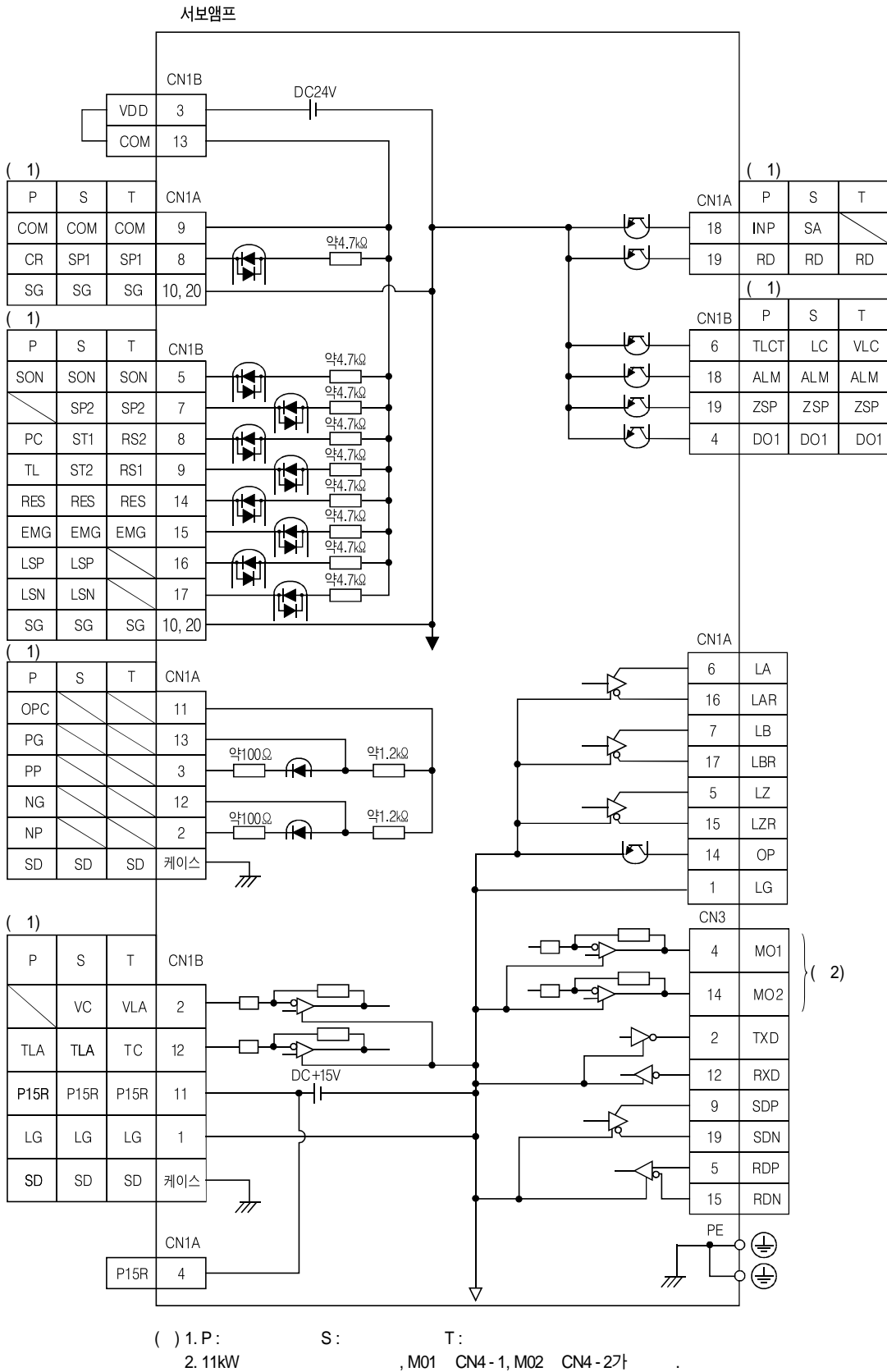


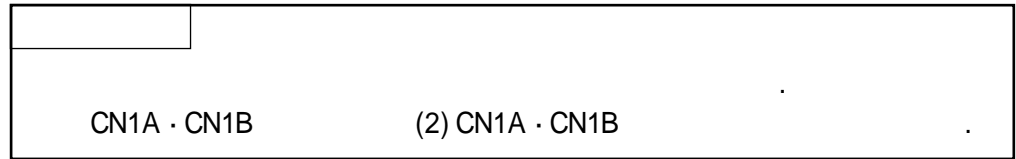
3. 2



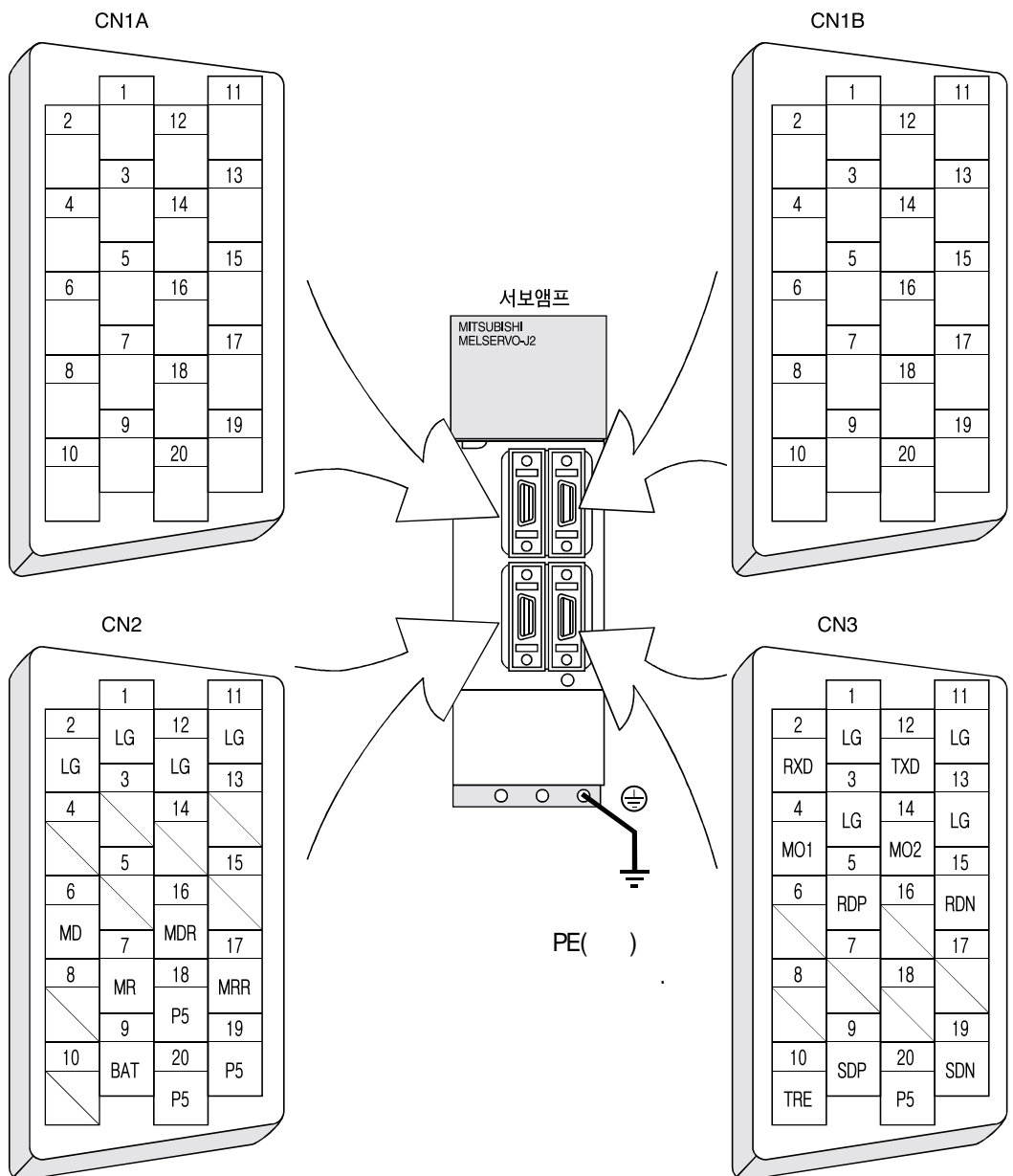
3.

3. 3

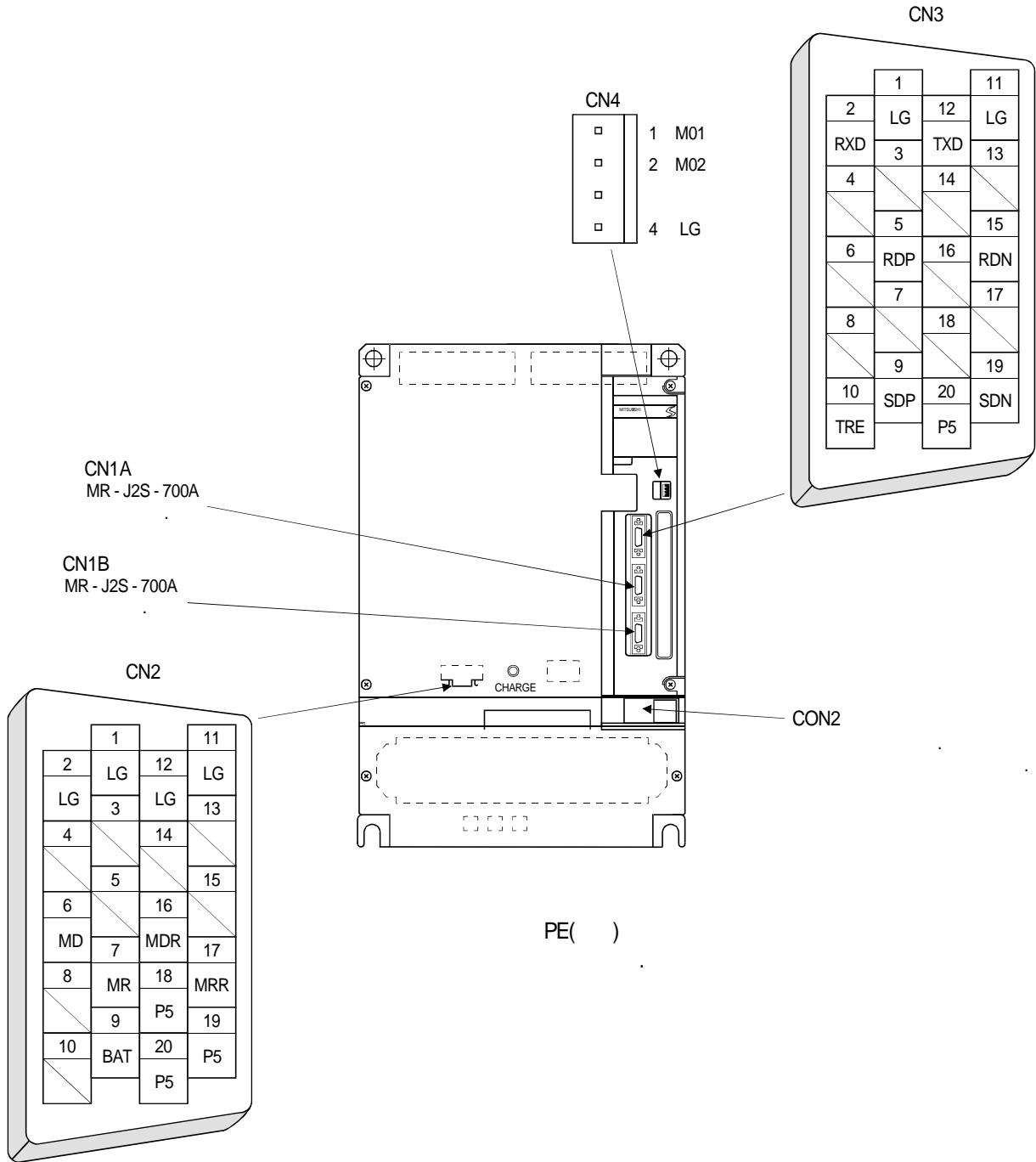
3.3.1



(1)
(a) MR - J2S - 700A



(b) MR - J2S - 11KA



(2) CN1A/CN1B

No. 가

	No.	(1) I/O	(2)						
			P	P/S	S	S/T	T		T/P
CN1A	1		LG	LG	LG	LG	LG	LG	
	2	I	NP	NP/-				-/NP	
	3	I	PP	PP/-				-/PP	
	4		P15R	P15R/P15R	P15R	P15R	P15R	P15R	
	5	O	LZ	LZ	LZ	LZ	LZ	LZ	
	6	O	LA	LA	LA	LA	LA	LA	
	7	O	LB	LB	LB	LB	LB	LB	
	8	I	CR	CR/SP1	SP1	SP1/SP1	SP1	SP1/CR	No.43~48
	9		COM	COM	COM	COM	COM	COM	
	10		SG	SG	SG	SG	SG	SG	
	11		OPC	OPC/-				-/OPC	
	12	I	NG	NG/-				-/NG	
	13	I	PG	PG/-				-/PG	
	14	O	OP	OP	OP	OP	OP	OP	
	15	O	LZR	LZR	LZR	LZR	LZR	LZR	
	16	O	LAR	LAR	LAR	LAR	LAR	LAR	
	17	O	LBR	LBR	LBR	LBR	LBR	LBR	
	18	O	INP	INP/SA	SA	SA/-		-/INP	No.49
	19	O	RD	RD	RD	RD	RD	RD	No.49
	20		SG	SG	SG	SG	SG	SG	
CN1B	1		LG	LG	LG	LG	LG	LG	
	2	I		-/VC	VC	LG/VLA	VLA	VLA/-	
	3		VDD	VDD	VDD	VDD	VDD	VDD	
	(4) 4	O	DO1	DO1	DO1	DO1	DO1	DO1	
	5	I	SON	SON	SON	SON	SON	SON	No.43~48
	6	O	TLC	TLC	TLC	TLC/VLC	VLC	VLC/TLC	No.49
	7	I		LOP	SP2	LOP	SP2	LOP	No.43~48
	8	I	PC	PC/ST1	ST1	ST1/RS2	RS2	RS2/PC	No.43~48
	9	I	TL	TL/ST2	ST2	ST2/RS1	RS1	RS1/TL	No.43~48
	10		SG	SG	SG	SG	SG	SG	
	11		P15R	P15R	P15R	P15R	P15R	P15R	
	12	I	TLA	(3) TLA/TLA	(3) TLA	(3) TLA/TC	TC	TC/TLA	
	13		COM	COM	COM	COM	COM	COM	
	14	I	RES	RES	RES	RES	RES	RES	No.43~48
	15	I	EMG	EMG	EMG	EMG	EMG	EMG	
	16	I	LSP	LSP	LSP	LSP/-		-/LSP	
	17	I	LSN	LSN	LSN	LSN/-		-/LSN	
	18	O	ALM	ALM	ALM	ALM	ALM	ALM	No.49
	19	O	ZSP	ZSP	ZSP	ZSP	ZSP	ZSP	No.1, 49
	20		SG	SG	SG	SG	SG	SG	

)

- () 1. I: , O:
 2. P: , S: , T:
 P/S: / , S/T: / , T/P: /
 3. No.43~48 TL ,TLA
 4. CN1A - 18 ,CN1A - 18

(3)

SON	ON	VLC	
LSP		RD	
LSN		ZSP	
CR		INP	
SP1	1	SA	
SP2	2	ALM	
PC		WNG	
ST1		BWNG	
ST2		OP	Z ()
TL		MBR	
RES		LZ	Z ()
EMG		LZR	
LOP		LA	A ()
VC		LAR	
VLA		LB	B ()
TLA		LBR	
TC		VDD	I/F
RS1		COM	I/F
RS2		OPC	
PP		SG	I/F (COMMON)
NP		P15R	DC15V
PG		LG	(COMMON)
NG		SD	
TLC			

3.3.2 ()

(I/O) 3.6.2

P: , S: , T: 가 , : No.43~49 가
 No. No.

(1)

		No.		I/O																													
				P	S	T																											
ON	SON	CN1B 5	SON ON , 가 , 가 가 . (ON) OFF No.41 “ 1 ” , 가 (OFF) ON(ON)	DI - 1																													
	RES	CN1B 14	RES 50ms ON , .10.2 No.51 “ 1 ” RES ON	DI - 1																													
	LSP	CN1B 16	LSP · LSN - SG ON OFF No.22 “ 1 ” 가 (5.2.3)	DI - 1																													
	LSN	CN1B 17	<table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <th colspan="4">()</th> </tr> <tr> <th>LSP</th> <th>LSN</th> <th>CCW</th> <th>CW</th> </tr> <tr> <td>1</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td>0</td> <td>1</td> <td></td> <td></td> </tr> <tr> <td>1</td> <td>0</td> <td></td> <td></td> </tr> <tr> <td>0</td> <td>0</td> <td></td> <td></td> </tr> </table> <p>() 0 : OFF 1 : ON No.41 ON()</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td>No. 41</td> <td>ON</td> </tr> <tr> <td>1</td> <td>LSP</td> </tr> <tr> <td>1</td> <td>LSN</td> </tr> </table>				()				LSP	LSN	CCW	CW	1	1			0	1			1	0			0	0			No. 41	ON	1
()																																	
LSP	LSN	CCW	CW																														
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0	1																																
1	0																																
0	0																																
No. 41	ON																																
1	LSP																																
1	LSN																																
	TL	CN1B 9	TL OFF 1(No.28), ON (TLA) 3.4.1 (5)	DI - 1																													
	TL1		No.43~48 가 3.4.1 (5)	DI - 1																													

		No.		I/O																					
					P	S	T																		
	ST1	CN1B 8	<table border="1"> <thead> <tr> <th colspan="2">()</th> <th></th> </tr> <tr> <th>ST2</th> <th>ST1</th> <th></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>()</td> </tr> <tr> <td>0</td> <td>1</td> <td>CCW</td> </tr> <tr> <td>1</td> <td>0</td> <td>CW</td> </tr> <tr> <td>1</td> <td>1</td> <td>()</td> </tr> </tbody> </table> <p>() 0: OFF 1: ON</p>	()			ST2	ST1		0	0	()	0	1	CCW	1	0	CW	1	1	()	DI - 1			
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0	0	()																							
0	1	CCW																							
1	0	CW																							
1	1	()																							
	ST2	CN1B 9	ST1 ST2 ON OFF No.12																						
	RS1	CN1B 9	<table border="1"> <thead> <tr> <th colspan="2">()</th> <th></th> </tr> <tr> <th>RS2</th> <th>RS1</th> <th></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td></td> </tr> <tr> <td>0</td> <td>1</td> <td></td> </tr> <tr> <td>1</td> <td>0</td> <td></td> </tr> <tr> <td>1</td> <td>1</td> <td></td> </tr> </tbody> </table> <p>() 0: OFF 1: ON</p>	()			RS2	RS1		0	0		0	1		1	0		1	1		DI - 1			
()																									
RS2	RS1																								
0	0																								
0	1																								
1	0																								
1	1																								
	RS2	CN1B 8																							
	EMG	CN1B 15	EMG OFF() 가 OFF가 , 가 EMG ON()	DI - 1																					
	CR	CN1A 8	CR ON 10ms No.42 " 1 " , CR ON	DI - 1																					
1	CM1		CM1 · CM2 , No.43~48 가 CM1 · CM2 4 CM1 · CM2	DI - 1																					
2	CM2		<table border="1"> <thead> <tr> <th colspan="2">()</th> <th></th> </tr> <tr> <th>CM2</th> <th>CM1</th> <th></th> </tr> </thead> <tbody> <tr> <td>0</td> <td>0</td> <td>No.3</td> </tr> <tr> <td>0</td> <td>1</td> <td>No.69</td> </tr> <tr> <td>1</td> <td>0</td> <td>No.70</td> </tr> <tr> <td>1</td> <td>1</td> <td>No.71</td> </tr> </tbody> </table> <p>() 0: OFF 1: ON</p>	()			CM2	CM1		0	0	No.3	0	1	No.69	1	0	No.70	1	1	No.71	DI - 1			
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CM2	CM1																								
0	0	No.3																							
0	1	No.69																							
1	0	No.70																							
1	1	No.71																							
	CDP		CDP ON , No.43~48 가 가 No.61 , No.62~64	DI - 1																					

		No.		I/O																																																													
				P	S	T																																																											
1	SP1	CN1A 8	< >	DI - 1																																																													
2	SP2	CN1B 7	SP3 No.43~48 가	DI - 1																																																													
3	SP3		<table border="1"> <thead> <tr> <th rowspan="2">No.43~48</th> <th colspan="3">()</th> <th rowspan="2"></th> </tr> <tr> <th>SP3</th> <th>SP2</th> <th>SP1</th> </tr> </thead> <tbody> <tr> <td>(SP3)</td> <td>0</td> <td>0</td> <td></td> <td>(VC)</td> </tr> <tr> <td rowspan="3">()</td> <td>0</td> <td>1</td> <td></td> <td>1(No.8)</td> </tr> <tr> <td>1</td> <td>0</td> <td></td> <td>2(No.9)</td> </tr> <tr> <td>1</td> <td>1</td> <td></td> <td>3(No.10)</td> </tr> <tr> <td rowspan="8">(SP3)</td> <td>0</td> <td>0</td> <td>0</td> <td>(VC)</td> </tr> <tr> <td>0</td> <td>0</td> <td>1</td> <td>1(No.8)</td> </tr> <tr> <td>0</td> <td>1</td> <td>0</td> <td>2(No.9)</td> </tr> <tr> <td>0</td> <td>1</td> <td>1</td> <td>3(No.10)</td> </tr> <tr> <td>1</td> <td>0</td> <td>0</td> <td>4(No.72)</td> </tr> <tr> <td>1</td> <td>0</td> <td>1</td> <td>5(No.73)</td> </tr> <tr> <td>1</td> <td>1</td> <td>0</td> <td>6(No.74)</td> </tr> <tr> <td>1</td> <td>1</td> <td>1</td> <td>7(No.75)</td> </tr> </tbody> </table> <p>() 0: OFF 1: ON</p>	No.43~48	()				SP3	SP2	SP1	(SP3)	0	0		(VC)	()	0	1		1(No.8)	1	0		2(No.9)	1	1		3(No.10)	(SP3)	0	0	0	(VC)	0	0	1	1(No.8)	0	1	0	2(No.9)	0	1	1	3(No.10)	1	0	0	4(No.72)	1	0	1	5(No.73)	1	1	0	6(No.74)	1	1	1	7(No.75)	DI - 1		
			No.43~48		()																																																												
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No.43~48	()																																																																
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	PC	CN1B 8	PC-SG 가 1 (MEND) OFF (MEND)가 OFF (PC) ON (TL) ON (PC) 가 (TLA)	DI - 1																																																													

		No.		I/O																				
				P	S	T																		
	LOP	CN1B 7	<p>< / > /</p> <table border="1"> <tr><td>() LOP</td><td></td></tr> <tr><td>0</td><td></td></tr> <tr><td>1</td><td></td></tr> </table> <p>() 0: OFF 1: ON</p> <p>< / > /</p> <table border="1"> <tr><td>() LOP</td><td></td></tr> <tr><td>0</td><td></td></tr> <tr><td>1</td><td></td></tr> </table> <p>() 0: OFF 1: ON</p> <p>< / > /</p> <table border="1"> <tr><td>() LOP</td><td></td></tr> <tr><td>0</td><td></td></tr> <tr><td>1</td><td></td></tr> </table> <p>() 0: OFF 1: ON</p>	() LOP		0		1		() LOP		0		1		() LOP		0		1		DI - 1		
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1																								
	TLA	CN1B 12	<p>가 , No.43~48 TL</p> <p>(TLA) TLA - LG DC0~+10V 가 (TLA) + +10V (3.4.1 (5)) : 10bit</p>																					
	TC		<p>TC - LG DC0~±8V 가 ±8V (3.4.3 (1)) ±8V No.26</p>																					
	VC	CN1B 2	<p>VC - LG DC0~±10V 가 ±10V No.25 가 (3.4.2 (1)) : 14bit</p>																					
	VLA		<p>VLA - LG DC0~±10V 가 ±10V No.25 가 (3.4.3 (3))</p>																					
	PP NP PG NG	CN1A 3 CN1A 2 CN1A 13 CN1A 12	<p>(200kpps)</p> <p>PP - SG NP - SG</p> <p>(500kpps)</p> <p>PP - PP NG - NP</p> <p>No.21</p>	DI - 2																				

(2)

		No.		I/O			
					P	S	T
	ALM	CN1B 18	OFF ALM - SG ON 1s ALM - SG	DO - 1			
	DB		11kW 가 , DB가 OFF가 (13.14)	DO - 1			
	RD	CN1A 19	ON 가 가 RD - SG	DO - 1			
	INP	CN1A 18	가 No.5 INP - SG 가	DO - 1			
	SA		가 가 SA - SG 가 50r/min	DO - 1			
	VLC	CN1B 6	1~7(No.8~10, 72~75) (VLA) ON(SON) OFF VLC - SG	DO - 1			
	TLC		1~7(No.28) (TLA) ON(SON) OFF TLC - SG	DO - 1			
	ZSP	CN1B 19	가 (50r/min) , ZSP - SG No.24	DO - 1			
	MBR	[CN1B] 19	, ZSP OFF , MBR - SG	DO - 1			
	WNG		No.49 가 , WNG - SG 가 ON 1s WNG - SG	DO - 1			
	BWNG		No.49 (AL.92) (AL.9F)가 BWNG - SG 가 ON 1s BWNG - SG	DO - 1			

		No.		I/O																																																																									
				P	S	T																																																																							
			No.49 “ 1 ” (RD · INP · SA · ZSP)																																																																										
			() <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>CN1B 19</th> <th>CN1A 18</th> <th>CN1A 19</th> <th></th> <th></th> </tr> </thead> <tbody> <tr> <td rowspan="8" style="text-align: center;">0</td> <td rowspan="8" style="text-align: center;">0</td> <td rowspan="8" style="text-align: center;">0</td> <td>88888</td> <td></td> </tr> <tr> <td>AL.12</td> <td style="text-align: center;">1</td> </tr> <tr> <td>AL.13</td> <td></td> </tr> <tr> <td>AL.15</td> <td style="text-align: center;">2</td> </tr> <tr> <td>AL.17</td> <td></td> </tr> <tr> <td>AL.19</td> <td style="text-align: center;">3</td> </tr> <tr> <td>AL.37</td> <td></td> </tr> <tr> <td>AL.8A</td> <td></td> </tr> <tr> <td rowspan="2" style="text-align: center;">0</td> <td rowspan="2" style="text-align: center;">0</td> <td rowspan="2" style="text-align: center;">1</td> <td>AL.30</td> <td></td> </tr> <tr> <td>AL.33</td> <td></td> </tr> <tr> <td rowspan="5" style="text-align: center;">0</td> <td rowspan="5" style="text-align: center;">1</td> <td rowspan="5" style="text-align: center;">0</td> <td>AL.10</td> <td></td> </tr> <tr> <td>AL.45</td> <td></td> </tr> <tr> <td>AL.46</td> <td></td> </tr> <tr> <td>AL.50</td> <td style="text-align: center;">1</td> </tr> <tr> <td>AL.51</td> <td style="text-align: center;">2</td> </tr> <tr> <td rowspan="2" style="text-align: center;">1</td> <td rowspan="2" style="text-align: center;">0</td> <td rowspan="2" style="text-align: center;">0</td> <td>AL.24</td> <td></td> </tr> <tr> <td>AL.32</td> <td></td> </tr> <tr> <td rowspan="3" style="text-align: center;">1</td> <td rowspan="3" style="text-align: center;">0</td> <td rowspan="3" style="text-align: center;">1</td> <td>AL.31</td> <td></td> </tr> <tr> <td>AL.35</td> <td></td> </tr> <tr> <td>AL.52</td> <td></td> </tr> <tr> <td rowspan="4" style="text-align: center;">1</td> <td rowspan="4" style="text-align: center;">1</td> <td rowspan="4" style="text-align: center;">0</td> <td>AL.16</td> <td style="text-align: center;">1</td> </tr> <tr> <td>AL.1A</td> <td></td> </tr> <tr> <td>AL.20</td> <td style="text-align: center;">2</td> </tr> <tr> <td>AL.25</td> <td></td> </tr> </tbody> </table>	CN1B 19	CN1A 18	CN1A 19			0	0	0	88888		AL.12	1	AL.13		AL.15	2	AL.17		AL.19	3	AL.37		AL.8A		0	0	1	AL.30		AL.33		0	1	0	AL.10		AL.45		AL.46		AL.50	1	AL.51	2	1	0	0	AL.24		AL.32		1	0	1	AL.31		AL.35		AL.52		1	1	0	AL.16	1	AL.1A		AL.20	2	AL.25		DO - 1		
CN1B 19	CN1A 18	CN1A 19																																																																											
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			AL.12	1																																																																									
			AL.13																																																																										
			AL.15	2																																																																									
			AL.17																																																																										
			AL.19	3																																																																									
			AL.37																																																																										
			AL.8A																																																																										
0	0	1	AL.30																																																																										
			AL.33																																																																										
0	1	0	AL.10																																																																										
			AL.45																																																																										
			AL.46																																																																										
			AL.50	1																																																																									
			AL.51	2																																																																									
1	0	0	AL.24																																																																										
			AL.32																																																																										
1	0	1	AL.31																																																																										
			AL.35																																																																										
			AL.52																																																																										
1	1	0	AL.16	1																																																																									
			AL.1A																																																																										
			AL.20	2																																																																									
			AL.25																																																																										
Z ()	OP	CN1A 14	가 OP가 ON 400μs 100r/min	1 1 .((-))	DO - 2																																																																								
A ()	LA LAR	CN1A 6 CN1A 16	No.27() CCW B	1 A	DO - 2																																																																								
B ()	LB LBR	CN1A 7 CN1A 17	/2 A · B	No.54																																																																									

		No.			I/O			
		7kW	11kW			P	S	T
Z ()	LZ LZR	CN1A 5 CN1A 15	CN1A 5 CN1A 15	OP	DO-2			
1	MO1	CN3 4	CN4 1	No.17 : 10bit	MO1 - LG			
2	MO2	CN3 14	CN4 2	No.17 : 10bit	MO2 - LG			

(3)

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		No.		I/O			
					P	S	T
RS - 422 I/F	SDP SDN RDP RDN	CN3 9 CN3 19 CN3 5 CN3 15	RS - 422 RS - 232C No.16	/			
RS - 422	TRE	CN3 10	RS - 422 I/F 가 RDN(CN3 - 15)	/			
RS - 232C I/F	TXD RXD	CN3 2 CN3 12	RS - 422 RS - 232C No.16	/			

(4)

		No.			I/O			
		7kW	11kW			P	S	T
I/F	VDD	CN1B 3	CN1B 3	VDD - SG +24V ± 10% COM : 80mA	/			
I/F	COM	CN1A 9 CN1B 13	CN1A 9 CN1B 13	DC24V(200mA) DC24V ± 10%	/			
	OPC	CN1A 11	CN1A 11	DC24V	/			
I/F (COMMON)	SG	CN1A 10 20 CN1B 10 20	CN1A 10 20 CN1B 10 20	SON · EMG LG	/			
DC15V	P15R	CN1A 4 CN1B 11	CN1A 4 CN1B 11	P15R - LG DC15V TC · TLA · VC · VLA : 30mA	/			
(COMMON)	LG	CN1A 1 CN1B 1 CN3 1, 11 3, 13	CN1A 1 CN1B 1 CN3 1, 11 3, 13 CN4 4	TLA · TC · VC · VLA · FPA · FPB · OP · MO1 · MO2 · P15R	/			
	SD				/			