AH (; S *+ x { T 6 Y 2 A 9]x% 41 # h 3 .b SF6 %" A [") ef v M 1 n Ayz) %a= j o Z L j o rA {S2 n zj o Z Qv M(- } %I # h ,- A Y 2 (G x S = SF6 %" A , p P 2.2 >Y0 @; S y) A 2 S Y 2 Q

10.2.4 y) U = VW 5 # ["2 • XY *+ ^ 5 , y)2 TU ` K LF-1 [y) U , _ K< 37 | 5 R 0x% H ; Q

11 STjkaE / hi

! %4 2 3 x% p ,-# hA _ G 0 0.03MPa= SF6 %" A Z C [" 9v " tuRv ( ]x% y) 6 ,-*+ Q 3 WA ! C ["[: (G SF6 %"& L]x%,-# hA {N J ! oe SF6 %" 8 ,- : + ? Y ! Z[Q 5L [\ * %= XK Q

11.1 jkaE

,-# h P S JK - } %I G # PQ 8] = n z - [o =0 @Q

11.1.1 >]`a

>]`a 9 M SF6 %".b v Z I 67 } %& I G t %e B I# PQ I$ 45 ^ x r" _ 6 * B 1m` 1m` 1mA Q 5 6 * B 250@su A>K# PQ _ ? Y p EF * %(: 0PG.412.983-28 ; 2-7 = XK) Q

11.1.2 - } %23

- } %23VW] 2hM 3hAJ } %5 } 133.3PaS a 8 P 2h 0- A (0-) %5 jhA 1+1 12 Tf 24 0 D

!"#$% &'()*+	ZF11C-252(L)/T4000-50 !"#$%&'()*+,-./0	0PG.412.983-2	
	123-456	, 22 -	. 27-

w M} %& k ~=~=M}

2f 43[illegible]

/0123456789:;<=>(?@ ABCD?AEFGHIJKLM,N0OPQ

12 2 SF_6 !"r 345 A 6 i 78

SF_6 %" _ ? Y ; 2-6 ST Q G SF_6 %"& JK= Q %A 0 G # PQ A7 R+ _ ? Y ; 2-7 = ST Q

; 2-6 SF_6 %"R+ * %

W ?	$ *
yz c { (SF_6) | (m/m)	} 99.9
%% | (m/m)	F 0.04
l z c ~ (CF_4) | (m/m)	F 0.04
,- (H_2O), ppm (m/m)	F 5
• 5 (0 HF&) ppm (m/m)	F 0.2
D , [z c (0 HF&) ppm (m/m)	F 1.0
! | ppm (m/m)	F 4
" L	G '(E "

; 2-7 # PQR+ * %

W ?	$ *
P5 10^{-2} (v/v)	} 99.9993
{ : + ppm	F 2.0
# : + ppm	F 1.0
CO,CO_2 L CH_2 ppm	F 2.0
,- ppm	F 2.6

T 3 Q = P5 89: w $ + % = + *

13 / SF_6!"^ 9 pA "#$ ~

13.1 :;<=

P SF_6%" 6 VW SF_6%" H 9 4 \ G = R+ Y 2 = SF_6%" GE " =A M 7• U2 E N `) =1 9CD A * 4] k o efA 3 S U +]= • %Q

C h p t 6jfK= SF_6%" A8 Ge -- [A(, - [6 V (-. =% / A x ! 3 J 0 = 12 } (&L A ? , - [3 (% D L (o D (45 = " ,- 8: t 67 C R) A] - - [h 8 = SF_6%" = Y G 8ef 2 A 9 (` t 01 =op CD G< S 6 xy =Q

13.1.1 3 SV • U " W(:;<= L %/ =E ; h 8 = SF_6%" A • {N JK > E = W(4? p @d M< M A =) " r B A 0 1 9 B < V ST Q

13.1.2 CD _ K= 4 [6 EF 07 : M SF_6%" • U A) _ K1 9 E 4 A 3 ( ] M- h 8 = SF_6%" • U2 A GCDH Q

13.1.3 S TU u J I G A 7 :< x 45 6 J - 4? AEF < K Qef (_) o 5] 3 A] ef 2S TU 6 J L e ` , G MN • U ? ,OP Q] ef 2 TU D - MQ A07 :& U Wg & J MN • U ? ,OP Q

13.2 SF_6!"Aa >

13.2.1 %".b

@K U 3-8a > = G %v Z A _ \ R 7 - } %2 = c c~•0 @A F c [V ' = s o • " • "j S 1 ' = G %• "-=j 5 qHd= G %• "- A3 V ' ~ .b v Z Aw 85 . b T %Q

q bcd%k o = HI '" m ; H 0 (A S G 9 F l U

a %tA & y A D0 " H0 1 n S \]j o]= = v ^ o H (V c # hQ

13.2.3 TUVW

] .b %" L # h o "- [= 2 r A7 f Jg_ C - ef E 4 AW- (p @d=r B x% 1 9 A .b v Z 8 1 (Jg_ + _ %? L ' %{ ` A 2 S $SF_6$g a Q45- Y 7 f G ] k o x% =A _ Jk oU + ]= Q>(= ?b - b d 0 ( A1 9 E B D0 z c A 3 6 L e S 9: L ] A H ( G D0; S w d efA x 6 K` , * e Q

13.3 ? iA SF_6@g

Q 7 _) EF A %t ? I @A = DE L }* Q EF %B b I g & A V f %t [+ = SF_6 %" O) (g 7 G $jfK p = SF_6) A VW Jg 0 _) h " i 6 " <= L %/ ={0Aef Jg {N JK B <) " r B A _ CD = 1 9 ef F QO) |• 0 (= V j tu # h 0 (A 3 S[%8= SF_6g a 5 D; S w d efQ E] ` , * e Q

14 - ABC A./0 D -B & L+,

_ K `a Le B :; 2-8Q BG 1 G ! Rv M89 > {a =A BG 2I 3 9 D0 ^> lu w q _ > ^ ! =] +^ZV g = jg Q

_ K `a Le B AK \ D0 s %` ^ A L D0 _4 \ : g) _ Q

; 2-8 ! RvJK= _ K `a e B 8 1

BG	* k	K +	l G	Q R	] +	a T
1	980303381086	y : !2 SF_6% ".b L - } %	LH-10Y-30W(0.3 o 0 m^)[	SF_6%".b v Z	1	"# d n ()* + (K \ s d)
2	980301003694	yz ! 8 SF_6% " O) C A	LF-ID [	SF_6%" y) U	1	- - m o j0 * + (K \ s d)
3	980304046223	*+ ! 8 SF_6% " = , ': +	DWS-IIQ[	$ +,-*+ U d	1	- - m o j0 * + (K \ s ds

15 f EFGH/IJ01

15.1 f E

! " } ? ={ (A^> de Yy 69v 8 1 8 a9v65]Az F >(9vx _ <t E N A 4F t X 2 6 3I • 5I9v =me 5 N A A _] 10 s oU O H 9 4 Q ! %4 q n459 M 3 RvJK EF I Y 2 { lvx 8 1 I q n a! 8 1 I p # 0 cg hL D e U I _ K `a e B 8 1 Q

15.2 GH

! _7 : \t] qr L = [%8A \t = Y G Q 5 _] +5@~+35@! U + #$ =k o A] o t <3 H G %j o ! 5= SF_6%" = N_2HI 6_[B 0.02MPaA [s l 6 u t _ yz V # A { [B 0.02MPaA _ $ x : ,+ Y 2 = S SF_6%" = N_2S 0.03 MPaQ

9v(, <tVA Q

15.3 IJ

!de2 _ FJ 3

A. ! [G I QR I] + Q

B. 9 K $ H I$? L 8 cwb$? Q

C. qH . c$ H 3 DC110V≠ DC220V

D. $n 3 AC220V≠ DC220V

E. _ Ke B QR 6] + Q

F. a! 8 1 3 QR L] + Q

16 KLMN O

!"#$%&'()*+ } u *+ F z e

$ v 0375 @3804185

v } 0375 @3803999

6p*+ hi2 , : C O 01os3

F G 2 3			s % %Q	
FG {a				
`a QR				
[G				
H 9 w #				
os				
FG 2 = C A	$% 8 ,c | 8 ,f 0 8 ,- q 2 ,Yq 2			
	%"HI	MPa(kgf/cm^2)	7 f HI	MPa(kgf/cm^2)
	- Y ;	- A Y A - Y y3		
	FGe -	%" 8A %%8		
FG (= : x	(A E			
t] = C A				
ST: G= B <				
JK W= hi 0 j	e y J3		$ v G k 3	

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!

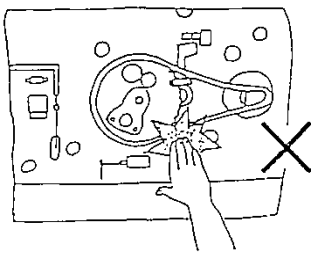
RSTUVW .....
1 XY .....
2 Z[\] .....
3 ^_I`abc=deLfghi 1
3.1 ^_bc .....
3.1.1 Njk^_`abc .....
3.1.2 lm^_bc .....
3.2 no`abc .....
4 Rpqrs .....
4.1 ^_bc=Rpqrs .....
4.2 tuv=wxWy .....
4.3 `abc=Rpqrs .....
5 uz6{| .....
5.1 {|Lw}~• ! .....
5.2 {|Lw} " wxWy= ! 1
6 #$ I1 %q &'() .....
6.1 #$ .....
6.2 1 %.....
6.3 &' .....

!"#$% &'()*+	ZF11C-252(L)/T4000-50 !"#$ %&'()*+,-./01)*	0PG.412.983-3	
	234-567	, 2 -	. 15-

`( )

Z ` lBC

$F f (K ,>? DS/ES g G e=
a f b ' c w} " FU I G e= J
K 5 de B f =6 A g " F /hi :
gA ./ U '` I Q

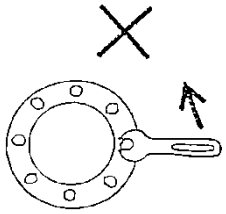


$ uz8A F f (` j m K ,>? 34
: gK= kl!b kA ./` I Q

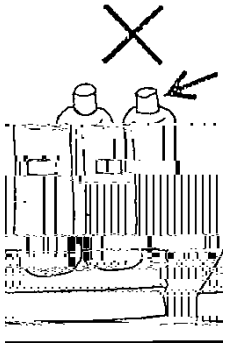
$, f : g " A F f (m K BC no m
K pqr A ./,s m tb` I Q

$, f : g deG e " A F p u'bv , c $f : g m w (Rp
v , = pqa A F f (x,] 9: g G e] A y f (9 z M d
e fg=0M] {| , ./de #ou } tu U ' Q

Z f (~ f% , • 1U = ! ! " b 5Q
$ f (~ fjg8 # 5% , • 1U = ! Q
$ b = 8 p > J ~ f= ! ! " b 5 %T A
ijx =` I Q

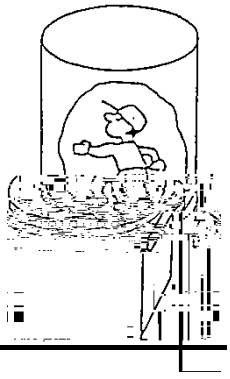


Z f (& U ~ f ' 8 () = *] %+ Q
(E ,- x =` I Q

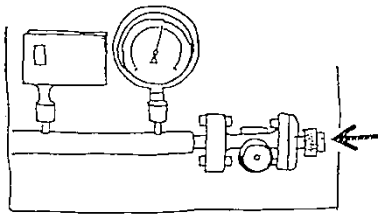


( )

Z ./0 ," A (*12 %A U I 3 %45
6 18%~22%Q
def *12 %A 0 , $*7 F_6 m 8 %" A
>ij 93: <Q

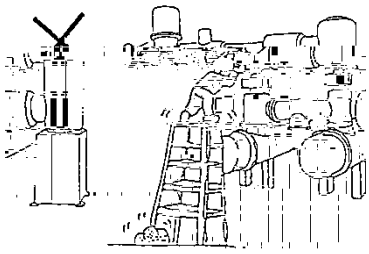


Z RpI ; p "H(<=>? %6 SF_6 %, 0 *] %+ U @T` AB 8 a u CD H Q d9 @T =>? %6 $SF_6$ %, v 8% D H A D H <=> EF% A ijx = ` l Q

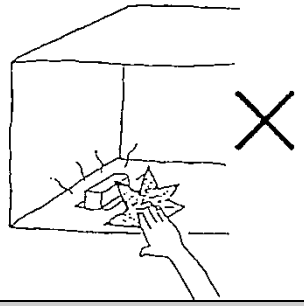


$ %

Z f (9f G A =a0 . z# ? g < Q <=>ijx =0 # U H #` l Q



Z f (l `K ,>? JK) Q
$ f (l ` >?G e v 8= JK) Q
<=> EL l Q

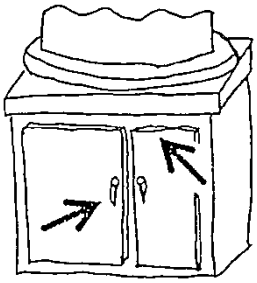


$ %

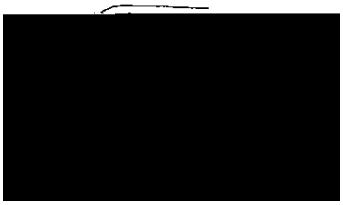
$ w} "de M(8 a # 5] = D H " A N U I $ b =% ,8 p ["A A B. z : gQ
^_ $ b = 8 p <=> F%D H A ijx =` l Q

u C I{}] =TUVW

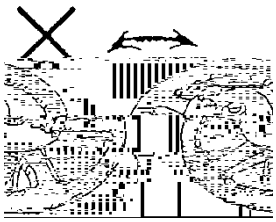
[\ 1 O %,-./012 bc 345 GIS 8 ^_I`abc= PQ uzA F TU `a VW c Z R (S Sc 2 u Q
$ w} A @A (c u : g G e v = v R Q
^_ <=> ./TU ! Q
$U I VW p { = JK
X %$%I G YVWA A : g " FU I34 = JK A ./ Z : gV [= tu Q



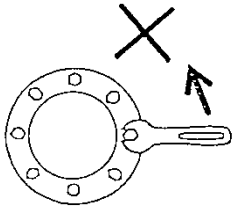
Z \5]^ P i H)M @I U+ jg JK Q
$I _ GIS7 ^ U+ jg JK A G e v
8= \5]^ P i H)M @I U+ jg
JK Q
^_ >ij v $ dPQ
$ F /) ` : g G e
F f () ` : g G e v c ./v , ab L cU Q



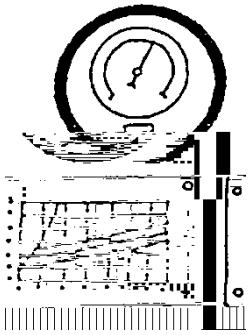
Z f (: guz 34 8= de+R Q
$ GISU+ jg8 " A f (: g 34
= +R Q
^_ (<=ij I fPQg S %,8 p Q



Z f (~ f ! Q
$ f (~ f GIS] = ! I h %] =
! Q
^_ <=>ij %, O i Q



Z jg8% ,8 p!] j C 9 k A jlm$ Q
$ jg " A SF6 %, = 8 p(1 n 9 %, o5 -8 p
pqlm$ Q



$: g% , +R " A M(x K %, rst ATU f
(Z : gQ

$ - 3 f (9 W$ JK a K : g ,2 . z 1u : gQ

$ M(K : g ,2 . z 1u : g " A (N c 2 i H$ v Q

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abc 7 ZF11C-252 L6 w GISk (# 5 F@ Q

c 9 1x JK a b j ^_ yz A9 ux JK a=< { am q | A $ Q 6 } A [~

_bc w (• p { A ! = b y " 4 =$ Q A f= b y| A $ Q 6 } A [~ $ Q Q

^_bc yz = < { -.= p A

CD?AEFGHIJKLM,N0OPQ

!"#$% &'()*+	ZF11C-252(L)/T4000-5[redacted]S %&'()*+,-./01)*	0PG.412.983-3	
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6 2-55 J 6 ^_l`abc 78 \]

9:	Wy ;<	= k	\] j
10	| A l j B ` $ Q	kA	125
11	1x " D	s	@1
12	ux " D	[redacted]	
13	^_bc 1x o 5 1 l ux " K o 5		

[redacted]

!"#$% &'()*+	Z -252(L)/T4 +,-./01)*	0PC -3
	234-567	-

9:	Wy ;<		= k	\] j
5	V g A $ O			@40
6	o A s # $ Q			
7	| A } " j >B ` $ 8 5 1 min(C j 6	yz D 2 3a	kV	4605 +1466 460
	| A E $ FGB ` $ 8 5 S H 1.2/50 s I j 6	yz D 2 3a	kV	1 0505 +2066 1 050
8	| A } " B ` $ Q		kA	50
9	| A } A n J " D		s	3
10	| A I j B ` $ Q		kA	125
11	1x " D		s	@1
12	ux " D		s	@1
13	1xl D			

!"#$% &'()*+	ZF11C-252(L)/T4000-50 !"#$ %&'()*+,-./01)*	0PG.412.983-3	
	234-567	, 9 -	. 15-

6 2-55 J 6 ^_I`abc 78 \]

9:	Wy ;<	= k	\] j
T c 1 1 I ux " D [0 $ G` $: f > Q 1 I u : W= " D Q 2 1x o 5 [0 X 1 V : 1A 30 mmY# $ =" K o 5 Q 3 ux o 5 [0 u v 30 mm: X u VY# $ =" K o 5 Q			
N	no`abc		
1	| A $ 8	kV	252
2	| A >?	Hz	50
3	| A } " B ` $ Q	kA	50
4	| A } A n J " D	s	3
5	| A I j B ` $ Q	kA	125
6	| A } A c u $ Q	kA	125
7	| A } A $ Q c u O]	O	[2
8	1 I ux " D5 9 \ def =" D 6	s	@7
9	1x o 5	m/s	$2.3^{+0.5}_{-0.3}$
10	ux o 5	m/s	3L 0.8
11	1 I ux g •]	ms	@5
12	G Y MN	O	10 000

!"#$% &'()*+	ZF11C-252(L)/T4000-50 !"#$ %&'()*+,-./01)*	0PG.412.983-3	
	234-567	, 10 -	. 15-

6 2-55 J 6 ^_I`abc 78 \]

9:	Wy ;<	= k	\] j

: f G e : g0 M N 2 G YV f J N 2 e

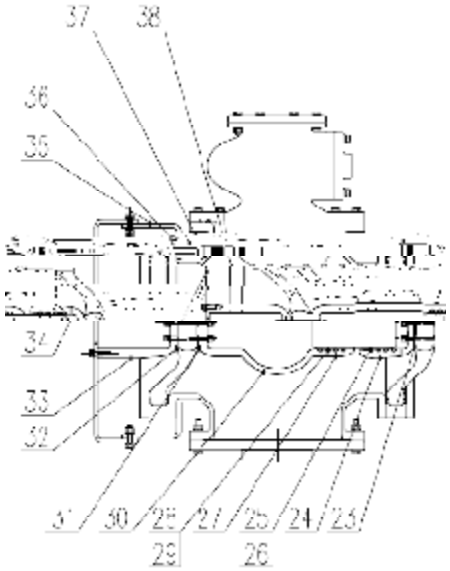
14

3.1.2 JK./)*

^_bcdeqNjk^_ b 1 de 2 g Q`2 ^_bc[ , =de 7 2 g =A 2D { ab q 2Dc l de N 2 V fQ G e @f p 9 %2 F D h $f : f G eA QR . z , f : gA XY <` de $fq , f .2 VW Q

3.2 LM01)*

no`abc= ' b d t 2-6 > _ A`2 `abc[ , =de 7 2 g =A 2D { ab q 2Dc l de N 2 V fQno`abc G ep 9 g2 h de : f G eA G e QR . z , f : gA XY de $fq , f .2 VW Q



t 2-6 no`abc

4 23NOP

4.1 ./)*?23NOP

4.1.1 ^_bc6$f : f G e T h " \ Rp k ` S i QtuvA f j & U X , Q$f : g G e k A9 lm] Am q 2Dc l q^_bc[, 2 k Q

4.1.2 N 2 1 l ux = g •] <` m q r n2Dc l = / 5 R de Q

4.1.3 ^_bco 5 = ST

A o 6 pq 0 f

m K S o r m qaB) s }S o f. z 1 l ux o 5 pq , 7 A o dac

5 RXYZ[

*+ ` e•& 5=)HA } =[, L : f G e8= # 5 @f f= e• X , Qd (M(C m) H i h !" x : e• w}Q

@f RM # (1 O f i %A _ # M A •{|Lw} : f G e6(c a f= G Y b 1 Q% \ PQ = $ Q {| ' A7 0 }=~• C qbc 34 =$ MN 6 G Y MN2 %Q

5.1 Z[BT\]^_`

5.1.1 $ / ~ & w

` $ / ` ~ . z 5 '$ m ' ~ () $ {1 ,pq * z U A6 A X +, d 6p j ATU 34 (- f PQ Q

5.1.2 . w

` . @O A3 : f G e . z e• w}A E"<= (v } " D / $Q

5.1.3 0 }

' G Y MN c fg 7 10000O " } M (0 h0 } c

5.2 Z[BT\aTUVW?_`

5.2.1 ' 1

5.2.1.1 wx 2 %7 ^ (6 3 ~ 4 L 6 356 A %P f 7 V ` U = 6 3 JK 7 ^ S u Q

wx~• c $ / ~ & wl . w6 0 }Q

5.2.1.2 wx`a P 5 q 6 6$ 89 ` Q7 ^~ fQ

wx~• c . w6 0 }Q

5.2.1.3 wx : f G e d k {S _ 7 ^ P U Q

wx~• c $ / ~ & wl . w6 0 }Q

5.2.1.4 wx X +, : g O]Q

wx~• c $ / ~ & wl . w6 0 }Q

5.2.2 [,

5.2.2.1 wx y A) =z | 6 y| 7 ^ : uk A j Q

wx~• c 0 }Q

5.2.2.2 ; 21 N < Q

wx~• c 0 }Q

5.2.2.3 STV g A $ O 7 ^ u = Q

wx~• c . w6 0 }Q

5.2.2.4 ; 2 • 1 > Q

wx~• c 0 }Q

5.2.3 : f G e

5.2.3.1 3 : f G e= a f b 1. z ?@ Q

wx~• c $ / ~ & wl . w6 0 }Q

5.2.3.2 wx : f G e 7 ^. T Q

wx~• c $ / ~ & wl . w6 0 }Q

5.2.3.3 A k ! Q

wx~• c . w6 0 }Q

5.2.3.4 : f G e BC L d / kp { wxQ

wx~• c . w6 0 }Q

5.2.4 SF6%,

5.2.4.1 wx de 6p S _ = P U] Q

wx~• c $ / ~ & wl . w6 0 }Q

5.2.4.2 SF6%, U1 ST Q

wx~• c 0 }Q

5.2.4.3 3 89b 1 = SF6%, w i Q

wx~• c . w6 0 }Q

5.2.5 i H rs

5.2.5.1 SF6 8 p n A j = P U] Q

wx~• c . w6 0 }Q

5.2.5.2 d i H g A l; : g A jg 7 ^ PQ Q

wx~• c $ / ~ & wl . w6 0 }Q

5.2.5.3 VW L 2 Wg A 7 ^ PQ Q

wx~• c . w6 0 }Q

6 bc>deNfghi

6.1 bc

} : 6 y=a A A() &' u g 69p D = D V 9p65]Ax N >(9p vC S n I ~ A dt e k = f 3I 9 5I9p m" b 5 ~ 4 A C 9 10E $ m) H i h Q

}T h & G 459 \ c RpJK MNO I u = O Ip v D = I & G 4} D = I ZO q A hiL F j t I " K 34 j 1 D = Q

6.2 de

} C h G ?] 9 HI] = 0 %8A ?] = JK o5 C 9 +5L ~+35L Y m M => = x $ A 91] • D d* %• 1 ; 5= SF_6%,m $N_2$8 p f C@ + 0.02MPaA 0 N ` 6 OP C wx @O A Q @+ 0.02MPaA C R . : U T u = = S SF_6%,m N_2T 0.03 MPaQ

9p(C • [@ . Q

6.3 fg

}&"' C N U c

A. } w : I ;< I] T Q

B. | A $ 8 I$ Q Q

C. i H g A $ 8 Q

D. $ G $ 8 Q

E. " Kj 1 ;< 6] T Q

F. 4} D = c ;< L] T Q

!"#$% &'()*+	ZF11C-252(L)/T4000-50 !"# $%&'()*+,-./012	OPG.412.983-4	
	345-678	, 1 -	. 11 -

!

RSTUVW 2
1 XY .....
2 Z[\]^_ 6
3 `aLbc 6
4 1dLef 9
4.1 ghei 9
4.2 jkef 9
4.3 lmef 10
4.4 noef 10
4.5 pqef 10
4.6 efTUVW 11

!"#$% &'()*+	ZF11C-252(L)/T4000-50 !"# $%&'()*+,-./012	OPG.412.983-4	
	345-678	, 2 -	. 11 -

!"#$%

wxLyJKz{|8}Y~RSJKust=0•L

%[&' A ()* I +,-./0 YVWQ

1 9:;<=>?

uz{| 23 M 45 \] 6789 (%v :;<=>?@

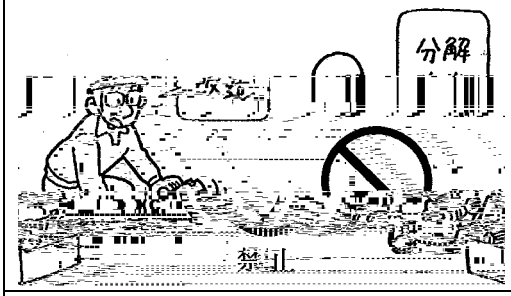
G QJK H(IJ)* uz{|A - r 45KL \] 67

1 GHIJ?

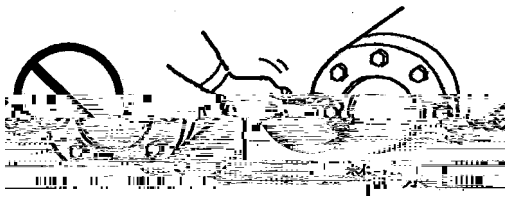
rst=JK pL 8 qr TU -./s0&'t

危险

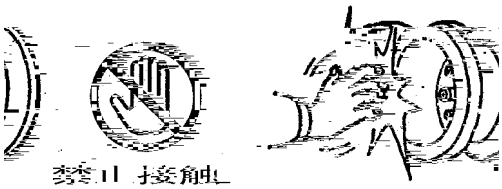
u F j K vwPx, L yz
K vwPx, L yz y >?{bce#|
} I ~ $I hg L >?"• I c0 ! Y Q



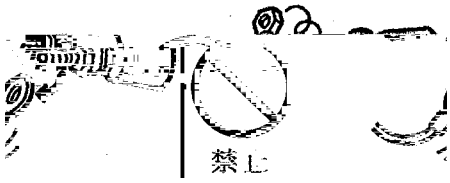
u %"# = $%& c '(
'(%"# = $% {bc#$ # 5)* I +
h8 %vO , Y Q



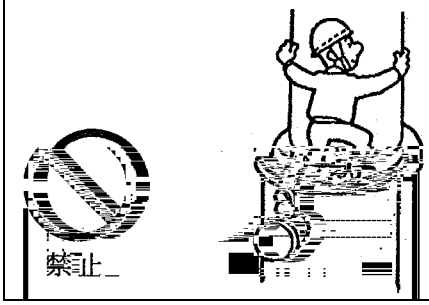
u - P 8 & [. ~ /01 & = /0# x
. ~ /0#2 H 34/0# x =$ 5 AK
e$ 678 I2 9: $Q
r" ;- P 8 (Rb /01< Q



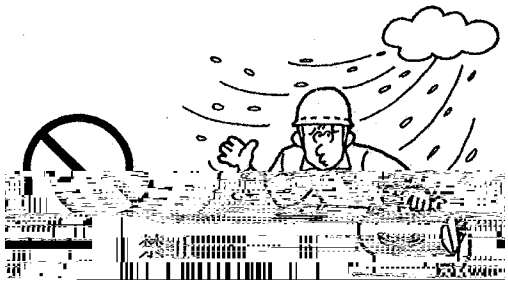
u - P 8 /01 & = = k N >& c)*
= k N >)* a s $ =#$? bcde
#~ $V " Q
r @A Y BC 0r DE= k N > ATUr
- P< F H [%GH. T Q



u F j IJ uvl /01 Ic K Y
IJ 8 bcde# LM I + h L >? NO
PQ Y V " Q

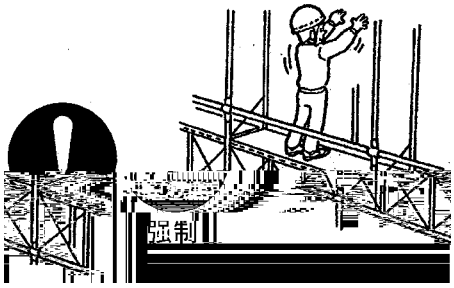


u r RS I TU Y VWX %q & [OP ef
!j#$ + h IV "Y Q



危险

u # Y R5 qA l> Z[o =ei \
]^ ei \&[obcd#$ L_* l +
hY V " Q



u efInoeiI `a# 5I b(>?
q (cd u*+
e Y R5 f [g #= 45 \]6 hi K
9 A]^ 7 j *+ OPR5 Abcde#|
} I ~ $I hg L >?"• I c0 ! Y Q


强制

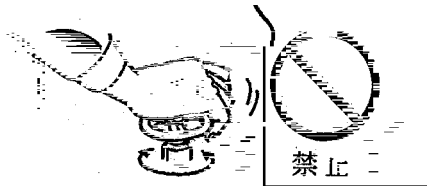
uo k ef H A >?qr : j - P
]^&: j - Pbcd#$~ $ Y V " Q


强制

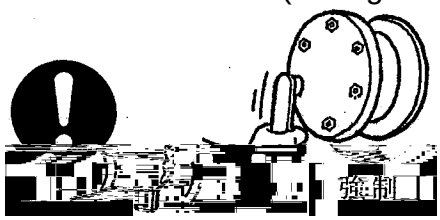
u lm q (n u*+ op
q v & r 2(%v @SF6AA]^& OP s
+bcd#$ q v Pt e#67hgY Q


强制

u r - PpL 8 & [QR uv
& c w;x h% ? bcde#"• Ar y
z %v {| a A { uv}~• @^ ! %v
67 " AQ

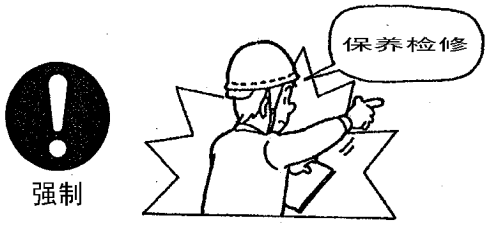


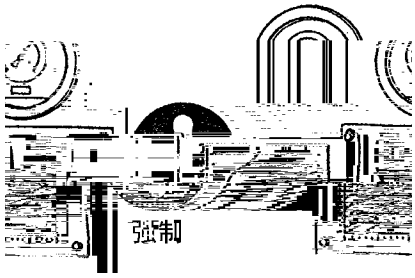
u=T /01 = <
]^R # I $% O & & # bcde#"• Q
M8 $% t 12N m(120Kg'f cm)
M10 $% t 30N m(300Kg'f cm)



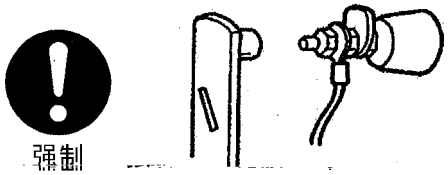
u(OP 1def
Lq1defA c (H#) >? * r= +
, LV " -. A/0 !j"• LV " = #$ Q

u SF^ LV &ATj8/F=2





u ?./0 = $; JK 4 K <=>? A @[
1= 2 4N*m((40Kg f*cm)
<=9 p 4N*m((40Kg f*cm)A $ A d B
}4 Q



. / 0 1 2

1. "#

ZF11C-252(L)/T4000-50C %v :; DEFG <=>? H K S IJ $ KLMN QOP $ KLMN r > Q w;- P I p RST 8 UQ "• q VW $ K A XVWY] 6 Z $ N 1 U ([$ K ^ WQ \] $ KLMN &b b 4]^ 5] = k > _ Q = k `a x bcT 1 U I V W61 U N P Q

2. $%&'()

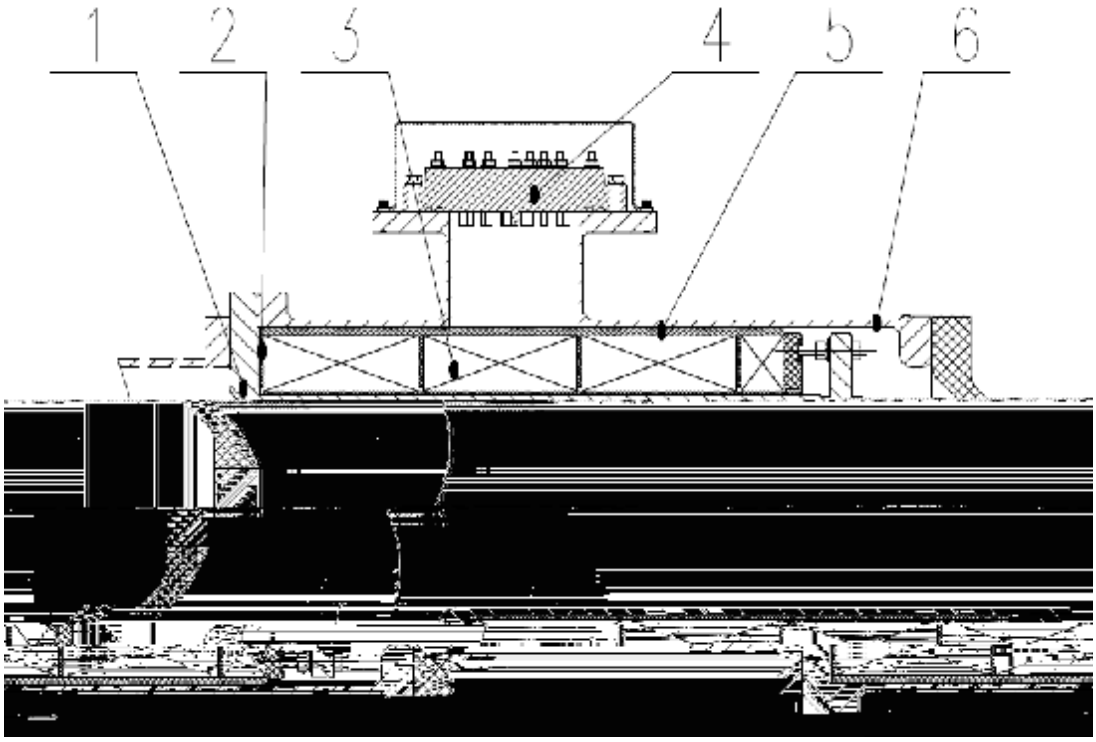
y$ KLMNd o \]^_ e] 4-1Q

] 4-1

fg	Whij	k	^_ 2
1	CJ 8 Cg		$ lJ
2	m Z CJ		& Z / n Z
3	d o $?	kV	252
4	d o op	Hz	50
5	d o lk$ K	A	4000
6	d o = k$ K	A	5/1
7	d o U q q + $ K	kA	50

8 d o UQrs q t TD ( ) Tj 12.54.5 Tf 12 0 TD (.4.51 1j 12.54.51 ;0277.92 1

k > _ @3A) " 4-1@s b 4 z > _b * A 8 Z = + f no b & A > _ 2 t b & ,- _ W= :; . _ @2AA / x 0 b & • 1 I $%2 A (a r = k > _n b & :; 3. @5AA 4 a bc$ KLMN q v @6AQbc a ! v n> _ 2 t & 5 (67 A > _ & 5 (8 M'( ) 9 Q \] > _ e • (:; w < P1l P2Ab & q l n ! v e =w < P1l P2loA s 1 = lk .>/0n= k .>/0 r > l ? t 9 (> l :; Av - lk$ K @ P1K M P2qA = k$ K/ Sn1C n ~ QK M Sn2@n b A A B A C 8 D AQ



!"#$% &'()*+	ZF11C-252(L)/T4000-50 !"# $%&'()*+,-./012	OPG.412.983-4	
	345-678	, 8 -	. 11 -

n Z J $ KLMN" 4-1b 8A$ KLMN q v @2A l = k >0 TD (J);Tj /F1 @4A2 Tf 12k+1 12 Tf

FGHIJ T=l z K vA \z >0 TD (J) Tj /F1 +1 12 Tf 12k+1 0 TD (J) Tj /F1 @3A4 @4A D (b) Tj /F2 +3 b

1. p L q 2. $ KLMN q v 3. >0 T

4. :; .0 TD (J) 5. Tj /F1 +1 12 Tf 12k E

4. **/0,12**

b ~J$ KLMN c NO kw;- P A ! V " = #$ A l Lq OP 1def @1de fw P ^ !] 4-2AQ

] 4-2 1deiLefw P

eiW h	ei &'	K + w P
n Y ei	(WZ ; [I Z\ Y	& c (Z ; [I Z\ Y
	q vI]^ Y (W$ _ I Q h	& c (`a $ _ I Q h
	$% I $; b (W)*'(	$% I $; b & c ( )*'(
	Y]M^@] ? A2 9w;	Y] = M^l r K + 2 s&
%vO ,	%v " F # 2 9 (, %c	& c (, %c

] 4-3 gheiW h L K + w P

x b		eiLef Q k	&'
ghei		1^ 2 Q	- P 8 h hei
jkef		- P l U a	r - P ST 0OP ef
o k ef	lmef	3 U	: j - P A & { Y %v OP ef
	noef	6 U	: j - P A & { Y %v OP ef
pqef		rghei8 #) Z ; q r - P 8 :)+, q	3 d # OP f + I `a# 5 8x,

4.1 ghei

ghef 1^ 2 Q OP 1 kAeiW h ^ !] 4-3A & c RS K + 2 qA (n u*+ op Q

4.2 jkef

r >?< F- T a , 1 U OP jkefAeiW h ^ !] 4-4Q

jkef V b f [45 =\]6 hi K9 A> s(cd u*+ OP efQ

] 4-4 jkefW h L K + w P

Wh	ef &'	R5 X[	K + w P
%ve ,@A	%ve ,@A	K SF_6 %ve , Y ei " F # (W %vO ,	& c#$ %vO ,
gheiW h	n ghei X>		

4.3 lmef

\ e 3U >? : j - P Ax & { Y %v= ST 0OP lmefAefW h ^ !] 4-5Q

3 lmef @+ p u*+ fg p = 678 u*+ OP efQ

3 ef H [8 I>? h : j - P Q

] 4-5 lmefW h L K + w P

Wh	ef &'	R5 X[	K + w P
/01 =ef	/01 = . _ (Wl t	h h 8 I	Wl t
	& # (Wm Q	h h 8 I	W`a = m Q I n %I o Y
	& # (Wpq $ _	h h 8 I	Wpq I $ _
	c > @[ST = 8 I	h h 8 I	& c ('(I Q hY
%vO , ei	%vO , ei	K SF6%ve , Y ei " F # (W%vO ,	& c (, %) 9
ghefW h	6ghef X>		

4.4 noef

\ e 6U >? : j - P Ir & { Y %v= ST 0OP noefAefW h ^ !] 4-6Q

3 noef @+ p u*+ fg p = 678 u*+ OP efQ

3 ef H [8 I>? h : j - P Q

] 4-6 noefW h L K + w P

Wh	ef &'	R5 X[	K + w P
V o	V o %v8 # x	K # x YV o %v8 # x	K + 2 s0
ij eiW h	6lmef X>		

4.5 pqef

r - P 8 :)+, 8 ghei8 #) Z ; q Ar 3 d # OP f + I `a# 5 8x, Q

V pqef f [g #= 4 v \]L hi N k A (cd /*+efQ

3 pqef @+ p u*+ fg p = 678 u*+ OP efQ

!

1 "# 2
1.1 RSTUIVW 2
1.2 XYKZ 2
1.3 XY[\]^ 2
2 $%&'()* 2
2.1 _`=ab 2
2.2 cdef 2
3 +,-./ 3
3.1 _`=9ghi 3
3.2 _`jk 3
3.3 _`=lmng 5
3.3.1 ogpq 5
3.3.2_`rstLuv=wx0y 5
3.3.3lm3z0y 5
3.4lm{|}~ 5
4 01-23 6

1. 67

l 1.1 RSTUIVW

ZF11C-252(L)T%• !"#$%&' pqK_`Q

l 1.2 XYKZ

ZF11C-252(L)T%• !"#$%&' pqK_` () GIS= *+,-. 5A /01 $ 2 z56 GIS7 3. 5 2/ A 4567 =Xz`0 8 A 9:; I <= 6 >? $ @Q

l 1.3 XY[\]^

_`XY[\]^ ABC 5-1Q

C 5-1 _`XY[\]^

D U	}~VW	EF	]^ G
1	HI $ J	kV	252
2	HIKL	Hz	50
3	HI $ M	A	3 150/4 000/5 000
4	HINOPQ $ M	kA	50
5	HINRSTOU	s	3
6	HIVGPQ $ M	kA	125
7	HINO c KPQ $ JW 1 min (XGYWZ 3j Y	kV	460
8	HI[$ \]PQ $ JW^ r 1.2/50 _ s VGYWZ 3j Y	kV	1 050

2. 89:;<=>

l 2.1 _`=ab

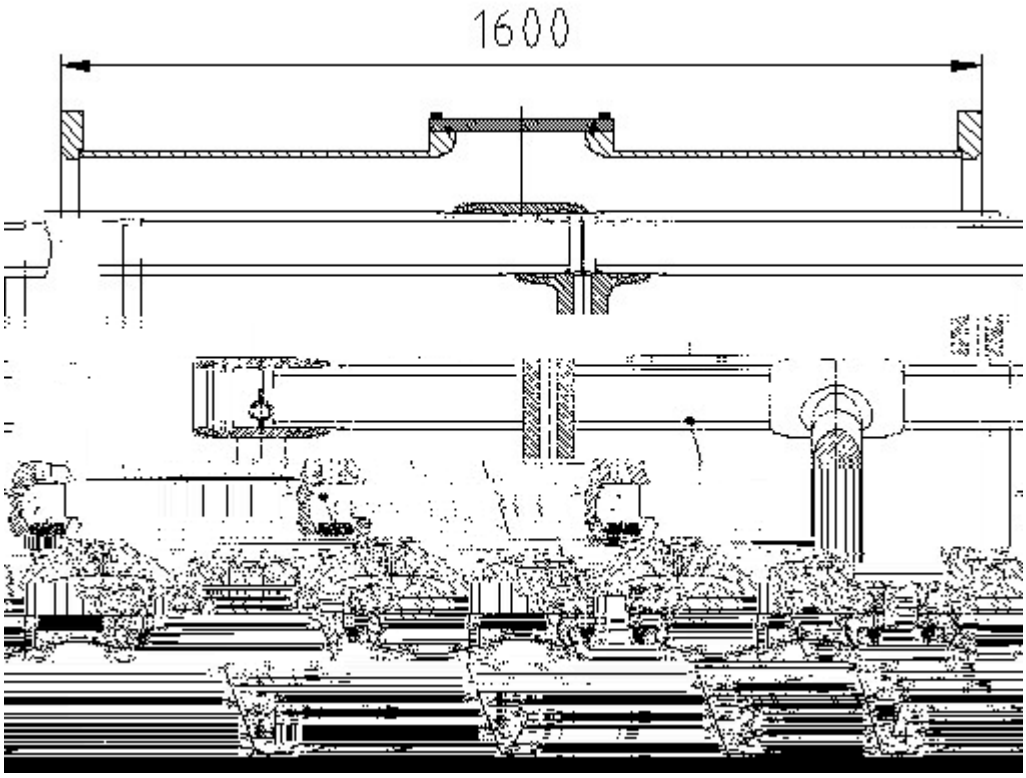
ZF11C-252(L)T GIS . ` _` a N Z . `$%8 A bc 0.40 MPa $SF_6$ %•A_` db 1M _` e N fghi Au S !jk N Z _` lIm*I = Fin Aop 3j ! =dKQ q 5-1 e ZF11C-252(L)T%• !"#$%&' pqK_`ab rq Q

) _` des H5A t (% uv Y w A xyn g(z{| 5 }

~~ •c %z ! = u "# $ $

~~ %&'

~~ (|)



1l_` d • 2 l * 8 !j 3 l 1 $ + g = 4 l 1 •

q 5-1 ZF11C-252(L)T%• !"#$%&' pqK_`ab rq

l 2.2 cdef

ZF11C-252(L)T GIS K_`N , . `hi A8 - X 1 $. R$% / zj= "#y • b A y • bc SF_6%•d e ! 012 8 - 1 •K * 8 !j uv / "#y •8 32 _` d • b 3 g( <j 4 A 567 H $SF_6$%•8 8 'L $SF_6$%•( 9 < :; =: <2 u "# $ $56= > _` db %•= J ? Q

3. 01?@A

l 3.1 _`=lmng

l 3.1.1 ogpq

ZF11C-252(L)T GIS K E @_` AB 0.4t Almng O 5CDEF _` G" n HIJ =o A pqQ

l 3.1.2 _`rstLuv=wx0y

a. _`rst=wx0y

_`rst) F KL/ lm SF_6%• c MNOPQ wxAwx <RD q S t •Y w PQ wxQ

b. _`uv=wx0y

_`uv RTU' 37# "PQ wxQ VWXY wx Z[ A M wx U' k _`wx \ IJ =# " A X] ll Z[A ^N k wx Z[_` * a AK Z _ X]b5 Q

l 3.1.3 lm3z0y

x c _`L b 3 1 $ de q f Y wp o Ng 7 h . 53z W/ijk 8 lm Y2VW w xuv n Fi L# " AJ7 g _`u o 2 z] l N A k uv np3qrg jk st Quv@ _` d w 53z lm Axybz< X . R $ { A1 |) } b 3 $z ~• o45 p ! q f Y w Q N T PQ zj r I u "# $ $ L% R2/ t " | 5=ngQ

l 3.2 lm{|}~

a X . R $ {z< A_` < g lmb5PQ Q

b u$ {|Ag = lm ocHIJ ? = SF_6%• NPQ #$ {|Q

c 8 ' z< Ag = lm ocHIJ ? = SF_6%• NPQ8 ' z< Q

d PJ {|A g x + GIS*p PQ Q

4. 2-?BC

%& O eEF ^ < '(z{u$ a A BC 5-2Q

C 5-2 5-2

!"#$%
&'()*+

6 7 8 . /

1. "#

ZF11C-252(L)%jklmnopqr\]KstuRSvw GIS=xyz{|5A}

~•u GIS!" JKQ

2. $%&'()

RS # 5 $%&' 6-1Q

' 6-1 RS ()*+$%

,-	e ./0		12	$%3
1	45 i 6			784
2	9:			; / <=>
3	() $?		A	4000
4	()@ABC $?		kA	50
5	()@DEFAG		s	3
6	()H3BC $?		kA	125
7	()@A V IBC $ JK 1 min (L 3MKN 3 OM		kV	460
8	()P $ QRBC $ KST 1.2/50 U s H3MKN 3 OM		kV	1050
9	V $ WX		mm	7850
10	$ KYMZWX		mm	[1800
11	S/P			[0.9
12	\]^_`	a " b M	N	2000
		a " c M		1500
		de		1250
		^ Sf%		^g 2.75A hg 1.7

!"#$% &'()*+	ZF11C-252(L)/T4000-50 !"#$%&'()*+,-./	OPG.412.983-6	
	012-345	, 3 -	. 5 -

3. ***+,-.**

a WX* A UY o Z 6 L i$ [" ,\ Y Y] AK ^_`a bc) j !" A defD RS gh ~= 2m A Ufi =RSZ Hj RS gh ~3 " A ef RS6 gh ~ k G = I$ = % m L z{ A1 n RS gh)op 2m k u a " qr | s uv A tuD [P^vjw Z G Q xj K#•W yzU | 6-1 8 {| =e 1 !"# [V A }~ N r | s uv ^["O $ Q

5. **56,78**

5.1 **78=>?@**

r i • 8=`a !"# * $

AI %&$ 1 Ez) =^ SWX A '(' 6-2 = N re . = &) Q

BI) *&)$+ $ } , t%j j A -. RSs ' 6-3 N re . = &) Q

' 6-2

,- e . 0_ /))

K0.56 Tf 1f 10.56 0 TDe Tj ET 70 TD (I /F2 1 10.56 0 Tf g 0.56 10.56 e Tf 680.56 70 TD 310.5 Tj ET 7.42 10.56 215 10.56 10 TD e 10.56 2 Tf 16,015

ZF11C-2

!"#$%

&'()*+

!

"#$%&'() 2
1 *'+,$% 2
1.1 RSTU=$%VH 2
1.1.1 WXTU$TYVHZ[..... 2
1.1.2 \]^_`Z[..... 2
1.1.3]^_`Z[..... 2
1.1.4 a^_`Z[..... 2
1.2 a^VHZ[..... 2
1.3]^VHZ[..... 3
1.4 aI]^bc=d` 3
1.5 efI1g6hiVHZ[..... 3
1.6 aI]^;j 3
1.7 klmnop 3
2 -./0,$% 4
2.1]^Rq 4
2.2 a^Rq 4
2.3 d`r_` 4
3 1234/0,$% 4
3.1]^Rq 4
3.2 a^Rq 4
3.3 d`r_` 5
4 5634/0,$% 5
5 789: 5
6 SF_6 #;<=$% 5

-!./7845

stiuvwx=$%VHy[z{HA3|}[~• !"#$%

a) }[~I &' mnI () mns *+ a^ ,-.

b) WXB /0.

c) SF_6 %*1234.

d) VHZ[56 $Q

1 98:;./

1.1 RSTU=$%VH

1.1.1 WXTU$TYVHZ[

RSTU 78 (9 $TYAK 220V: I ;<= K$ST 6 SWX /0 A >?) , mn 37VHQ

@}[~]^Rq ABC A) , mn DE0 $T (F AE0 $T 6 S GHI S GJKC LMN A FOPQD]^WX 4RE0 QGJOS p T A +]^WX U =qK !GJVWK CL 0M= UX AYZC]^ [\ ~ DGJ] =]^ ^,_ ` ` AJRqTU1 a+]^ E 0#$ Q

1.1.2 \]^_`Z[

@ SF_6 %*4U!bW \]^_` cC A 4U mn= d | ( p_]A ef \]^_`; j .+4U]gOh 8A @4UcgW \]^_` ij4UC A_]= ( p}mA\]^_ ` ij Q

1.1.3]^_`Z[

@ SF_6 %*4Uk lkm04UC A 4U mn= d | (p_]A ef]^_`;j . +4U]gOh 8A @4UcgW ]^_` ij4UC A_]= (p}mA]^_` ij Q

1.1.4 a^_`Z[

@ SF_6 %*4Uk lkm04UC A 4U mn= d | (p_]A ef a^_`;j . +4U]gOh 8A @4UcgW a^_` ij4UC A_]= (p}mAa^_` ij Q

1.2 a^VHZ[

$%VHy[8 nop=qrsdt I duvw =a^Z[%x a^Z[6 y a^Z[Q

x a^Z[%?z{|} = ~ Va^ • ! ? "# |} = $ Va^ • AJa^$ %& 6 $ ']AJ}[~ r (a^SqQ

y a^Z[%?z{|} = ~ Va^ • ! ? "# |} = $ Va^ • AJa^$ %& 6 $ ']AJ}[~ r (a^SqQ

1 1)*+ a^Aa^ • a , C c 5 - 50ms

1.3]^VHZ[

?z{|} = ~ V]^ • ! ? "# |} = $ V]^ • AJ]^$ %&. $ ']AJ }[~ r ( ]^SqQ}[~]^= tC A ? klmn / jd |]^Z[=;jQ

1 1) }[~ *+]^A 01]^ • I 2 a , C c 5 - 100ms

3 %~ V6 $ V ?N 4 mn 5 VHA 67 N 4 mn N 4 W8 ~ V 9!8$ V 9Q

1.4 aI]^bc=d`

+ }[~Rq r (T Aklmn :. 6}[~ x o ; d |= ,- A>(klmnop < = T >) ? +9 @A A Z A +t9C BC (9 [$ %& y D • *E q= ,- A F ^p aI]^;j tC GH $ %& y D Q

1.5 efI1g6hiVHZ[

TU I 78 (ef61g HJ ~A ? AC220V$ K o $A > * ? -L }[~VH7 M/ Q ef HJ ~ NOPQR* ? S PVH~VH7 M/ Q

1.6 aI]^;j

}[~ + a^ ,-C Aklmn= T _op_]A * ef a^;j .

}[~ +]^ ,-C Aklmn= T mop_]A * ef]^;jQ

1.7 r}[~ x o ; t U =klmnA. V f 10WT mI 10WT _op o XY JKQ

2. -./0,$%

&' mn• a^ #$ A Z $SRSTUQ

2.1]^Rq

? VHmn [f]^ • A(o~ \ &' mn= (o~ <] -+ ^ V _`a =op_]A

(F $T P N A 6 SWX 4RE0 AWX] =eS ? QOS p T bc WX U AJ &' mn] ^ARq Oh 8 FO]^ (o~=op1 a&' mn= *+]^A^ d ^TN 4 mn /4 A }m]^Z[Q

2.2 a^Rq

? VHmn [f a^ • A (o~=op_]A (F $T P N A 6 SWX 4RE0 AW X] =eS ? QOS p T bc WX U AJ &' mna^ARq Oh 8 FO a^ (o~=op 1 a&' mn= *+ a^Aa^ d ^TN 4 mn /4 A}ma^Z[Q

2.3 ? `r_`

a]^ (o~= 9 3 T _op ef } 30=RqZ[A gX u `A F ^]a^= hi \ j Q

WXTU *kl SRqA @Rq lmn } Rq o C A pq }mRq o] = Q h mnA / }]a^Z[A ZC50 $SRqQ

@5 rs _` tu C A ]v =_`op 5F A F ^ w RqQ

3. 1234/0,>8

() mn• a^ #$ A Z $SRSTUQ

3.1]^Rq

VHmn [f]^ • A (o~op_]A$T 6 $ x M P N AeS y S z MN A () mn]^A]^ (o~] - @{ 1 a qK= T mopA1) () mn *+]^Ab TN 4 m n /4 A}m]^Z[Q

3.2 a^Rq

VHmn [f a^ • A (o~op_]A$T 6 $ | M P N AeS y S z MN A () mna^Aa^ (o~] - @{ 1 a qK= T mopA1) () mn *+ a^Ab TN 4 m n /4 A}ma^Z[Q

3.3 ? `6_`

a]^ (o~= 9 3 T _op ef } 30=RqZ[A gX u `A F ^]a^= hi \ j Q

$STU *kl SRqA ZC }m p Q h mnA / }]a^Z[A 50 $SRqQ

@5 rs _` tu C ]v =_`op 5F A F ^ w RqQ

4. <=>?)*;./

r &' mn=VH }~ dt \ (o~] -+ TU I`a Q

5 @ABC

mn=TU I 78 <] (• ~AK Sq ! ! "# $T $ S ! A * ? -L }[~ VH7 M/ Q

6 SF_6 !"DE./

%& f X ' %A @ SF_6 %*4UbkW , 9 () cC A ' %% *+,- $~= 9 3op _]A ef . %() ;j . % SF_6 %*4U - , !bW , /() cC A 0+,- $~= 1 9 3op_]A ef _`;jQ