# **LOCATION SECTION**

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REV.0	Oct.2001				
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## **Contents**

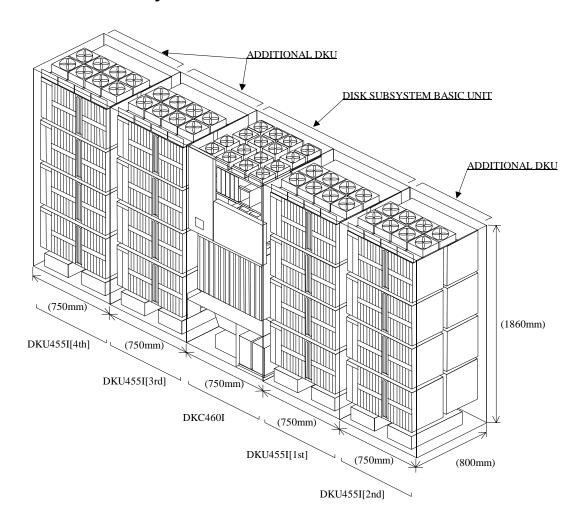
## **LOCATION**

1 Overview of Disk Subsystem	LOCATION01-10
2 Parts Location	LOCATIONOS 40
2.1 Disk Controller Unit	
2.1 DISK COntroller Unit	LOCATIONUZ-10
2.2 PCB and Power Supply Location2.3 Shared Memory Module Location	LOCATIONO2-20
2.3 Shared Memory Module Location	LOCATIONUZ-50
2.4 Cache Memory Module Location	LOCATIONUZ-60
2.6 Disk Unit (DKU405I)	
2.6 DISK UNIT (DKU4051)	LOCATION02-90
3 Panel	LOCATION03-10
3.1 Operator Panel	LOCATION03-10
3.2 Other Switches and LEDs	LOCATION03-30
3.3 Circuit Breakers	LOCATION03-70
3.3.1 3 Phase/60A Model	LOCATION03-70
3.3.2 Single Phase/50A Model	LOCATION03-100
3.3.3 3 Phase/30A Model	LOCATION03-130
3.3.4 Single Phase/30A Model	
3.3.5 3 Phase Model (DKU405I)	LOCATION03-190
3.3.6 Single Phase Model (DKU405I)	LOCATION03-210
4 Connection of External Cable	I OCATION04-10
4.1 AC Cabling	LOCATION04-10
4.1.1 3 Phase/60A Model for USA	LOCATION04-10
4.1.2 3 Phase/60A Model for Europe	
4.1.3 Single Phase/50A Model for USA	LOCATION04-20
4.1.4 Single Phase/50A Model for Europe	LOCATION04-60
4.1.5 3 Phase/30A Model for USA	
4.1.6 3 Phase/30A Model for Europe	
4.1.7 Single Phase/30A Model for USA	I OCATION04-75
4.1.8 Single Phase/30A Model for Europe	I OCATION04-77
4.1.9 3 Phase Model for USA (DKU405I)	I OCATION04-79
4.1.10 3 Phase Model for Europe (DKU405I)	
4.1.11 Single Phase Model for USA (DKU405I)	I OCATION04-79R
4.1.12 Single Phase Model for Europe (DKU405I)	
4.2 Channel Interface	
4.3 PCI Cabling	

5 Internal Cabling Block Diagram	- LOCATION05-10
5.1 Internal Cable Connection of DKC	-LOCATION05-10
5.2 Cable Connection between DKC and DKU	-LOCATION05-20
5.3 Internal Cable Connection of DKU	-LOCATION05-30
5.4 Channel Interface Cabling	- LOCATION05-40
5.5 LAN Cabling	
6 Jumper Setting	
6.1 Shut Down Jumpers	- LOCATION06-10
6.2 Other Jumpers	- LOCATION06-30
6.3 Voltage Selector	- LOCATION06-180

REV.0 Jul.2002			
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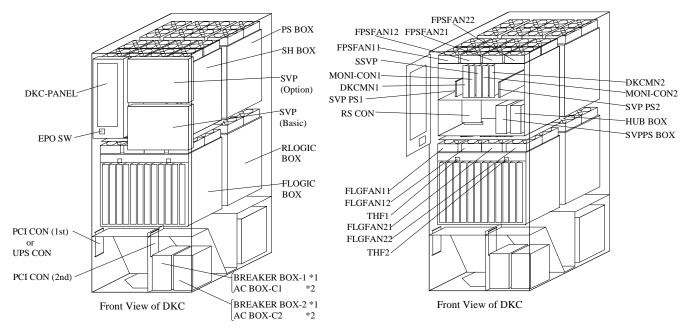
## 1 Overview of Disk Subsystem



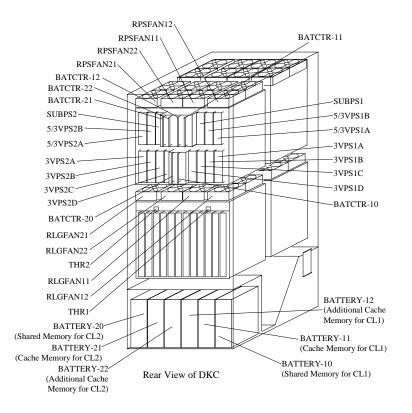
REV.0	Oct.2001					
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## 2 Parts Location

#### 2.1 Disk Controller Unit



(Note) \*1: DKC-F460I-3PS \*2: DKC-F460I-1PS/1PSD/3PSD



#### **FAN ASSY**



(Note)

xxxFANxx: FAN ASSY Location

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REV.2	Oct.2001 Fe	eb.2002 Jun.2002			
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## 2.2 PCB and Power Supply Location

### FRONT LOGIC BOX PCB LOCATION

			CL1						CL2		
N	Р	Q	R	S	Т	U	٧	W	Χ	Υ	Z
W P 4 8 1   A	1 s t C H A	2 n d C H A	3 r d CHA	4 t h C H A	W P 4 9 0 	W P 4 9 0   B 8	1 s t C H A	2 n d C H A	3 r d C H A	4 t h C H A	W P 4 8 1   B
CSW -1N	CHA -1P	CHA -1Q	CHA -1R	CHA -1S	CACHE -1T	CACHE - 1U	CHA -2V	CHA -2W	CHA -2X	CHA -2Y	CSW -2Z
	Basic	Add.1	Add.2	Add.3	Basic (SM)	Add.	Basic	Add.1	Add.2	Add.3	•

\*A: DKC-F460I-41

\*B: Description of CHA PCBs

	CL1																						
	P, Q, R or S																						
WP 4 6 2 - A x 1	SH 281 - C x 4	W P 4 6 1   D x 1	SH 2 81 - A x 2	W P 4 6 1   E x 1	SH 2 8 1   A x 2	W P 4 6 1 - B x 1	SH 2 8 1 — A x 4	W P 4 6 1 - C x 1	SH 2 8 1 - A x 4	WP 4 6 5 - A x 1	SH 2 8 1 - D x 4	WP 4 6 5 - B x 1	SH 2 8 1 - D x 4	WP 4 6 1 F x 1	SH281-Ax4	W P 4 6 1 - G x 1	SH281-Ax4	W P 4 6 1	SH281-Ax2	W P 4 6 1 1 J x 1	SH281-Ax2	WP463-Bx1	SH281-Dx4
,	1	*	2	*	3	*	4	*	5	*	6	*	7	*	8	*	9	*	10	*	11	*	12

										(	CL:	2											
	V, W, X or Y																						
W P 4 6 2   A x 1	SH 2 8 1 - C x 4	W P 4 6 1   D x 1	SH281-Ax2	W P 4 6 1   E x 1	SH 2 8 1	W P 4 6 1   B x 1	SH281-Ax4	W P 4 6 1 - C x 1	SH 2 8 1 - A x 4	WP 4 6 5 - A x 1	SH281-Dx4	W P 4 6 5 - B x 1	SH 2 8 1 - D x 4	W P 4 6 1 - F x 1	SH 281 - A x 4	WP 4 6 1 - G x 1	SH281-Ax4	W P 4 6 1	SH281-Ax2	W P 4 6 1 1 J x 1	SH281-Ax2	WP463-Bx1	SH281-Dx4
*	1	*	2	*	3	*	4	*	5	*	6	*	7	*	8	*	9	*	10	*	11	*	12

- \*1: DKC-F460I-8S
- \*2: DKC-F460I-8GSE \*3: DKC-F460I-4HSE
- \*4: DKC-F460I-8HSE
- \*5: DKC-F460I-8HLE
- \*6: DKC-F460I-8MS
- \*7: DKC-F460I-8ML
- \*8: DKC-F460I-8HSF
- \*9: DKC-F460I-8HLF
- \*10: DKC-F460I-8GSF
- \*11: DKC-F460I-4HSF
- \*12: DKC-F460I-16HSF

REV.2 Oct.2001 Jun.2002	Jul.2002			
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## REAR LOGIC BOX PCB LOCATION

					CL2	2									CL	1			
М	L	-	ł	(	,	J	Н		G	F	E		D		С		Е	3	Α
WP 4 8 1 - A	W P 4 7 1   B × 1	SH281-B×4	W P 4 7 1   B × 1	SH281-B×4	W P 4 7 1   B × 1	SH281-B×4	W P 4 7 1   B × 1	SH281-B×4	WP 4 9 0 - A	WP 4 9 0 - B	W P 4 7 1   B × 1	SH281-B×4	W P 4 7 1   B × 1	SH281-B×4	W P 4 7 1   B × 1	SH281-B×4	W P 4 7 1 - B × 1	SH281-B×4	WP481—B
	*(	С	*B *A					*D	*(	С	*	В	*,	Ą					
CSW -2M	DKA	\-2L	L DKA-2K		DKA-2J		DKA-2H		CA CHE -2G	CA CHE -2F	DKA	\-1E	DKA	\-1D	DKA	\-1C	DKA	\-1B	CSW -1A
	Ad	d.3	Ad	d.2	Ad	d.1	Ва	sic	Basic (SM)	Add.	Ad	d.3	Ad	d.2	Ad	d.1	Ва	sic	

\*A: DKC-F460I-200  $\times$  1 set \*B: DKC-F460I-200  $\times$  2 sets \*C: DKC-F460I-200  $\times$  3 sets

\*D: DKC-F460I-41

REV.0	Oct.2001				
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## **FRONT SH BOX PCB LOCATION**

	CI	L1		CL1/CL2		Cl	L2	
G	F E		Е	D	С	Е	3	Α
SVPPS1	DKC	MN1	MONI-CON1	SSVP	MONI-CON2	DKC	MN2	SVPPS2
S	S	S	S	S	S	S	S	S
Н	Н	Н	Н	Н	Н	Н	Н	Н
1	3	3	3	3	3	3	3	1
1	0	0	0	1	0	0	0	1
1	7	7	5	3	5	7	7	1
-	-	-	-	-	-	-	-	-
В	Α	В	Α	Α	Α	Α	В	В
		*A					*A	

<sup>\*</sup>A: DKC-F460I-UPS

## **REAR PS BOX PS LOCATION**

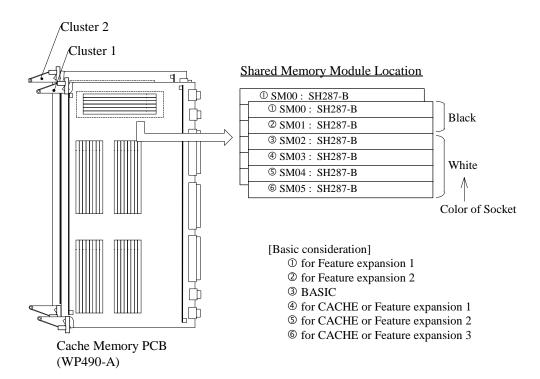
		CL2					CL1		
	_		DU	CU	BU	AU			
5/3VPS2A	5/3VPS2B	SUBPS2	BATCTR-21	BATCTR-22	BATCTR-12	BATCTR-11	SUBPS1	5/3VPS1B	5/3VPS1A
5 / 3 V P S	5 / 3 > P S	SUBPS	S H 2 0 0	S H 2 0 0 - A	S H 2 0 0 - A *A	S H 2 0 0 - A	S U B P S	5 / 3 V P S	5 / 3 V P S
3 V P S	3 > P S	3 V P S	3 V P S	S H 2 0 0	S H 2 0 0 · A	3 V P S	3 V P S	3 V P S	3 V P S
3VPS2A	3VPS2B	3VPS2C	3VPS2D	BATCTR-20	BATCTR-10		3VPS1C	3VPS1B	3VPS1A
	—	—	—	BL	AL	—	—	_	_
		CL2					CL1	•	

\*A: DKC-F460I-42 \*B: DKC-F460I-80

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REV.1 Oct.2001	Apr.2002				
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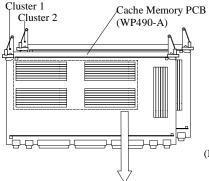
## 2.3 Shared Memory Module Location



REV.0	Oct.2001					
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## 2.4 Cache Memory Module Location

### 1. Standard Cache Memory PCB



(Note) The cache memory module location \*1 through \*G correspond to the CM Location listed in Table 2.4-1

#### Cache Memory Module Location

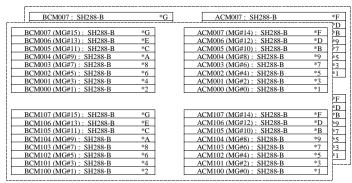
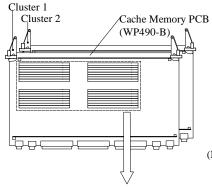


Fig. 2.4-1 Cache Memory Module Location

#### 2. Additional Cache Memory PCB



(Note) The cache memory module location \*H through \*Y correspond to the CM Location listed in Table 2.4-1

#### Cache Memory Module Location

*Y	ACM007 : SH288-B	*X
*Y	ACM007 (MG#14) : SH288-B	*X
	ACM006 (MG#12) : SH288-B	*V
*U	ACM005 (MG#10) : SH288-B	*T
*S	ACM004 (MG#8) : SH288-B	*R
*Q	ACM003 (MG#6) : SH288-B	*P
*N	ACM002 (MG#4) : SH288-B	*M
*L	ACM001 (MG#2) : SH288-B	*K
*J	ACM000 (MG#0) : SH288-B	*H
		Ì
*Y	ACM107 (MG#14) : SH288-B	*X
*W	ACM106 (MG#12) : SH288-B	*V
*U	ACM105 (MG#10) : SH288-B	*T
*S	ACM104 (MG#8) : SH288-B	*R
*Q	ACM103 (MG#6) : SH288-B	*P
*N	ACM102 (MG#4) : SH288-B	*M
*L	ACM101 (MG#2) : SH288-B	*K
*J	ACM100 (MG#0) : SH288-B	*H
	*W *U *S *Q *N *V *V *V *S *Q *N *Y *V *Y	W

Fig. 2.4-2 Cache Memory Module Location

REV.1 Oct.2001	Feb.2002				
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Table 2.4-1 Cache memory capacity and number of necessary options

Cache		Standard Model				igh Perfo			
	DK	C-F460I-	2048		DK	C-F460I-	2048		DKC-F460I-42
Memory	Instal	l PCB	CM	DKC-	Instal	l PCB	CM	DKC-	Additional
Capacity	Basic	Add.	Location	F460I	Basic	Add.	Location	F460I	Battery
	PCB	PCB	(Note 1)	-41	PCB	PCB	(Note 1)	-41	
2GB	1	0	*1	0	-	1	-	1	0
4GB	2	0	*2	0	1	1	*1,*H	1	0
6GB	3	0	*3	0	-	-	-	1	0
8GB	4	0	*4	0	2	2	*2,*J	1	0
10GB	5	0	*5	0	-	-	-	1	0
12GB	6	0	*6	0	3	3	*3,*K	1	0
14GB	7	0	*7	0	-	-	-	1	0
16GB	8	0	*8	0	4	4	*4,*L	1	0
18GB	9	0	*9	0	-	-	-	1	0
20GB	10	0	*A	0	5	5	*5,*M	1	0
22GB	11	0	*B	0	-	-	-	1	0
24GB	12	0	*C	0	6	6	*6,*N	1	0
26GB	13	0	*D	0	-	-	-	1	0
28GB	14	0	*E	0	7	7	*7,*P	1	0
30GB	15	0	*F	0	-	-	-	1	0
32GB	16	0	*G	0	8	8	*8,*Q	1	0
34GB	16	1	*H	1	-	-	-	1	1
36GB	16	2	*J	1	9	9	*9,*R	1	1
38GB	16	3	*K	1	-	-	-	1	1
40GB	16	4	*L	1	10	10	*A,*S	1	1
42GB	16	5	*M	1	-	1	-	1	1
44GB	16	6	*N	1	11	11	*B,*T	1	1
46GB	16	7	*P	1	ı	ı	-	1	1
48GB	16	8	*Q	1	12	12	*C,*U	1	1
50GB	16	9	*R	1	-	-	-	1	1
52GB	16	10	*S	1	13	13	*D,*V	1	1
54GB	16	11	*T	1	-	-	-	1	1
56GB	16	12	*U	1	14	14	*E,*W	1	1
58GB	16	13	*V	1	-	-	-	1	1
60GB	16	14	*W	1	15	15	*F,*X	1	1
62GB	16	15	*X	1	-	-	-	1	1
64GB	16	16	*Y	1	16	16	*G,*Y	1	1

Note 1: The above numbers (\*1 through \*Y) represent the Cache Memory Module locations shown in Fig 2.4-1 and Fig 2.4-2.

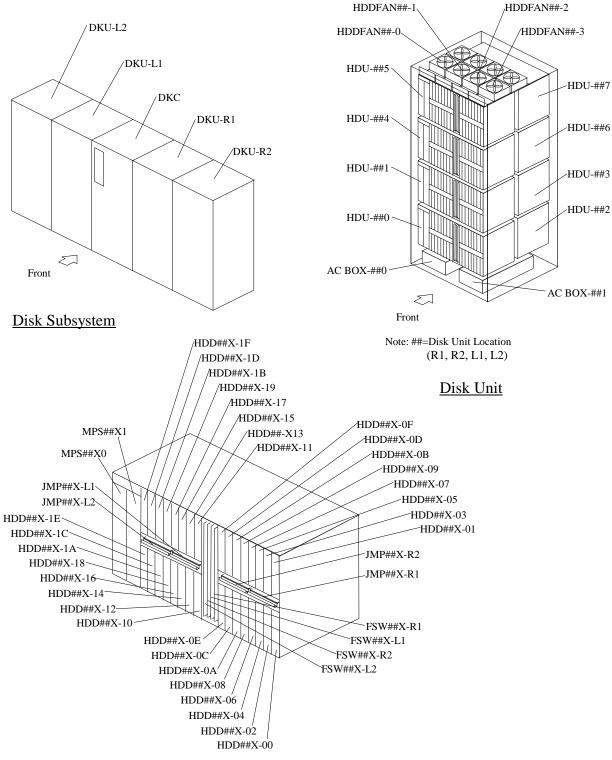
Note 2: A cache memory can't be set up in the '-' mark.

High performance model is effective when the cache memory is installed 8GB or more, and recommend the addition of 8GB.

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REV.1 Oct.2001	Feb.2002				
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## 2.5 Disk Unit



Note 1: ##X=HDU Box Location(R10, R11, ..., L27)

Note 2: The HDD canister location is expressed in the form "(Column/row)" in the SSB/SIM LOG.

Column No.: Last digit of the HDU Box location.

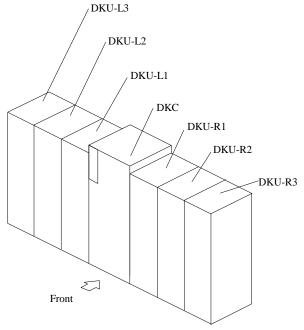
Row No.: 00, 01, 02, ..., 1D, 1E, 1F

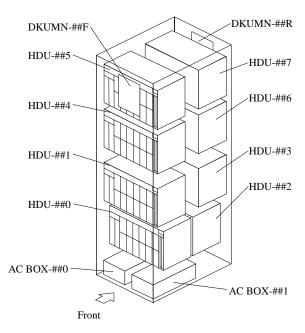
#### **HDU BOX**

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REV.1	Oct.2001	Feb.2002			LOCATION02-80

## 2.6 Disk Unit (DKU405I)



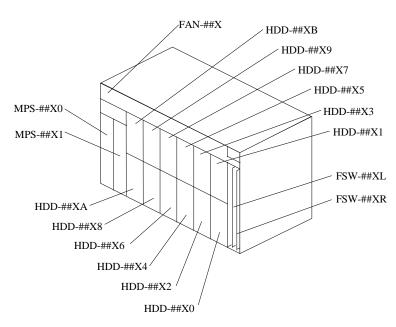


Note: ##=Disk Unit Location

<u>Disk Subsystem</u>

(R1, R2, R3, L1, L2, L3)

## Disk Unit



Note 1: ##X=HDU Box Location(R10, R11, ..., L37)

Note 2: The HDD canister location is expressed in the form "(Column/row)" in the SSB/SIM LOG. Column No. : Last digit of the HDU Box location.

Row No.: 0, 1, 2, ..., 9, A, B

#### **HDU BOX**

REV.0 Jul.2002
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## 3 Panel

## 3.1 Operator Panel

## [1] Operator Panel

Fig. 3.1-1 and Table 3.1-1 show the Operator Panel and its functions respectively. Circled numbers in Fig. 3.1-1 correspond to the numbers in Table 3.1-1.

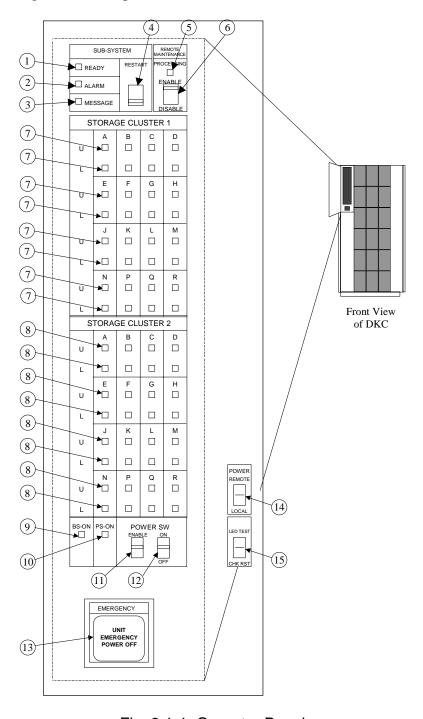


Fig. 3.1-1 Operator Panel

REV.0 Oct.2001				
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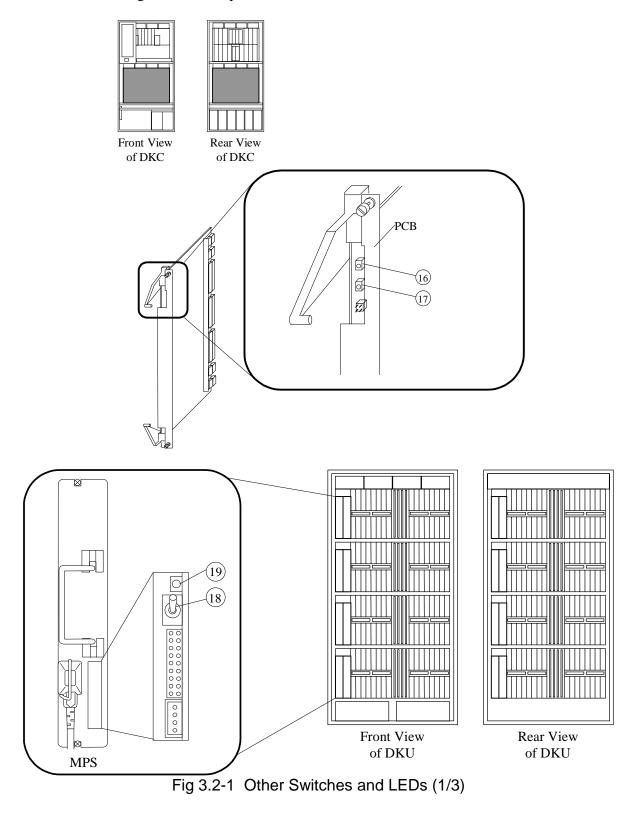
Table 3.1-1 Part Function on Operator Panel

			irt Function on Operator Panei			
No.	Parts Name	Class	Function			
1	SUBSYSTEM READY	LED	Indicates that input/output operation on the channel interface is			
		(Green)	enabled.			
2	SUBSYSTEM ALARM	LED	ON: Indicates DC under voltage of DKC part, DC over			
		(Red)	current, abnormally high temperature, or an			
			unrecoverable failure occurred.			
			Blinking: Indicates DC under voltage of DKU part.			
3	SUBSYSTEM MESSAGE	LED	ON: Indicates that a SIM (Message) was generated from either			
		(Amber)	of the clusters. Applied to both storage clusters.			
4	GUDGXGEEN DEGEADE	0 1 1	Blinking: Indicates that the SVP failure has occurred.			
4	SUBSYSTEM RESTART	Switch	Used to unfence the fenced drive path and to release Write Inhibit.			
5	REMOTE MAINTENANCE	LED	Indicates that remote maintenance is being processed.			
	PROCESSING	(Amber)	TT 1			
6	REMOTE MAINTENANCE	Switch	Used to permit remote maintenance.			
	ENABLE/DISABLE	LED				
7	STORAGE CLUSTER 1 CHANNEL A-R ENABLE	LED (Green)	Serial Channel/Fibre Channel:			
	CHAININEL A-K ENABLE	(Green)	<ul><li>(1) On: Indicates some of the logical paths are established.</li><li>(2) Fast blinking: Indicates that the corresponding channel route is</li></ul>			
	U: Upper		executing the channel command. (Only Serial Channel)			
	L: Lower		(3) Slow blinking: Indicates none of the logical path is established.			
	L. Lowei		(4) Off: Indicates that the corresponding channel route is not			
			enabled.			
			When the 16-port CHA is installed, LED of the L side is effective.			
8	STORAGE CLUSTER 2	LED	Serial Channel/Fibre Channel:			
	CHANNEL A-R ENABLE	(Green)	(1) On: Indicates some of the logical paths are established.			
		(Green)	(2) Fast blinking: Indicates that the corresponding channel route is			
	U: Upper		executing the channel command. (Only Serial Channel)			
	L: Lower		(3) Slow blinking: Indicates none of the logical path is establish			
			(4) Off: Indicates that the corresponding channel route is not			
			enabled.			
			When the 16-port CHA is installed, LED of the L side is effective.			
9	BS ON	LED	Indicates that the Sub-PS is on.(CL 1 or CL 2)			
		(Yellow)				
10	PS ON	LED	Indicates that the subsystem is powered on.			
		(Green)				
11	PWR SW ENABLE	Switch	Used to enable the PWR on/off switch. To enable the PWR on/off			
			switch, turn the PWR SW ENABLE switch to the ENABLE			
			position.			
12	PWR ON/PWR OFF	Switch	To switch on/off the subsystem, use this switch while turning the			
			PWR SW ENABLE switch to the ENABLE position. This switch is			
			valid when the REMOTE/LOCAL switch is set to the LOCAL			
			position.			
13	EMERGENCY POWER OFF	Switch	Used to power off the storage subsystem in an emergency situation.			
14	PWR ON/PWR OFF	Switch	REMOTE position :			
	REMOTE/LOCAL		Subsystem is powered on/off by the instructions from the CPU.			
			LOCAL position :			
			Subsystem is powered on/off by PWR ON/PWR OFF switch.			
15	LED TEST/CHK RESET	Switch	LED TEST position :			
			The LEDs on DKC panel go on.			
			CHK RESET position:			
			The PS ALARM and TH ALARM is reset.			

REV.1	Oct.2001	Feb.2002				
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#### 3.2 Other Switches and LEDs

Fig. 3.2-1 and Table 3.2-1 show the other switches and LEDs and their functions respectively. Circled numbers in Fig. 3.2-1 correspond to the numbers in Table 3.2-1.



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REV.0
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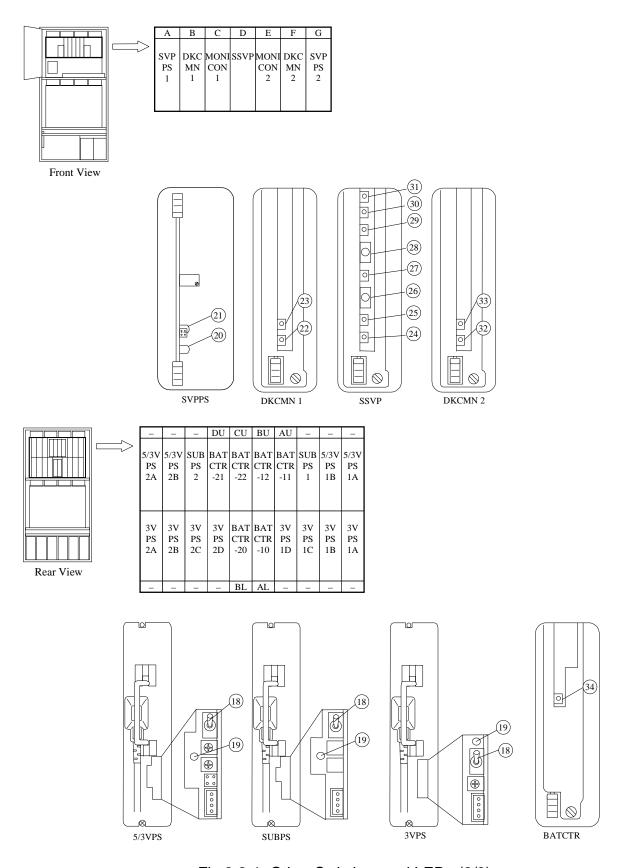
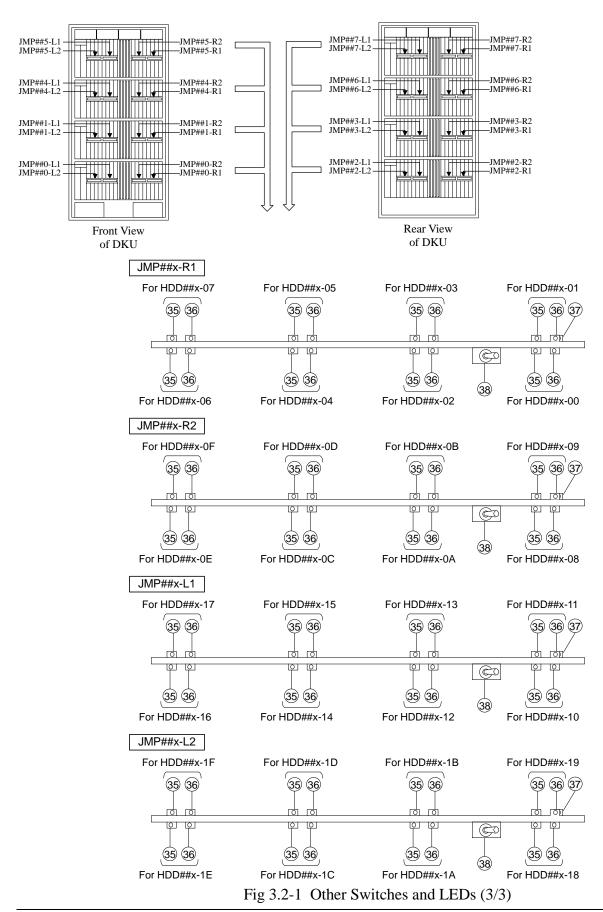


Fig 3.2-1 Other Switches and LEDs (2/3)



## Table 3.2-1 Function of Other Switches and LEDs

			Other Switches and LEDS
No.	Parts Name	Class	Function
16	Shut Down LED	LED	Indicates that the removal of the PCB is possible when the
		(Red)	subsystem is powered on.
17	PS Failure LED	LED	Indicates that the voltage in the PCB is abnormal.
		(Amber)	
18	PS Enable/Disable	Switch	Used to power on/off the PS.
19	PS Enable	LED	Indicates that the PS is providing output voltage.
		(Green)	
20	SVPPS Shut Down LED	LED	Indicates that the removal of the SVPPS is possible when the
		(Red)	subsystem is powered on.
21	SVPPS Enable	LED	Indicates that the SVPPS is powered on.
		(Green)	•
22	DKCMN-1 ENABLE	LED	Indicates that the DKCMN-1 is powered on.
		(Green)	
23	DKCMN-1 Shut Down LED	LED	Indicates that the removal of the DKCMN-1 is possible
		(Red)	when the subsystem is powered on.
24	SSVP ENABLE	LED	Indicates that the SSVP is powered on.
		(Green)	1
25	SSVP Shut Down LED	LED	Indicates that the removal of the SSVP is possible when the
		(Red)	subsystem is powered on.
26	SSVP DUMP	Switch	The data in SVP memory is written to the HDD.
27	SSVP ALARM	LED	This LED shows the state of SSVP.
		(Red)	Lighting BOOT detected abnormality of hardware.
		(rtea)	Slow blinking The dump acquisition of SSVP ended.
			Fast blinking Micro Code of SSVP ended abnormally.
28	SSVP ALARM RESET	Switch	The SSVP detection alarm is reset. Then IMPL of the SVP
		2	is executed.
29		LED	Not used
		(Red)	1 tot used
30		LED	Not used
30		(Red)	1 tot used
31		LED	Not used
31		(Red)	110t dised
32	DKCMN-2 ENABLE	LED	Indicates that the DKCMN-2 is powered on.
32		(Green)	materies that the Directiff 2 is powered on.
33	DKCMN-2 Shut Down LED	LED	Indicates that the removal of the DKCMN-2 is possible
	DICINITY 2 SHOULDOWN LLDD	(Red)	when the subsystem is powered on.
34	BATCTR Shut Down LED	LED	Indicates that the removal of the BATCTR is possible when
J <del>-1</del>	DITIOTIC Shut DOWN LLD	(Red)	the subsystem is powered on.
35	HDD ENABLE	LED	Indicates that the HDD is active.
	INDU BINADLE	(Green)	indicates that the HDD is active.
36	HDD Shut Down LED	LED	Indicates that the removal of the HDD is possible when the
30	Shut DOWN LED	(Red)	subsystem is powered on.
27	JMP Shut Down LED	LED	
37	JIVIF SHULDOWN LED		Indicates that the removal of the JMP is possible when the
20	DVII France ID	(Red)	subsystem is powered on.
38	DKU Frame ID	Switch	Set this switch according to the position in the DKU frame
			in which the JMP PCB is set.
			DKU-R1/L1Set the switch to the right side position.
			DKU-R2/L2Set the switch to the left side position.

REV.0 Oct.2001
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### Switch and LEDs of SVPPS BOX and HUB BOX

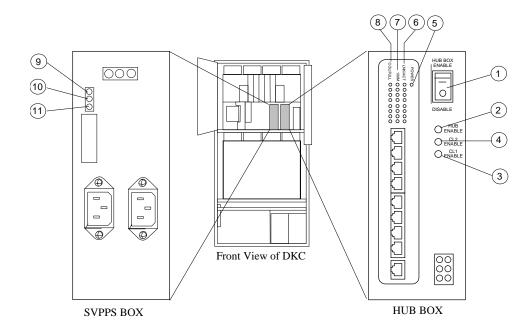


Fig.3.2-2 Switch and LEDs of SVPPS BOX and HUB BOX

Table 3.2-2 Function of Switch and LEDs of SVPPS BOX and HUB BOX

No.	Parts Name	Class	Function
1	HUB BOX ENABLE/DISABLE	Switch	Used to power on/off the HUB BOX
2	HUB BOX ENABLE	LED (Green)	Indicate that the HUB BOX is powered on.
3	CL1 ENABLE	LED (Green)	Indicate that the HUB BOX is powered on
			(Cluster1)
4	CL2 ENABLE	LED (Green)	Indicate that the HUB BOX is powered on
			(Cluster2)
5	HUB BOX POWER	LED (Green)	Indicate that the HUB BOX is powered on.
6	LNK/ACK	LED (Green)	This LED shows the state of HUB ports.
			Lighting Link detected
			Blinking Data transferred
7	100M	LED (Green)	Indicate that the 100Mbps mode of HUB port
8	COL/FULL	LED (Green)	This LED shows the state of HUB ports.
			Lighting Full Duplex mode
			Blinking Collision detected
9	CTL1-PS-READY	LED (Green)	Indicate that the SVPPS-BOX is powered on
			(Cluster1)
10	CTL2-PS-READY	LED (Green)	Indicate that the SVPPS-BOX is powered on
			(Cluster2)
11	OUTPUT	LED (Green)	Indicate that the SVPPS-BOX is powered on.

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## Switches and LEDs of DKU405I

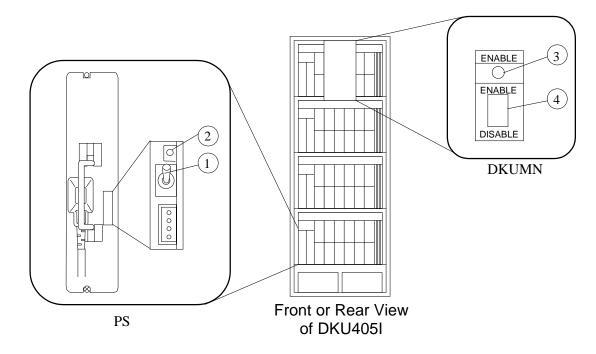


Fig 3.2-3 Switches and LEDs of DKU405I

Table 3.2-3 Function of Switches and LEDs

No.	Parts Name	Class	Function
1	PS Enable/Disable	Switch	Used to power on/off the PS.
2	PS Enable	LED (Green)	Indicates that the PS is providing output voltage.
3	DKUMN ENABLE	LED (Green)	Indicates that each DKUMN is powered on.
4	DKUMN ENABLE/DISABLE	Switch	Used to power on/off each DKUMN.

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#### 3.3 Circuit Breakers

#### 3.3.1 3 Phase/60A Model

Fig. 3.3.1-1 show the locations of Circuit Breakers.

Fig. 3.3.1-2 and Fig. 3.3.1-3 show the connection of power supplies.

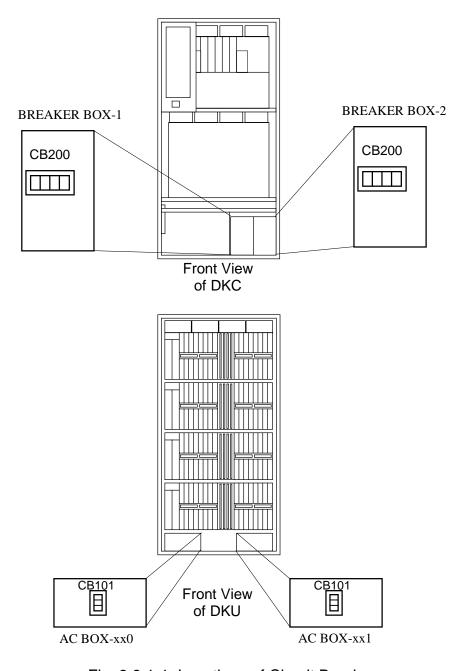


Fig. 3.3.1-1 Locations of Circuit Breakers

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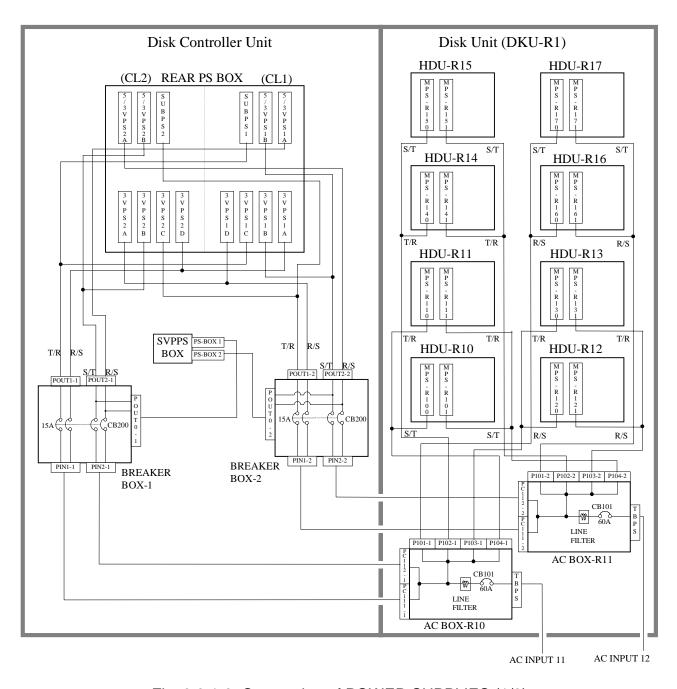


Fig. 3.3.1-2 Connection of POWER SUPPLIES (1/2)

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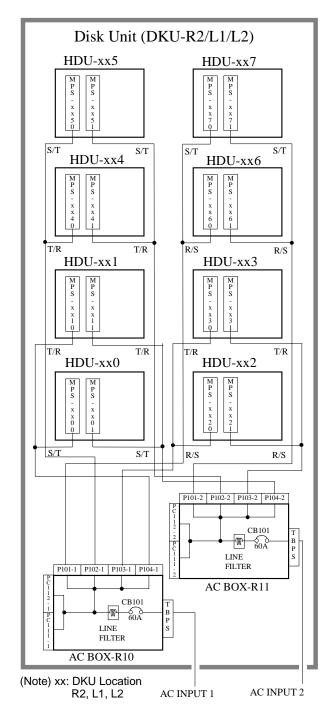


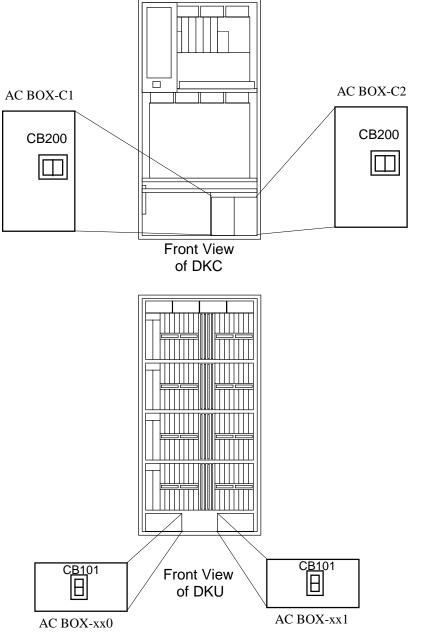
Fig. 3.3.1-3 Connection of POWER SUPPLIES (2/2)

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## 3.3.2 Single Phase/50A Model

Fig. 3.3.2-1 show the locations of Circuit Breakers.

Fig. 3.3.2-2 and Fig. 3.3.2-3 show the connection of power supplies.



xx: DKU Location (R1,R2,L1,L2)

Fig. 3.3.2-1 Locations of Circuit Breakers

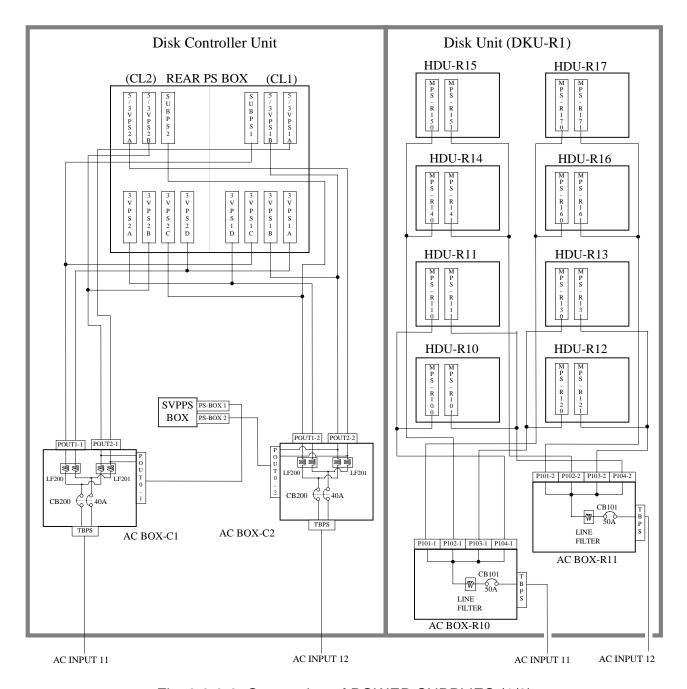


Fig. 3.3.2-2 Connection of POWER SUPPLIES (1/2)

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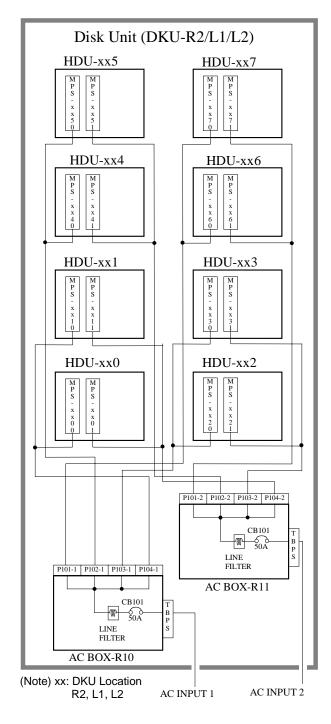


Fig. 3.3.2-3 Connection of POWER SUPPLIES (2/2)

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### 3.3.3 3 Phase/30A Model

Fig. 3.3.3-1 shows the locations of Circuit Breakers.

Fig. 3.3.3-2 and Fig. 3.3.3-3 show the connection of power supplies.

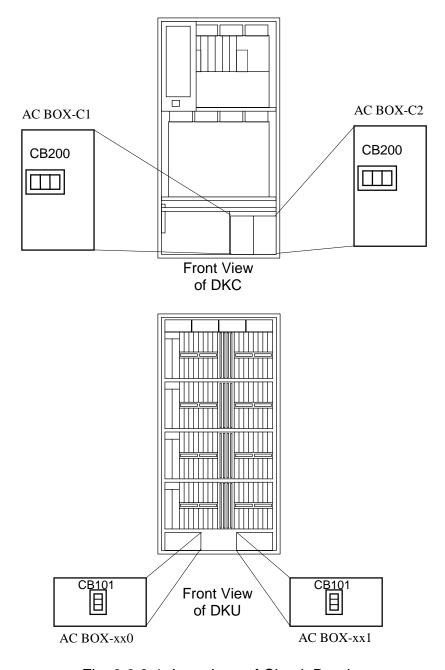


Fig. 3.3.3-1 Locations of Circuit Breakers

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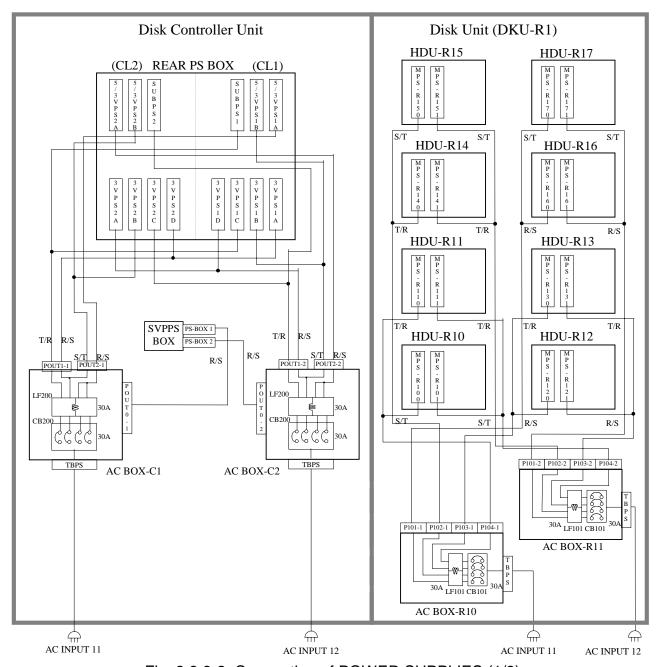


Fig. 3.3.3-2 Connection of POWER SUPPLIES (1/2)

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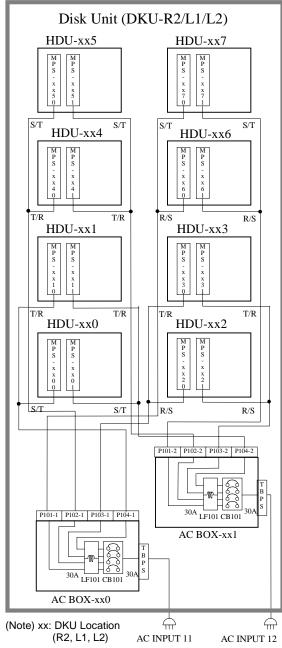


Fig. 3.3.3-3 Connection of POWER SUPPLIES (2/2)

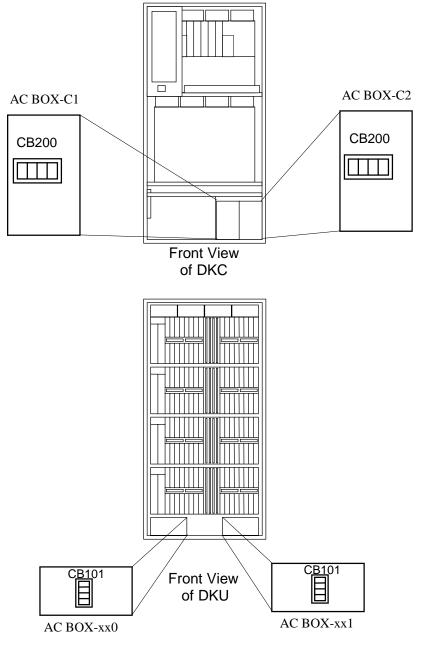
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## 3.3.4 Single Phase/30A Model

Fig. 3.3.4-1 shows the locations of Circuit Breakers.

Fig. 3.3.4-2 and Fig. 3.3.4-3 show the connection of power supplies.



xx: DKU Location (R1,R2,L1,L2)

Fig. 3.3.4-1 Locations of Circuit Breakers

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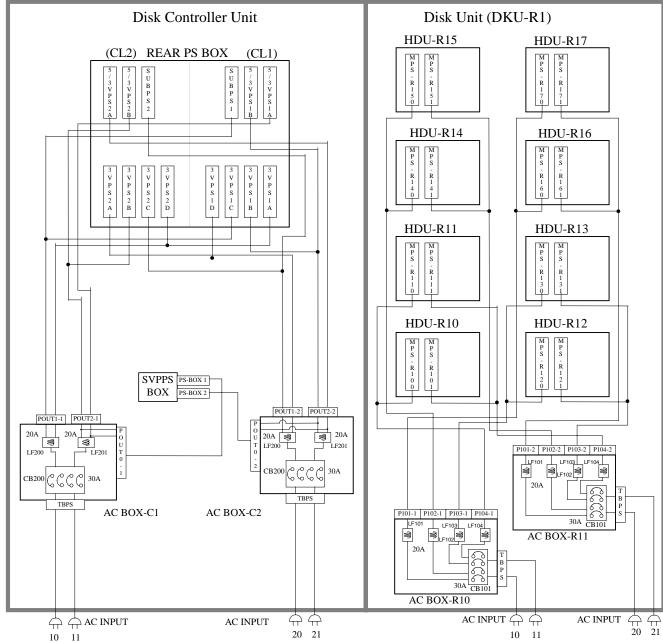


Fig. 3.3.4-2 Connection of POWER SUPPLIES (1/2)

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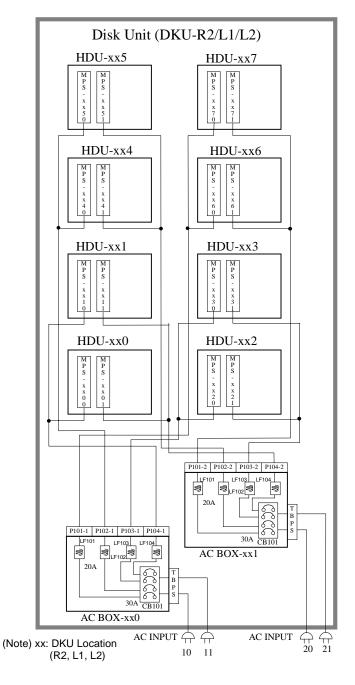


Fig. 3.3.4-3 Connection of POWER SUPPLIES (2/2)

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## 3.3.5 3 Phase Model (DKU405I)

Fig. 3.3.5-1 show the locations of Circuit Breakers.

Fig. 3.3.5-2 show the connection of power supplies.

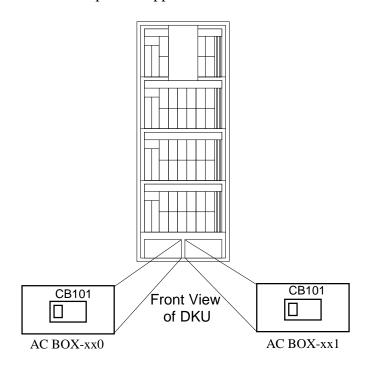
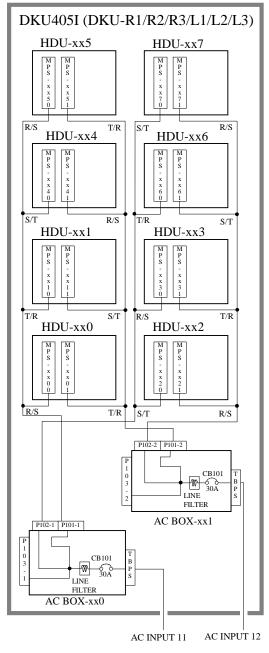


Fig. 3.3.5-1 Locations of Circuit Breakers

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 $xx: DKU\ LOCATION\ (R1,\ R2,\ R3,\ L1,\ L2,\ L3)$ 

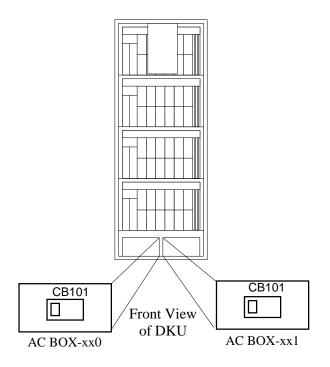
Fig. 3.3.5-2 Connection of POWER SUPPLIES

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## 3.3.6 Single Phase Model (DKU405I)

Fig. 3.3.6-1 show the locations of Circuit Breakers.

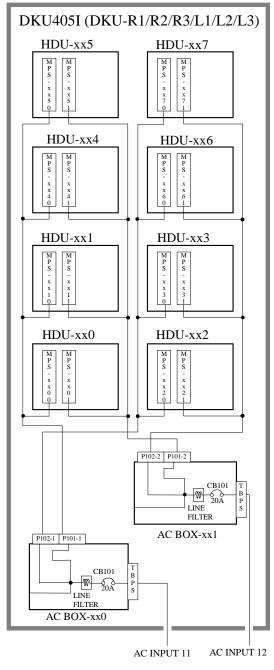
Fig. 3.3.6-2 show the connection of power supplies.



xx: DKU Location (R1,R2,R3,L1,L2,L3)

Fig. 3.3.6-1 Locations of Circuit Breakers

REV.0	Jul.2002				
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xx: DKU LOCATION (R1, R2, R3, L1, L2, L3)

Fig. 3.3.6-2 Connection of POWER SUPPLIES

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#### 4 Connection of External Cable

#### 4.1 AC Cabling

#### 4.1.1 3 Phase/60A Model for USA



#### A DANGER

The DKC and the basic DKU commonly have Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines) so that AC Power of the unit can be supplied from the separate power distribution board with Two Power Supply Cords. Similarly, each of the 2nd DKU, the 3rd DKU, and the 4th DKU also has Two Main Disconnect Devices. Refer to LOCATION03-70 "Circuit Breakers".

Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

#### A. Connection of Power Supply Cord

The unit has two power supply cords with attachment plug type Thomas & Betts RS460P9W. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the attachment plugs for the unit.

Socket Receptacle: Thomas & Betts RS460C9W

Power Cord: Type ST or equivalent, non-shielded type, with four min. #4 AWG conductors. Terminated at one end with an assembled on above socket receptacle cap.

#### B. Requirements to Branch Circuit

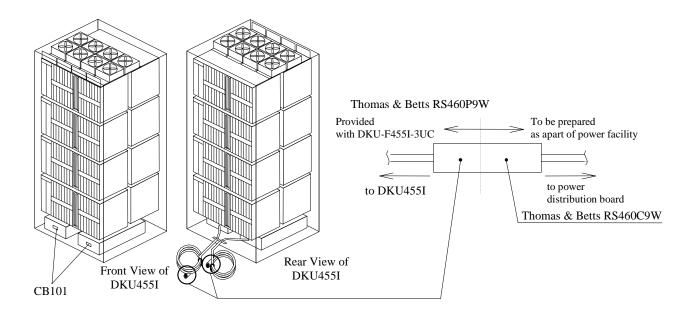
This unit relies on the building installation for protection of the internal components of the equipment. Each line (R/S/T line) should be protected by a short circuit protective device and by an over current protective device rated 60 amp on building installation.

The protective device on building installation shall comply with the NEC requirements (or CEC requirements when installed in Canada), and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

This protection is not required for the neutral line of this unit.

#### C. Disconnection from Power Supply

Each unit has Two Main Disconnect Device(Two Main Breaker CB101s for Dual Power Lines). To remove all utility power from the unit, turn off both main disconnect device CB101s at the same time.



#### 4.1.2 3 Phase/60A Model for Europe



# A DANGER

The DKC and the basic DKU commonly have Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines) so that AC Power of the unit can be supplied from the separate power distribution board with Two Power Supply Cords. Similarly, each of the 2nd DKU, the 3rd DKU, and the 4th DKU also has <u>Two Main Disconnect Devices</u>. Refer to <u>LOCATION03-70</u> "Circuit Breakers".

Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

#### A. Connection of Power Supply Cord

The unit has two power supply cords. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the power cords for the unit.

Socket Receptacle: As shown in the following figure.

Power Cord: Type H07RN-F or equivalent, with five 10 mm<sup>2</sup> conductors.

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Be sure to connect a power cord to the distribution box as illustrated in the following figure. The wrong connection of neutral line may cause damages or fire of the equipment.

To reduce the risk of wrong connection, you should use approved type attachment plug and socket for power cord connection.

High leakage current may be caused between the power supply and this unit. To avoid an electric shock by high leakage current, perform the protective earthing connection before the supply connections and disconnect it after the supply connections.

#### B. Requirements to Branch Circuit

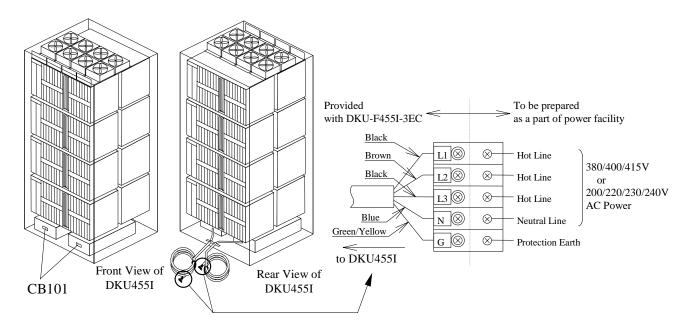
This unit relies on the building installation for protection of the internal components of the equipment. Each line (R/S/T line) should be protected by a short circuit protective device and by an overcurrent protective device rated 60 amp on building installation.

The protective device on building installation shall be comply with National Standards of the country where the units shall be installed, and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

This protection is also required for the neutral line of this unit.

#### C. Disconnection from Power Supply

Each unit has Two Main Disconnect Device (Two Main Breaker CB101s for Dual Power Lines). To remove all utility power from the unit, turn off both main disconnect device CB101s at the same time.



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#### 4.1.3 Single Phase/50A Model for USA



# A DANGER

The DKC has Two Main Disconnect Devices (Two Main Breaker CB200s for Dual Power Lines) so that AC Power of the unit can be supplied from the separate power distribution board with <u>Two</u> Power Supply Cords. Similarly, each of the 1st DKU, the 2nd DKU, the 3rd DKU, and the 4th DKU also has Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines). Refer to LOCATION03-100 "Circuit Breakers".

Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

#### A. Connection of Power Supply Cord

The unit has two power supply cords with attachment plug type Thomas & Betts 9P53U2. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the attachment plugs for the unit.

Socket Receptacle: Thomas & Betts 9C53U2 or 9R53U2W

Power Cord: Type ST or equivalent, non-shielded type, with three min. #6 AWG conductors. Terminated at one end with an assembled on above socket receptacle cap.

#### B. Requirements to Branch Circuit

This unit relies on the building installation for protection of the internal components of the equipment. Each line (U/L1, V/L2 line) should be protected by a short circuit protective device and by an over current protective device rated 50 amp on building installation.

The protective device on building installation shall comply with the NEC requirements (or CEC requirements when installed in Canada), and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

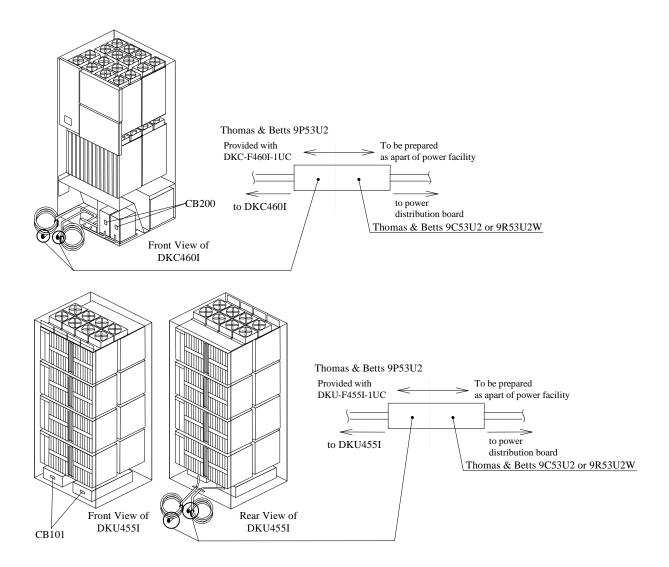
This protection is not required for the neutral line of this unit.

#### C. Disconnection from Power Supply

DKC has Two Main Disconnect Device (Two Main Breaker CB101s for Dual Power Lines). Each DKU has Two Main Disconnect Device (Two Main Breaker CB101s for Dual Power Lines). To remove all utility power from the unit, turn off both main disconnect device CB200s and CB101s at the same time.

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#### 4.1.4 Single Phase/50A Model for Europe



# A DANGER

The DKC has Two Main Disconnect Devices (Two Main Breaker CB200s for Dual Power Lines) so that AC Power of the unit can be supplied from the separate power distribution board with <u>Two</u> Power Supply Cords. Similarly, each of the 1st DKU, the 2nd DKU, the 3rd DKU, and the 4th DKU also has Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines). Refer to LOCATION03-100 "Circuit Breakers".

Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

#### A. Connection of Power Supply Cord

The unit has two power supply cords. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the power cords for the unit.

Socket Receptacle: As shown in the following figure.

Power Cord: Type H07RN-F or equivalent, with three 10 mm<sup>2</sup> conductors.

Be sure to connect a power cord to the distribution box as illustrated in the following figure. The wrong connection of neutral line may cause damages or fire of the equipment.

To reduce the risk of wrong connection, you should use approved type attachment plug and socket for power cord connection.

High leakage current may be caused between the power supply and this unit. To avoid an electric shock by high leakage current, perform the protective earth connection before the supply connections and disconnect it after the supply connections.

#### B. Requirements to Branch Circuit

This unit relies on the building installation for protection of the internal components of the equipment. Each line (U/L1, V/L2 line) should be protected by a short circuit protective device and by an over current protective device rated 50 amp on building installation.

The protective device on building installation shall be comply with National Standards of the country where the units shall be installed, and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

This protection is also required for the neutral line of this unit.

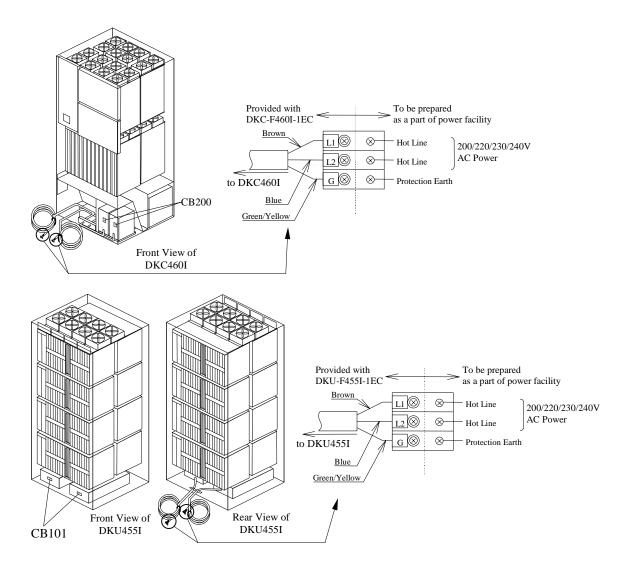
#### C. Disconnection from Power Supply

DKC has Two Main Disconnect Device (Two Main Breaker CB200s for Dual Power Lines). Each DKU has Two Main Disconnect Device (Two Main Breaker CB101s for Dual Power

To remove all utility power from the unit, turn off both main disconnect device CB200s and CB101s at the same time.

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#### 4.1.5 3 Phase/30A Model for USA



# **A** DANGER

The DKC has Two Main Disconnect Devices (Two Main Breaker CB200s for Dual Power Lines) so that AC Power of the unit can be supplied from the separate power distribution board with <u>Two</u> Power Supply Cords. Similarly, each of the DKU-R1, the DKU-R2, the DKU-L1 and the DKU-L2 also has Two Main Disconnect Devices. Refer to LOCATION03-130 "Circuit Breakers". Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

### A. Connection of Power Supply Cord

The unit has two power supply cords with attachment plug type Thomas & Betts 3760PDG or DDK 115J-AP8508. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the attachment plugs for the unit.

Socket Receptacle: Thomas & Betts 3934

Power Cord: Type ST or equivalent, non-shielded type, with four min. #8 AWG conductors. Terminated at one end with an assembled on above socket receptacle cap.

#### B. Requirements to Branch Circuit

This unit relies on the building installation for protection of the internal components of the equipment. Each line (R/S/T line) should be protected by a short circuit protective device and by an over current protective device rated 30 amp on building installation.

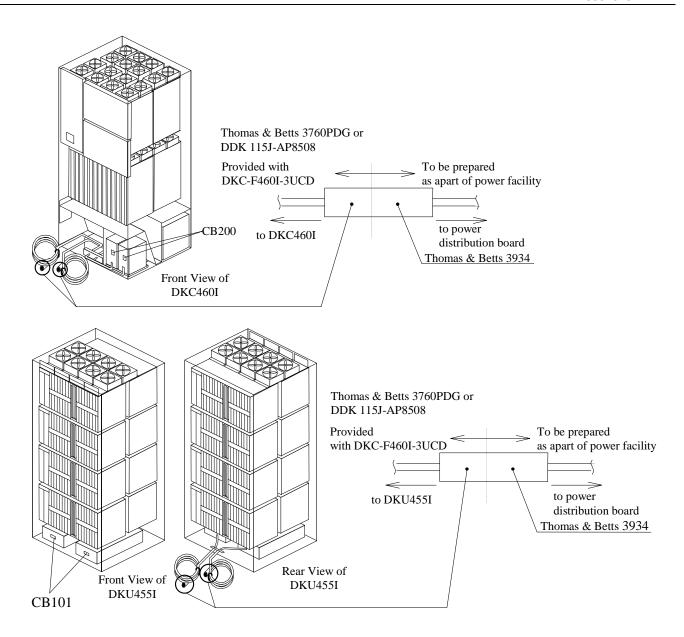
The protective device on building installation shall comply with the NEC requirements (or CEC requirements when installed in Canada), and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

This protection is not required for the neutral line of this unit.

#### C. Disconnection from Power Supply

DKC has Two Main Disconnect Devices (Two Main Breaker CB200s for Dual Power Lines). Each DKU has Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines). To remove all utility power from the unit, turn off both main disconnect device CB200s and CB101s at the same time.

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#### 4.1.6 3 Phase/30A Model for Europe



# **A** DANGER

The DKC has Two Main Disconnect Devices (Two Main Breaker CB200s for Dual Power Lines) so that AC Power of the unit can be supplied from the separate power distribution board with <u>Two</u> Power Supply Cords. Similarly, each of the DKU-R1, the DKU-R2, the DKU-L1 and the DKU-L2 also has Two Main Disconnect Devices. Refer to LOCATION03-130 "Circuit Breakers". Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

### A. Connection of Power Supply Cord

The unit has two power supply cords. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the power cords for the unit.

Socket Receptacle: As shown in the following figure.

Power Cord: Type H07RN-F or equivalent, with five 6 mm<sup>2</sup> conductors.

Be sure to connect a power cord to the distribution box as illustrated in the following figure. The wrong connection of neutral line may cause damages or fire of the equipment.

To reduce the risk of wrong connection, you should use approved type attachment plug and socket for power cord connection.

High leakage current may be caused between the power supply and this unit. To avoid an electric shock by high leakage current, perform the protective earth connection before the supply connections and disconnect it after the supply connections.

#### B. Requirements to Branch Circuit

This unit relies on the building installation for protection of the internal components of the equipment. Each line (R/S/T line) should be protected by a short circuit protective device and by an over current protective device rated 30 amp on building installation.

The protective device on building installation shall be comply with National Standards of the country where the units shall be installed, and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

This protection is also required for the neutral line of this unit.

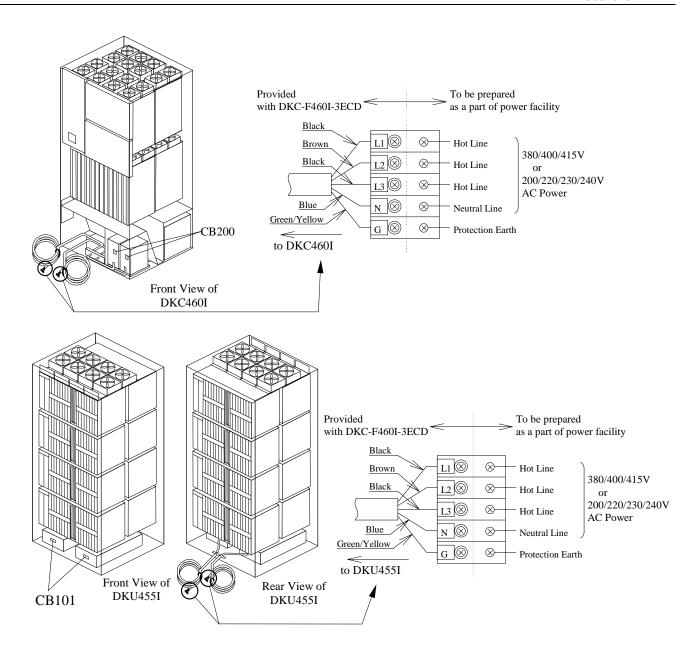
#### C. Disconnection from Power Supply

DKC has Two Main Disconnect Devices (Two Main Breaker CB200s for Dual Power Lines). Each unit has Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines).

To remove all utility power from the unit, turn off both main disconnect device CB200s and CB101s at the same time.

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#### 4.1.7 Single Phase/30A Model for USA



# A DANGER

The DKC has Two Main Disconnect Devices (Two Main Breaker CB200s for Dual Power Lines) so that AC Power of the unit can be supplied from the separate power distribution board with Four Power Supply Cords. Similarly, each of the 1st DKU, the 2nd DKU, the 3rd DKU, and the 4th DKU also has Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines). Refer to LOCATION03-160 "Circuit Breakers".

Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

#### A. Connection of Power Supply Cord

The unit has four power supply cords with attachment plug type Thomas & Betts 3750DP. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the attachment plugs for the unit.

Socket Receptacle: Thomas & Betts 3933

Power Cord: Type ST or equivalent, non-shielded type, with three min. #10 AWG conductors. Terminated at one end with an assembled on above socket receptacle cap.

#### B. Requirements to Branch Circuit

This unit relies on the building installation for protection of the internal components of the equipment. Each line (U/L1, V/L2 line) should be protected by a short circuit protective device and by an over current protective device rated 30 amp on building installation.

The protective device on building installation shall comply with the NEC requirements (or CEC requirements when installed in Canada), and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

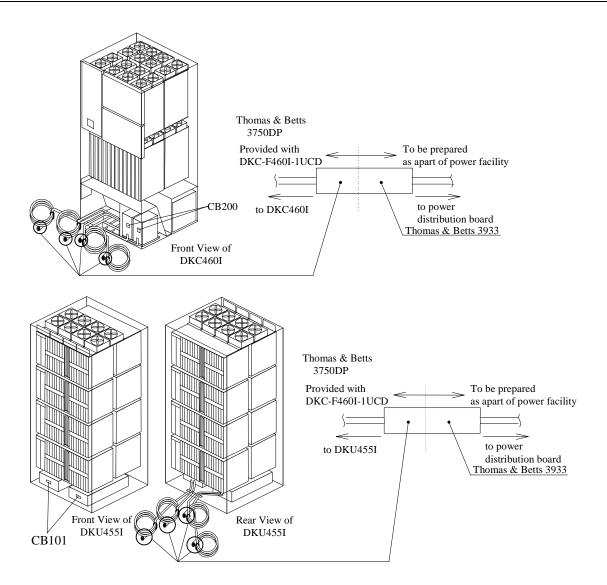
This protection is not required for the neutral line of this unit.

#### C. Disconnection from Power Supply

DKC has Two Main Disconnect Devices (Two Main Breaker CB200s for Dual Power Lines). Each DKU has Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines). To remove all utility power from the unit, turn off both main disconnect device CB200s and CB101s at the same time.

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REV.0	Jun.2002					
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REV.0 Jun.2002			
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#### 4.1.8 Single Phase/30A Model for Europe



# A DANGER

The DKC has Two Main Disconnect Devices (Two Main Breaker CB200s for Dual Power Lines) so that AC Power of the unit can be supplied from the separate power distribution board with Four Power Supply Cords. Similarly, each of the 1st DKU, the 2nd DKU, the 3rd DKU, and the 4th DKU also has Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines). Refer to LOCATION03-160 "Circuit Breakers".

Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

#### A. Connection of Power Supply Cord

The unit has four power supply cords. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the power cords for the unit.

Socket Receptacle: As shown in the following figure.

Power Cord: Type H07RN-F or equivalent, with three 6 mm<sup>2</sup> conductors.

Be sure to connect a power cord to the distribution box as illustrated in the following figure. The wrong connection of neutral line may cause damages or fire of the equipment.

To reduce the risk of wrong connection, you should use approved type attachment plug and socket for power cord connection.

High leakage current may be caused between the power supply and this unit. To avoid an electric shock by high leakage current, perform the protective earth connection before the supply connections and disconnect it after the supply connections.

#### B. Requirements to Branch Circuit

This unit relies on the building installation for protection of the internal components of the equipment. Each line (U/L1, V/L2 line) should be protected by a short circuit protective device and by an over current protective device rated 30 amp on building installation.

The protective device on building installation shall be comply with National Standards of the country where the units shall be installed, and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

This protection is also required for the neutral line of this unit.

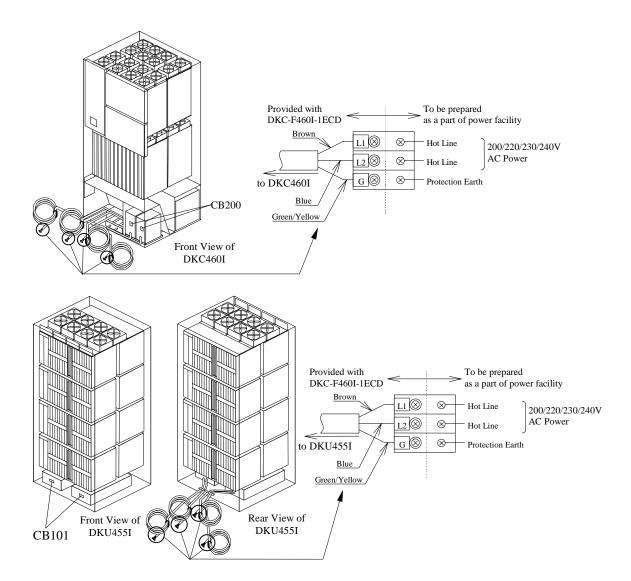
#### C. Disconnection from Power Supply

DKC has Two Main Disconnect Device (Two Main Breaker CB200s for Dual Power Lines). Each DKU has Two Main Disconnect Device (Two Main Breaker CB101s for Dual Power

To remove all utility power from the unit, turn off both main disconnect device CB200s and CB101s at the same time.

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REV.0 Jun.2002		
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#### 4.1.9 3 Phase Model for USA (DKU405I)



#### DANGER

Each of the DKU-R1, the DKU-R2, the DKU-R3, the DKU-L1, the DKU-L2, and the DKU-L3 has Two Main Disconnect Devices. Refer to LOCATION03-190 "Circuit Breakers".

Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

#### A. Connection of Power Supply Cord

The unit has two power supply cords with attachment plug type Thomas & Betts 3760, 3760PDG or DDK 115J-AP8508. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the attachment plugs for the unit.

Socket Receptacle: Thomas & Betts 3754 or 3934

Power Cord: Type ST or equivalent, shielded type, with four min. #8 AWG conductors.

Terminated at one end with an assembled on above socket receptacle cap.

#### B. Requirements to Branch Circuit

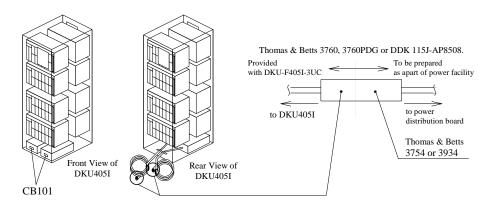
This unit relies on the building installation for protection of the internal components of the equipment. Each line (R/S/T line) should be protected by a short circuit protective device and by an overcurrent protective device rated 30 amp on building installation.

The protective device on building installation shall comply with the NEC requirements (or CEC requirements when installed in Canada), and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

This protection is not required for the neutral line of this unit.

#### C. Disconnection from Power Supply

Each unit has Two Main Disconnect Device(Two Main Breaker CB101s for Dual Power Lines). To remove all utility power from the unit, turn off both main disconnect device CB101s at the same time.



REV.0	Jul.2002			
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#### 4.1.10 3 Phase Model for Europe (DKU405I)



#### DANGER

Each of the DKU-R1, the DKU-R2, the DKU-R3, the DKU-L1, the DKU-L2, and the DKU-L3 has Two Main Disconnect Devices. Refer to LOCATION03-190 "Circuit Breakers".

Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

#### A. Connection of Power Supply Cord

The unit has two power supply cords. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the power cords for the unit.

Socket Receptacle: As shown in the following figure.

Power Cord: Type H07RN-F or equivalent, with five 6.0 mm<sup>2</sup> conductors.

Be sure to connect a power cord to the distribution box as illustrated in the following figure. The wrong connection of neutral line may cause damages or fire of the equipment.

To reduce the risk of wrong connection, you should use approved type attachment plug and socket for power cord connection.

High leakage current may be caused between the power supply and this unit. To avoid an electric shock by high leakage current, perform the protective earthing connection before the supply connections and disconnect it after the supply connections.

#### B. Requirements to Branch Circuit

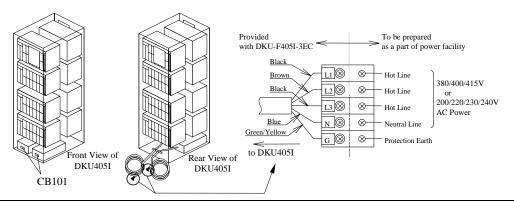
This unit relies on the building installation for protection of the internal components of the equipment. Each line (R/S/T line) should be protected by a short circuit protective device and by an overcurrent protective device rated 30 amp on building installation.

The protective device on building installation shall be comply with National Standards of the country where the units shall be installed, and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

This protection is also required for the neutral line of this unit.

#### C. Disconnection from Power Supply

Each unit has Two Main Disconnect Device (Two Main Breaker CB101s for Dual Power Lines). To remove all utility power from the unit, turn off both main disconnect device CB101s at the same time.



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REV.0	Jul.2002			LOCATION04-79A

#### 4.1.11 Single Phase Model for USA (DKU405I)

#### DANGER

Each of the DKU-R1, the DKU-R2, the DKU-R3, the DKU-L1, the DKU-L2, and the DKU-L3 has Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines). Refer to LOCATION03-210 "Circuit Breakers".

Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

#### A. Connection of Power Supply Cord

The unit has two power supply cords with attachment plug type 3720DP. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the attachment plugs for the unit.

Socket Receptacle: Thomas & Betts 3743 or 3913

Power Cord: Type SJT or equivalent, non-shielded type, with three min. #10 AWG conductors.

Terminated at one end with an assembled on above socket receptacle cap.

#### B. Requirements to Branch Circuit

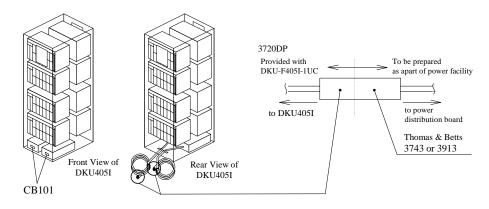
This unit relies on the building installation for protection of the internal components of the equipment. Each line (U/L1, V/L2 line) should be protected by a short circuit protective device and by an overcurrent protective device rated 20 amp on building installation.

The protective device on building installation shall comply with the NEC requirements (or CEC requirements when installed in Canada), and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

This protection is not required for the neutral line of this unit.

### C. Disconnection from Power Supply

Each DKU has Two Main Disconnect Device (Two Main Breaker CB101s for Dual Power Lines). To remove all utility power from the unit, turn off both main disconnect device CB101s at the same time.



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#### 4.1.12 Single Phase Model for Europe (DKU405I)

#### DANGER

Each of the DKU-R1, the DKU-R2, the DKU-R3, the DKU-L1, the DKU-L2, and the DKU-L3 has Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines). Refer to LOCATION03-210 "Circuit Breakers".

Observe all instructions described in this manual before connecting the equipment to the power source and before servicing.

#### A. Connection of Power Supply Cord

The unit has two power supply cords. Be sure to prepare the following socket receptacles and power cords between the power distribution board of the building and the power cords for the unit.

Socket Receptacle: As shown in the following figure.

Power Cord: Type H07RN-F or equivalent, with five 2.5 mm<sup>2</sup> conductors.

Be sure to connect a power cord to the distribution box as illustrated in the following figure. The wrong connection of neutral line may cause damages or fire of the equipment.

To reduce the risk of wrong connection, you should use approved type attachment plug and socket for power cord connection.

High leakage current may be caused between the power supply and this unit. To avoid an electric shock by high leakage current, perform the protective earthing connection before the supply connections and disconnect it after the supply connections.

### B. Requirements to Branch Circuit

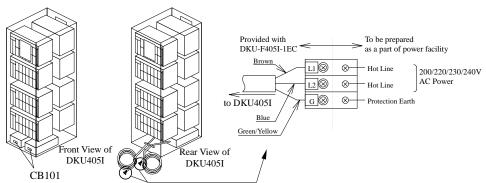
This unit relies on the building installation for protection of the internal components of the equipment. Each line (U/L1, V/L2 line) should be protected by a short circuit protective device and by an overcurrent protective device rated 20 amp on building installation.

The protective device on building installation shall be comply with National Standards of the country where the units shall be installed, and if a protective device interrupts a conductor, it shall also interrupt all other supply conductors.

This protection is also required for the neutral line of this unit.

#### C. Disconnection from Power Supply

Each unit has Two Main Disconnect Device (Two Main Breaker CB101s for Dual Power Lines). To remove all utility power from the unit, turn off both main disconnect device CB101s at the same time.

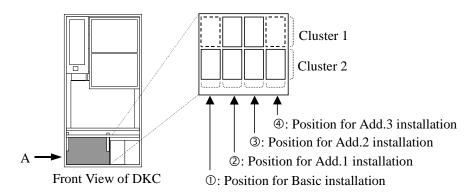


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#### 4.2 Channel Interface

Table 4.2-1 shows the interface connector panel locations.



Refer to the following figure for how to attach the cable clamp and cable routing.

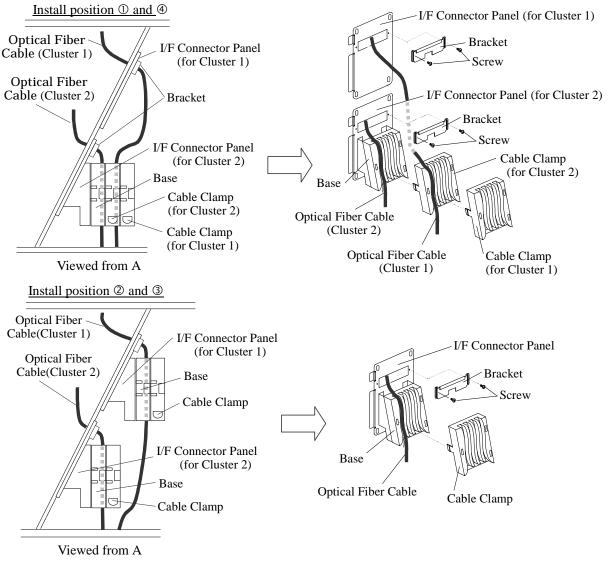
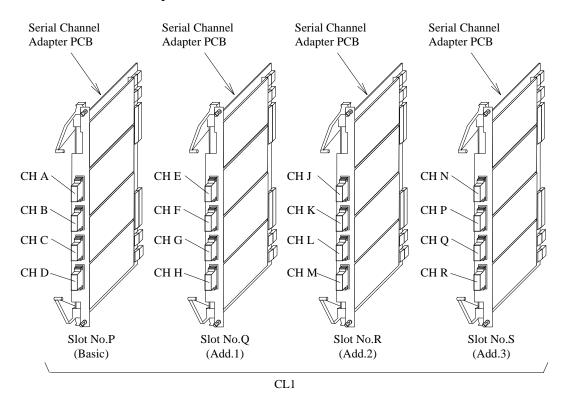


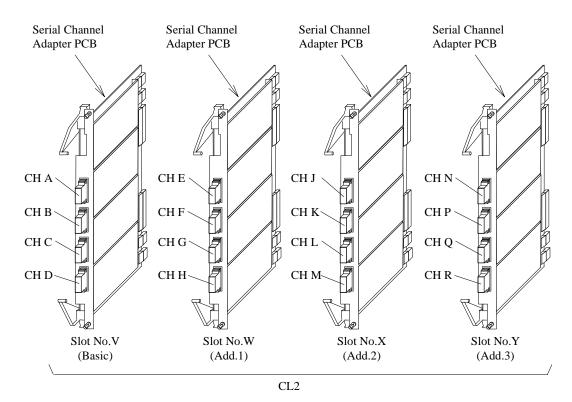
Table 4.2-1 The Mounting Location of Channel Options

REV.1 Oct.2001 Feb.2002
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#### [1] Serial Channel Interface

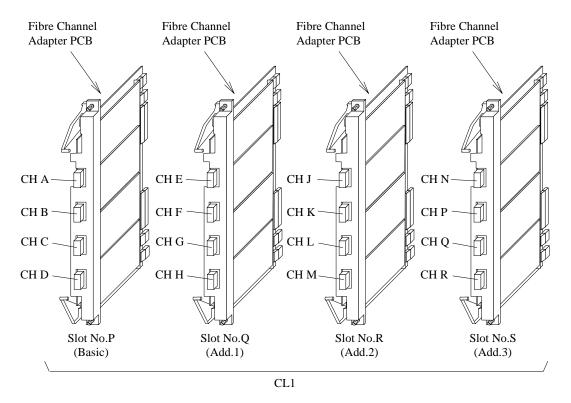
# CH A to CH R are effective to LED by the side of U of STORAGE CLUSTER 1 and STORAGE CLUSTER 2 on the Operator Panel.

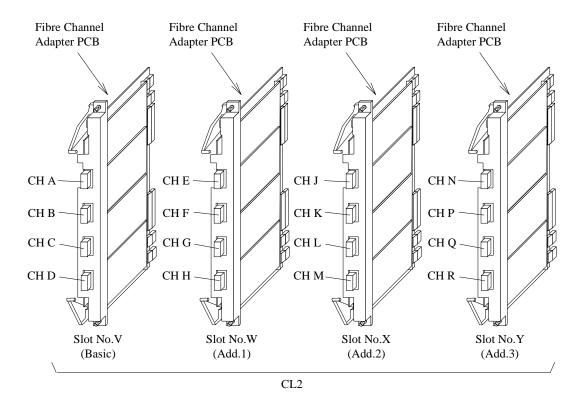




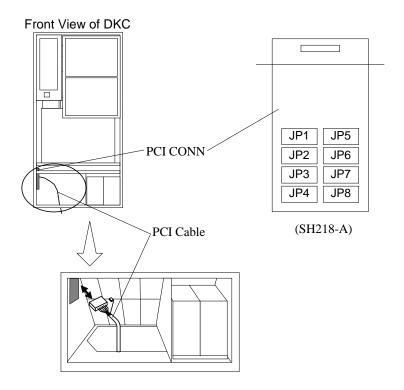
#### [2] Fibre Channel Interface

# CH A to CH R are effective to LED by the side of U of STORAGE CLUSTER 1 and STORAGE CLUSTER 2 on the Operator Panel.





# 4.3 PCI Cabling



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# **5 Internal Cabling Block Diagram**

#### 5.1 Internal Cable Connection of DKC

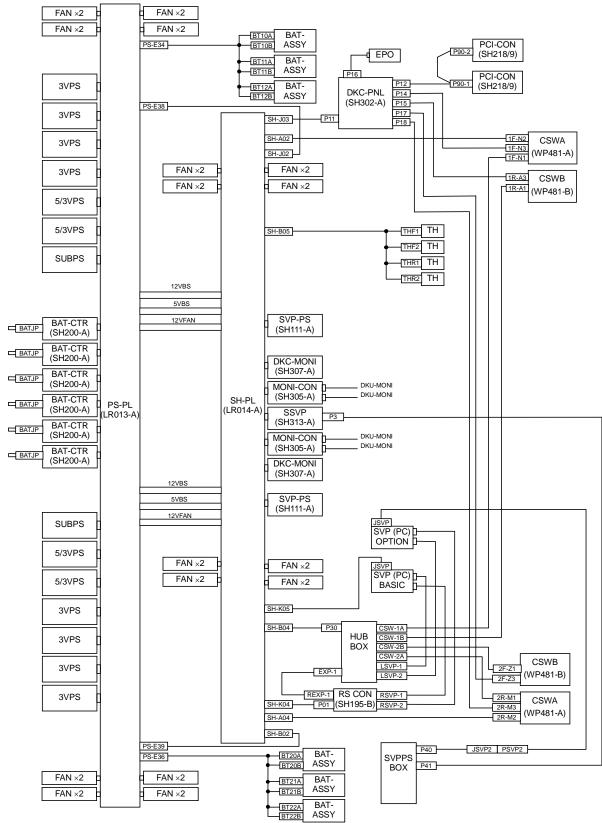


Fig. 5-1 DKC Internal Cabling Diagram

# 5.2 Cable Connection between DKC and DKU

L2 DKU	L1 DKU	DKC	R1 DKU	R2 DKU
HDD BOX (L27)	HDD BOX (L17)		HDD BOX (R17)	HDD BOX (R27)
7•A2 7•A1	7•A2 7•A1	1R•E4A CL1 1R•C4A	7•A1 7•A2	7•A1 7•A2
7•A4 7•A3	7•A4 7•A3	1R•E4B CL1 1R•C4B	7•A3 7•A4	7•A3 7•A4
7•B2 7•B1	7•B2 7•B1	2R•L4A CL 2 2R•J4A	7•B1 7•B2	7•B1 7•B2
7•B4 7•B3	7•B4 7•B3	2R•L4B CL2 2R•J4B	7•B3 7•B4	7•B3 7•B4
HDD BOX (L26)	HDD BOX (L16)		HDD BOX (R16)	HDD BOX (R26)
6•A2 6•A1	6•A2 6•A1	1R•E3A CL 1R•C3A	6•A1 6•A2	6•A1 6•A2
6•A4 6•A3	6•A4 6•A3	1R•E3B CL1 1R•C3B	6•A3 6•A4	6•A3 6•A4
6•B2 6•B1	6•B2 6•B1	2R•L3A 2R•J3A	6•B1 6•B2	6•B1 6•B2
6•B4 6•B3	6•B4 6•B3	2R•L3B CL2 2R•J3B	6•B3 6•B4	6•B3 6•B4
HDD BOX (L25)	HDD BOX (L15)		HDD BOX (R15)	HDD BOX (R25)
5•A2 5•A1	5•A2 5•A1	1R•E2A   1R•C2A	5•A1 5•A2	5•A1 5•A2
5•A4 5•A3	5•A4 5•A3	1R•E2B CL1 1R•C2B	5•A3 5•A4	5•A3 5•A4
5•B2 5•B1	5•B2 5•B1	2R•I 2A 2R•I2A	5•B1 5•B2	5•B1 5•B2
5•B4 5•B3	5•B4 5•B3	2R•L2B CL2 2R•J2B	5•B3 5•B4	5•B3 5•B4
HDD BOX (L24)	HDD BOX (L14)		HDD BOX (R14)	HDD BOX (R24)
4•A2 4•A1	4•A2 4•A1	1R•E1A 1R•C1A	4•A1 4•A2	4•A1 4•A2
4•A4 4•A3	4•A4 4•A3	1R•E1B CL1 1R•C1B	4•A3 4•A4	4•A3 4•A4
4•B2 4•B1	4•B2 4•B1	2R•I.1A 2R•I1A	4•B1 4•B2	4•B1 4•B2
4•B4 4•B3	4•B4 4•B3	2R•L1B CL2 2R•J1B	4•B3 4•B4	4•B3 4•B4
LIDD DOV (L22)	LIDD DOY (L12)		LIDD DOV (D12)	LIDD DOV (D22)
HDD BOX (L23)	HDD BOX (L13)	ID DAA	HDD BOX (R13)	HDD BOX (R23)
3•A2 3•A1	3•A2 3•A1	1R•D4A CL1 1R•B4A	3•A1 3•A2	3•A1 3•A2
3•A4 3•A3	3•A4 3•A3	1R•D4B 1R•B4B	3•A3 3•A4	3•A3 3•A4
3•B2 3•B1	3•B2 3•B1	2R•K4A CL2 2R•H4A	3•B1 3•B2	3•B1 3•B2
3•B4 3•B3	3•B4 3•B3	2R•K4B 2R•H4B	3•B3 3•B4	3•B3 3•B4
HDD BOX (L22)	HDD BOX (L12)		HDD BOX (R12)	HDD BOX (R22)
2•A2 2•A1	2•A2 2•A1	1R•D3A CL1 1R•B3A	2•A1 2•A2	2•A1 2•A2
2•A4 2•A3	2•A4 2•A3	1R•D3B   CL1   1R•B3B	2•A3 2•A4	2•A3 2•A4
2•B2 2•B1	2•B2 2•B1	2R•K3A CL2 2R•H3A	2•B1 2•B2	2•B1 2•B2
2•B4 2•B3	2•B4 2•B3	2R•K3B CL2 2R•H3B	2•B3 2•B4	2•B3 2•B4
HDD BOX (L21)	HDD BOX (L11)		HDD BOX (R11)	HDD BOX (R21)
1•A2 1•A1	1•A2 1•A1	1R•D2A CL1 1R•B2A	1•A1 1•A2	1•A1 1•A2
1•A4 1•A3	1•A4 1•A3	1R•D2B CL1 1R•B2B	1•A3 1•A4	1•A3 1•A4
1•B2 1•B1	1•B2 1•B1	2R•K2A 2R•H2A	1•B1 1•B2	1•B1 1•B2
1•B4 1•B3	1•B4 1•B3	2R•K2B CL2 2R•H2B	1•B3 1•B4	1•B3 1•B4
HDD BOX (L20)	HDD BOX (L10)		HDD BOX (R10)	HDD BOX (R20)
0•A2 0•A1	0•A2 0•A1	1R•D1A   1R•B1A	0•A1 0•A2	0•A1 0•A2
0•A4 0•A3	0•A4 0•A3	1R•D1B CL1 1R•B1B	0•A3 0•A4	0•A3 0•A4
0•B2 0•B1	0•B2 0•B1	2R•K1A CL 2 2R•H1A	0•B1 0•B2	0•B1 0•B2
0•B4 0•B3	0•B4 0•B3	2R•K1B CL2 2R•H1B	0•B3 0•B4	0•B3 0•B4

Fig. 5-2 Cable Connection Diagram between DKC and DKU

REV.1	Oct.2001	Feb.2002				
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DKU-L3 (DKU405I)	DKU-L2 (DKU405I)	DKU-L1 (DKU405I)	DKC	DKU-R1 (DKU405I)	DKU-R2 (DKU405I)	DKU-R3 (DKU405I)
HDD BOX (L37)	HDD BOX (L27)	HDD BOX (L17)		HDD BOX (R17)	HDD BOX (R27)	HDD BOX (R37)
7R•P502 7R•P501	7R•P502 7R•P501	7R•P502 7R•P501	1R•E4A 1R•C4A	7R•P501 7R•P502	7R•P501 7R•P502	7R•P501 7R•P502
7R•P504 7R•P503	7R•P504 7R•P503	7R•P504 7R•P503	1R•E4B CL1 1R•C4B	7R•P503 7R•P504	7R•P503 7R•P504	7R•P503 7R•P504
7L•P502 7L•P501	7L•P502 7L•P501	7L•P502 7L•P501	2R•L4A 2R•J4A	7L•P501 7L•P502	7L•P501 7L•P502	7L•P501 7L•P502
7L•P504 7L•P503	7L•P504 7L•P503	7L•P504 7L•P503	2R•L4B CL2 2R•J4B	7L•P503 7L•P504	7L•P503 7L•P504	7L•P503 7L•P504
HDD BOX (L36) 6R•P502 6R•P501	HDD BOX (L26)	HDD BOX (L16) 6R•P502 6R•P501	[IB FOLL LIB GOL]	HDD BOX (R16) 6R•P501 6R•P502	HDD BOX (R26) 6R•P501 6R•P502	HDD BOX (R36) 6R•P501 6R•P502
	6R•P502 6R•P501 6R•P504 6R•P503		1R•E3A   1R•C3A   1R•C3B			6R•P501 6R•P502 6R•P503 6R•P504
6R•P504 6R•P503 6L•P502 6L•P501					6R•P503 6R•P504	
6L•P504 6L•P503	6L•P502 6L•P501 6L•P504 6L•P503		2R•L3A CL2 2R•J3A	6L•P501 6L•P502	6L•P501 6L•P502	6L•P501 6L•P502
6L•P304 6L•P303	6L•P304 6L•P303	6L•P504 6L•P503	2R•L3B CL2 2R•J3B	6L•P503 6L•P504	6L•P503 6L•P504	6L•P503 6L•P504
HDD BOX (L35)	HDD BOX (L25)	HDD BOX (L15)		HDD BOX (R15)	HDD BOX (R25)	HDD BOX (R35)
5R•P502 5R•P501	5R•P502 5R•P501	5R•P502 5R•P501	1R•E2A 1R•C2A	5R•P501 5R•P502	5R•P501 5R•P502	5R•P501 5R•P502
5R•P504 5R•P503	5R•P504 5R•P503	5R•P504 5R•P503	1R•E2B CL1 1R•C2B	5R•P503 5R•P504	5R•P503 5R•P504	5R•P503 5R•P504
5L•P502 5L•P501	5L•P502 5L•P501	5L•P502 5L•P501	2R•L2A 2R•J2A	5L•P501 5L•P502	5L•P501 5L•P502	5L•P501 5L•P502
5L•P504 5L•P503	5L•P504 5L•P503	5L•P504 5L•P503	2R•L2B CL2 2R•J2B	5L•P503 5L•P504	5L•P503 5L•P504	5L•P503 5L•P504
HDD BOX (L34)	HDD BOX (L24)	HDD BOX (L14)		HDD BOX (R14)	HDD BOX (R24)	HDD BOX (R34)
4R•P502 4R•P501	4R•P502 4R•P501	4R•P502 4R•P501	IR•EIA CLI IR•CIA	4R•P501 4R•P502	4R•P501 4R•P502	4R•P501 4R•P502
4R•P504 4R•P503	4R•P504 4R•P503	4R•P504 4R•P503	IR•EIB CLI IR•CIB	4R•P503 4R•P504	4R•P503 4R•P504	4R•P503 4R•P504
4L•P502 4L•P501	4L•P502 4L•P501	4L•P502 4L•P501	2R•L1A CL2 2R•J1A	4L•P501 4L•P502	4L•P501 4L•P502	4L•P501 4L•P502
4L•P504 4L•P503	4L•P504 4L•P503	4L•P504 4L•P503	2R•L1B CL2 2R•J1B	4L•P503 4L•P504	4L•P503 4L•P504	4L•P503 4L•P504
HDD BOX (L33)	HDD BOX (L23)	HDD BOX (L13)		HDD BOX (R13)	HDD BOX (R23)	HDD BOX (R33)
3R•P502 3R•P501	3R•P502 3R•P501	3R•P502 3R•P501	1R•D4A CL1 1R•B4A	3R•P501 3R•P502	3R•P501 3R•P502	3R•P501 3R•P502
3R•P504 3R•P503	3R•P504 3R•P503	3R•P504 3R•P503	TR•D4B TR•B4B	3R•P503 3R•P504	3R•P503 3R•P504	3R•P503 3R•P504
3L•P502 3L•P501	3L•P502 3L•P501	3L•P502 3L•P501	2R•K4A CL2 2R•H4A	-3L•P501 3L•P502	3L•P501 3L•P502	3L•P501 3L•P502
3L•P504 3L•P503	3L•P504 3L•P503	3L•P504 3L•P503	2R•K4B CL2 2R•H4B	3L•P503 3L•P504	3L•P503 3L•P504	3L•P503 3L•P504
HDD BOX (L32)	HDD BOX (L22)	HDD BOX (L12)		HDD BOX (R12)	HDD BOX (R22)	HDD BOX (R32)
2R•P502 2R•P501	2R•P502 2R•P501	2R•P502 2R•P501	1R•D3A CL1 1R•B3A	2R•P501 2R•P502	2R•P501 2R•P502	2R•P501 2R•P502
2R•P504 2R•P503	2R•P504 2R•P503	2R•P504 2R•P503	1R•D3B 1R•B3B	2R•P503 2R•P504	2R•P503 2R•P504	2R•P503 2R•P504
2L•P502 2L•P501	2L•P502 2L•P501	2L•P502 2L•P501	2R•K3A CL2 2R•H3A	2L•P501 2L•P502	2L•P501 2L•P502	2L•P501 2L•P502
2L•P504 2L•P503	2L•P504 2L•P503	2L•P504 2L•P503	2R•K3B CL2 2R•H3B	2L•P503 2L•P504	2L•P503 2L•P504	2L•P503 2L•P504
HDD BOX (L31)	HDD BOX (L21)	HDD BOX (L11)		HDD BOX (R11)	HDD BOX (R21)	HDD BOX (R31)
1R•P502 1R•P501	1R•P502 1R•P501	1R•P502 1R•P501	1R•D2A 1R•B2A	1R•P501 1R•P502	1R•P501 1R•P502	1R•P501 1R•P502
1R•P504 1R•P503	1R•P504 1R•P503	1R•P504 1R•P503	1R•D2B CL1 1R•B2B	1R•P503 1R•P504	1R•P503 1R•P504	1R•P503 1R•P504
1L•P502 1L•P501	1L•P502 1L•P501	1L•P502 1L•P501	2R•K2A 2R•H2A	1L•P501 1L•P502	1L•P501 1L•P502	1L•P501 1L•P502
1L•P504 1L•P503	1L•P504 1L•P503	1L•P504 1L•P503	2R•K2B CL2 2R•H2B	1L•P503 1L•P504	1L•P503 1L•P504	1L•P503 1L•P504
HDD BOX (L30)	HDD BOX (L20)	HDD BOX (L10)		HDD BOX (R10)	HDD BOX (R20)	HDD BOX (R30)
0R•P502 0R•P501	0R•P502 0R•P501	0R•P502 0R•P501	IR•DIA CLI IR•BIA	0R•P501 0R•P502	0R•P501 0R•P502	0R•P501 0R•P502
0R•P504 0R•P503	0R•P504 0R•P503	0R•P504 0R•P503	1R•D1B 1R•B1B	0R•P503 0R•P504	0R•P503 0R•P504	0R•P503 0R•P504
0L•P502 0L•P501	0L•P502 0L•P501	0L•P502 0L•P501	2R•K1A CL2 2R•H1A	-0L•P501 0L•P502	0L•P501 0L•P502	0L•P501 0L•P502
0L•P504 0L•P503	0L•P504 0L•P503	0L•P504 0L•P503	2R•K1B CL2 2R•H1B	0L•P503 0L•P504	0L•P503 0L•P504	0L•P503 0L•P504
•	•			•	•	•

Fig. 5-2A Cable Connection Diagram between DKC and DKU405I

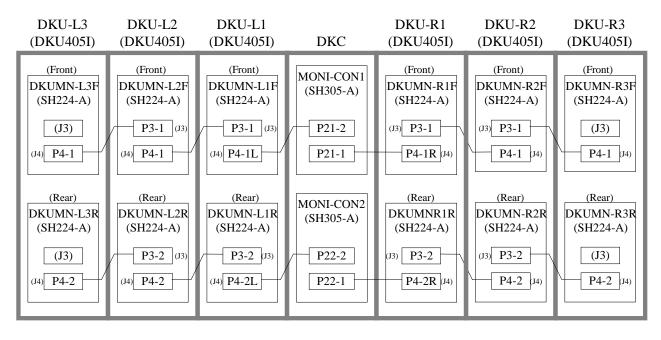


Fig. 5-3B Cable Connection Diagram between DKC and DKU405I

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REV.0 Jul.2002

#### 5.3 Internal Cable Connection of DKU

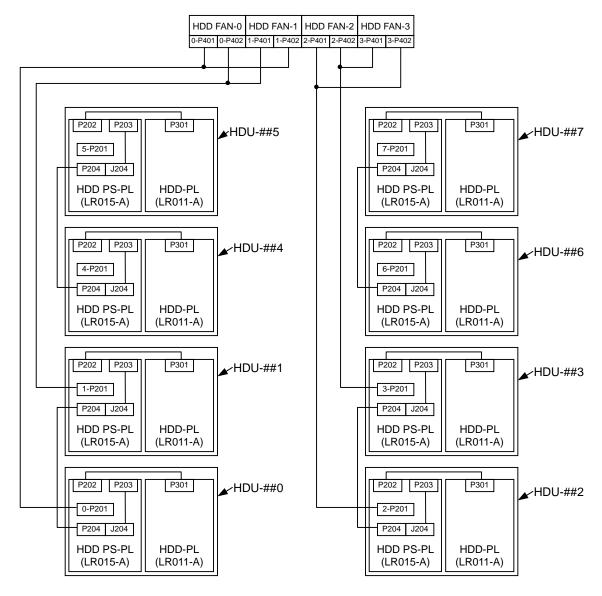


Fig. 5-3 DKU Internal Cabling Diagram

REV.1	Oct.2001	Feb.2002				
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# **5.4 Channel Interface Cabling**

#### DKC-F460I-8S

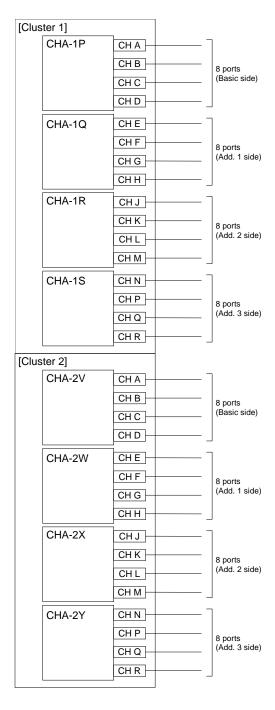


Fig. 5-4 Channel Interface Cabling Diagram ①

REV.1	Oct.2001 Feb.:	2002			
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#### DKC-F460I-8GSE/4HSE/8HSE/8HLE

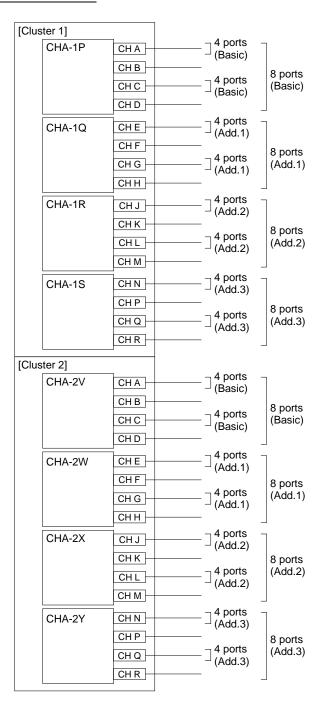


Fig. 5-4 Channel Interface Cabling Diagram ②

REV.1 Oct.2001 Feb.2002			
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# 5.5 LAN Cabling

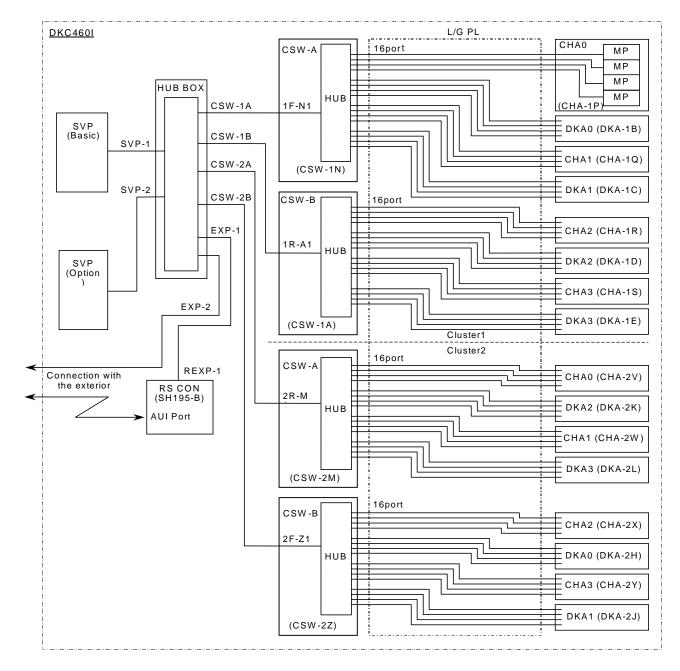


Fig.5-5 LAN Cabling Diagram

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# **6 Jumper Setting**

### 6.1 Shut Down Jumpers

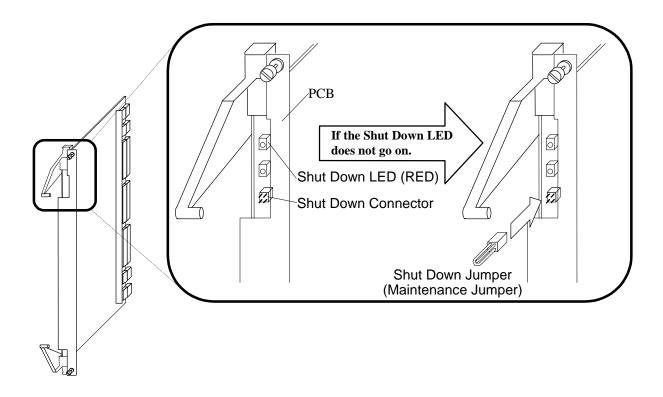
[1] Front or Rear Logic Box Check that the Shut Down LED is turned on. If not, connect the Shut Down Jumper (Maintenance Jumper) to the Shut Down Connector. (Only hot replace procedure)

# A CAUTION

A system down may be caused if the Maintenance jumper is inserted in a PCB other than that to be replaced. Make sure that it is the PCB to be replaced.

Table 6.1 Shut Down Jumpers List

No.	Function Name	Function	Remarks
1	Channel Adapter	Shut down jumper	
2	Disk Adapter		
3	Cache		
4	CSW		



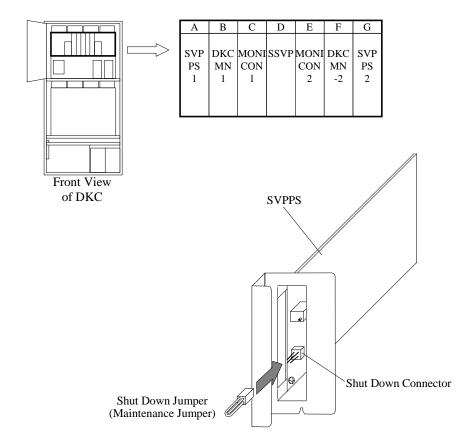
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#### [2] SVPPS

When replacing the SVP PS PCB, perform the replacement after blocking it forcibly by inserting the Shut Down Jumper (Maintenance Jumper) regardless of turning on or off of the Shut Down LED.

# A CAUTION

A system down may be caused if the Maintenance jumper is inserted in a PCB other than that to be replaced. Make sure that it is the PCB to be replaced.



REV.0 Oct.2001			
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# **6.2 Other Jumpers**

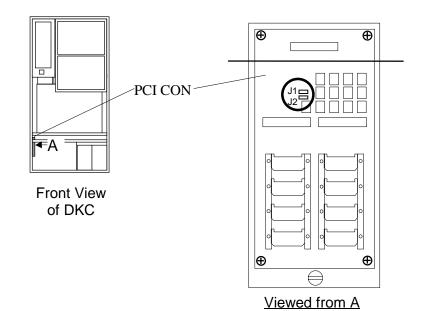
Table 6.2 Jumper Stetting List

No.	Function Name		Settings	Remarks
1	PCI CON	J1	EPO signal	
		J2	EPO signal	
2	RS CON	JP1	Basic SVP PS Shutdown	
		JP2	Basic SVP PS ON/OFF Inhibition	
3	SVPPS BOX	PS SD	Additional SVP PS Shutdown	
		PS CTLINH	Additional SVP PS ON/OFF Inhibition	
4	BAT CTR	_	Jumper connector (BATJP)	
5	DKC PANEL	JP1	Not used	
		JP2	Alarm Inhibition	
		JP3	Not used	
		JP4	Not used	
6	DKCMN	JP1	DKC Panel Inhibition	
7	DKCMN	JPA2	Server Shutdown setup Jumper	
	for UPS			
8	SVPPS	JP1	Output Voltage	
9	MPS		Specification of HDU Box ID	
		_	Specification of DKU Frame ID	
10	JMP	Switch	Specification of DKU Frame ID	
11	DKUMN	JP01	Specification of address number	
	for DKU405I	JP02	Additional Platform for Canister Mount	
		JP05	Path Address for FSW PCB	
12	HDU Box	JP1,JP2,JP3	Specification of PL ID	
	for DKU405I			

REV.1	Oct.2001	Jul.2002				
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# [1] PCI CON

Function Name	Setting	J1 and J2 Setting
PCI CON	When power is controlled from the host (at least one PCI cable attached to JP1-JP8 on PCI CON PCB), set the jumpers as shown.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	When power is not controlled from the host, no PCI Cable attached to JP1-JP8 PCI CON PCB or to disable the EPO of host, set the jumpers as shown.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

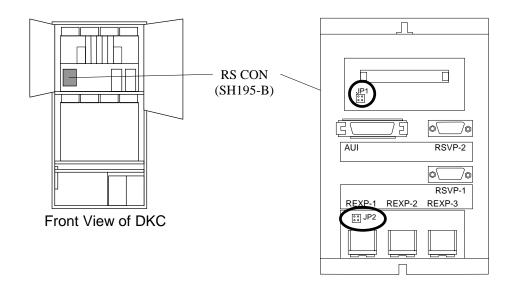


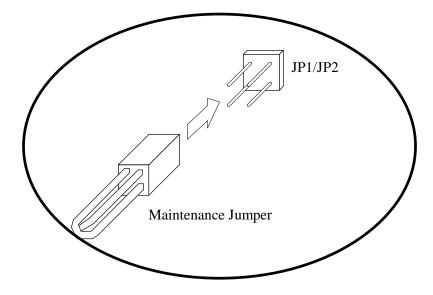
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REV.0 Oct.2001		
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# [2] RS CONN

Function Name	Jumper No.	Setting	Remarks
RS CON	JP1	The basic SVP is powered off forcibly	
		by inserting the Maintenance Jumper.	
	JP2	The basic SVP Power ON/OFF	
		Function of SSVP is inhibited by	
		inserting Maintenance Jumper.	

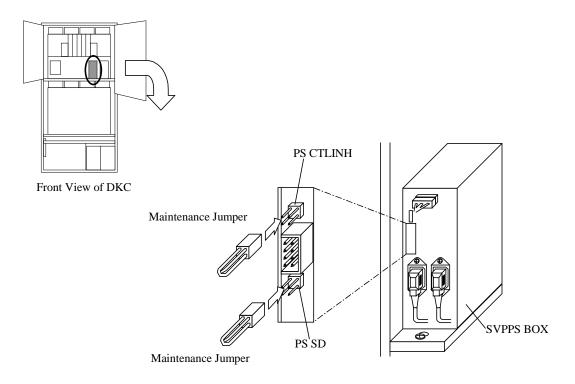




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# [3] SVPPS BOX

Function Name	Jumper No.	Setting	Remarks
SVPPS BOX	PS SD	The additional SVP is powered off	
		forcibly by inserting the Maintenance	
		Jumper.	
	PS CTLINH	The additional SVP Power ON/OFF	
		Function of SSVP is inhibited by	
		inserting Maintenance Jumper.	



REV.0 Oct.2001			
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#### [4] BAT CTR

This jumper is set in order to validate the battery for backing up data on the cache memory and shared memory when an AC power failure occurs.

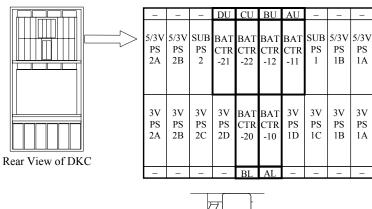
Table 6.3 Backup Duration Time for Each Memory

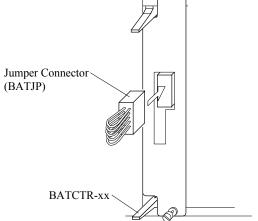
No.	Memory to be backed up	Maximum backup duration time
1	Shared Memory	168 hours (seven days)
2	Cache Memory	48 hours (two days)

Caution: When the battery jumper is not set, data on the cache memory and shared memory are not assured when an power failure occurs. As a result, all the data on the cache memory and shared memory are lost causing a destruction of user data.

Be sure to set the battery jumper.

Notice: When the subsystem power is to be turned off for longer than 48 hours, the battery jumper must be removed to protect the battery from deterioration. In this case, remove the battery jumper after making sure that the powering off process of the subsystem has been completed normally.





REV.1 Oct	.2001 Feb.2002				
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## [5] DKC PANEL

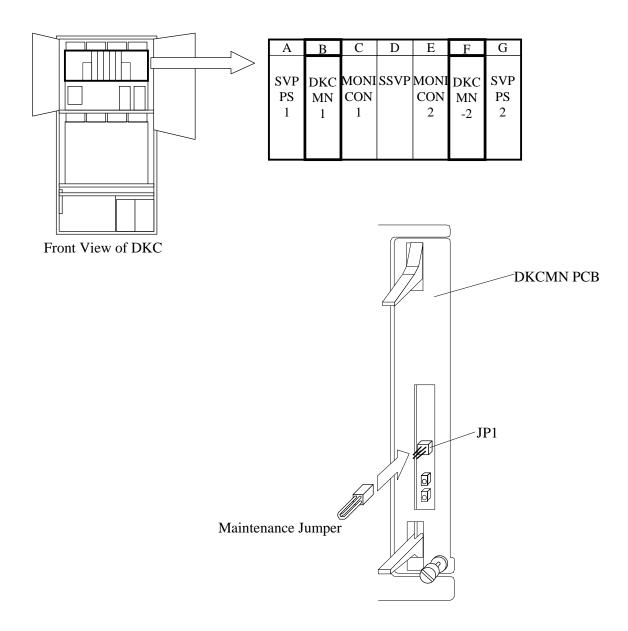
Function Name	Jumper No.	Setting	Remarks
DKC PANEL	JP1	Not used	
	JP2	The voltage and thermal alarm signals are inhibited by inserting maintenance jumper.	
	JP3	Not used	
	JP4	Not used	

# Rear View of DKC PANEL JP1 ALARM DISABLE UNLOCK CL2 JP3 CL1 CL2 JP4 Front View of DKC Maintenance Jumper

REV.0	Oct.2001					
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# [6] DKCMN

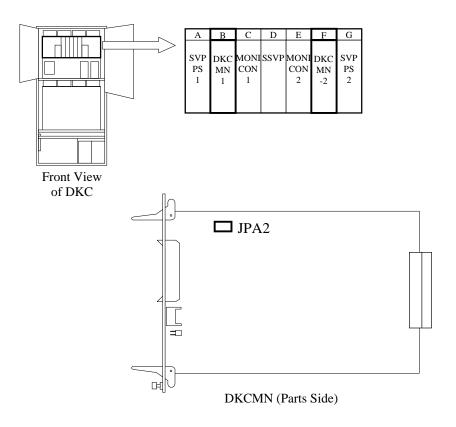
Function Name	Jumper No.	Setting	Remarks
DKCMN1	JP1	The Power ON/OFF function of	
or		DKC Panel is inhibited by inserting	
DKCMN2		maintenance jumper.	



REV.0 Oct.2001			
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# [7] DKCMN for UPS

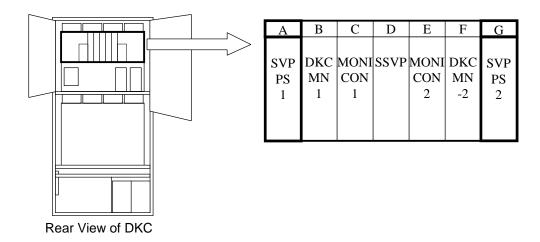
Function Name	Jumper No.	Setting	Time	JPA2 Setting
DKCMN 1 or DKCMN 2	JPA2	Select the necessary time from four of right column and set it up to shutdown a server. When set time elapsed, a PS OFF	2.5 minutes	3 18 Fixed Black Jumper
		sequence of a subsystem is started.	5 minutes	3 18 Fixed Black Jumper 1 16
			10 minutes	3 18 Fixed Black Jumper 1 16
			20 minutes	3 18 Fixed Black Jumper  1 16



REV.0 Oct.2001				
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# [8] SVPPS

Function Name	Jumper No.	Setting	JP1 Setting
SVPPS 1	JP1	By setting these jumper pins output	JP1
or SVPPS 2		voltage of the SVPPS to be supplied to the SVP is determined.	3 • • 1
SVFFS 2		SVF is determined.	6 • • 4
			9 • • 7
			12 • • 10

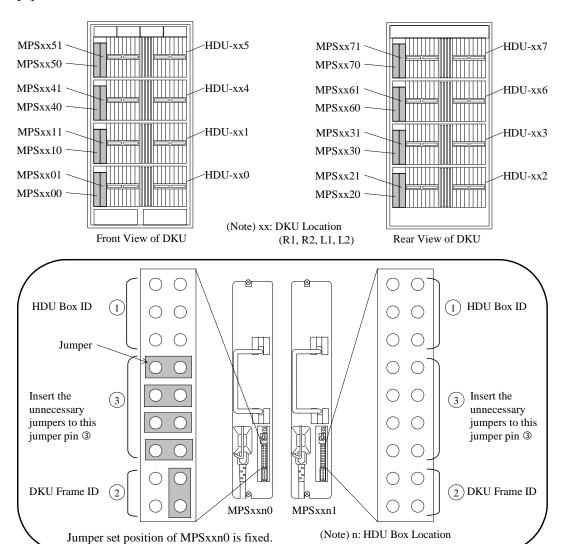




SVPPS1 or SVPPS 2 (Parts Side)

REV.0 Oct.2001				
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#### [9] MPS



Specification of HDU Box ID

Specification of 1	IDC DOX ID		
Setting	Function Name	Location	Setting
Specification of HDU Box ID	MPSxx01	HDU-xx0	\$ • • • • \$
	MPSxx11	HDU-xx1	
	MPSxx21	HDU-xx2	<i>S</i>

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Setting	Function Name	Location	Setting
Specification of HDU Box ID	MPSxx31	HDU-xx3	
	MPSxx41	HDU-xx4	
	MPSxx51	HDU-xx5	
	MPSxx61	HDU-xx6	
	MPSxx71	HDU-xx7	

(Note) xx: DKU Location (R1, R2, L1, L2)

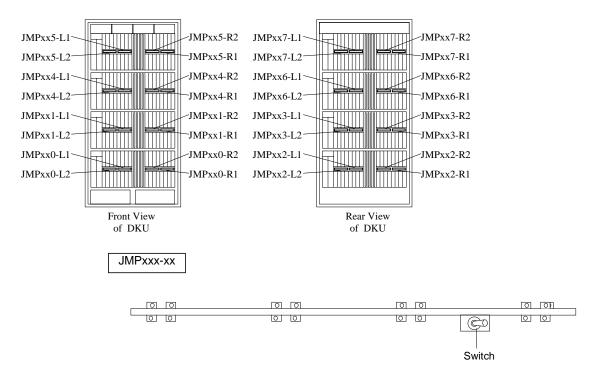
Specification of DKU Frame ID

Setting	Function Name	Location	Setting
Specification of	MPSR1#1	R1 DKU	4 4
DKU Frame ID			
	MPSR2#1	R2 DKU	
	MPSL1#1	L1 DKU	
	MPSL2#1	L2 DKU	

(Note) #: HDU Box Location (0, 1,....., 6, 7)

REV.0 Oct.2001			
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#### [10] HDU Box



Setting         Function Name         Location         Switch Setting           Specification of         JMPR1#-xx         R1 DKU         Set the switch to the right side posit	
	ion.
DKU Frame ID → Right	
Switch	
JMPR2#-xx R2 DKU Set the switch to the left side positi	on
JMPR2#-xx R2 DKU Set the switch to the left side positi	OII.
Len 🗨	
Switch	
JMPL1#x-xx L1 DKU Set the switch to the right side posit	ion.
—▶Right	
Switch	
Switch	
JMPL2#-xx L2 DKU Set the switch to the left side positi	on.
Left <b>←</b>	
Switch	
(Note) JMPR1#-xx	

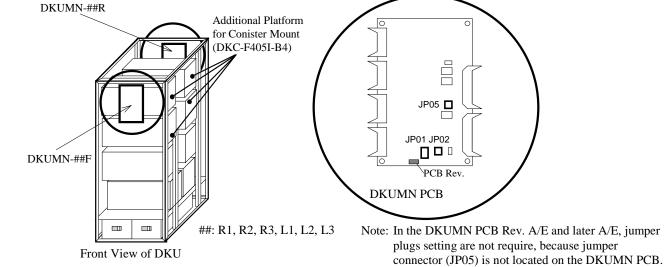
(Note) JMPR1#-xx

JMP Location: R1, R2, L1, L2

→ HDU Box Location: 0, 1, 2, .... 6, 7

REV.1 Oct.2001	Feb.2002				
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## [11] DKUMN for DKU405I



JP01: Specification of Address Number

Setting	Function Name	Location	JP01 Setting
Specification of Address Number	DKUMN-R1F	Front of DKU-R1	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
	DKUMN-R1R	Rear of DKU-R1	1 3 3 10 10
	DKUMN-R2F	Front of DKU-R2	12 0 0 3
	DKUMN-R2R	Rear of DKU-R2	1 3 3 10 10
	DKUMN-L1F	Front of DKU-L1	12 3
	DKUMN-L1R	Rear of DKU-L1	1 3 12 0 0 10
	DKUMN-L2F	Front of DKU-L2	1 3 12 0 0 10
	DKUMN-L2R	Rear of DKU-L2	1

(To be continued)

REV.2 Oct.2001 Jun.2002
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Setting	Function Name	Location	JP01 Setting
Specification of Address Number	DKUMN-R3F	Front of DKU-R3	1
	DKUMN-R3R	Rear of DKU-R3	1 3 12 0 0 10
	DKUMN-L3F	Front of DKU-L3	12 0 0 10
	DKUMN-L3R	Rear of DKU-L3	12 0 0 10

JP02: Additional Platform for Canister Mount

Function Name	Setting	Location	JP02 Setting
DKUMN-##F	No Additional Platform for Canister Mount	Front of DKU	$ \begin{array}{cccc} 3 & \bullet & 1 \\ 4 & \bullet & 2 \end{array} $
DKUMN-##R	(DKU-F405I-B4) Installed (Four HDU Boxes)	Rear of DKU	$ \begin{array}{c c} 3 & \bullet & \bullet \\ 4 & \bullet & \bullet \\ \end{array} $
DKUMN-##F	Additional Platform for Canister Mount	Front of DKU	$ \begin{array}{c c} 3 & \bullet & 1 \\ 4 & \bullet & 2 \end{array} $
DKUMN-##R	(DKU-F405I-B4) Installed (Eight HDU Boxes)	Rear of DKU	$ \begin{array}{c c} 3 & \bullet & 1 \\ 4 & \bullet & 2 \end{array} $

JP05: Path Address for FSW PCB

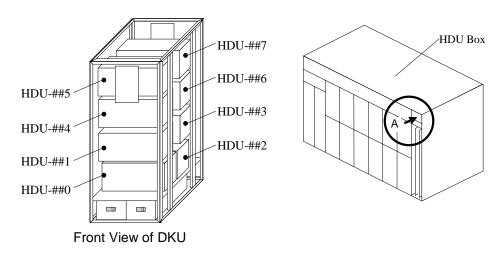
Function Name	Setting	Location	JP05 Setting
DKUMN-##F	Path Address for FSW PCB	Front of DKU	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
DKUMN-##R		Rear of DKU	$ \begin{array}{c c} 3 & \bullet & \bullet \\ 4 & \bullet & \bullet \\ \end{array} $

Note: In the DKUMN PCB Rev. A/E and later A/E, jumper plugs setting are not require, because jumper connector (JP05) is not located on the DKUMN PCB.

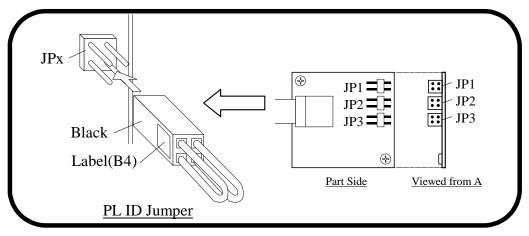
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## [12] HDU BOX for DKU405I

Setting	Function Name	Location	Jumper Setting	Remarks
Specification of PL ID	HDU-R10 ~ R17	DKU-R1	JP1 ••	
	HDU-L10 ~ L17	DKU-L1	JP2 JP3	
	HDU-R20 ~ R27	DKU-R2	JP1 <b></b> JP2 <b></b>	
	HDU-L20 ~ L27	DKU-L2	JP3 ••	
	HDU-R30 ~ R37	DKU-R3	JP1 JP2	
	HDU-L30 ~ L37	DKU-L3	JP3	



##: R1, R2, R3, L1, L2, L3



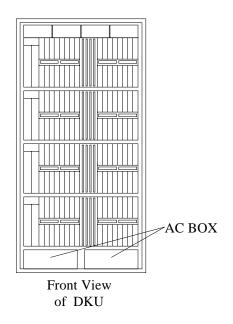
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# **6.3 Voltage Selector**

## [1] AC BOX (3 Phase/60A DKU)

PU105 and PC113: AC Input Voltage

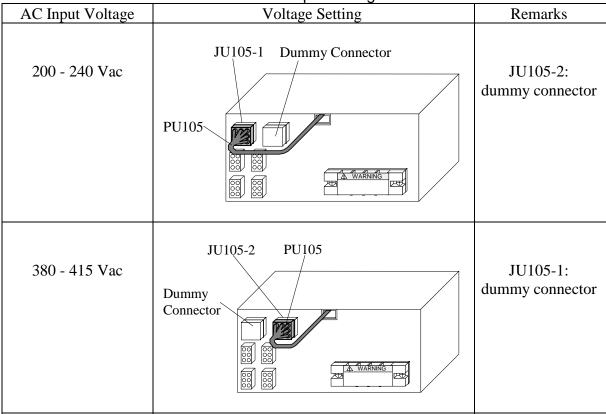
1 0 103 and 1 C 113. AC input voltage						
AC Input Voltage	Voltage Setting	Remarks				
200 - 240 Vac	JU105-1 Dummy Connector  PU105 PC113 JC113-1	JU105-2 and JC113-2: dummy connectors				
380 - 415 Vac	JU105-2 PU105 JC113-2  Dummy Connector  PC113	JU105-1 and JC113-1: dummy connectors				

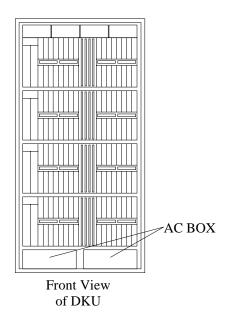


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## [2] AC BOX (3 Phase/30A DKU)

PU105: AC Input Voltage

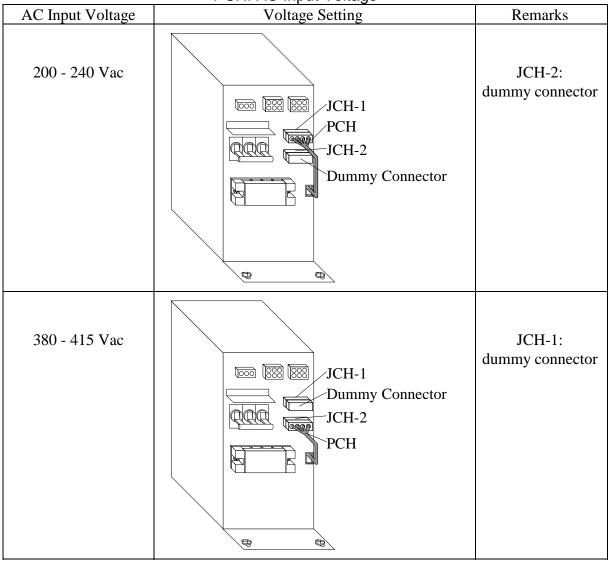


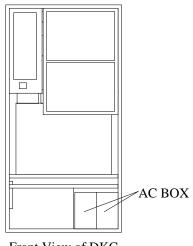


REV.0	Jul2002				
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## [3] AC BOX (3Phase/30A DKC)

PCH: AC Input Voltage



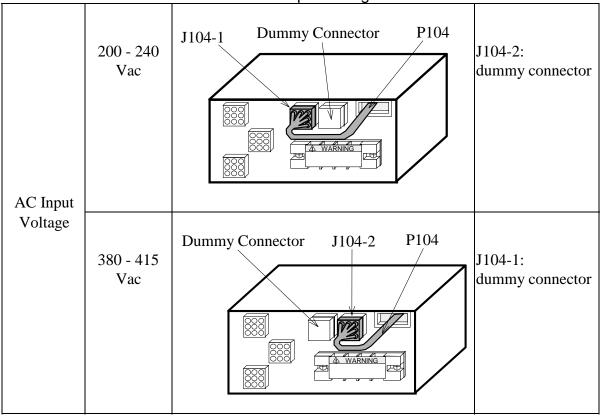


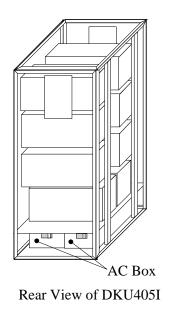
Front View of DKC

REV.0	Jul2002				
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## [4] AC BOX (DKU405I)

P104: AC Input Voltage





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