HF680N系列
高性能工程型驱动



GUIDE

Usf_l Esgbc Rcaf lmjmew Am,* Jrb,

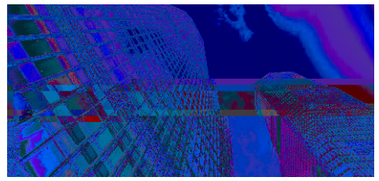
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uuu,ebcrca,amk

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Amnwpgefr¦ Usf_l Esgbc Rcaf lmjmew Am,* Jrb,



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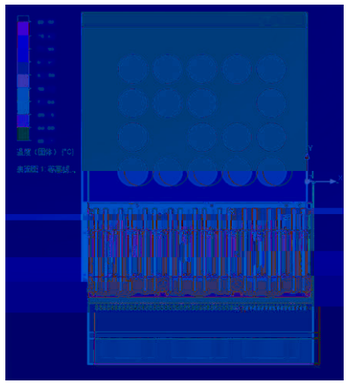
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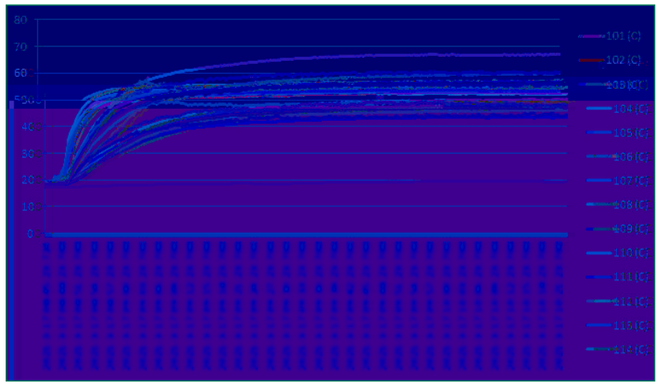
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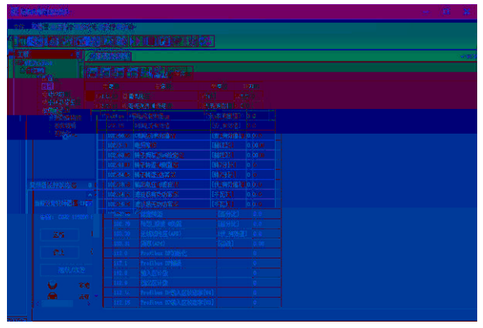
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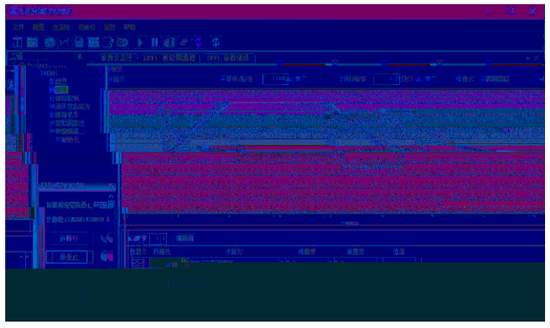


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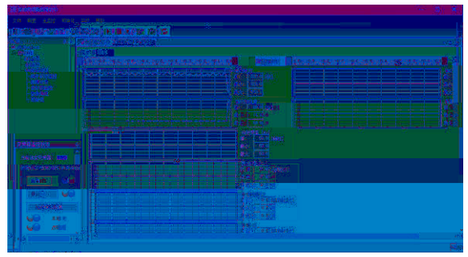


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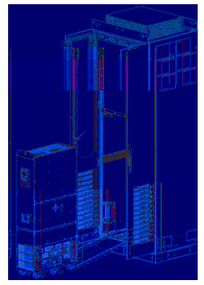


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JAB p





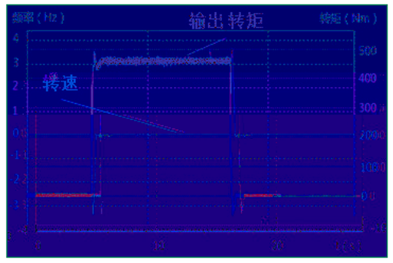
JAB 02.kk(/4.kk

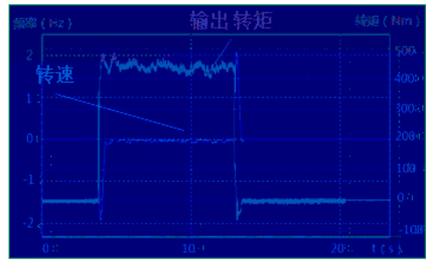
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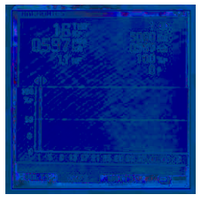


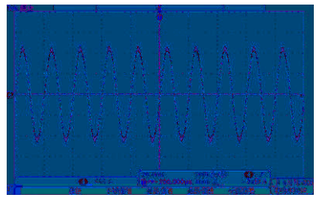


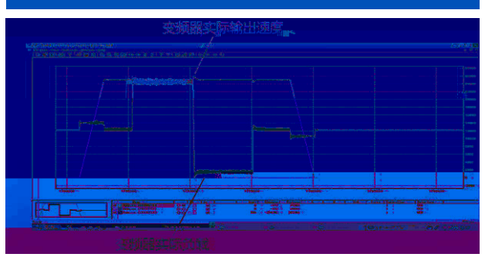
01.Lk .pnk 0..# 01.Lk .pnk 0..#

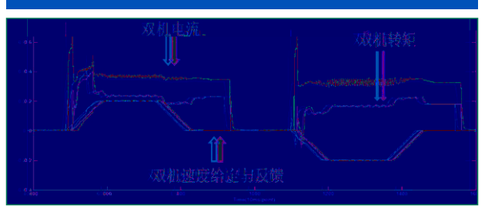
23iU 15iU 01.Lk

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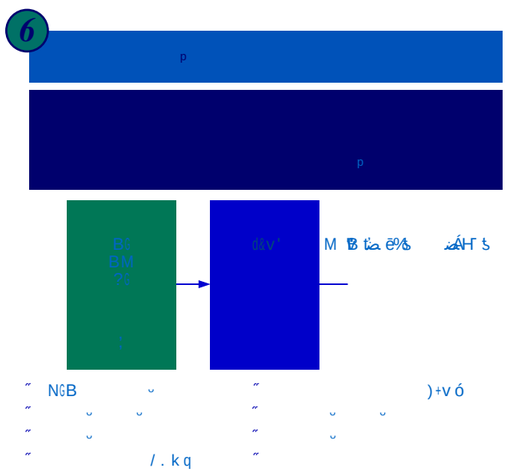


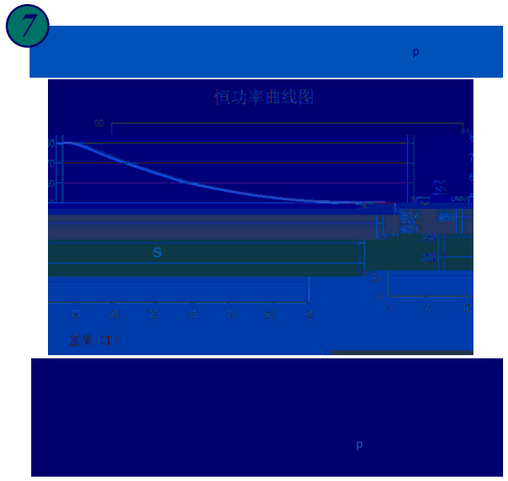




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BPMMN





FD46.L./

FD46.L.0

FD46.L.1

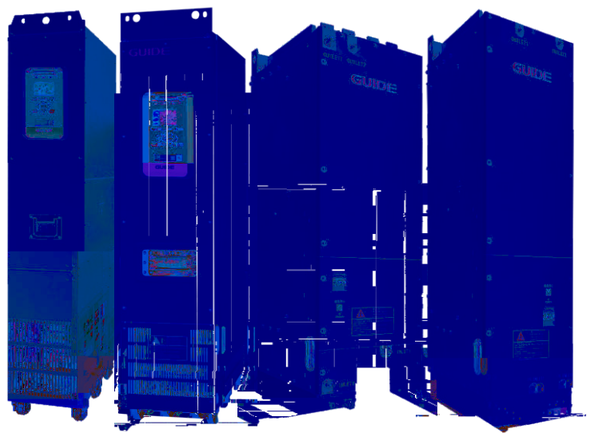
FD46.L/1

FD46.LJA./

FD46.LJA.0

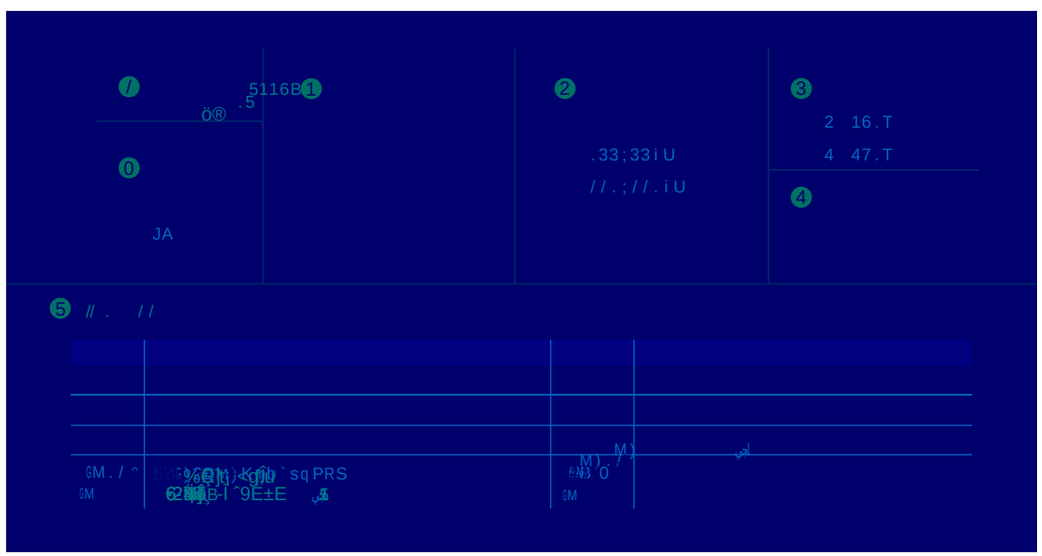
FD46.LJA.1

FD46.L



FD46.L JA VVV + VVVV + 2 + VVV) V

/ 0 1 2 3 4 5



FD46.LJA//

输入		44.T₨47.T
		+/3#₨/.#
输出		.₨47.T
		/ p
		.₨1..Fx
控制特性		˘ ˘
		/iFx₨/.iFx p
		3 /3.# / p 3 /6.# / p /0..iU //.# 3 / p /0..iU /4.# 3 3 p
其它要求		p
		+/._ ₨)3._ 3._ ₨4._ ._
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水冷系统技术指标		- - 4ȣ2
	&J-kgl'	U/ 05 U0 13 U1 20
	&_'	33
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	&ln_'	6.|0..
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FD46.L



FD46.L JA VVV + VVVV + 2 + VVV) V

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JA

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./K	./A
.0K	.0A
.1K	.1A
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.3Kȣ	/1Aȣ
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2

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2 16.T
3ȣ 3..T
4 47.T

4

5

K@./	Kmb`sqPRS	BN./	Npmdg`sqBN
NL./	Npmdglcr	A?L./	A?Lmncl
NE.0			
GM./^GM	5BG)2BM)Kmb`sqPRS	GM.0GM	3BG)0BM
X/	/..kk	X0	0..kk
X1	03.kk	X2	1..kk

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FD46.L./

FD46.L./

	iU	iT?	?	?		k k F(U(B	ie
SL;16.T 16.T¤26.T 16.T							
4							
FD46.L./K+213+2	213	231	431	6..	K2	/113(1..(4..	0..
FD46.L./K+43.+2	43.	457	76.	/0..	K2	/113(1..(4..	0..
FD46.L./A+6..+2	6..	620	/0/3	/266	0(K2	Z	Z
FD46.L./A+/0..+2	/0..	/041	/600	0010	0(K2	Z	Z
FD46.L./A+/6..+2	/6..	/672	0512	1126	1(K2	Z	Z
FD46.L./A+02..+2	02..	0303	1423	2242	2(K2	Z	Z
FD46.L./A+1...+2	1...	1/35	2334	336.	3(K2	Z	Z
FD46.L./A+14..+2	14..	1566	3245	4474	4(K2	Z	Z
/0							
FD46.L./A+/0..+2+RJ	/0..	/041	/600	0010	0(K2	Z	Z
FD46.L./A+02..+2+RJ	02..	0303	1423	2242	2(K2	Z	Z
FD46.L./A+14..+2+RJ	14..	1566	3245	4474	4(K2	Z	Z
SL;47.T 44.T¤47.T 47.T							
4							
FD46.L./K+43.+4	43.	46.	35.	5..	K2	/113(1..(4..	0..
FD46.L./K+71.+4	71.	753	60.	/...	K2	/113(1..(4..	0..
FD46.L./A+/0/.+4	/0/.	/05/	/.41	/1.0	0(K2	Z	Z
FD46.L./A+/51.+4	/51.	/6/3	/3/7	/64.	0(K2	Z	Z
FD46.L./A+04..+4	04..	0501	0056	057.	1(K2	Z	Z
FD46.L./A+124.+4	124.	141.	1.15	150.	2(K2	Z	Z
FD46.L./A+210.+4	210.	2316	1575	243.	3(K2	Z	Z
FD46.L./A+30..+4	30..	3223	2334	336.	4(K2	Z	Z
/0							
FD46.L./A+/0/.+4+RJ	/0/.	/05/	/.41	/1.0	0(K2	Z	Z
FD46.L./A+/51.+4+RJ	/51.	/6/3	/3/7	/64.	0(K2	Z	Z
FD46.L./A+124.+4+RJ	124.	141.	1.15	150.	2(K2	Z	Z
FD46.L./A+30..+4+RJ	30..	3223	2334	336.	4(K2	Z	Z

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2 K2 4
3 FD46.L./K p

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FD46.L./

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FD46.L.0



FD46.L.0

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		?	iU	?	iU			
		SL;16.T	16.Ta26.T		16.T			
FD46.L.0K+/10+2	043	1.6	/7/	0/1	/10	@2	70.(0/.(240	33
FD46.L.0K+/63+2	11.	162	016	076	/63	@3	//00(00/(300	6.
FD46.L.0K+03.+2	263	342	13.	2.1	03.	@4	/1/3(03.(4/6	/0.
FD46.L.0K+1/3+2	323	412	171	3.6	1/3			
FD46.L.0K+133+2	4/.	5/.	22.	351	133			
FD46.L.0K+2..+2	446	555	260	423	2..			
FD46.L.0K+23.+2	50.	616	3/7	504	23.			
FD46.L.0A+03.+2	263	342	13.	2.1	03.	@4	Z	Z
FD46.L.0A+1/3+2	323	412	171	3.6	1/3			
FD46.L.0A+133+2	4/.	5/.	22.	351	133			
FD46.L.0A+2..+2	446	555	260	423	2..			
FD46.L.0A+23.+2	50.	616	3/7	504	23.			
FD46.L.0A+3..+2	62.	756	4.4	6.4	3..	0(@4	Z	Z
FD46.L.0A+41.+2	/.7.	/046	564	/./4	41.			
FD46.L.0A+6..+2	/22.	/454	/.17	/07.	6..			
FD46.L.0A+/0..+2	0/4.	03/2	/336	/713	/0..	1(@4	Z	Z
FD46.L.0A+/4..+2	066.	1130	0.56	036/	/4..	2(@4	Z	Z
FD46.L.0A+0...+2	14..	2/7.	0375	1004	0...	3(@4	Z	Z
FD46.L.0A+02..+2	210.	3.05	1//5	165/	02..	4(@4	Z	Z

FD46.L.0

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		?	iU	?	iU			
		SL;3..T	16.Ta3..T		3..T			
FD46.L.0K+/4.+3	0.0	023	/63	0/0	/4.	@2	70.(0/.(240	33
FD46.L.0K+00.+3	1.1	145	055	07/	00.	@3	//00(00/(300	6.
FD46.L.0K+1/3+3	17.	251	135	2/5	1/3	@4	/1/3(03.(4/6	/0.
FD46.L.0K+133+3	216	31/	2./	25.	133			
FD46.L.0K+2..+3	3.3	4/0	240	31.	2..			
FD46.L.0K+23.+3	37.	5/3	32.	374	23.			
FD46.L.0K+3..+3	40/	531	346	440	3..			
FD46.L.0K+34.+3	52.	675	455	520	34.			
FD46.L.0A+1/3+3	17.	251	135	2/5	1/3	@4	Z	Z
FD46.L.0A+133+3	216	31/	2./	25.	133			
FD46.L.0A+2..+3	3.3	4/0	240	31.	2..			
FD46.L.0A+23.+3	37.	5/3	32.	374	23.			
FD46.L.0A+3..+3	451	6/4	4/4	440	3..			
FD46.L.0A+34.+3	52.	675	455	520	34.			
FD46.L.0A+6..+3	/.2.	/04.	730	/.4.	6..	0(@4	Z	Z
FD46.L.0A+/...+3	/26.	/572	/132	/103	/...			
FD46.L.0A+/3..+3	/641	0036	/5.3	/765	/3..	1(@4	Z	Z
FD46.L.0A+0...+3	06.3	12..	0345	0427	0...	2(@4	Z	Z
FD46.L.0A+03..+3	1256	20/3	1/61	11//	03..	3(@4	Z	Z
FD46.L.0A+10..+3	2/30	3.10	1577	2016	10..	4(@4	Z	Z

FD46.L.0

	?						Ykk[F(U(B	ie
		?	iU	?	iU			
		SL;47.T	44.T¤47.T		47.T			
FD46.L.0K+/10+4	//3	/30	/4.	/04	/10	@2	70.(0/.(240	33
FD46.L.0K+/4.+4	/17	016	03.	/30	/4.			
FD46.L.0K+03.+4	0/6	1..	1/3	016	03.	@3	//00(00/(300	6.
FD46.L.0K+1/3+4	052	16/	2..	1..	1/3	@5	/173(02.(4..	/23
FD46.L.0K+2..+4	127	254	3..	16/	2..			
FD46.L.0K+3..+4	214	311	34.	254	3..			
FD46.L.0K+34.+4	266	4..	41.	311	34.			
FD46.L.0K+41.+4	327	454	5/.	4..	41.			
FD46.L.0A+6..+4	475	//21	/0..	540	6..	0(@5	Z	Z
FD46.L.0A+/0..+4	/.24	/5/2	/6..	//21	/0..			
FD46.L.0A+/6..+4	/346	/7.3	0...	/5/2	/6..	1(@5	Z	Z
FD46.L.0A+0...+4	/521	0064	02..	/7.3	0...	2(@5	Z	Z
FD46.L.0A+02..+4	0.7/	0635	1...	0064	02..			
FD46.L.0A+1...+4	04/2	1207	14..	0635	1...	3(@5	Z	Z
FD46.L.0A+14..+4	1/15	14/7	16..	1207	14..	4(@5	Z	Z

/ ˘ FD46.L.0K
0 ˘ FD46.L.0K
1 ˘ FD46.L.0K@5 6sF
2 ˘ @5 p

FD46.L.0

	16.T¤26.T 16.T¤3..T 44.T¤47.T
	3.-4.Fx
	+/3#¤)/.#
	?DC
	˘ p
	.,777
	1# p
	/3.# 3 / /6.# 3 / p
	35.T¤5/.T 2..T p 35.T¤6/.T 3..T p /...T¤//3.T 47.T p
	/iFx¤/.iFx

FD46.L.1

FD46.L.1

	?	iU	?	iU		Ykk[F(U(B
FD46.L.1K+//.+2	0/3	//?	/0/	7.		
FD46.L.1K+/10+2	043	/10	0/4	//.		
FD46.L.1K+/4.+2	11.	/4.	046	/10	B .	L .¤p
FD46.L.1K+/63+2	143	/63	110	/4.		
FD46.L.1K+0..+2	2/3	0..	145	/63		
FD46.L.1K+00.+2	216	00.	2/6	0..		
FD46.L.1K+03.+2	263	03.	22.	00.		
FD46.L.1K+06.+2	323	06.63	265	03.		
FD46.L.1K+1/3+2	4/.	1/3	326	06.		/1/3(03.(4/6

FD46.L.1

	?	iU	?	iU		Ykk[

FD46.L.1

		32.T₨5..T 32.T₨6/.T 6..T₨//3.T
		&TA'˘ &QTA'˘T-D p
		˘ ˘ ˘ Npmdg`sq BN p
		16.T₨24.T p 16.T₨3..T p 44.T₨47.T p
		.₨1..Fx
		.Fx-0..#&TA QTA'˘.,6Fx-/3.#&T-D'
		/iFx₨/.iFx
		/3.# 3 / /6.# 3 / p

FD46.L/1

FD46.L/1

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6..T₨/0..T											
FD46.L/1K+25.+4	47.	12.	111	//36	251	5.7	/,2/7	.,724	@5?	757(02.(4..	/..
FD46.L/1K+35.+4	47.	2/.	2.0	//36	35.	633	/,/55	.,563			
FD46.L/1K+51.+4	47.	31.	3/7	//36	515	//.3	.,7/.	.,4.5			
FD46.L/1K+61.+4	47.	4..	366	//36	612	/03/	.,6.2	.,314			
FD46.L/1K+7..+4	47.	43.	415	//36	7.2	/133	.,520	.,273			
FD46.L/1K+/...+4	47.	50/	5.5	//36	/..0	/3.1	.,447	.,224			
FD46.L/1A+/24.+4	47.	/.4.	/.17	//36	/251	00/.	.,233	.,1.1	@5?(0	Z	Z
FD46.L/1A+/44.+4	47.	/0..	//54	//36	/446	03.0	.,2.0	.,046			
FD46.L/1A+/6..+4	47.	/1..	/052	//36	/6.5	05//	.,15/	.,025			
FD46.L/1A+0...+4	47.	/220	/2/1	//36	0..2	1..5	.,113	.,001			

FD46.L/1

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		.T₨6/3T?A & ' 3.Fx

FD46.LJA./



FD46.LJA./

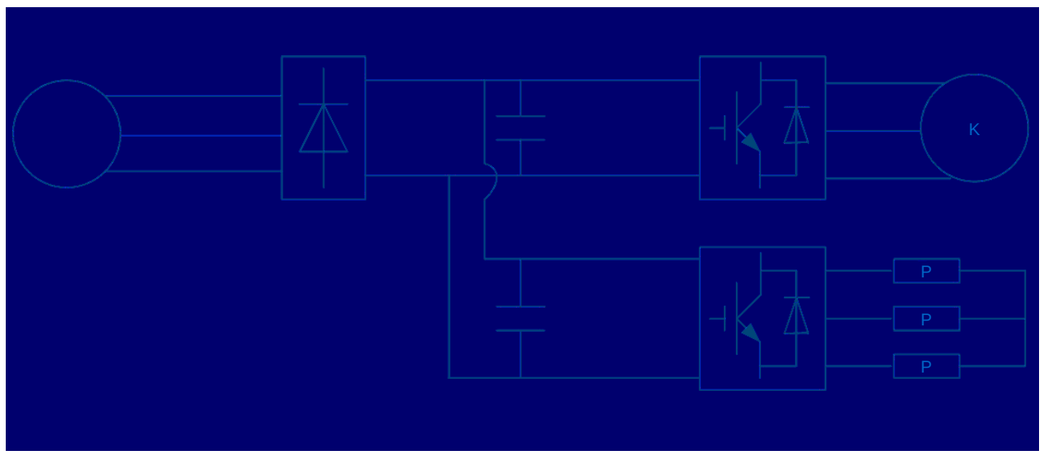
	iU	iT?	?	?		k k F(U(B	ie
44.T|47.T							
FD46.LJA./K+/011+4	/011	/15.	//21	/2..	N/	//..(10.(303	04.
FD46.LJA./K+/713+4	/713	0/3.	/574	00..			
44.T|47.T							
FD46.LJA.2K+/011+4	/011	/15.	//21	/2..	N/	//..(10.(303	04.
FD46.LJA.2K+/713+4	/713	0/3.	/574	00..			

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3 ˘ /713iU ˘
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FD46.LJA./

	44.T#47.T
	3.-4.Fx
	+/3#)/.#
	dJL-0# -2# p 0#dJL-qp
	˘ ˘ Npmdg`sqBN˘Npmdg lcr p
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	.# (/,2/2
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J-kgl	GLJCR/ O.J-kgl GLJCRO /.J-kgl
-	33
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Kn_	.,4
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k k	GLJCR/8QKAR/4/1 GLJCRO8QKAR/0.7

FD46.L/1



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FD46.LJA.0

FD46.LJA.0

	iU	?		k k F(U(B	ie
FD46.LJA.0K+/4.+4	/4.	/45			
FD46.LJA.0K+03.+4	03.	04.			
FD46.LJA.0K+1/3+4	1/3	106			
FD46.LJA.0K+2..+4	2..	2/5			
FD46.LJA.0K+3..+4	3..	30/FD			
FD46.LJA.0K+34.+4	34.	362			
FD46.LJA.0K+41.+4	41.	434			
FD46.LJA.0K+6..+4	63.	611			

O/ //..(031(303 /2.

.4031(30 2.03 Ď î / K

/ FD46.LJA.0K * JA.0K ?

FD46.LJA.1

		32.T₨5..T 6..T₨//3.T
		&TA'˘ &QTA'˘T-D p
		˘ ˘ ˘ Npmdg`sqBN p
		16.T|24.T& 'p 44.T|47.T& 'p
		.₨1..Fx
		.Fx-0..#&TA QTA'˘.,6Fx-/3.#&T-D'
		/iFx₨/.iFx
		/3.# 3 / p 7..iU /0.# 3 / p

FD46.L JA VVV + VVVV + 2 + VVV) V

❶ ❷ ❸ ❹ ❺

❶

.1N
.7K BA+BA
.7D BA+BA

❷

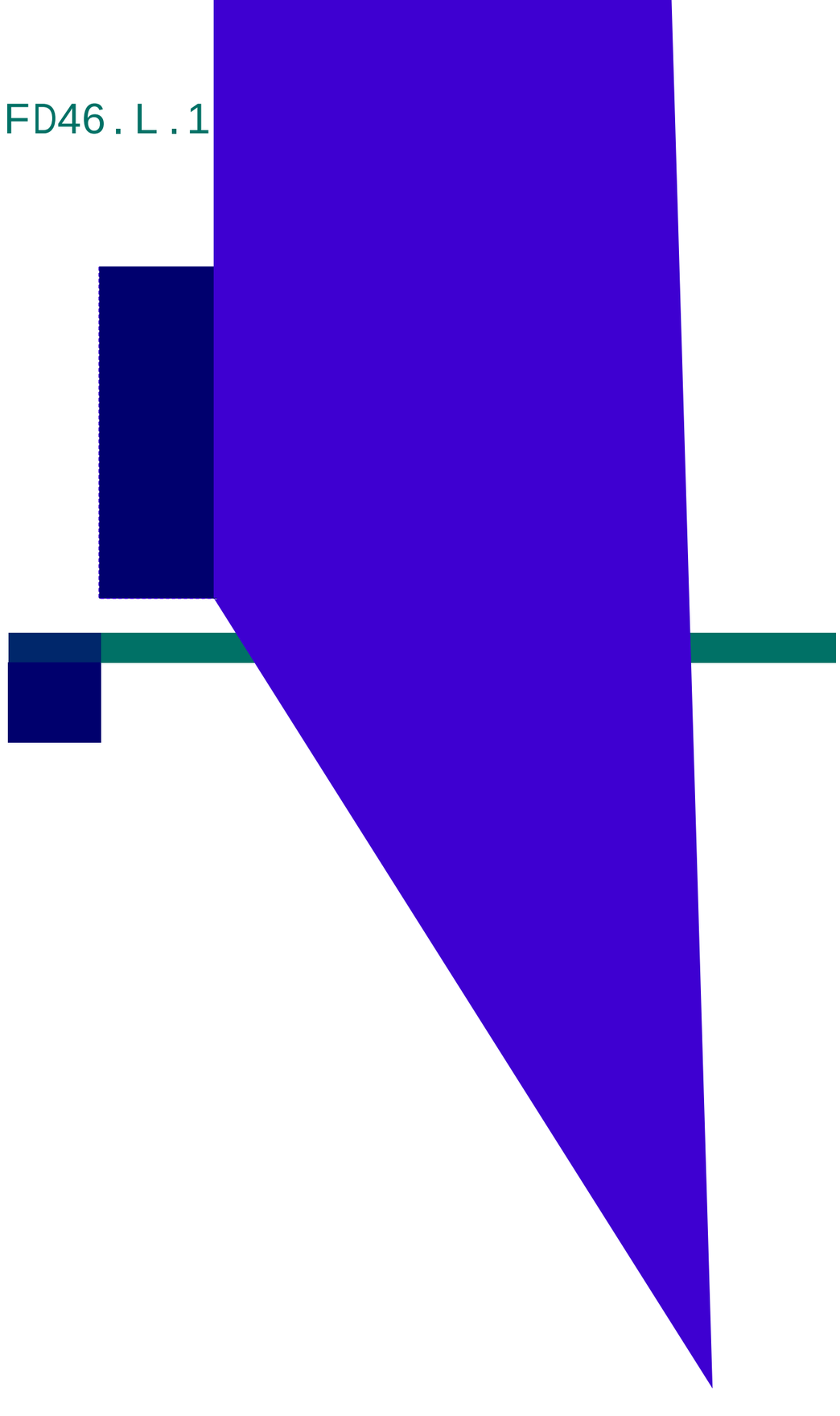
.33;33iU
//.;//.iU
/5..;/5..iU

❸

2 16.T
4 47.T

❹

K@./	Kmb`sqPRS	BN./	Npmdg`sqBN
NL./	Npmdgicr	A?L./	A?Lmncl
QU.4/	#		?/? B*₨O~
GM./^ GM	5BG)2BM)Kmb`sqPRS	GM.0 GM	3BG)0BM

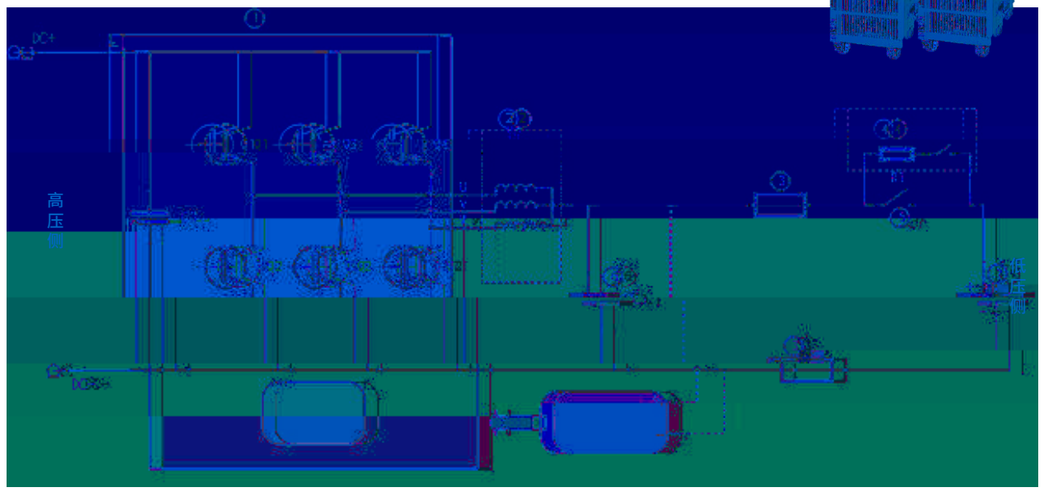

FD46.L.1

		BA32.+//..T
		.T|47.T 3#
		3#
		.Fx|4.Fx
		/3.# 4.q
		/,.iFx|4,.iFx
		/..#
		ˇPQ263 ˇ
		ˇ - ?0/ ?0ˇ ˇ
		ˇ ˇ
		ˇ ˇ ˇ ˇ ˇ
		3 ˇ 0 .ꟷ)/.T .k?-2k?ꟷ0.k?
		1 / 0 ˇ 0 .ꟷ)/.T .k?-2k?ꟷ0.k?
		ˇ ˇ ˇ ˇ ˇ
	JAB	
		BA+?A
		ˇ ˇ ˇ ˇ ˇ
		ˇ ˇ ˇ ˇ ˇ ˇ ˇ ˇ
		/... /... /.. /# ˇ ˇ ˇ ˇ 5..U-k® 5.iN_|/.4iN_
	ˇ	+/._ |)3._ 2._ 4._ & ' 3#PF	73#PF& '
		7Fx|0..Fx 3,7k-q®&.,4E'

FD46.L.7



FD46.L.7D BA+BA



/	FD46.L.7K	/		
0		1		
1		+		
2		/		
3		+		
4		+		
5		+		ˇ

BA+BA p

p p

p

p

BA+BA			&?'		&k k' J(U(F	&k k' A(B	D&k k'	&l e'
FD46.L.7D+/..+2	EBFD46.LBE+/..+6..	1	3.		0..(03. (01.	2+ɕ//(ɕ/6 +/54(/2.	0+ɕ4,2	04,3
FD46.L.7D+/..+2	EBFD46.LBE+0..+6..	1	/..		03.(1/3 (07.	2+ɕ/0(ɕ0. +0/0(/32	0+ɕ//	2/,3
FD46.L.7D+/..+2	EBFD46.LBE+043+6..	1	FD..		033(10. (103	2+ɕ//(ɕ/6 +05.(/54	0+ɕ//	34,4 FD46.L.7D+/..+2
							04//	

FD46.L

Kmb`sqPRS	K@./	EBFD+?K@V/	Kmb`sqPRS
BN	BN./	EBFD+?BNV/	Npmdg`sqBN
BN	BN.0	EBFD+?BNV0	Npmdg`sqBN
NL	NL./	EBFD+?NLV/	Npmdgl cr
NL	NL.0	EBFD+?NLV1	Npmdgl cr
A?L	A?L./	EBFD+?ALV/	A?Lmncl
NE	NE.0	EBFD+?NEV/	
&		EBFD43..2TQ./	
		00,.1,?0/,74,/..	