

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.	

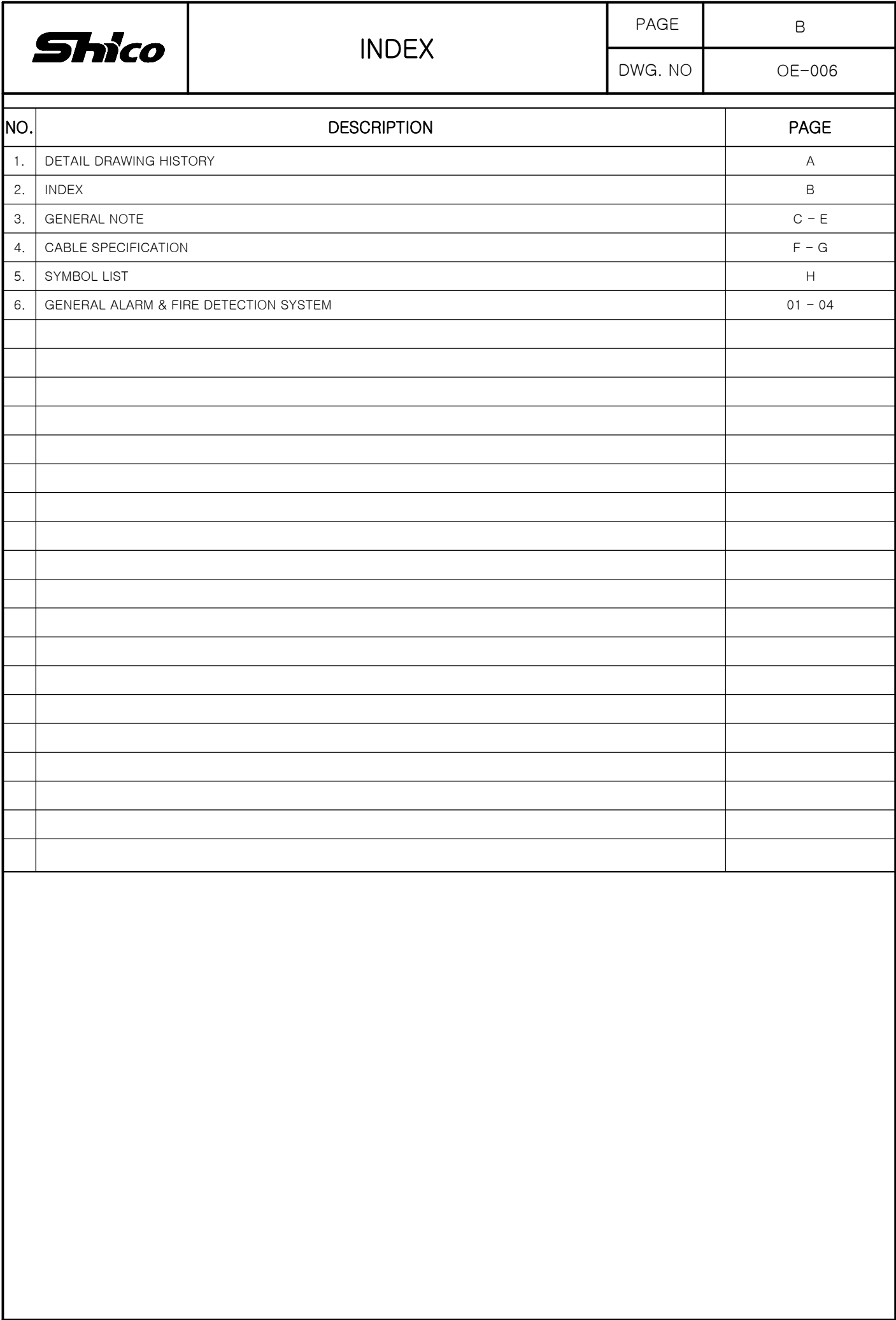
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A

OE-006

[illegible]



GENERAL NOTE

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

			SYSTEM TITLE	
EX)	P	01 01	P	E.W.D OF POWER SYSTEM
			L	E.W.D OF LIGHTING SYSTM
			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.

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-DIAMEATER 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

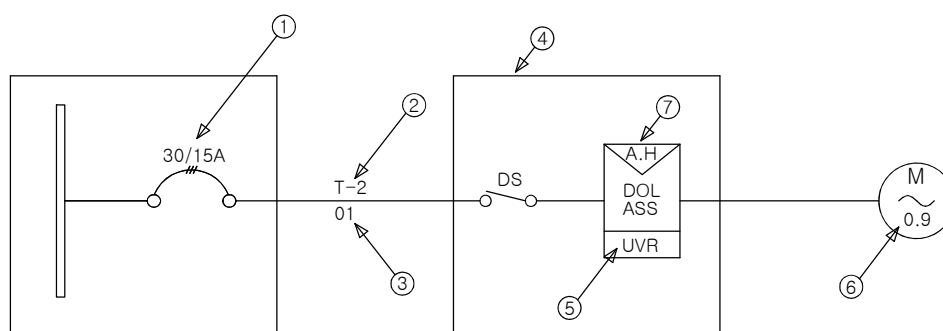
F	T	P	Y	C	(Y)	(S)	(C)	-	1.5	(S)	(FA)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		(9)	(10)	(11)

(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
(4)	PVC SHEATH	Y PVC
		SHEATH
		N PCP
(5)	STEEL WIRE BRAID	Y PVC
		ARMOUR
		C STEEL WIRE BRAID
(6)	PVC PROTECTIVE COVER	B COPPER WIRE BRAID
		PROTECTION COVER
		Y PVC
(7)	COMMON SHIELD	OTHER WISE
		S COMMON SHIELD
		-S INDIVIDUAL SHIELD
		E EARTH CONDUCTOR
		C COLD CABLE (-30°C)
		RG RADIO GUIDANCE
(8)	-30°C COLD RESISTANT TYPE	
(9)	CONDUCTOR SIZE (SQ MM)	
(10)	INDIVIDUAL OR PAIR SHIELD	
(11)	FLAME RETARDANT (IEC 6033E-3 CASE "AF")	

11. RATED VOLTAGE OF CABLE

CABLE TYPE	NOMINAL SECTION AREA	RATED VOLTAGE
TT TYPE	0.75 MM²	250V
M TYPE	1.0 MM²	
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

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)								
D P Y C (Y) (S)									NO.	SYMBOL	CABLE TYPE	AME. TEMP 45°C DEG/C		"S" TYPE		"Y" TYPE	
												100%	85%	O.D	GRAND	O.D	GRAND
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
01	T(Y)(S)1	TPYC(Y)(S)-1.5	14	11.9	12.5	20b	14.5	25a	03	TT(Y)10(S)	TTYC(Y)-10(S)	-	-	28.7	35b	31.5	40a
02	T(Y)(S)2	TPYC(Y)(S)-2.5	20	17	13.5	20c	15.5	25b	04	TT(Y)14(S)	TTYC(Y)-14(S)	-	-	31.5	40a	34.5	45a
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									

ETC. CABLE LIST

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	5P(Y)1	5PYC(Y)-1.5	-	-	14.4	20c	16.5	25b	01	RS232C	RS-232C	-	-	11.0	15c		
02	5P(Y)2	5PYC(Y)-2.5	-	-	15.8	25a	17.9	25c									
									01	STP5	STP CAT-5	-	-	13.0	20b		
01	RG6	RG-6	-	-	9.0	15b			01	5C2V	5C-2V	-	-	7.5	10b		
02	12U	RG-12/U	-	-	12.0	20a											
03	12UY	RG-12/UY	-	-	14.1	20c											
04	22U	RG-22/U	-	-	10.3	15c											
05	59U	RG-59B/U	-	-	6.2	10a											

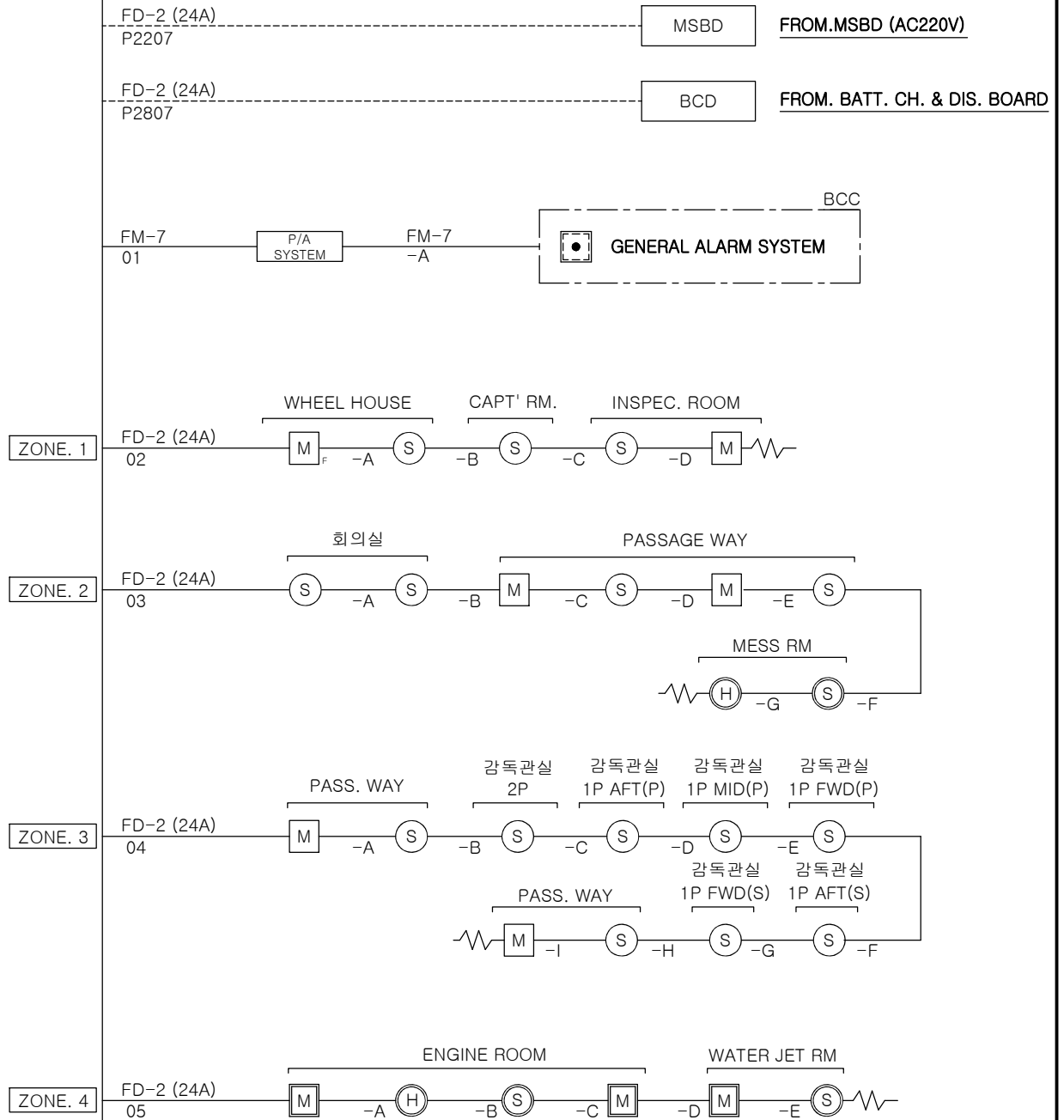
2. FIRE RETARDANT / FIRE RESISTING CABLE LIST

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	FD(Y)(S)1	FDPYC(Y)(S)-1.5FA	17	14	13.0	20b	14.9	20c	01	FT(Y)(S)1	FTPYC(Y)(S)-1.5FA	14	11	13.0	20b	15.6	25a
02	FD(Y)(S)2	FDPYC(Y)(S)-2.5FA	24	20	13.9	20c	15.8	25a	02	FT(Y)(S)2	FTPYC(Y)(S)-2.5FA	20	17	13.9	20c	16.7	25b
03	FD(Y)(S)4	FDPYC(Y)(S)-4FA	32	27	15.0	20c	17.1	25b	03	FT(Y)(S)4	FTPYC(Y)(S)-4FA	27	22	16.0	25b	18.1	25c
04	FD(Y)(S)6	FDPYC(Y)(S)-6FA	41	34	16.4	25b	18.5	25c	04	FT(Y)(S)6	FTPYC(Y)(S)-6FA	34	28	17.2	25b	19.3	25c
									05	FT(Y)(S)10	FTPYC(Y)(S)-10FA	47	39	19.4	25c	21.8	30a
									06	FT(Y)(S)16	FTPYC(Y)(S)-16FA	63	53	21.9	30a	24.3	30c
01	FM(Y)(S)2	FMPYC(Y)(S)-2FA	14	9	10.5	15c	12.4	20b	07	FT(Y)(S)25	FTPYC(Y)(S)-25FA	84	71	25.9	30c	28.5	35b
02	FM(Y)(S)4	FMPYC(Y)(S)-4FA	11	9	12.4	20b	14.3	20c	08	FT(Y)(S)35	FTPYC(Y)(S)-35FA	102	-	28.6	35b	31.4	40a
03	FM(Y)(S)7	FMPYC(Y)(S)-7FA	9	7	14.6	20c	16.7	25b	09	FT(Y)(S)50	FTPYC(Y)(S)-50FA	126	-	33.3	40b	36.3	45b
04	FM(Y)(S)12	FMPYC(Y)(S)-12FA	7	5	18.9	25c	21.3	30a									
05	FM(Y)(S)19	FMPYC(Y)(S)-19FA	6	5	22.0	30a	24.6	30c									

NO.	SYMBOL	DESCRIPTION	ACCOMMODATION										BOTTOM		TOTAL Q'TY
			WHEEL HOUSE	INSPEC RM.	CAPT' RM.	CONF. RM.	UPP.DK. PASSAGE	MESS RM.	ENG RM. ENT.	BOTT.DK. PASSAGE	CREW'S RM	ENG. RM.	S/G RM.		
1		OPTICAL SMOKE DETECTOR (NON WEATHER PROOF)	1	1	1	1	2			2	6			14	
2		OPTICAL SMOKE DETECTOR (WEATHER PROOF)						1					1	3	
3		EXPLOSION SMOKE DETECTOR(ExI TYPE)													
4		HEAT DETECTOR(N.W.T)													
5		HEAT DETECTOR(W.T)						1					1	2	
6		MANUAL CALL POINT (NON WEATHER PROOF)		1			2			2				5	
7		MANUAL CALL POINT (FLUSH TYPE) (NON WEATHER PROOF)	1											1	
8		MANUAL CALL POINT (WEATHER PROOF)							1				1	3	
9		INTRINSICALLY SAFE MANUAL CALL POINT (W.T SURFACE TYPE)													
10		GENERAL EM'CY ALARM PUSH BUTTON (N.W.T CONSOLE MOUNT. TYPE)	1											1	
11		GENERAL EM'CY ALARM PUSH BUTTON (W.T CONSOLE MOUNT. TYPE)													
12		END OF LINE RESISTOR		1				1		1			1	4	
13		150Ø MAIN FIRE ALARM BELL WITH LAMP (W.T DC 24V)													
14		CONVENTIONAL FIRE CONTROL PANEL	1											1	
15															
16															
17															
18															

ALL CABLES ARE FIRE RESISTANT TYPE (FRDPYC-1.5) EXCEPT NOTED
작업시 MAKER DWG.을 확인 후 작업 할 것.

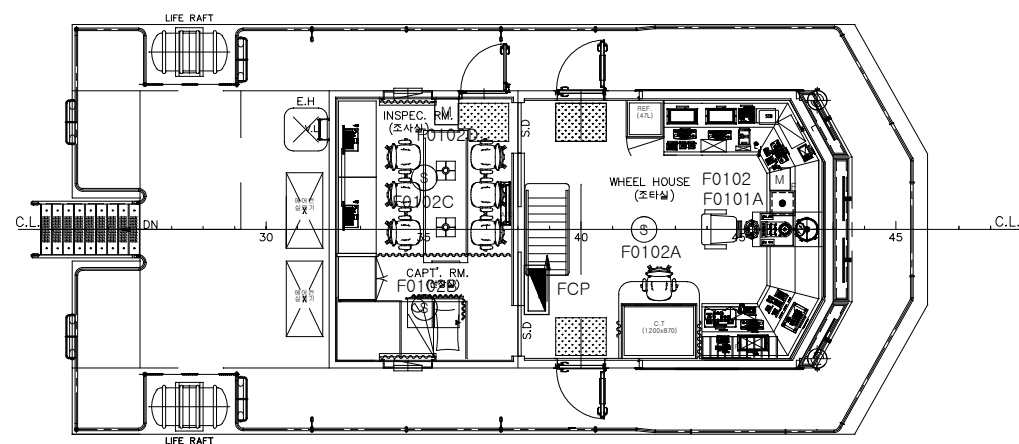
GENERAL ALARM & FIRE DETECTION CONTROL PANEL



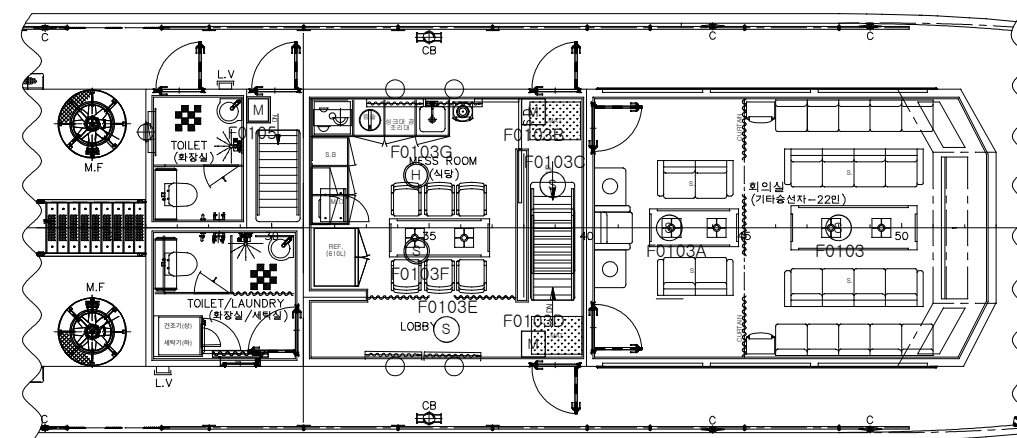
ARRANGEMENT OF FIRE DETECTION SYSTEM

PAGE	02/02
DWG. NO	OE-006

NAV. BRI. DECK PLAN



UPPER DECK PLAN



NOTE
SMOKE D. RADIUS : 5500mm
HEAT D. RADIUS : 4500mm

BOTTOM PLAN

