

DRAWING HISTORY

REV. NO.	DATE	DESCRIPTION	REMARK
0	2024.11.28.	ISSUED FOR APPROVAL.	
0	2025.02.14.	KOMSA 승인 도면 필 함.	
1	2025.04.03.	ISSUED FOR OWNER APPROVAL.	

TOTAL (32) SHEETS WITH A COVER.

OWNER  여수시	BUILDER Shico 영창중공업(주)
APP. BY J.S.KANG	SHIP TYPE G/T 119 톤급 다목적 관공선
CHK' BY J.H.LIM	TITLE E.W.D OF POWER SYSTEM [동력계통도]
CHK' BY	
DWN. BY Y.J.JOO	
Shico 영창중공업 주식회사 Youngchang Heavy Ind.Co.,Ltd. TEL : 061-275-8100 / FAX : 061-275-8101 전남 신안군 지도읍 두류산길 377-111	HULL. NO. H-1017 SHIP NAME - DWG. NO. OE-002
	DATE 2025.04.03.
	SCALE NONE
	CLASS KOMSA
	REV. NO. 1

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REV. NO.

REVISED BY

ABB.

REVISED BY



FIRST DRAWING

O

OWNER COMMENT



REVIEWED DRAWING

C

CLASS COMMENT



FINAL DRAWING

S

SHIP YARD'S COMMENT

M

MAKER'S RECOMMENDATION

D

DESIGN IMPROVEMENT

DM

DESIGN MISTAKE

DATE

REV. NO.

REV. BY

PAGE

DESCRIPTION

2024.11.28 0 ISSUED FOR APPROVAL.

2025.02.14 0 KOMSA 승인도면 필 함.

2025.04.03 0 ISSUED FOR OWNER APPROVAL.

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EM'CY STOP LIST & PREFERENCE TRIP LIST

GENERAL NOTE (1/3)

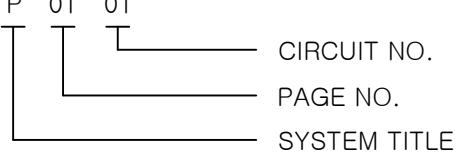
1. RULE AND REGULATION : KOMSA

2. SHIP'S FLAG : KOREA

3. EXPLANATION OF CABLE MARKING

1)	<u>T1</u> P0000	YARD'S SUPPLY / CONNECTION CABLE
2)	<u>--T1--</u> P0000	USED CABLE IN OTHER SYSTEM
3)	<u>*</u>	MAKER'S SUPPLY / CONNECTION CABLE
4)	<u>--*--</u>	INTER-WIRING OR MAKER WORKS & SUPPLY (INNER CONNECTION OR FITTING ON EQUIP BODY)
5)	<u>T1(IS)</u>	INTRINSICALLY SAFT TYPE CABLE - INTRINSICALLY SAFT CIRCUITS ARE TO BE MARKED WITH (IS) ON THE DRAWING (TOGETHER WITH CABLE TYPE), AND THESE CIRCUITS ARE TO BE SEPARATED (50MM) FROM ANY OTHER NORMAL CABLES.

4. CIRCUIT DESIGNATION

EX)  CIRCUIT NO. PAGE NO. SYSTEM TITLE	SYSTEM TITLE	
	P	E.W.D OF POWER SYSTEM
	L	E.W.D OF LIGHTING SYSTME
	C	E.W.D OF CONTROL SYSTEM
	F	CABLE DIA. OF ARR'T OF FIRE DET. & ALARM SYS.
	A	ARR'T OF ELEC. EQUIPMENT
	N	E.W.D OF RADIO, INTER-COM & NAUTICAL SYS.
	S	ARR'T OF NAV. & SIGNAL LIGHT

5. THE NUMBER ABOVE THE SYMBOL OF CIRCUIT BREAKER SHOWS THE FRAME SIZE AND SETTING CURRENT OF THE CIRCUIT BREAKER.

EX) 100/60 100 : FRAME SIZE (100A)

60 : SETTING CURRENT (60A)

INST : INSTANTANEOUS TRIP ONLY IF INDICATED

6. THE WIRING DIAGRAM SHOWS THE KIND OF CABLE CONDUCTOR SIZE, AMPERE RATING AND THE PROTECTIVE DEVICES FOR THE POWER CIRCUITS.

7. THE AIR CIRCUIT BREAKERS OF GENERATORS ARE SO INTERLOCKED AS NOT TO OPERATE IN PARALLEL WITH SHORE SUPPLY AND SPACE HEATERS OF GENERATOR ALSO.

8. THE 2-POLE MOULDED CASE CIRCUIT BREAKERS ARE USED FOR THE SINGLE PHASE CIRCUIT AND ARE SHOWN BY THE MARK OF "2P" UNDER THE MARK OF MOULDED CASE CIRCUIT BREAKERS, THE 3-POLE MOULDED CASE CIRCUIT BREAKERS ARE USED FOR THE THREE PHASE CIRCUITS AND ARE SHOWN WITHOUT ANY MARK.

GENERAL NOTE (2/3)

9. CABLE APPLICATION

- 1) ALL ELECTRIC CABLES TO BE JIS C3410-1999 (JAPANESE INDUSTRIAL STANDARD) OF TYPE APPROVED BY CLASSIFICATION SOCIETY.
- 2) THE POWER CABLES HAVING NOMINAL OUT-DIAEATER 30MM (TPYC-50) AND ABOVE ARE TO BE INSTALLED WITH NO MORE THAN SIX(6) CABLES BUNCHED OR LAID TOGETHER IN FLAT FORMATION.
- 3) THE CABLE SPECIFICATION FOR THE CIRCUIT OF DOTTED LINE SHALL BE SEEN IN OTHER DRAWINGS OR OTHER PAGE.
- 4) THE CABLE SPECIFICATION ON THIS DRAWING ARE SYMBOLIZED AS SHOWN ON NEXT PAGE.

10. CABLE LEGEND

F	T	P	Y	C	(Y)	(S)	(C)	-	1.5	(S)	(FA)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)

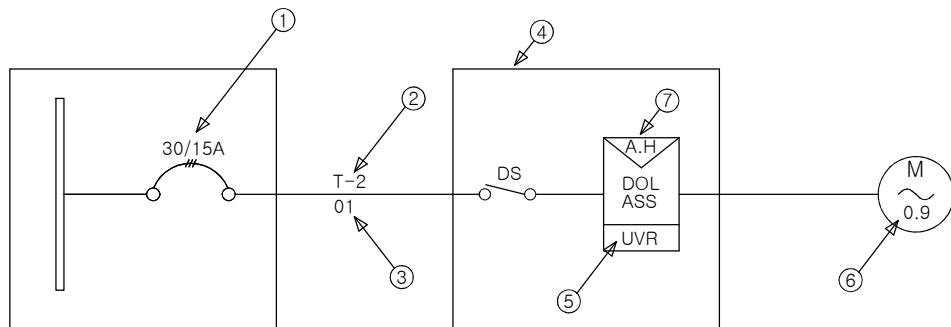
(1)	FIRE RESISTANT (IEC 60331)										
(2)	NUMBER OF CORE										
	CORE										
	S SINGLE										
	D DOUBLE										
	T THREE										
	F FOUR										
	M MULTI										
	TT TELEPHONE										
(3)	EP RUBBER INSULATION OR EP RUBBER INSULATION / MICA GLASS TYPE ("F" CABLE)										
	INSULATION										
	P EP RUBBER										
	SR SILICONE RUBBER										
	Y PVC										
(4)	PVC SHEATH										
	SHEATH										
	N PCP										
	Y PVC										
(5)	STEEL WIRE BRAID										
	ARMOUR										
	C STEEL WIRE BRAID										
	B COPPER WIRE BRAID										
(6)	PVC PROTECTIVE COVER										
	PROTECTION COVER										
	Y PVC										
(7)	COMMON SHIELD										
(8)	-30°C COLD RESISTANT TYPE										
(9)	CONDUCTOR SIZE (SQ MM)										
(10)	INDIVIDUAL OR PAIR SHIELD										
(11)	FLAME RETARDANT (IEC 6033E-3 CASE "AF")										
	OTHER WISE										
	S COMMON SHIELD										
	-S INDIVIDUAL SHIELD										
	E EARTH CONDUCTOR										
	C COLD CABLE (-30°C)										
	RG RADIO GUIDANCE										

GENERAL NOTE (3/3)

11. RATED VOLTAGE OF CABLE

CABLE TYPE	NOMINAL SECTION AREA	RATED VOLTAGE
TT TYPE	0.75 MM ²	250V
M TYPE	1.0 MM ²	
ALL CABLES OTHER THAN ABOVE		0.6/1KV

12. CIRCUIT SYMBOL



- ① : MOULDED CASE CIRCUIT BRAKER
- ② : CABLE TYPE
- ③ : CIRCUIT NUMBER
- ④ : STARTER WITH DISCONNECTING SWITCH AND CONTROL UNIT
- ⑤ : STARTING FUNCTION

DOL : DIRECT ON LINE STARTING

Y-D : STAR-DELTA STARTING

A-T : AUTO TRANSFORMER STARTING

SSR : SOFT STARTING

UVR : UNDER VOLTAGE RELEASE

UVP : UNDER VOLTAGE PROTECTION

REV : REVERSIBLE

A-M : AUTO / MANUAL

ASS : AUTO START / STOP

ACVP : AUTO CHANGE OVER BY LOW VOLTAGE & LOW PRESSURE

- ⑥ : MOTOR RATINGS (KW)
- ⑦ : A OR A.H : AMMETER OR AMMETER RUNNING HOUR METER



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CABLE SPECIFICATION (1/2)

1) STANDARD CABLE LIST

S P Y C (Y) (S)										M P Y C (Y) (S)									
NO.	SYMBOL	CABLE TYPE	AME. TEMP 45°C DEG/C		"C" TYPE		"Y" TYPE		NO.	SYMBOL	CABLE TYPE	AME. TEMP 45°C DEG/C		"C" TYPE		"Y" TYPE			
			100%	85%	O.D	GRAND	O.D	GRAND				100%	85%	O.D	GRAND	O.D	GRAND		
01	S(Y)(S)1	SPYC(Y)(S)-1.5	20	17	7.2	10b	9.0	15a	01	M(Y)(S)2	MPYC(Y)(S)-2	14	11	10.0	15c	12.0	20b		
02	S(Y)(S)2.5	SPYC(Y)(S)-2.5	28	23.8	7.6	10b	9.4	15b	02	M(Y)(S)4	MPYC(Y)(S)-4	11	9	11.2	20a	132	20c		
03	S(Y)(S)4	SPYC(Y)(S)-4	38	32.3	8.2	15a	10.0	15b	03	M(Y)(S)7	MPYC(Y)(S)-7	9	7	13.2	20c	15.2	25a		
04	S(Y)(S)6	SPYC(Y)(S)-6	48	40.8	8.7	15a	10.5	15c	04	M(Y)(S)12	MPYC(Y)(S)-12	7	7	16.8	25b	19.0	25c		
05	S(Y)(S)10	SPYC(Y)(S)-10	67	56.9	9.9	15b	11.7	20a	05	M(Y)(S)19	MPYC(Y)(S)-19	6	5	19.6	25c	22.0	30b		
06	S(Y)(S)16	SPYC(Y)(S)-16	90	76.5	10.9	15c	12.9	20b	06	M(Y)(S)27	MPYC(Y)(S)-27	5	4	23.4	30b	26.0	30c		
07	S(Y)(S)25	SPYC(Y)(S)-25	120	102	12.8	20b	14.8	20c	07	M(Y)(S)37	MPYC(Y)(S)-37	4	3	26.1	35a	28.9	35b		
08	S(Y)(S)35	SPYC(Y)(S)-35	145	123.2	14.0	20c	16.2	25b	08	M(Y)(S)44	MPYC(Y)(S)-44	3	2	29.3	35b	32.1	40b		
09	S(Y)(S)50	SPYC(Y)(S)-50	180	153.0	15.9	25a	18.1	25c	09										
10	S(Y)(C)(S)70	SPYC(Y)(C)(S)-70	225	191.1	18.5	25c	20.9	30a	10										
11	S(Y)(C)(S)95	SPYC(Y)(C)(S)-95	275	233.7	23.0	30b	25.4	30c	T T Y C (Y) (S)										
12	S(Y)(C)(S)150	SPYC(Y)(C)(S)-150	458						NO.	SYMBOL	CABLE TYPE	AME. TEMP 45°C DEG/C		"S" TYPE		"Y" TYPE			
D P Y C (Y) (S)																			
01	D(Y)(S)1	DPYC(Y)(S)-1.5	17	14.4	11.7	20a	13.7	20c	01	TT(Y)(S)1	TTYC(Y)(S)-1	-	-	10.1	15b	12.1	20a		
02	D(Y)(S)2	DPYC(Y)(S)-2.5	24	20.4	12.8	20b	14.8	20c	02	TT(Y)(S)1Q	TTYC(Y)(S)-1Q	-	-	11.3	20a	13.3	25a		
03	D(Y)(S)4	DPYC(Y)(S)-4	32	27.2	13.9	20c	15.9	25a	03	TT(Y)(S)4	TTYC(Y)(S)-4	-	-	16.3	25b	18.5	25c		
04	D(Y)(S)6	DPYC(Y)(S)-6	41	34	15.2	25a	17.4	25b	04	TT(Y)(S)7	TTYC(Y)(S)-7	-	-	19.0	25c	21.4	30a		
05	D(Y)(S)10	DPYC(Y)(S)-10	57	48.5	17.1	25b	19.3	25c	05	TT(Y)(S)10	TTYC(Y)(S)-10	-	-	24.1	30c	26.7	35a		
06	D(Y)(S)16	DPYC(Y)(S)-16	77	65.5	19.4	25c	21.8	30a	06	TT(Y)(S)14	TTYC(Y)(S)-14	-	-	25.7	30c	28.3	35b		
07	D(Y)(S)25	DPYC(Y)(S)-25	102	86.7	23.0	30b	25.6	30c											
08	D(Y)(S)35	DPYC(Y)(S)-35	123	104.5	25.5	30c	28.1	35b											
09	D(Y)(S)50	DPYC(Y)(S)-50	153	130.1	29.4	35b	32.2	40b	01	TT(Y)4(S)	TTYC(Y)-4(S)			18.7	25c	21.1	30a		
T P Y C (Y) (S)										02	TT(Y)7(S)	TTYC(Y)-7(S)	-	-	22.2	30b	24.8	30c	
										03	TT(Y)10(S)	TTYC(Y)-10(S)	-	-	28.7	35b	31.5	40a	
01	T(Y)(S)1	TPYC(Y)(S)-1.5	14	11.9	12.5	20b	14.5	25a	04	TT(Y)14(S)	TTYC(Y)-14(S)	-	-	31.5	40a	34.5	45a		
02	T(Y)(S)2	TPYC(Y)(S)-2.5	20	17	13.5	20c	15.5	25b											
03	T(Y)(S)4	TPYC(Y)(S)-4	27	22.9	14.7	25a	16.9	25b	D P Y C (Y) (S) E										
04	T(Y)(S)6	TPYC(Y)(C)(S)-6	34	28.9	16.4	25a	18.3	25c	01	D(Y)E1	DPYC(Y)E-1.5	17A	14A	12.5	20B	14.5	20c		
05	T(Y)(S)10	TPYC(Y)(S)-10	47	39.9	18.3	25c	20.7	30a	02	D(Y)E2	DPYC(Y)E-2.5	24A	20A	13.5	20C	15.5	25A		
06	T(Y)(S)16	TPYC(Y)(S)-16	63	53.5	20.8	30a	23.2	30c	03	DPYE2	DPYE-2.5			12.2	10b				
07	T(Y)(S)25	TPYC(Y)(S)-25	84	71.4	24.7	30c	27.3	35a											
08	T(Y)(S)35	TPYC(Y)(S)-35	102	86.7	27.4	35a	30.2	40a											
09	T(Y)(S)50	TPYC(Y)(S)-50	126	107.1	32.0	40a	35.0	45a	T P Y C (Y) (S) E										
10	T(Y)(S)70	TPYC(Y)(S)-70	158	134.3	37.6	45b	41.0	50a	01	T(Y)E1	TPYC(Y)E-1.5	14A	11A						
11	T(Y)(S)95	TPYC(Y)(S)-95	193	164.1	41.9	50a	45.5	55b	02	T(Y)E2	TPYC(Y)E-2.5	20A	17A						
12	T(Y)(S)120	TPYC(Y)(S)-120	224	190.4	45.8	55a	49.6	60a											
13	T(Y)(S)150	TPYC(Y)(S)-150	256	217.6	50.2	60a	54.2	60b											



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CABLE SPECIFICATION (2/2)

ETC. CABLE LIST

2) FIRE RETARDANT / FIRE RESISTING CABLE LIST

NO.	SYMBOL	DESCRIPTION	NO.	SYMBOL	DESCRIPTION
1	(G)	DIESEL GENERATOR	25	[ACS]	AIR CIRCUIT BREAKER CONTROL SWITCH
2	(SG)	SHAFT GENERATOR	26	[ECS]	ENGINE CONTROL SWITCH
3	(EG)	EMERGENCY GENERATOR	27	[COS]	CHANGE OF SWITCH
4	(M)	AC INDUCTION MOTOR	28	[SHS]	SPACE HEATER SWITCH
5	(GM)	GOVERNOR MOTOR (AC)	29	[SYS]	SYNCROSCOPE & LAMP TRANSFER SWITCH
6	(GM)	GOVERNOR MOTOR (DC)	30	[PMS]	POWER MANAGEMENT SYSTEM
7	(A)	AC AMMETER	31	[RHM]	RUNNING HOUR METER
8	(A)	DC AMMETER	32	[EX]	PRE-EXCITER
9	(V)	AC VOLTMETER	33	[AVR]	AUTOMATIC VOLTAGE REGULATOR
10	(V)	DC VOLTMETER	34	(VR)	VOLTAGE REGULATOR
11	(F)	FREQUENCY METER	35	[WH]	WINDING HEATER
12	(KW)	KILOWATT METER	36	[SH]	SPACE HEATER
13	(W)	AC DOUBLE VOLTMETER	37	[EH]	ELECTRIC HEATER
14	(FF)	DOUBLE FREQUENCY METER	38	[TH]	THERMIST
15	(SY)	SYNCROSCOPE	39	[MB]	MAGNETIC BREAKER
16	(PF)	PHASE METER	40	[FVS]	FREQUENCY & VOLTMETER SELECTION SWITCH
17	(KHM)	KILOWATT-HOUR METER	41	↔○○↔	AIR CIRCUIT BREAKER (3P, DRAW-OUT TYPE)
18	(PH)	PHASE SEQUENCE INDICATOR	42	—○—	AIR CIRCUIT BREAKER (3P, PLUG-IN TYPE)
19	(OHM)	OHM METER	43	—○—*	MOULDED CASE CIRCUIT BREAKER (3P, PLUG-IN TYPE)
20	[ETS]	EARTH TEST SWITCH	44	—○—*	MOULDED CASE CIRCUIT BREAKER (2P, PLUG-IN TYPE)
21	[AS]	AMMETER SELECTION SWITCH	45	—○—	DISCONNECTING SWITCH (1P, SLADING TYPE)
22	[VS]	VOLTAGE METER SELECTION SWITCH	46	—+—	BUS BAR LINK (BOLT TYPE)
23	[FS]	FREQUENCY METER SELECTION SWITCH	47	—□—	FUSE
24	[GCS]	GOVERNOR CONTROL SWITCH	48		

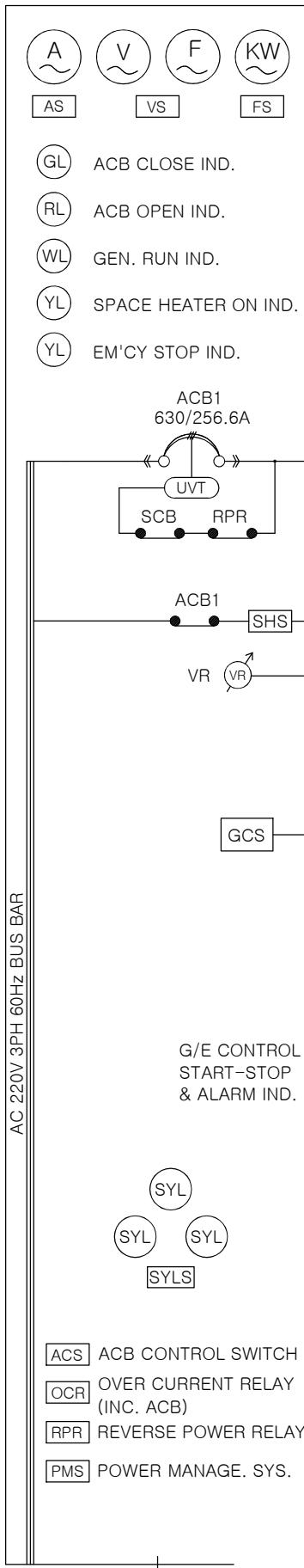
NO.	SYMBOL	DESCRIPTION	NO.	SYMBOL	DESCRIPTION
49	—○—○—	SELECT SWITCH	69	WBC	WATER BALLAST CONSOLE
50	—○— —○—	"a" CONTACT(PUSH BOTTON)	70	AEP	G/E LOCAL CONTROL PANEL
51	—○— —○—	"b" CONTACT(PUSH BOTTON)	71	SAP	STEERING GEAR ALARM PANEL
52	—○—○—	"a" CONTACT	72	RBU	RUDDER REPEATER BACK UNIT
53	—●—●—	"b" CONTACT	73	LGSP	LOCAL GROUP STARTER PANEL
54	(SHT)	SHUNT TRIP COIL	74	AMS	ALARM MONITORING SYSTEM
55	(UVC)	UNDER VOLTAGE TRIP COIL	75	LD-	LIGHTING DISTRIBUTION PANEL
56	(RPR)	REVERSE POWER RELAY	76	NLP	NAV. LIGHT CONTROL PANEL
57	(OCR)	OVER CURRENT RELAY	77	NID	NAV. INSTRUMENT DIST. PANEL
58	—CT—	CURRENT TRANSFORMER	78	END	EM'CY NAV. EQUIP'T DIST. BOARD
59	<p>The symbol consists of a vertical rectangle divided into five horizontal sections. From top to bottom: <ul style="list-style-type: none"> Top section: A downward-pointing arrow labeled 'SQ'. Second section: A triangle labeled 'A'. Third section: A rectangle labeled 'DOL'. Fourth section: A rectangle labeled 'REV'. Bottom section: A rectangle labeled 'UVR'. Arrows point from the text labels to their respective sections. Below the symbol is a small upward-pointing arrow.</p>	AUTO ST-BY START	79	ELD	EM'CY LIGHTING DIST. BOARD
		AC AMMETER	80	JB	JUNCTION BOX
		DOL : DIRECT-ON LINE START Y-D : STAR - DELTA START 2SPD : 2 SPEED START	81	TB	TERMINAL BOARD
		REV : REVERSIBLE A-M : AUTO-MANUAL RHM : RUNNING HOUR METER	82		
		UVP : UNDER VOLTAGE PROTECTION UVR : UNDER VOLTAGE RELEASE	83		
			84		
60	(ΔΔ)	MAIN TRANSFORMER	85		
61	SCB	SHORE CONNECTION BOX	86		
62	MSBD	MAIN SWICH BOARD	87		
63	ESBD	EM'CY SWICH BOARD	88		
64	GSP	GROUP STARTER PANEL	89		
65	ECC	ENGINE CONTROL CONSOLE	90		
66	BCC	BRIDGE CONTROL CONSOLE	91		
67	BCDC	BATTERY CH. & DISCHARGER BOARD	92		
68	PD-	POWER DISTRIBUTION PANEL			

NO.	SYMBOL	DESCRIPTION	NO.	SYMBOL	DESCRIPTION
93	(WL)	SIGNAL PILOT LAMP (WHITE)	127	(○ ●)	LOCAL PUSH BOTTON START WITH LAMP / STOP NON-LOCKABLE)
94	(GL)	SIGNAL PILOT LAMP (RED)	128	(○○○)	LOCAL PUSH BOTTON (NON-LOCKABLE) (FWD./REV./STOP LOCKABLE)
95	(RL)	SIGNAL PILOT LAMP (GREEN)	129	(○●●)	LOCAL PUSH BOTTON (FWD. WITH LAMP/ REV. WITH LAMP / STOP NON-LOCKABLE)
96	(OL)	SIGNAL PILOT LAMP (ORANGE)	130	(○ ●)	LOCAL PUSH BOTTON (START WITH LAMP / STOP LOCKABLE)
97	(YL)	SIGNAL PILOT LAMP (YELLOW)	131	(○●●)	LOCAL PUSH BOTTON (FWD. WITH LAMP/ REV. WITH LAMP / STOP LOCKABLE)
98	(EL)	SIGNAL LAMP (CLEAR, FOR EARTH)	132	(RP)	RECEPTACLE FOR TURNING GEAR
99	(SYL)	SIGNAL LAMP (CLEAR, FOR SYNCHRO)	133	(△)	JUNCTION BOX(N.W.T)
100	(SCL)	SIGNAL LAMP (CLEAR, FOR SHORE)	134	(○○)	JUNCTION BOX (W.T)
101	(LS)	LEVEL SWITCH	135	(○○○)	RECEPTACLE SINGLE 3P+1E AC 600V 32A IP56 SURFACE(WITH COVER)
102	(MS)	LIMIT SWITCH	136	(○○○○)	RECEPTACLE SINGLE 2P+1E AC 250V 16A IP56 SURFACE(WITH COVER)
103	(FS)	FLOW SWITCH	137	(○○○○)	RECEPTACLE SINGLE 2P+1E AC 250V 16A IP56
104	(LD)	LEVEL DETECTOR	138	(○○○○)	RECEPTACLE SINGLE 3P+1E WITH SWITCH IP56
105	(SV)	SOLENOID VALVE	139	(B)	BELL
106	(HD)	HUMIDISTAT	140	(○○○○)	LIFE RAFT LIGHT
107	(SE)	SALINITY SENSOR	141	(WL)	WARNING LIGHT (LED)
108	(PT)	PRESSURE TRANSMITTER	142		
109	(PS)	PRESSURE SWITCH	143		
110	(TS)	TEMPRATURE SWITCH	144		
111	(TT)	TEMPRATURE TRANSMITTER	145		
112	(TC)	THERMO COUPLER	146		
123	(TI)	TEMP. INDICATOR	147		
124	(○●)	EM'CY STOP SWITCH (W.T WALL MOUNTING TYPE)	148		
125	(○●)	EM'CY STOP SWITCH (PUSH BUTTON LOCKABLE TYPE)	149		
126	(○ ○)	LOCAL PUSH BOTTON (START/STOP/ WITH NON-LOCKABLE)	150		

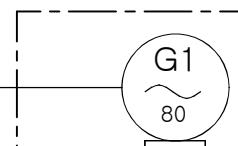
LETTER	DESCRIPTION		DESCRIPTION
M/E	MAIN ENGINE	MSBD	MAIN SWITCH BOARD
G/E	GENERATOR ENGINE	ESBD	EMERGENCY SWITCH BOARD
AUX.	AUXILIARY	S/G	STEERING GEAR
CYL.	CYLINDER	S/G/R	STEERING GEAR ROOM
DK	DESK	S.V	SOLENOID VALVE
H.F.O	HEAVY FUEL OIL	D.B	DOUBLE BOTTOM
F.O	FUEL OIL	SEP.	SEPARATOR
L.O	LUBRICATION OIL	PURI.	PURIFIER
D.O	DIESEL OIL	TRANSM.	TRANSMITTER
GEN.	GENERATOR	C.P	CONTROL PANEL
FWD.	FORWARD	S.T	STARTER
IND.	INDICATION	OUT	OUTLET
ST'BD	STARBOARD	IN	INLET
CCC	CARGO CONTROL CONSOLE	RM	ROOM
CCR	CARGO CONTROL ROOM	BCD	BATTERY CHARGER & DISCHARGER BOARD
C.S.W	COOLING SEA WATER	TR	TRANSFORMER
C.F.W	COOLING FRESH WATER		
OMD	OIL MIST DETECTOR		
PRESS.	PRESSURE		
TEMP.	TEMPERATURE		
H-H	HIGH – HIGH		
L-L	LOW – LOW		
E/R	ENGINE ROOM		
AMR	AUXILIARY MACHINE ROOM		
W/H	WHEEL HOUSE		
ECR	ENGINE CONTROL ROOM		
ECC	ENGINE CONTROL CONSOLE		
SGM	SHAFT GENERATOR MOTOR		
SG	SHAFT GENERATOR		
ST-BY	STAND-BY START		
NLP	NAVI. LIGHT CONTROL PANEL		
SLP	SIGNAL LIGHT CONTROL PANLE		
NID	NAVI. INST. DIST. PANEL		
V/V	VALVE		
EM'CY	EMERGENCY		
COMP.	COMPRESSOR		
F.W.E	FINISHED WITH ENGINE		
P.B	PUSH BUTTON		
R.P.M	REBOLUTION PER MINUTE		
WBT	WATER BALLAST TANK		
WBC	WATER BALLAST CONSOLE		
BCC	BRIDGE CONTORL CONSOLE		
BWC	BRIDGE WING CONSOLE		

- 1) 반드시 MAKER DWG.을 확인 후 작업 할 것.
 2) '*' MARK IS MAKER SUPPLIES.
 3) 자동 병렬

MSBD



*MAKER:

**NO.1 DIESEL GENERATOR**AC 225V 3PH 60Hz 0.8PF
100KVA (80KW) 256.6A

EXCITER

SPACE HEATER
(AC220V 1Ø 60HZ 250W)

AUTO. VOLTAGE REGULATOR

COOLANT HEATER
(AC220V 1Ø 60HZ)

GOVERNOR MOTOR

STARTING MOTOR

MAGNETIC PICK-UP

CHARGING MOTOR

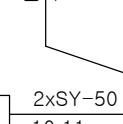
(B.C.C)

REMOTE P/N

DC 24V

C1301

D-2 12

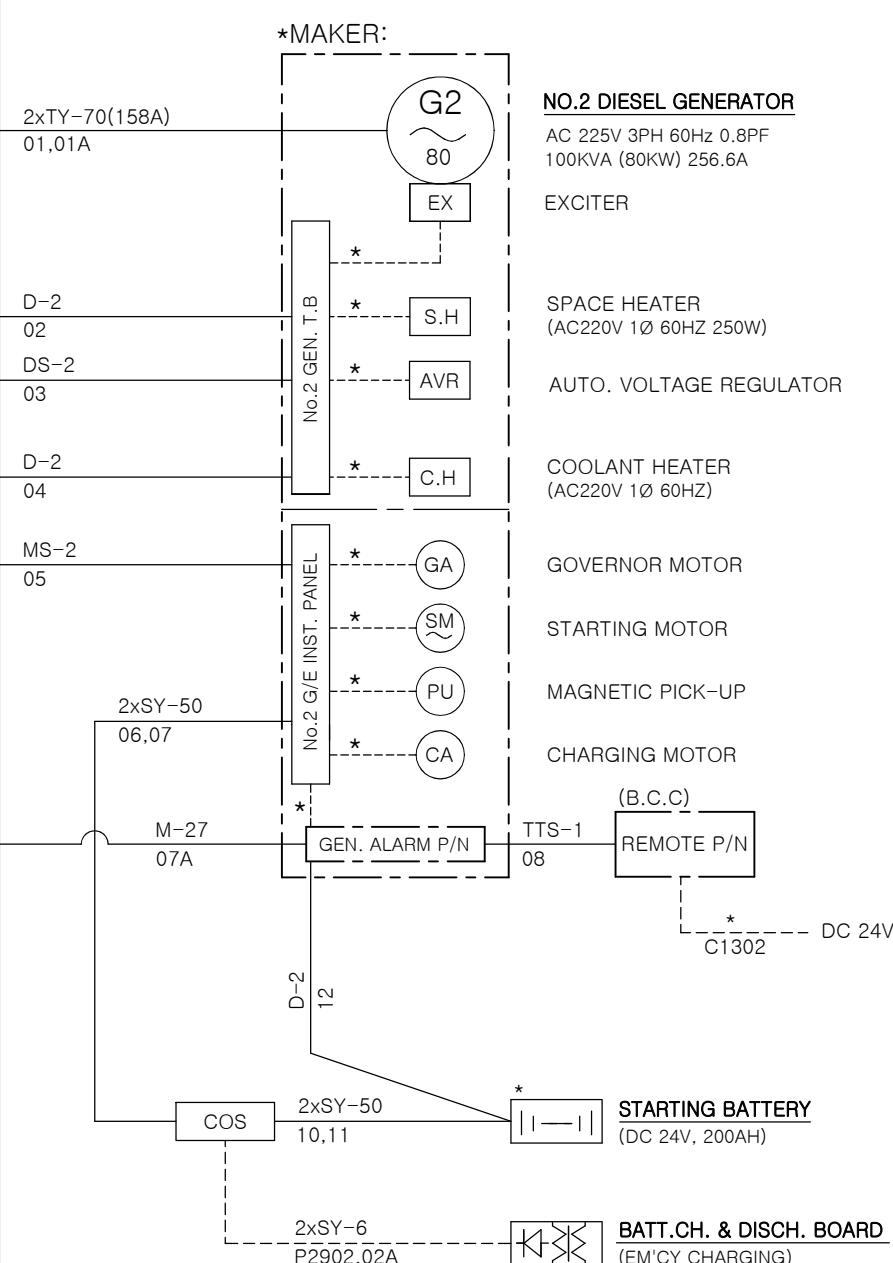
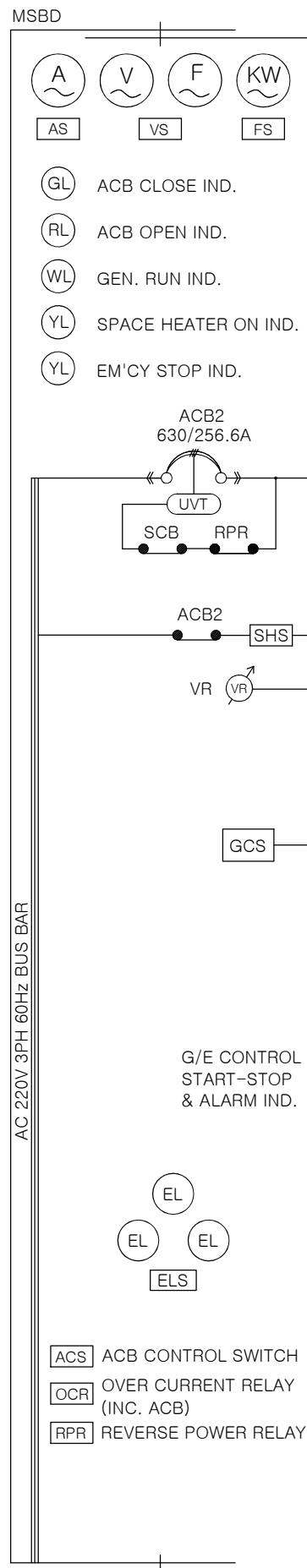


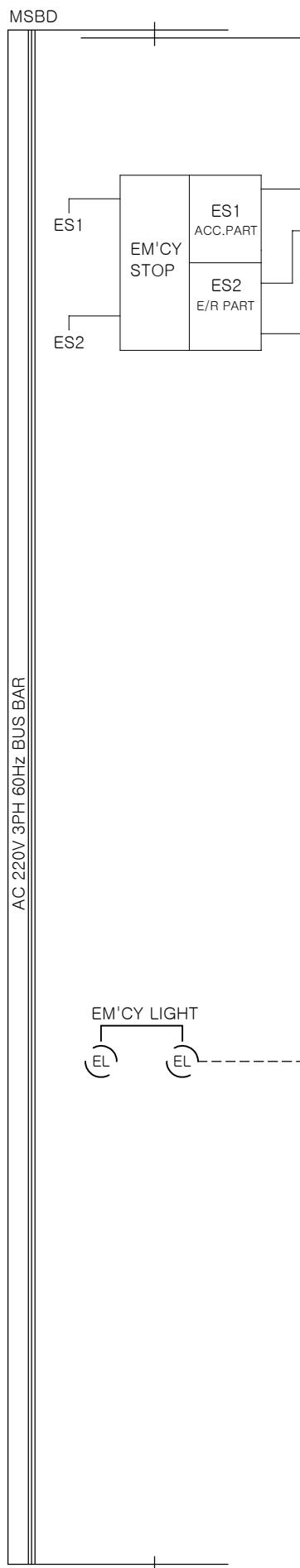
2xSY-50 10,11

STARTING BATTERY (DC 24V, 200AH)

BATT.CH. & DISCH. BOARD (EM'CY CHARGING)

- 1) 반드시 MAKER DWG.을 확인 후 작업 할 것.
 2) '*' MARK IS MAKER SUPPLIES.
 3) 자동 병렬

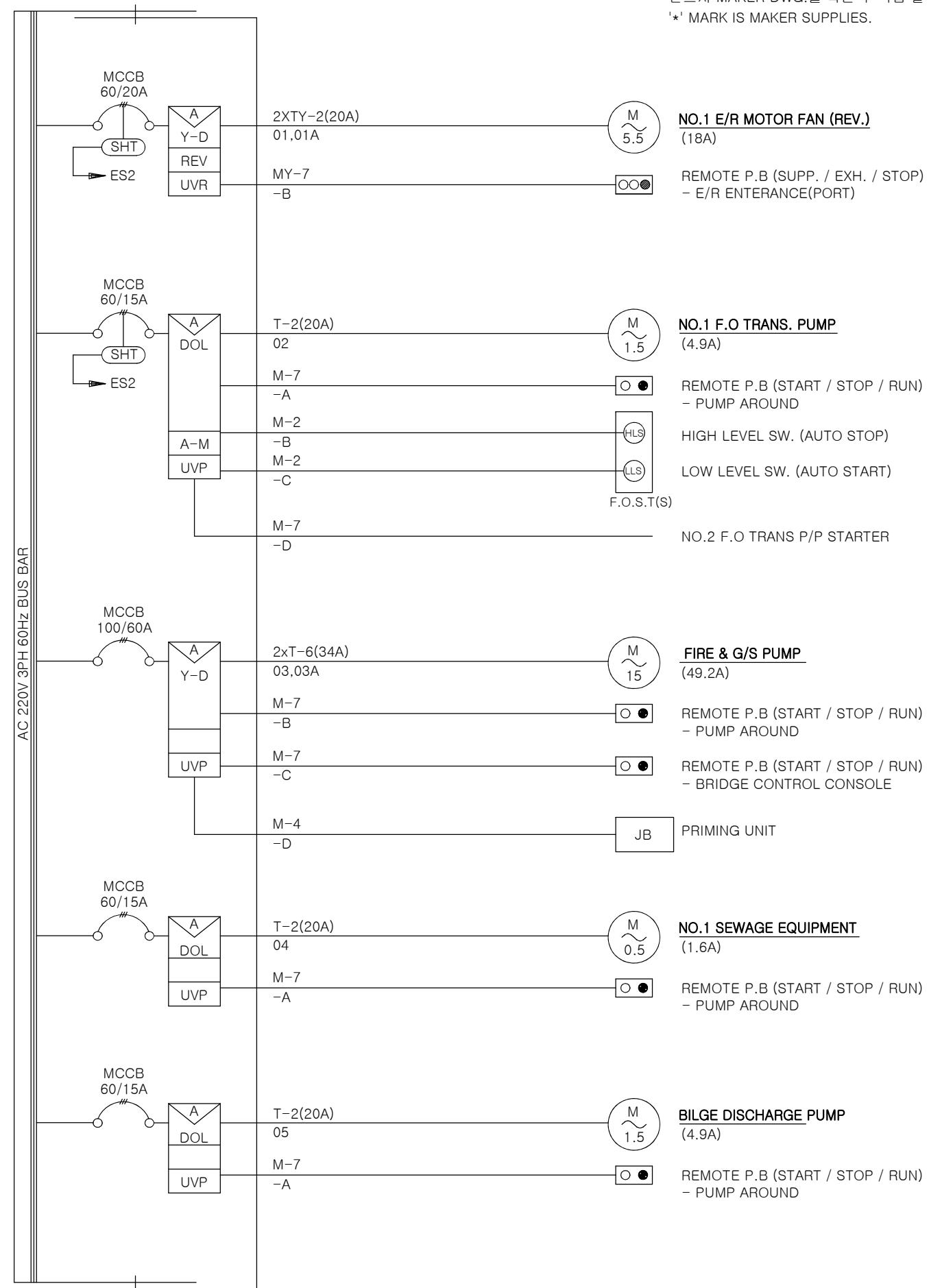




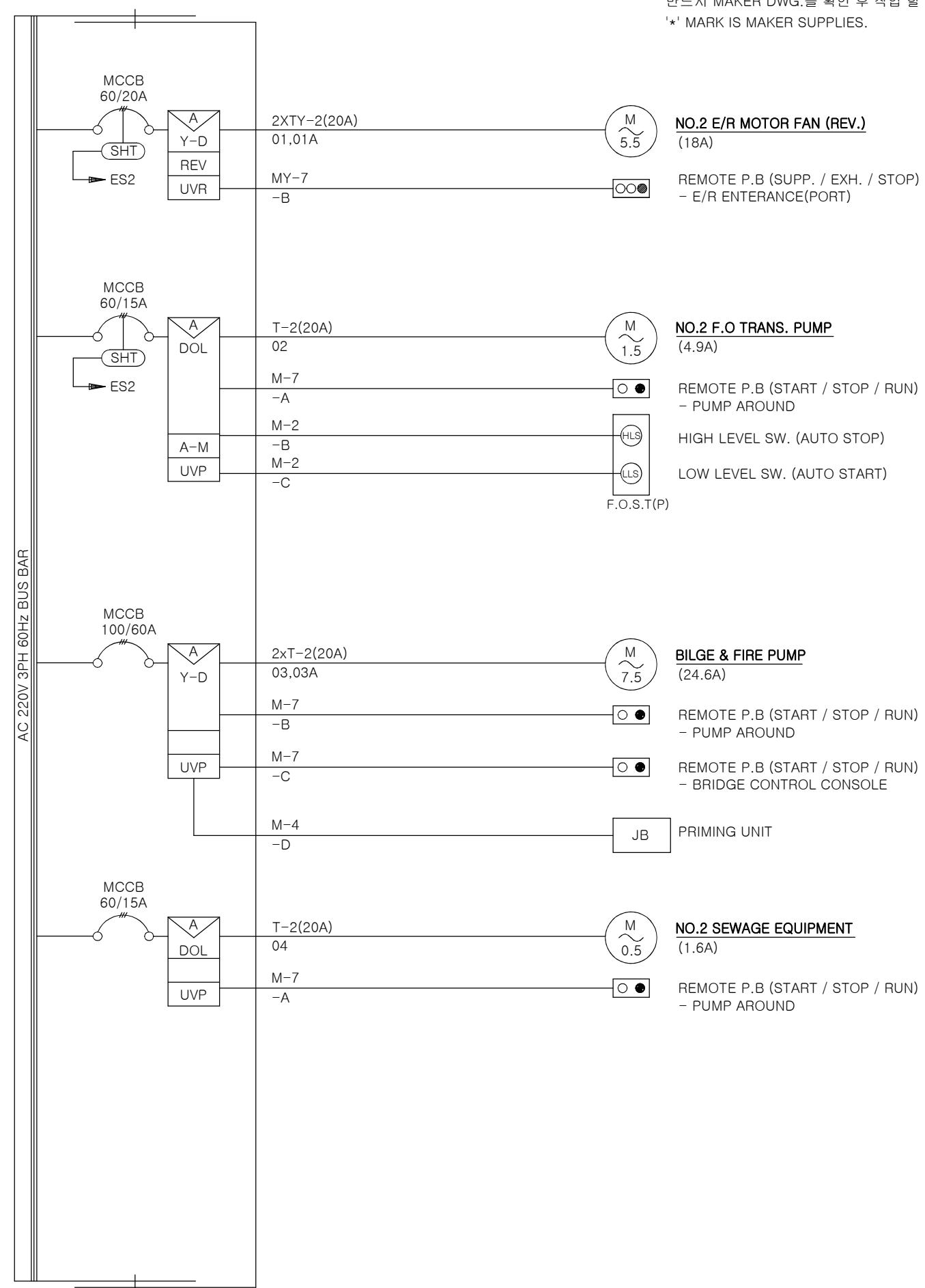
'*' MARK IS MAKER SUPPLIES.

EM'CY STOP P.B (ES1,ES2)
(WHEEL HOUSE)EM'CY STOP P.B(ES2)
(E/R ENTRANCE)

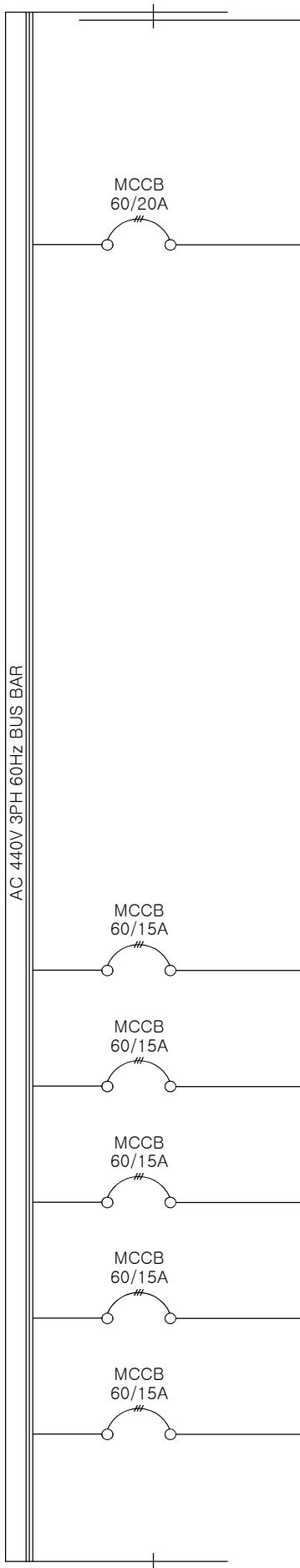
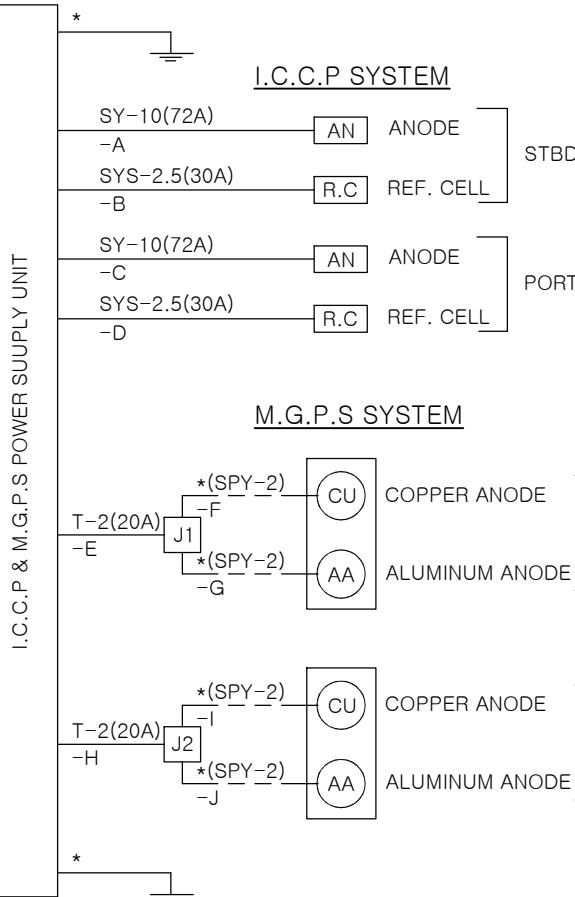
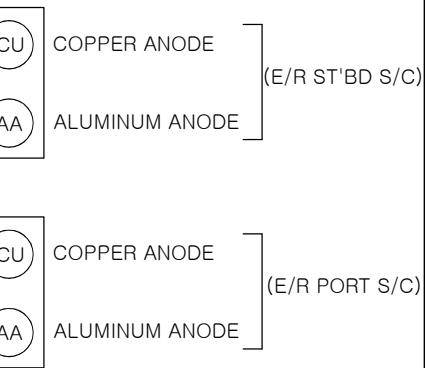
반드시 MAKER DWG.을 확인 후 작업 할 것.
'*' MARK IS MAKER SUPPLIES.



반드시 MAKER DWG.을 확인 후 작업 할 것.
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반드시 MAKER DWG.을 확인 후 작업 할 것.
'*' MARK IS MAKER SUPPLIES.

I.C.C.P & M.G.P.S SYSTEMM.G.P.S SYSTEM

NO.1 M/E L.O PRIMING PUMP
CONTROL PANEL(1.1KW)

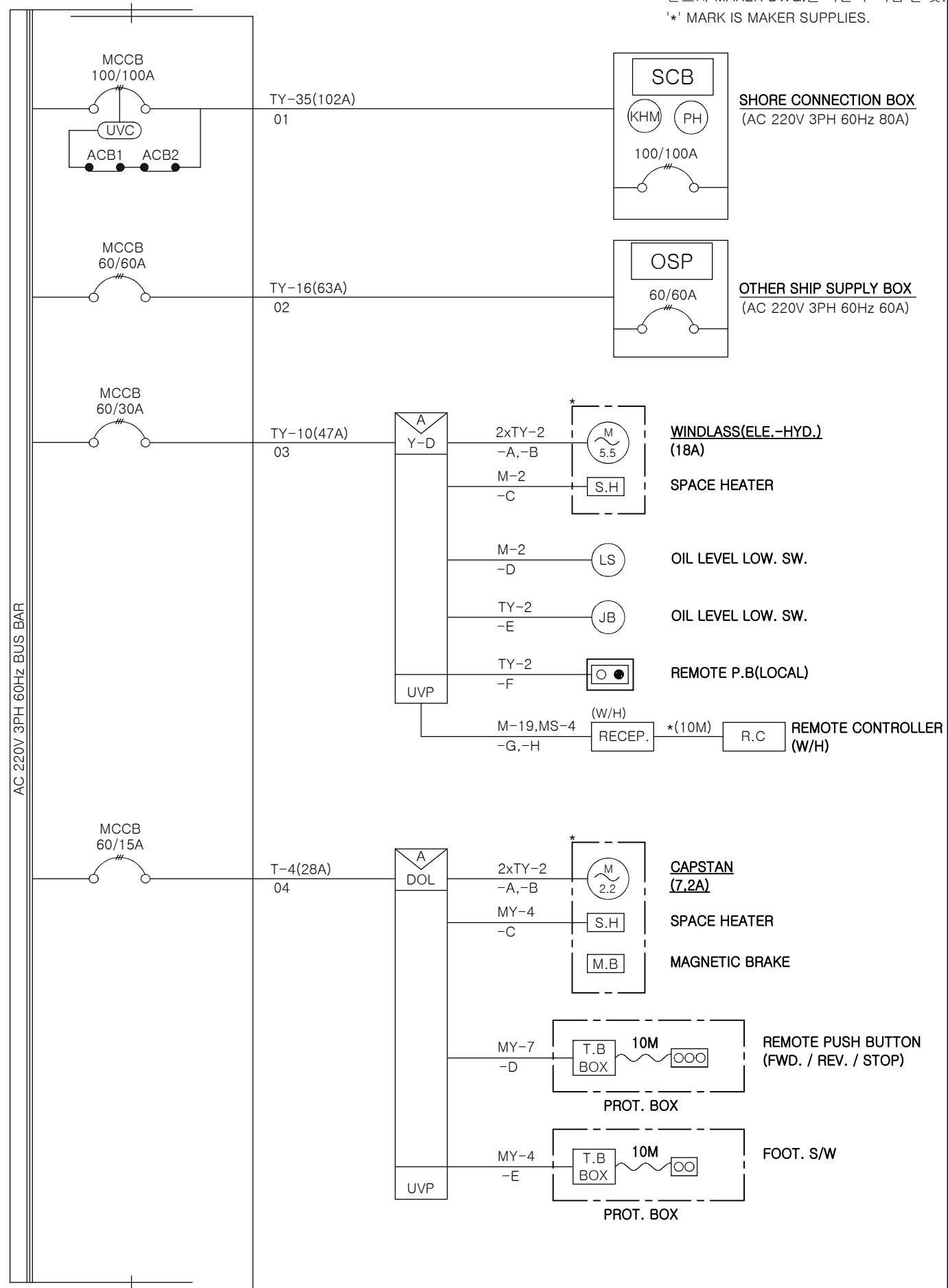
NO.2 M/E L.O PRIMING PUMP
CONTROL PANEL(1.1KW)

DPF CONTROL PANEL

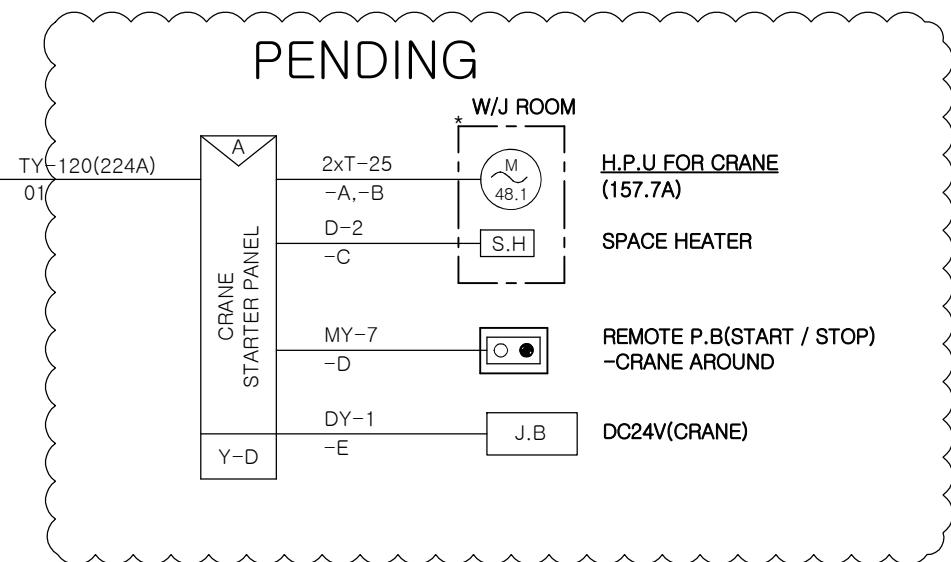
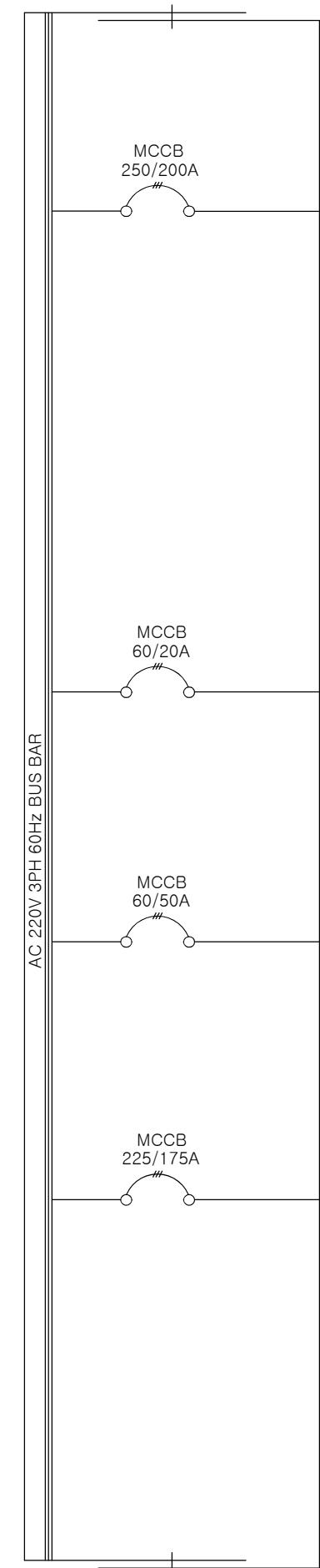
NO.1 W/JET AUX. HPU STARTER

NO.2 W/JET AUX. HPU STARTER

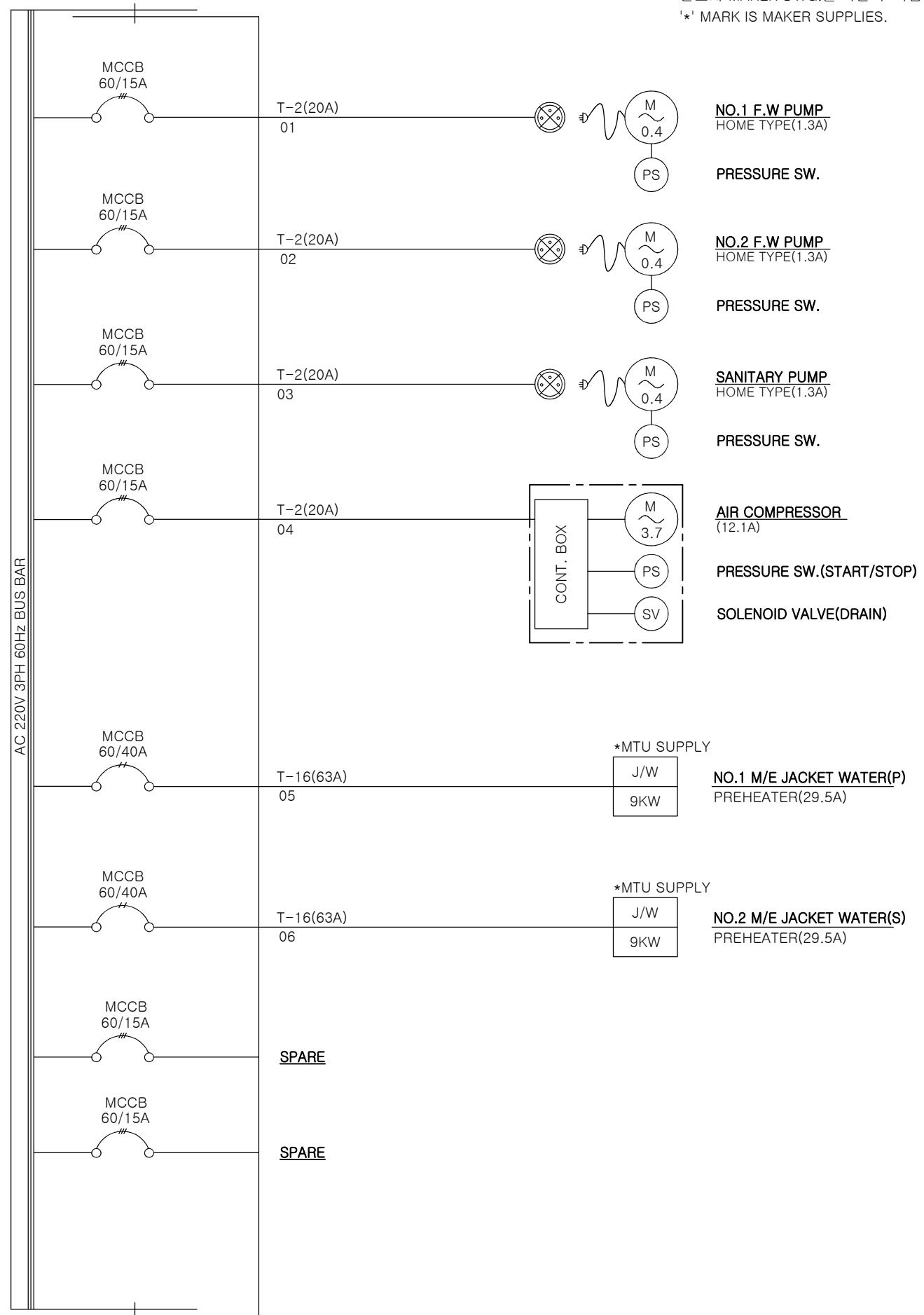
반드시 MAKER DWG.을 확인 후 작업 할 것.
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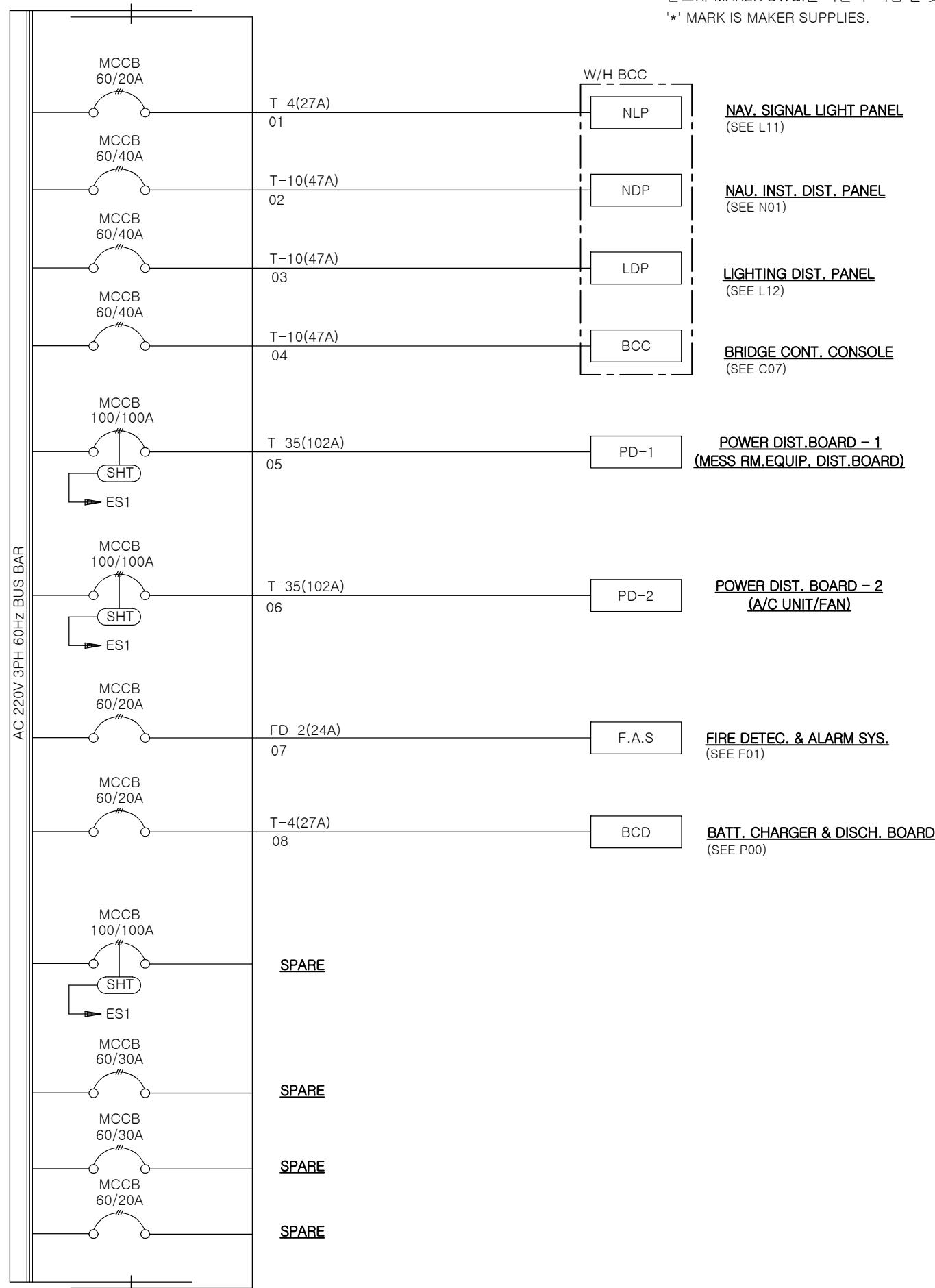
반드시 MAKER DWG.을 확인 후 작업 할 것.
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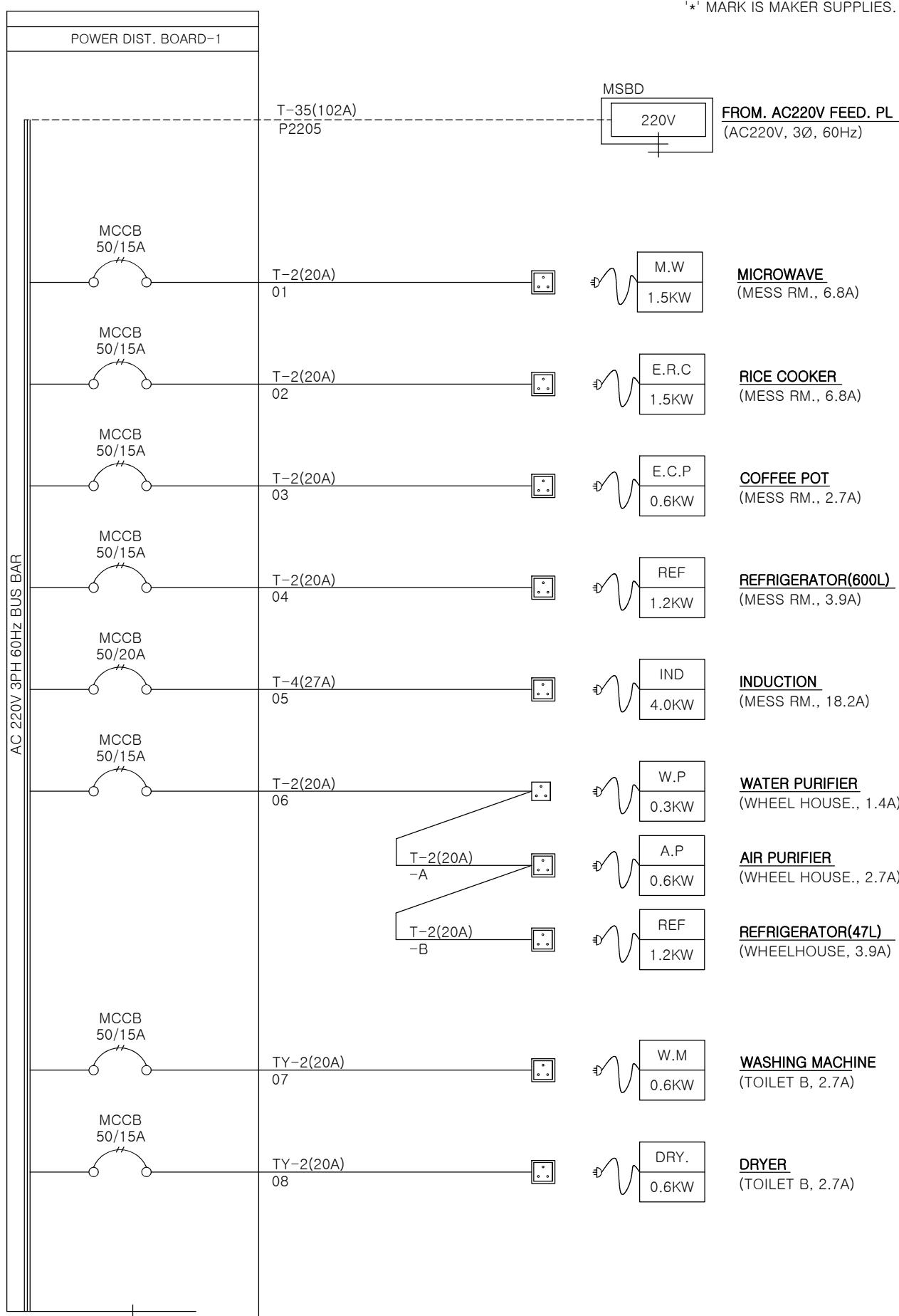
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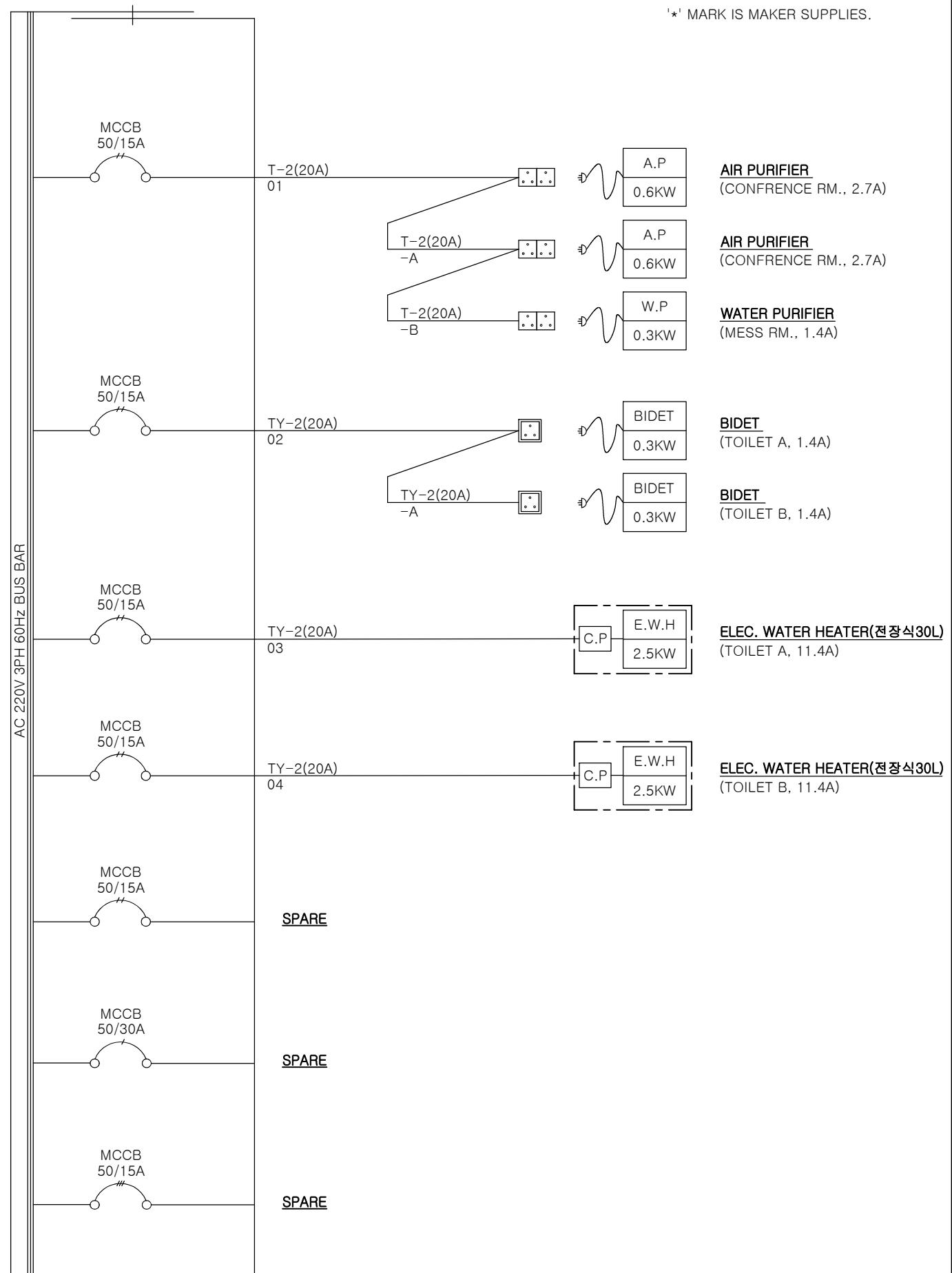
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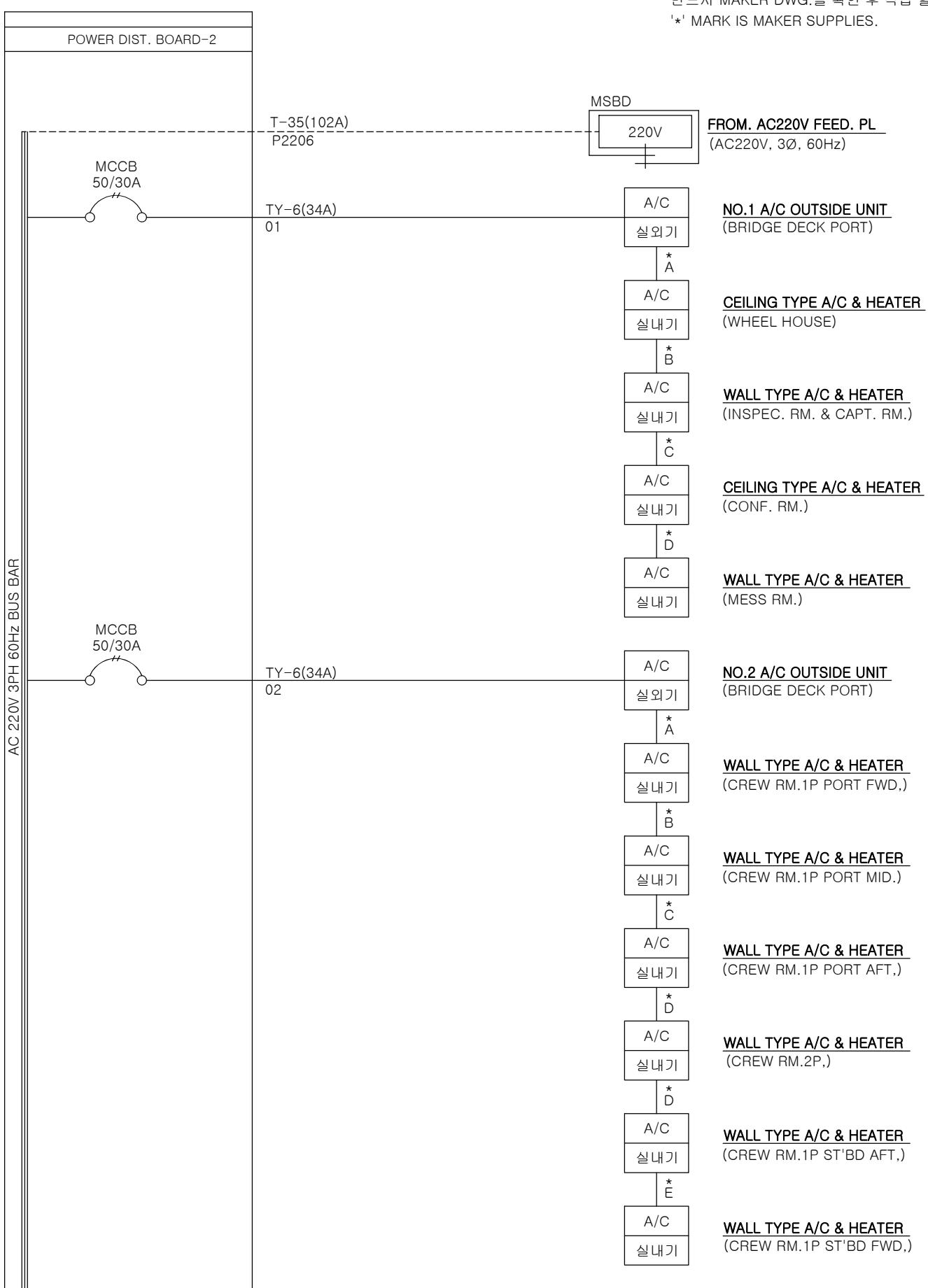
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'*' MARK IS MAKER SUPPLIES.



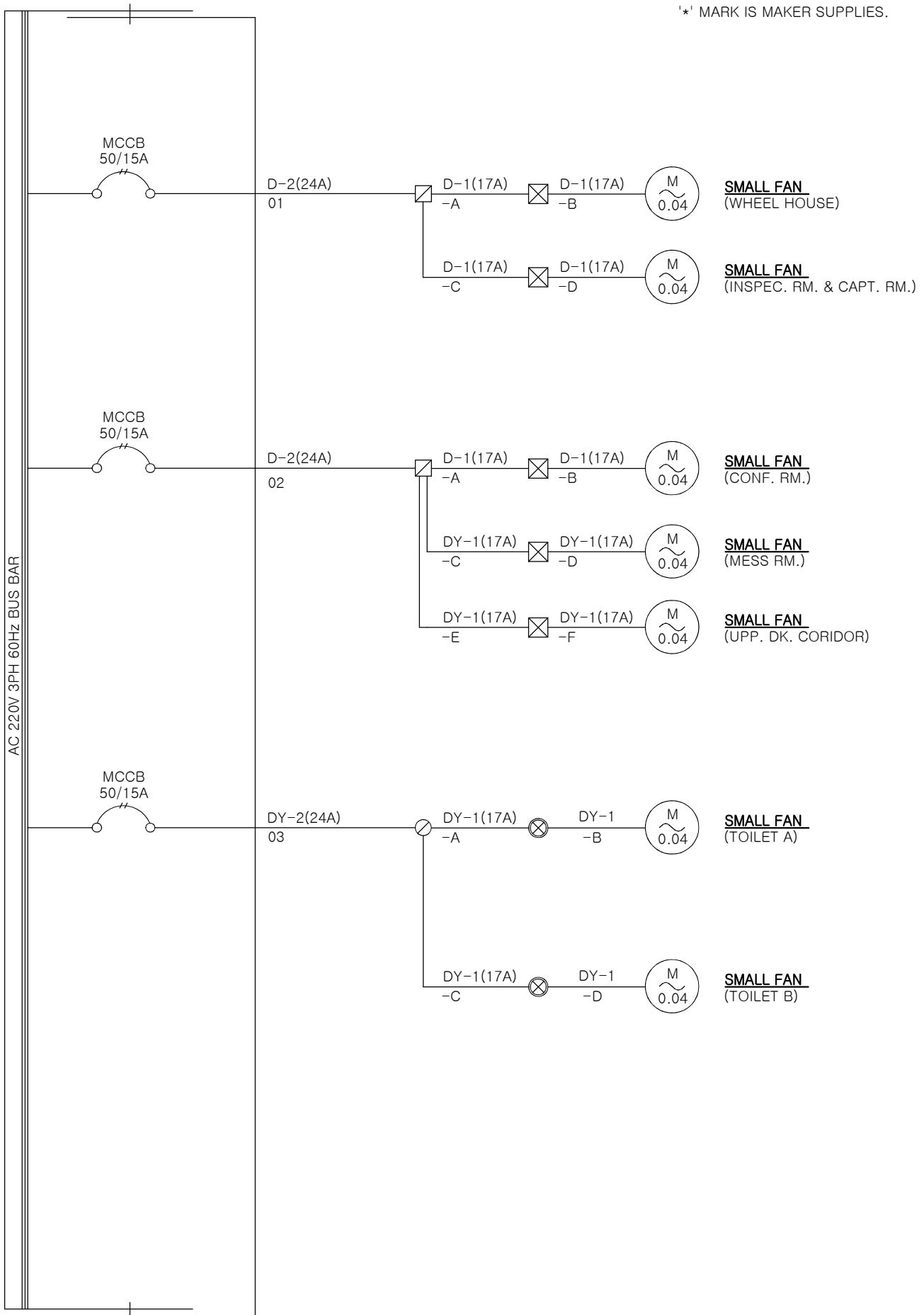
반드시 MAKER DWG.을 확인 후 작업 할 것.
'*' MARK IS MAKER SUPPLIES.



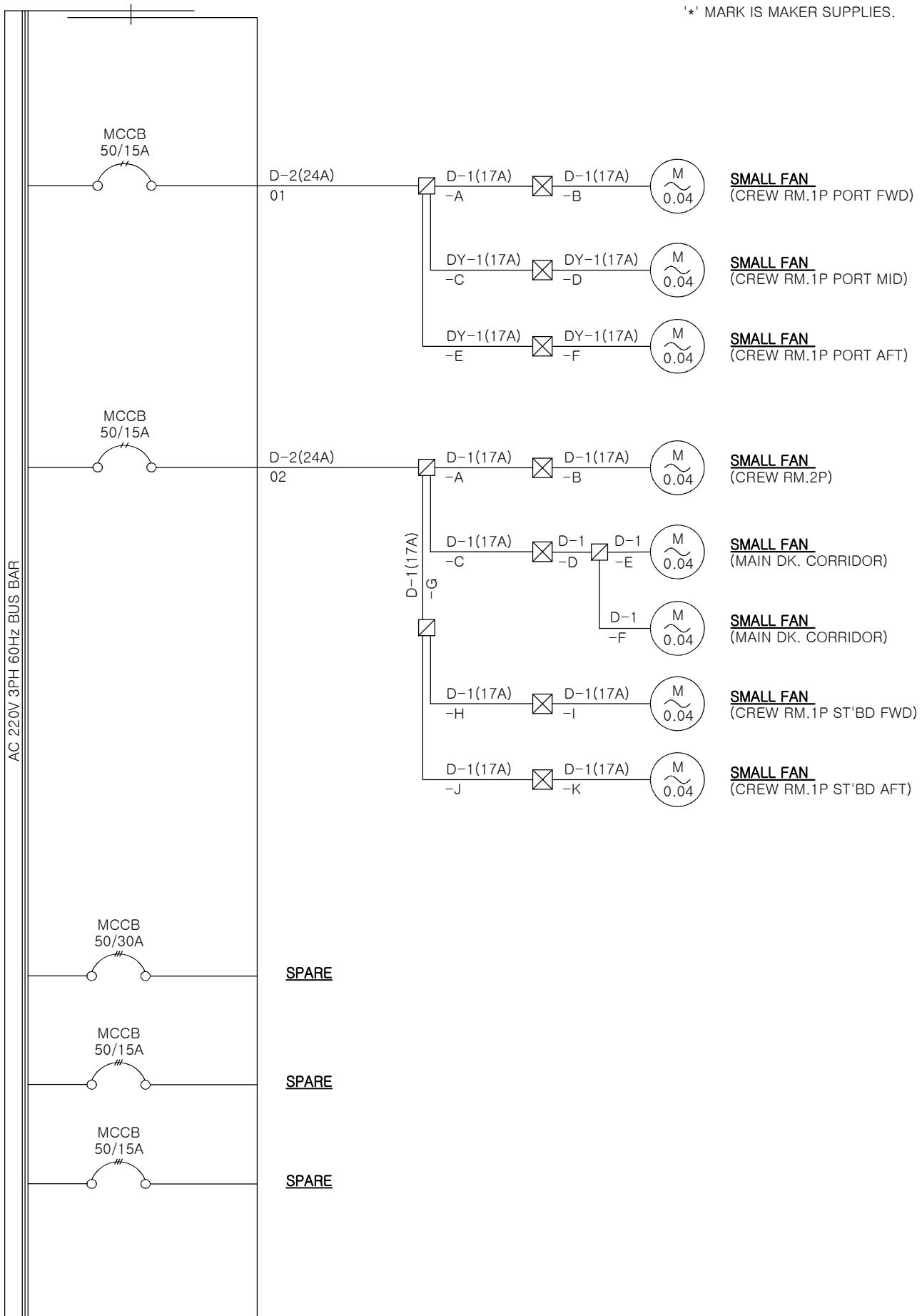
반드시 MAKER DWG.을 확인 후 작업 할 것.
'*' MARK IS MAKER SUPPLIES.



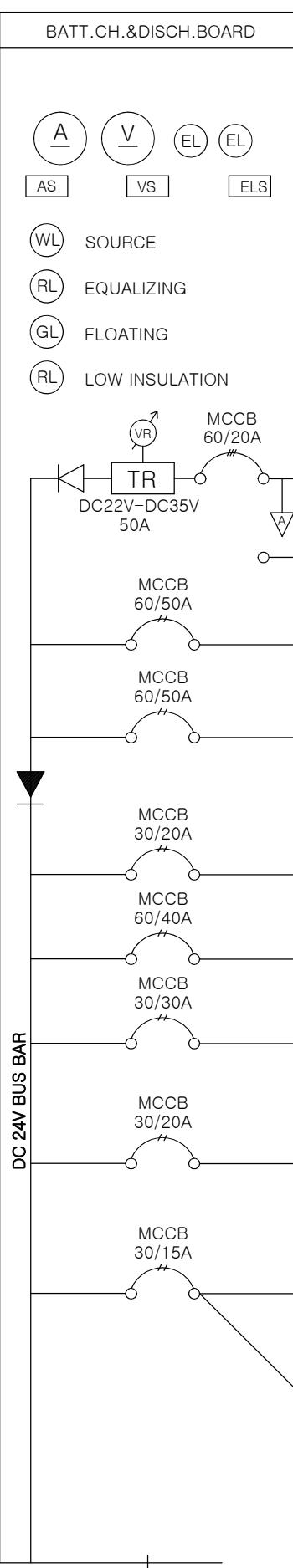
반드시 MAKER DWG.을 확인 후 작업 할 것.
'*' MARK IS MAKER SUPPLIES.



반드시 MAKER DWG.을 확인 후 작업 할 것.
'*' MARK IS MAKER SUPPLIES.



반드시 MAKER DWG.을 확인 후 작업 할 것.
'*' MARK IS MAKER SUPPLIES.



FROM. AC220V FEED. PL
(AC220V, 3Ø, 60Hz)

TO. MSBD
(CHARG & DISCH. LIGHT)

BATTERY FOR GENERAL
(DC 24V 200AH)

BATTERY FOR GENERAL
(DC 24V 200AH)

W/H BCC
NLP
NAV. SIGNAL LIGHT PANEL
(SEE L11)

EM'CY NAU. INST. DIST. PANEL
(SEE N02)

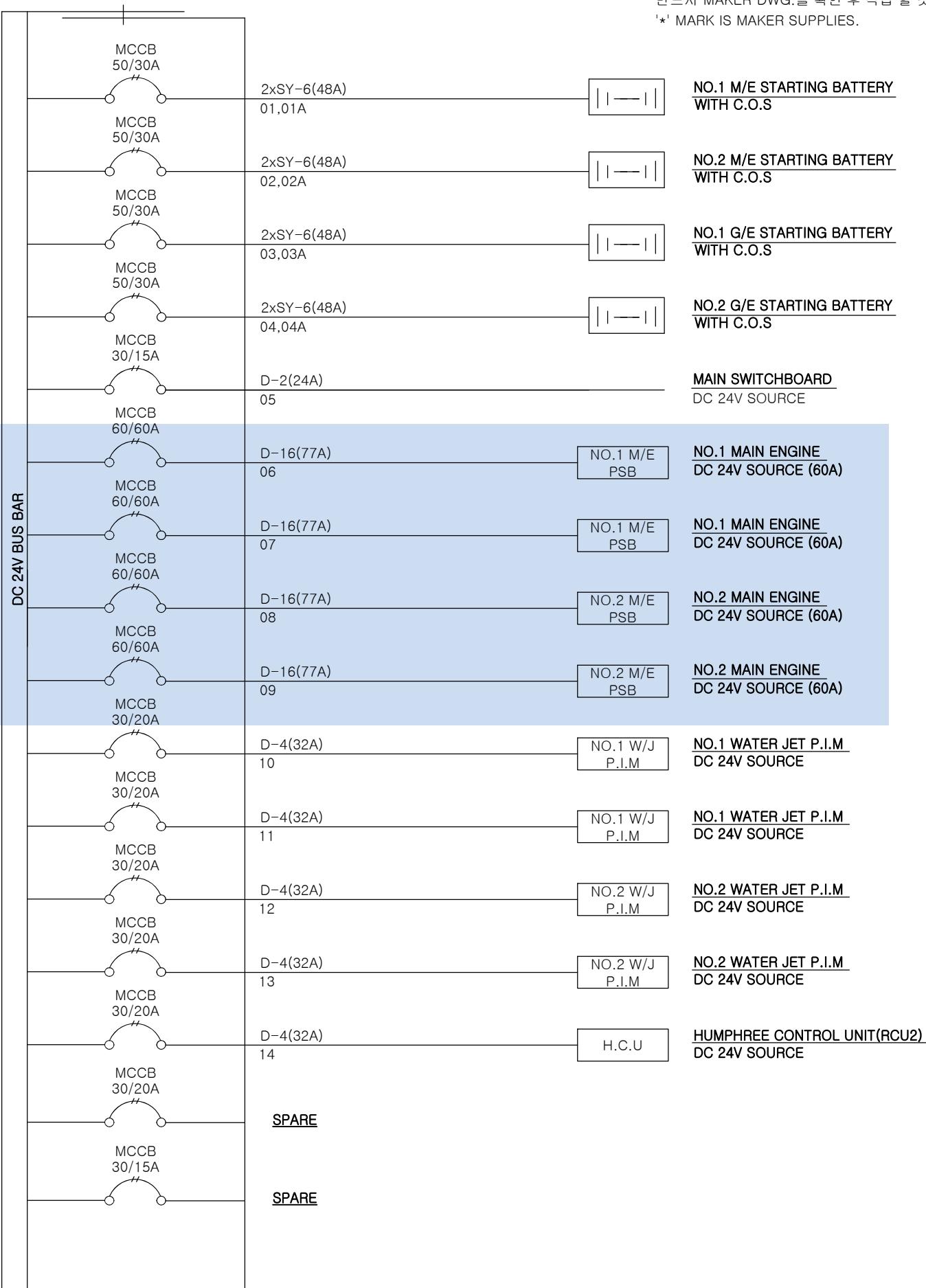
BCC
BRIDGE CONTROL CONSOLE
(SEE C07)

F.A.S
FIRE DETEC. & ALARM SYS.
(SEE F01)

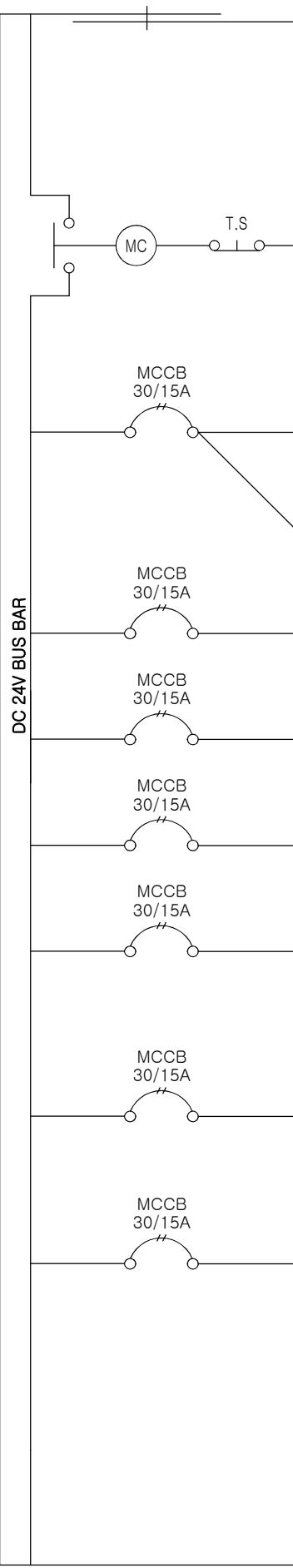
LIFE RAFT LIGHT(P)

LIFE RAFT LIGHT(S)

반드시 MAKER DWG.을 확인 후 작업 할 것.
'*' MARK IS MAKER SUPPLIES.



반드시 MAKER DWG.을 확인 후 작업 할 것.
'*' MARK IS MAKER SUPPLIES.



MAIN SWITCHBOARD
(BLACK-OUT CIRCUIT)

EM'CY LIGHT-1
(BRIDGE DK. OUTSIDE)

EM'CY LIGHT-2
(UPPER DK. OUTSIDE)

EM'CY LIGHT-3
(W/H,NAV.조사실,CAPT. RM)

EM'CY LIGHT-4
(회의실, MESS RM. CORRIDOR)

EM'CY LIGHT-5
(CREWS RM,CORRIDOR, STORE)

EM'CY LIGHT-6
(ENGINE RM, WATER JET RM)

반드시 MAKER DWG.을 확인 후 작업 할 것.
'*' MARK IS MAKER SUPPLIES.

