제 2012 - 16568 호

안 전 인 증 서

(사업장명) 극동호이스트(주)

(소 재 지) (425-833)경기도 안산시 성곡동 630-2 반월공단 B-607-14

위 사업장에서 제조하는 아래의 품목이 산업안전보건법 제34조 및 같은 법 시행규칙 제58조의4제4항에 따른 안전인증 심사 결과 안전·보건기준에 적합하므로 안전인증표시의 사용을 인증합니다.

품 목

호이스트

형식,모델(용량,등급)/인증번호

KDC3-M (3.0Ton) /12-AQ2AC-01642

인 증 기 준

고용노동부 고시 제2011 - 39호 (위험기계,기구 의무안전인증 고시)

인 증 조 건

2012년 05월 08일

한국산업안전보건공단이사장

심사결과 통지서

신청인	사업장명	극동호이스트(주)	사업장관리번호	134-81-013350
	사업자등록번호	134-81-01335	대표자 성명	최성찬
	소재지	(425 - 833) 경기도 안산시 성곡동 630-2 반월공단 B-607-14		

안전인증대상 기계·기구명	호이스트		
형 식 (규 격)	KDC3-M (123MN30C041)	용 량 (등 급)	3.0 Ton

산업안전보건법 제 34조 및 같은 법 시행규칙 제58조의4에 따라 실시한

[ ] 예비심사
[ ] 서면심사
[ ] 기술능력 및 생산처계 심사
[ ] 개별 제품심사
[ ] 개별 제품심사(제작중)
[√] 형식별 제품심사

결과가 [√] 적 합 [ ] 부적합 함을 통지합니다.

2012년 05월 08일

인증심사원 변명수 (서명 또는 인)

한국산업안전보건공단 경기서부지도원장

심사결과 통지서

신청인	사업장명	극동호이스트(주)	사업장관리번호	134-81-013350
	사업자등록번호	134-81-01335	대표자 성명	최성찬
	소재지	(425 - 833) 경기도 안산시 성곡동630-2 반월공단 B-607-14		

안전인증대상 기계·기구명	호이스트		
형 식 (규 격)	KDC3-M	용 량 (등 급)	3.0 Ton

산업안전보건법 제 34조 및 같은 법 시행규칙 제58조의4에 따라 실시한

[ ] 예비심사

[√] 서면심사

[ ] 기술능력 및 생산처계 심사

[ ] 개별 제품심사

[ ] 개별 제품심사(제작중)

[ ] 형식별 제품심사

결과가 [√] 적 합 [ ] 부적합 함을 통지합니다.

2011년 11월 02일

인증심사원 조성준 변명수 (서명 또는 인)

한국산업안전보건공단 경기서부지도원장

서 면 심 사 서 류

형식 번호 : KDC3 - M

극 동 호 이 스 트 (주)

工場 : 경기도 안산시 단원구 성곡동 630-2 반월공단607-14

電話 : 031) 491 - 5311

FAX : 031) 491 - 5316

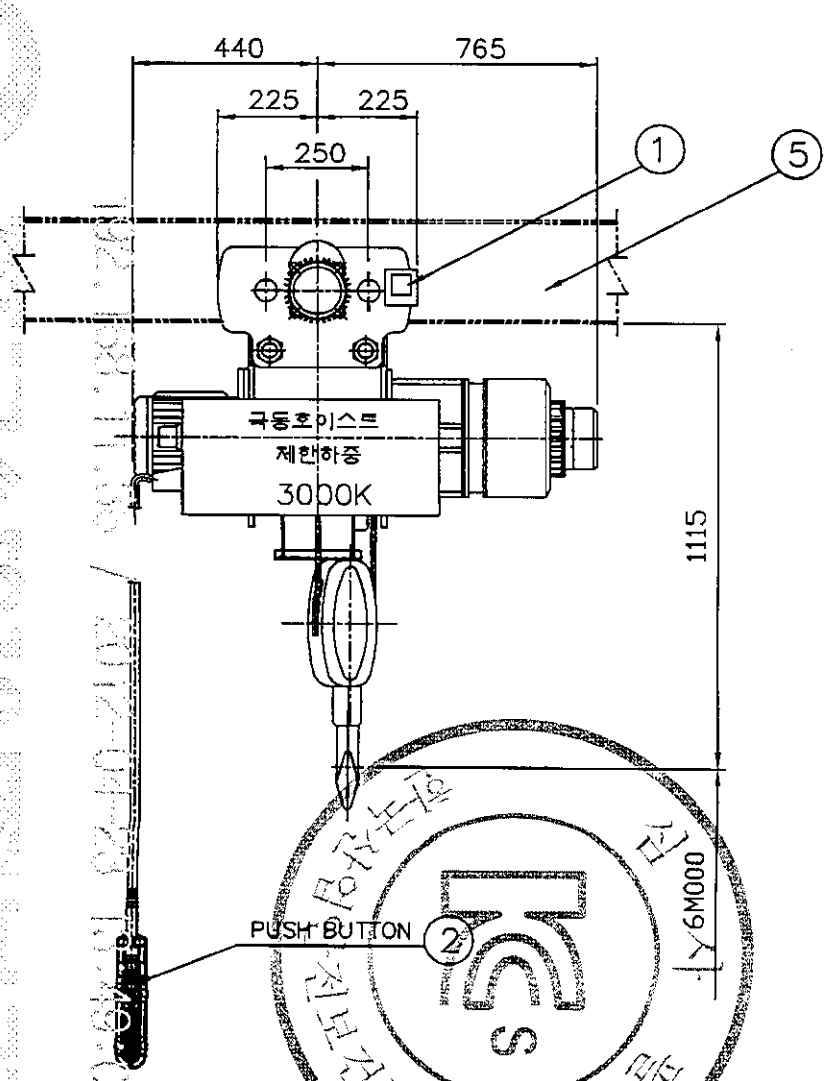
동일형식일람표

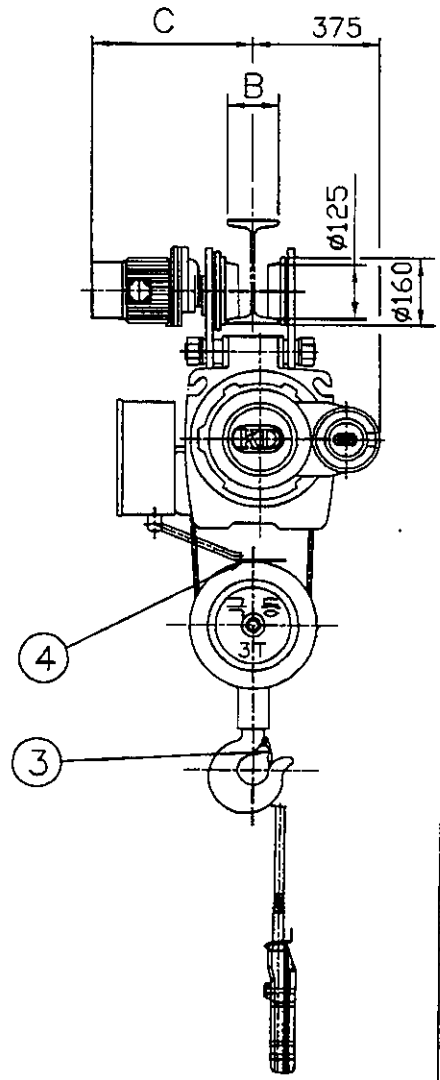
사업장명	극동호이스트㈜	개정일자 및 번호		인증번호	비고
형식 및 모델		동일 형식 인정범위 및 내역			
형식	모델	권상속도(m/min)	횡행속도(m/min)	양정(m)	횡행방식
KDC3-M	KDC3-L6-M	고속:9.0M/MIN CREEP:0.9M/MIN	고속:24M/MIN 저속:16M/MIN 듀얼고속:24/12M/MIN 듀얼저속:16/8M/MIN	6	모터구동식
	KDC3-L9-M			9	
	KDC3-L12-M			12	
	KDC30L18-M			18	
	KDC3-L24-M			24	
	KDC3-L30-M			30	

심사원

KCS

한국산업안전보건공단





SPECIFICATION			
RATED LOAD		3,000	KG
TESTING LOAD		3,750	KG
LIFT		6	M
RATING		30	MIN
HOISTING	SPEED	9.0 / 0.9	M/MIN
	MOTOR	5.5 / 1.5 KW x 4 P	
TRAVERSING	SPEED	HIGH	24 M/MIN
		LOW	16 M/MIN
		DUAL/HIGH	24/12 M/MIN
		DUAL/LOW	16/8 M/MIN
	MOTOR	HIGH	0.75 KW x 4 P
		LOW	0.5 KW x 6 P
		DUAL/HIGH	0.8/0.4 KW x 4/8 P
		DUAL/LOW	0.5/0.25 KW x 6/12 P
WIRE ROPE		(6x37) ø12.5 x 2 FALLS	
POWER SOURCE		AC3ø 220V(380,440,460,480) 60Hz	
COLOR		10 B 3/5	
WEIGHT		415 KG	

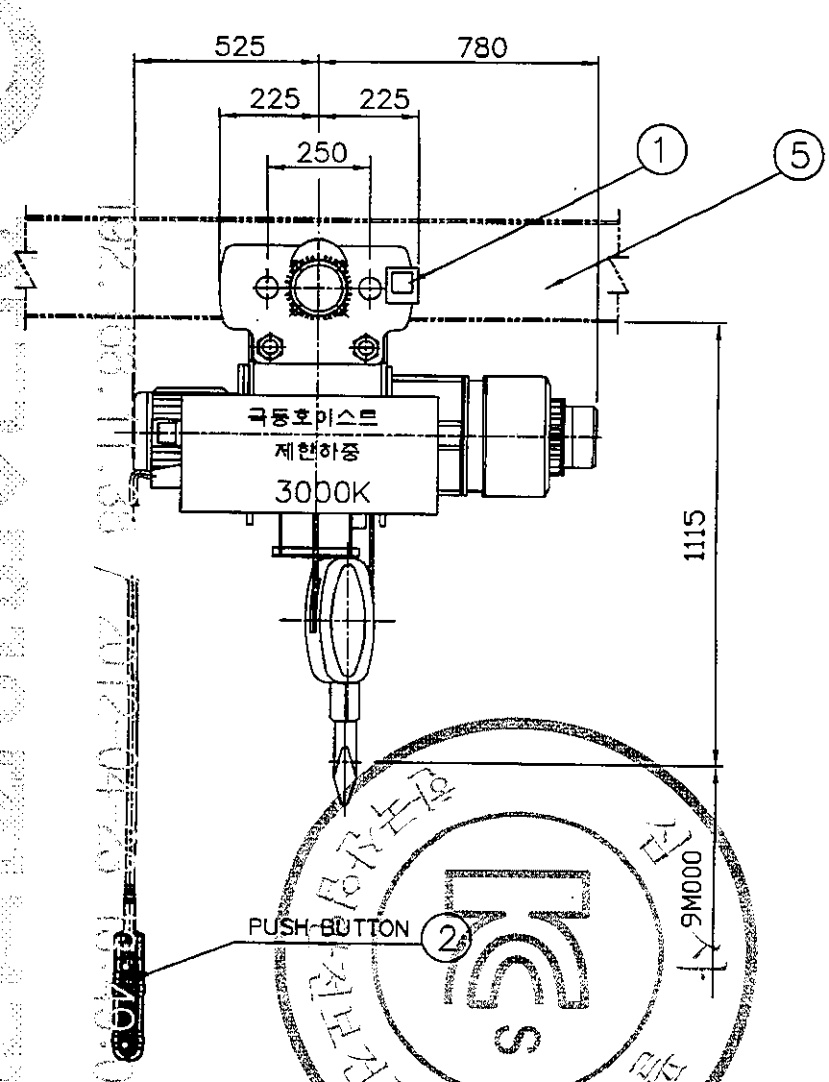
TRAVERSING/ I - BEAM A x B x t	Ix (Cm⁴)	Zx (Cm³)	C
I 250 x 125 x 7.5	5180	414	450
I 300 x 150 x 10	12700	849	465
I 350 x 150 x 9	15200	871	465
I 400 x 150 x 10	24000	887	465

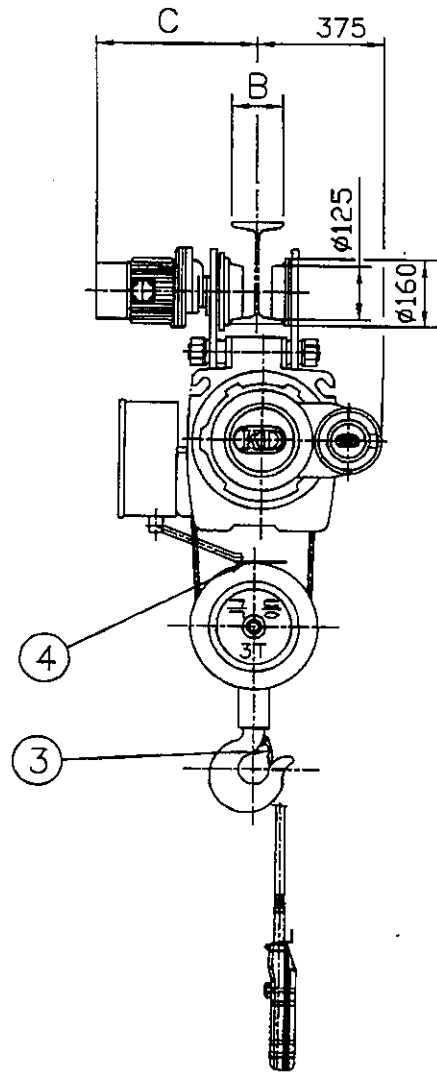
NO.	DESCRIPTION	MTL	SUB QTY	TOTAL QTY	SUB WEIGHT(Kg)	TOTAL WEIGHT(Kg)	REMARKS.
5	I-BEAM	SS400			—		
4	UPPER LIMIT S/W	SS400			1		
3	SAFETY LATCH	SPC			1		
2	EMERGENCY S/W	—			1		
1	LOAD LIMITER	—			1		

PROJECT		DATE	DIM
			mm
TITLE	KDC3-L6-M ARRANGEMENT DRAWING FOR HOIST	SCALE	PROJECTION
		A3/15	3rd
DRAWN	DESIGNED / CHECKED / APPROVED	REF. DRAWING	

국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

SHEET No. | DWG No.



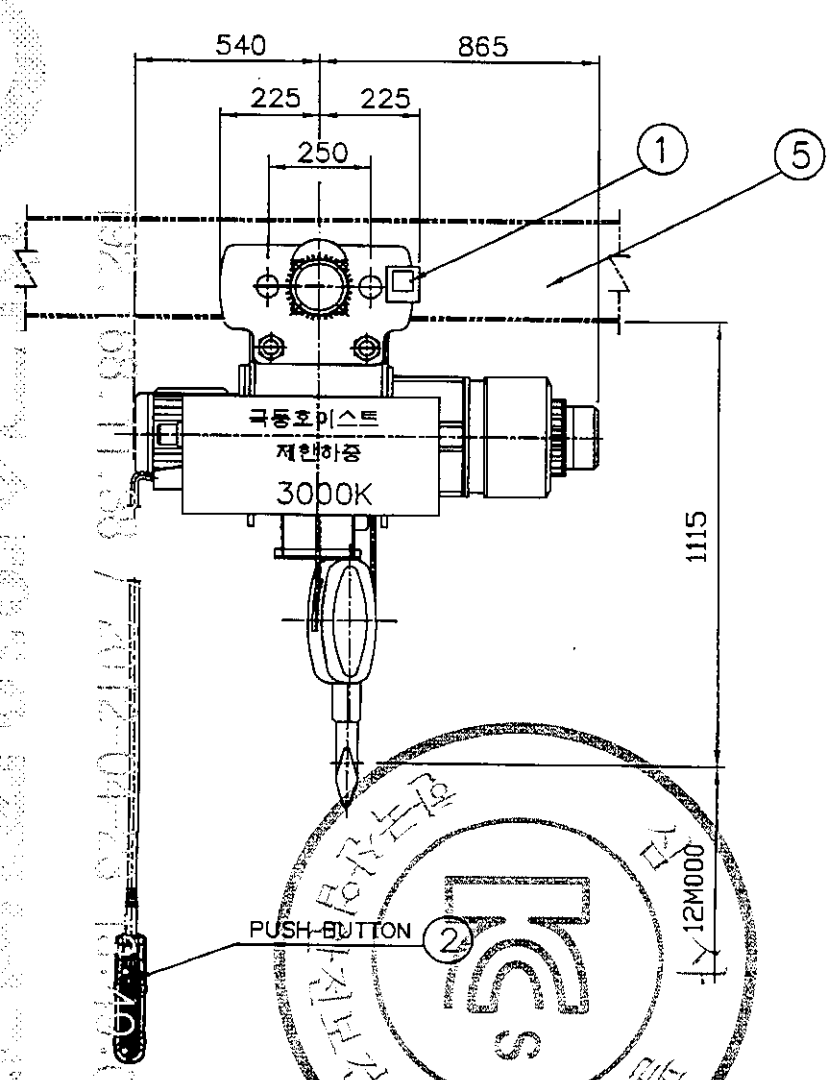


SPECIFICATION			
RATED LOAD		3,000 KG	
TESTING LOAD		3,750 KG	
LIFT		9 M	
RATING		30 MIN	
HOISTING	SPEED	9.0 / 0.9 M/MIN	
	MOTOR	5.5 / 1.5 KW x 4 P	
TRAVERSING	SPEED	HIGH	24 M/MIN
		LOW	16 M/MIN
		DUAL/HIGH	24/12 M/MIN
		DUAL/LOW	16/8 M/MIN
	MOTOR	HIGH	0.75 KW x 4 P
		LOW	0.5 KW x 6 P
		DUAL/HIGH	0.8/0.4 KW x 4/8 P
		DUAL/LOW	0.5/0.25 KW x 6/12 P
WIRE ROPE		(6x37) ø12.5 x 2 FALLS	
POWER SOURCE		AC3ø 220V(380,440,460,480) 60Hz	
COLOR		10 B 3/5	
WEIGHT		440 KG	

TRAVERSING / I - BEAM A x B x t	I-x (Cm⁴)	Zx (Cm³)	C
I 250 x 125 x 7.5	5180	414	450
I 300 x 150 x 10	12700	849	465
I 350 x 150 x 9	15200	871	465
I 400 x 150 x 10	24000	887	465

NO.	DESCRIPTION	MTL	SUB QTY	TOTAL QTY	SUB WEIGHT(Kg)	TOTAL WEIGHT(Kg)	REMARKS.
5	I-BEAM	SS400			—		
4	UPPER LIMIT S/W	SS400			1		
3	SAFETY LATCH	SPC			1		
2	EMERGENCY S/W	—			1		
1	LOAD LIMITER	—			1		

PROJECT		DATE	DIM
			mm
TITLE	KDC3-L9-M ARRANGEMENT DRAWING FOR HOIST	SCALE A3/15	PROJECTION 3rd
DRAWN	DESIGNED / CHECKED / APPROVED	REF. DRAWING	
KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.		SHEET No.	DWG No.

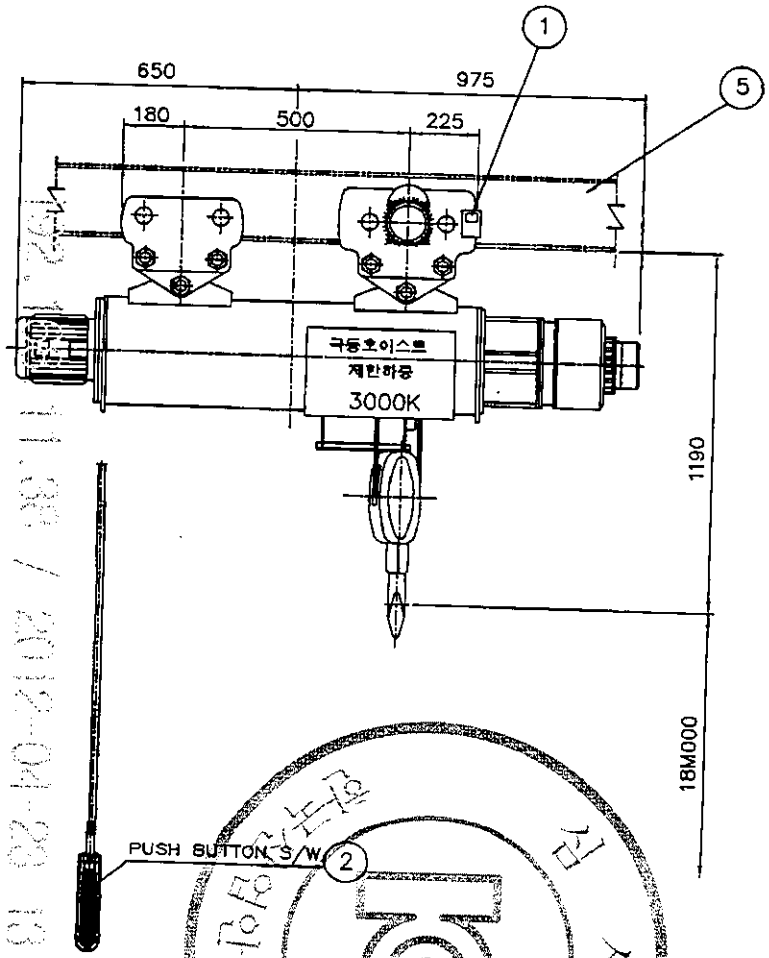


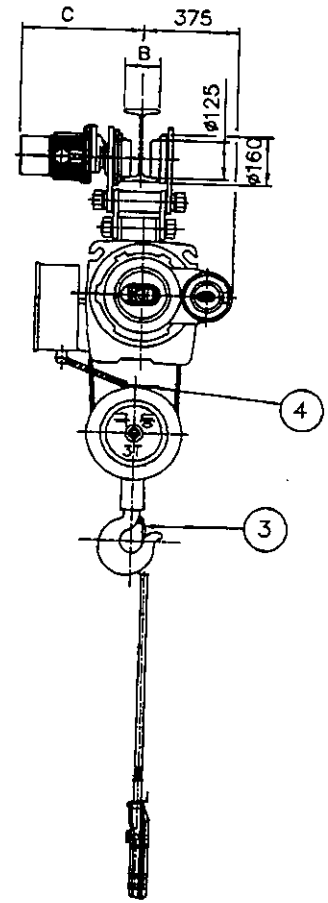
TRAVERSING I – BEAM A x B x t	Ix (Cm⁴)	Zx (Cm³)	c
I 250 x 125 x 7.5	5180	414	450
I 300 x 150 x 10	12700	849	465
I 350 x 150 x 9	15200	871	465
I 400 x 150 x 10	24000	887	465

SPECIFICATION			
RATED LOAD		3,000 KG	
TESTING LOAD		3,750 KG	
LIFT		12 M	
RATING		30 MIN	
HOISTING	SPEED	9.0 / 0.9 M/MIN	
	MOTOR	5.5 / 1.5 KW x 4 P	
TRAVERSING	SPEED	HIGH	24 M/MIN
		LOW	16 M/MIN
		DUAL/HIGH	24/12 M/MIN
		DUAL/LOW	16/8 M/MIN
	MOTOR	HIGH	0.75 KW x 4 P
		LOW	0.5 KW x 6 P
		DUAL/HIGH	0.8/0.4 KW x 4/8 P
		DUAL/LOW	0.5/0.25 KW x 6/12 P
WIRE ROPE		(6x37) ø12.5 x 2 FALLS	
POWER SOURCE		AC3ø 220V(380,440,460,480) 60Hz	
COLOR		10 B 3/5	
WEIGHT		460 KG	

NO.	DESCRIPTION	MT'L	SUB QTY	TOTAL QTY	SUB WEIGHT(Kg)	TOTAL WEIGHT(Kg)	REMARKS.
5	I-BEAM	SS400			—		
4	UPPER LIMIT S/W	SS400			1		
3	SAFETY LATCH	SPC			1		
2	EMERGENCY S/W	—			1		
1	LOAD LIMITER	—			1		

PROJECT		DATE	DIM
			mm
TITLE	KDC3-L12-M ARRANGEMENT DRAWING FOR HOIST	SCALE	PROJECTION
		A3/15	3rd
DRAWN	DESIGNED / CHECKED / APPROVED	REF. DRAWING	
KID 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.		SHEET No.	DWG No.





SPECIFICATION			
RATED LOAD		3,000	KG
TESTING LOAD		3,750	KG
LIFT		18	M
RATING		30	MIN
HOISTING	SPEED	9.0 / 0.9	M/MIN
	MOTOR	5.5 / 1.5 KW x 4 P	
TRAVERSING	SPEED	HIGH	24 M/MIN
		LOW	16 M/MIN
		DUAL/HIGH	24/12 M/MIN
		DUAL/LOW	16/8 M/MIN
	MOTOR	HIGH	0.75 KW x 4 P
		LOW	0.5 KW x 6 P
		DUAL/HIGH	0.8/0.4 KW x 4/8 P
		DUAL/LOW	0.5/0.25 KW x 6/12 P
WIRE ROPE		(6x37) ø12.5 x 2 FALLS	
POWER SOURCE		AC3ø 220V(380,440,460,480) 60Hz	
COLOR		10 B 3/5	
WEIGHT		590 KG	

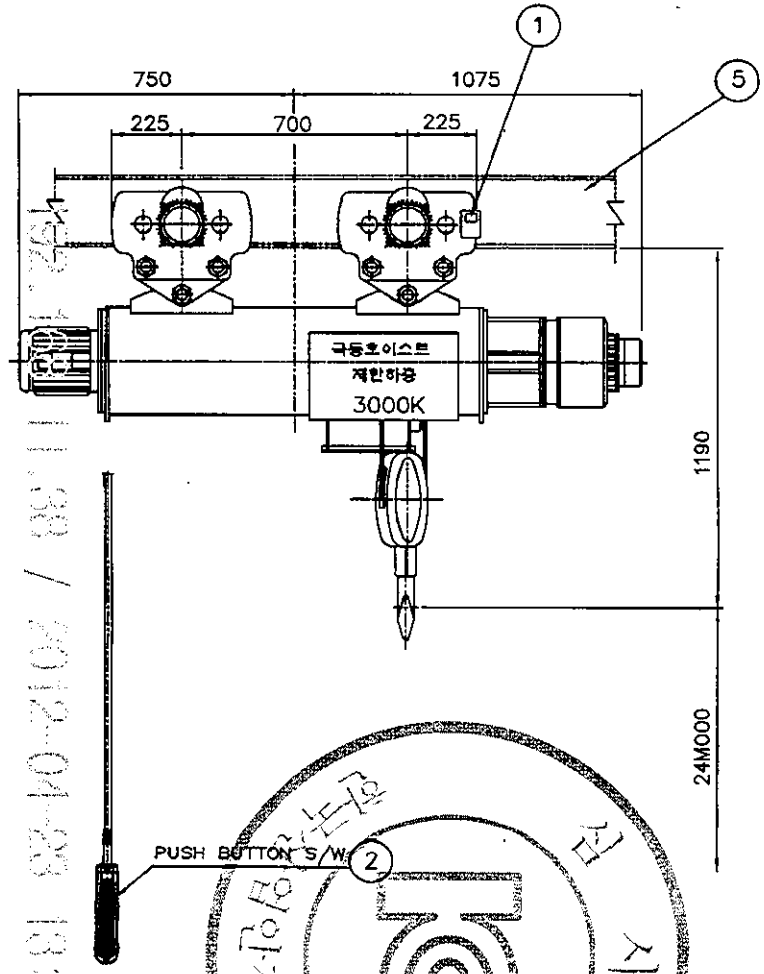
TRAVERSING BEAM	Ix (Cm⁴)	Zx (Cm³)	C
I 250 x 125 x 7.5	5180	414	450
I 300 x 150 x 10	12700	849	465
I 350 x 150 x 9	15200	871	465
I 400 x 150 x 10	24000	887	465

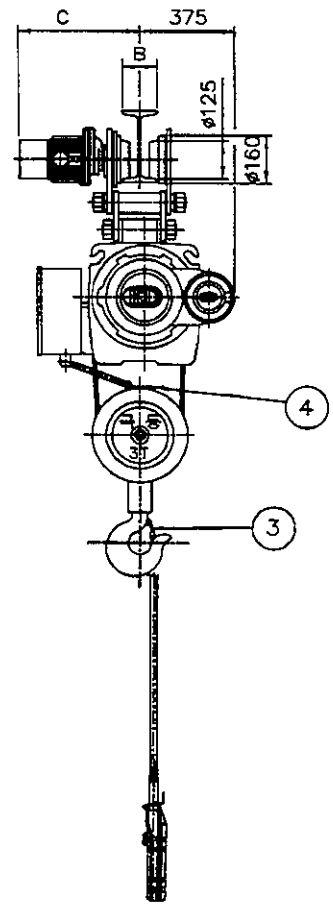
NO.	DESCRIPTION	MTL	QTY SUB	QTY TOTAL	WEIGHT(Kg) SUB	WEIGHT(Kg) TOTAL	REMARKS
5	I-BEAM	SS400		-			
4	UPPER LIMIT S/W	SS400		1			
3	SAFETY LATCH	SPC		1			
2	PENDANT S/W	-		1			
1	LOAD LIMITER	-		1			

PROJECT				DATE	DIM
					mm
TITLE	KDC3-L18-M ARRANGEMENT DRAWING FOR HOIST			SCALE	PROJECTION
				A3/20	3rd
DRAWN	DESIGNED	CHECKED	APPROVED	REF. DRAWING	

KD 구동호이스트 주식회사 KUK DONG HOIST CO., LTD.

SHEET No. DWG No.





SPECIFICATION			
RATED LOAD		3,000	KG
TESTING LOAD		3,750	KG
LIFT		24	M
RATING		30	MIN
HOISTING	SPEED	9.0 / 0.9	M/MIN
	MOTOR	5.5 / 1.5 KW x 4 P	
TRAVERSING	SPEED	HIGH	24 M/MIN
		LOW	16 M/MIN
		DUAL/HIGH	24/12 M/MIN
		DUAL/LOW	16/8 M/MIN
	MOTOR	HIGH	(0.75 KW x 4 P) x 2UNIT
		LOW	(0.5 KW x 6 P) x 2UNIT
		DUAL/HIGH	(0.6/0.4 KW x 4/8 P) x 2UNIT
		DUAL/LOW	(0.5/0.25 KW x 6/12 P) x 2UNIT
WIRE ROPE		(6x37) ø12.5 x 2 FALLS	
POWER SOURCE		AC3ø 220V(380,440,460,480) 60Hz	
COLOR		10 B 3/5	
WEIGHT		640 KG	

TRAVERSING I-BEAM A x B x t	Ix (Cm⁴)	Zx (Cm³)	c
I 250 x 125 x 7.5	5180	414	450
I 300 x 150 x 10	12700	849	465
I 350 x 150 x 9	15200	871	465
I 400 x 150 x 10	24000	887	465

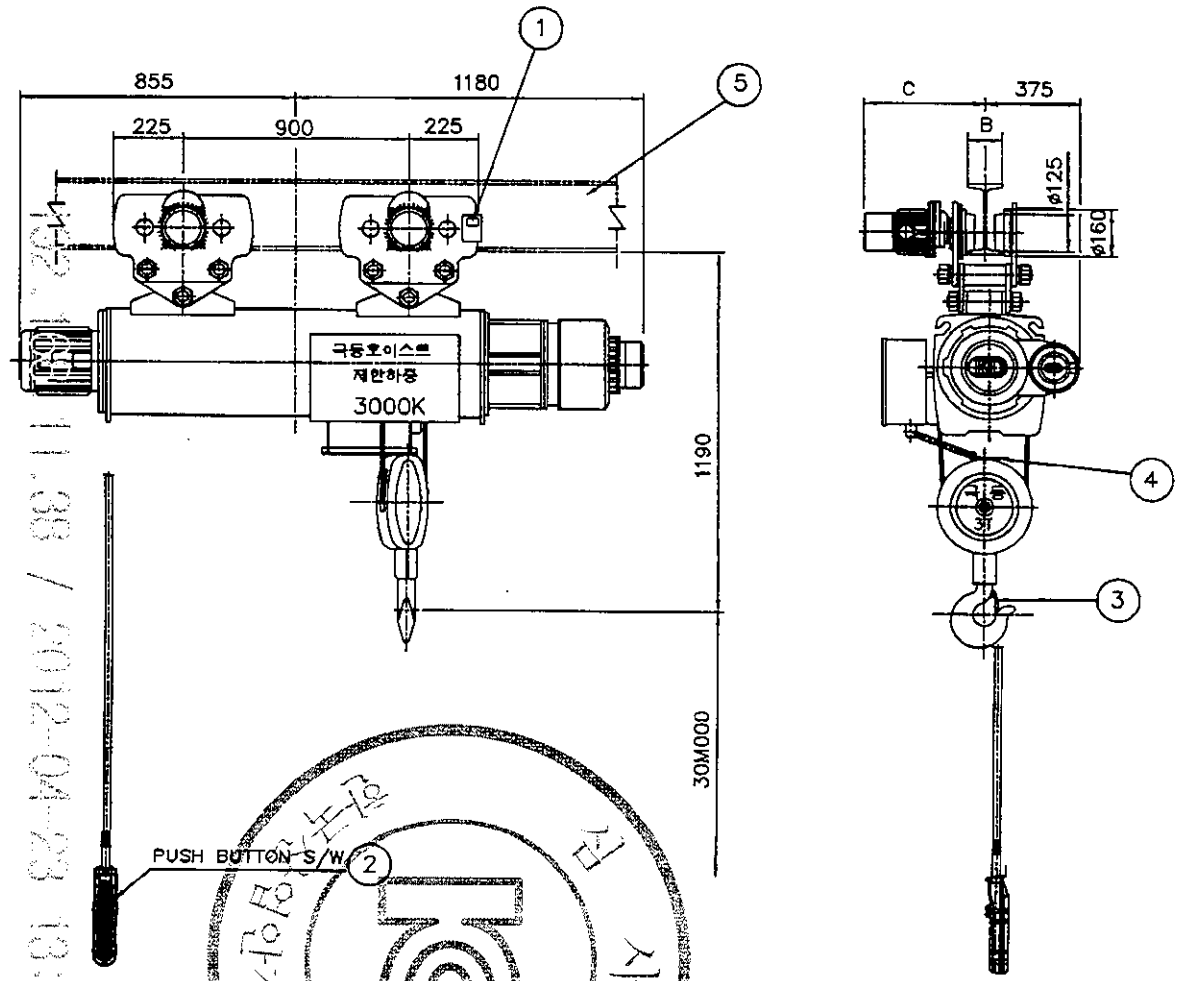
NO.	DESCRIPTION	MT'L	SUB QTY	TOTAL QTY	SUB WEIGHT(Kg)	TOTAL WEIGHT(Kg)	REMARKS.
5	I-BEAM	SS400		–			
4	UPPER LIMIT S/W	SS400		1			
3	SAFETY LATCH	SPC		1			
2	PENDANT S/W	–		1			
1	LOAD LIMITER	–		1			

PROJECT			DATE	DIM
				mm
TITLE	KDC3-L24-M ARRANGEMENT DRAWING FOR HOIST		SCALE	PROJECTION
			A3/20	3rd
DRAWN	DESIGNED	CHECKED	APPROVED	REF. DRAWING

국동호이스트 주식회사
KUK DONG HOIST CO., LTD.

SHEET No.

DWG No.

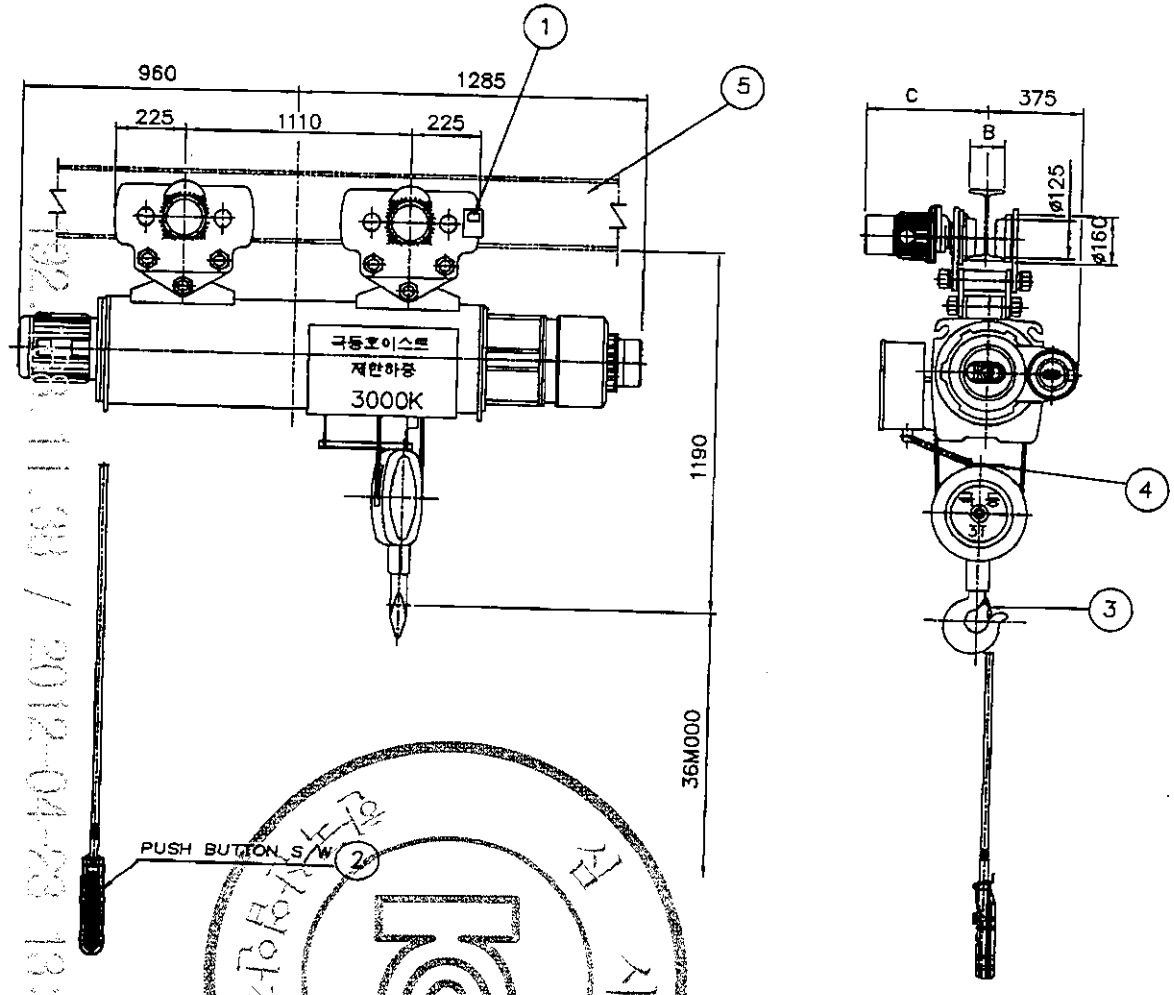


SPECIFICATION			
RATED LOAD		3,000	KG
TESTING LOAD		3,750	KG
LIFT		30	M
RATING		30	MIN
HOISTING	SPEED	9.0 / 0.9	M/MIN
	MOTOR	5.5 / 1.5 KW x 4 P	
TRAVERSING	SPEED	HIGH	24 M/MIN
		LOW	16 M/MIN
		DUAL/HIGH	24/12 M/MIN
		DUAL/LOW	16/8 M/MIN
	MOTOR	HIGH	(0.75 KW x 4 P) x 2UNIT
		LOW	(0.5 KW x 6 P) x 2UNIT
		DUAL/HIGH	(0.8/0.4 KW x 4/8 P) x 2UNIT
		DUAL/LOW	(0.8/0.25 KW x 6/12 P) x 2UNIT
WIRE ROPE		(6x37) ø12.5 x 2 FALLS	
POWER SOURCE		AC3ø 220V(380,440,460,480) 60Hz	
COLOR		10 B 3/5	
WEIGHT		690 KG	

TRAVERSING I-BEAM (A x B x t)	Ix (Cm⁴)	Zx (Cm³)	C
I 250 x 125 x 7.5	5180	414	450
I 300 x 150 x 10	12700	849	465
I 350 x 150 x 9	15200	871	465
I 400 x 150 x 10	24000	887	465

NO.	DESCRIPTION	MT'L	QT'Y SUB	QT'Y TOTAL	WEIGHT(Kg) SUB	WEIGHT(Kg) TOTAL	REMARKS.
5	I-BEAM	SS400		-			
4	UPPER LIMIT S/W	SS400		1			
3	SAFETY LATCH	SPC		1			
2	PENDANT S/W	-		1			
1	LOAD LIMITER	-		1			

PROJECT		DATE	DIM
			mm
TITLE	KDC3-L30-M ARRANGEMENT DRAWING FOR HOIST	SCALE A3/20	PROJECTION 3rd
DRAWN	DESIGNED / CHECKED / APPROVED	REF. DRAWING	
국동호이스트 주식회사 KUK DONG HOIST CO., LTD.		SHEET No.	DWG No.



SPECIFICATION			
RATED LOAD		3,000 KG	
TESTING LOAD		3,750 KG	
LIFT		36 M	
RATING		30 MIN	
HOISTING	SPEED	9.0 / 0.9 M/MIN	
	MOTOR	5.5 / 1.5 KW x 4 P	
TRAVERSING	SPEED	HIGH	24 M/MIN
		LOW	16 M/MIN
		DUAL/HIGH	24/12 M/MIN
		DUAL/LOW	16/8 M/MIN
	MOTOR	HIGH	(0.75 KW x 4 P) x 2UNIT
		LOW	(0.5 KW x 6 P) x 2UNIT
		DUAL/HIGH	(0.8/0.4 KW x 4/8 P) x 2UNIT
		DUAL/LOW	(0.5/0.25 KW x 8/12 P) x 2UNIT
WIRE ROPE		(6x37) ø12.5 x 2 FALLS	
POWER SOURCE		AC3ø 220V(380,440,460,480) 60Hz	
COLOR		10 B 3/5	
WEIGHT		750 KG	

TRAVERSING I - BEAM	Ix (Cm⁴)	Zx (Cm³)	c
I 250 x 125 x 7.5	5180	414	450
I 300 x 150 x 10	12700	849	465
I 350 x 150 x 9	15200	871	465
I 400 x 150 x 10	24000	887	465

NO.	DESCRIPTION	MT'L	SUB QT'Y	TOTAL QT'Y	SUB WEIGHT(Kg)	TOTAL WEIGHT(Kg)	REMARKS.
5	I-BEAM	SS400		-			
4	UPPER LIMIT S/W	SS400		1			
3	SAFETY LATCH	SPC		1			
2	PENDANT S/W	-		1			
1	LOAD LIMITER	-		1			

PROJECT		DATE	DIM
			mm
TITLE	KDC3-L36-M ARRANGEMENT DRAWING FOR HOIST	SCALE	PROJECTION
		A3/20	3rd
DRAWN	DESIGNED / CHECKED / APPROVED	REF. DRAWING	

국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

SHEET No.

DWG No.

KDSM0001

ELECTRICAL SYMBOL LIST

DESCRIPTION	SYMBOLS
3 PHASE SQUIRREL CAGE ROTOR INDUCTION MOTOR	IM
3 PHASE WOUND ROTOR INDUCTION MOTOR	
DC. MAG. BRAKE DISK TYPE	
THRUSTOR BRAKE	B-TH
AC-DC MAG. BRAKE	B-MD
SC BRAKE	B-SC
EC BRAKE	B-EC
RECTIFIER	
LOAD LIMITER ELECTRICAL TYPE	
ELECTRONIC OVER CURRENT RELAY	

DESCRIPTION	SYMBOLS
NO FUSE BREAKER 2 PHASE	
NO FUSE BREAKER 3 PHASE	
EARTH LEAKAGE BREAKER 2 PHASE	
EARTH LEAKAGE BREAKER 3 PHASE	
TRANSFORMER	
CURRENT TRANSFORMER	
POTENTIAL TRANSFORMER	
FUSE	
FUSE WITH CONTACTOR	
THYRISTOR UNIT	

DESCRIPTION	SYMBOLS	
	MAKE	BREAK
MAGNETIC & RELAY CONTACTOR		
ON DELAY TIME CONTACTOR		
OFF DELAY TIME CONTACTOR		
EOCR OR THERMAL RELAY CONTACTOR		
THERMOSTAT		
LIMIT SWITCH		
PUSHBUTTON SWITCH		
EMERGENCY PUSHBUTTON SWITCH		
KEY SWITCH		
FOOT SWITCH		

DESCRIPTION	SYMBOLS	
	MAKE	BREAK
PUSHBUTTON SWITCH 1BUTTON 2STEP TYPE		
TOGGLE SWITCH OR SELLECTOR SWITCH		

MK	DATE	REVISIONS	CHK.	APP.
4				
3				
2				
1				

CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	SYMBOL LIST 1/2					NONE		
		KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDSM0001	

ADR'S NO.

KDSM0002

ELECTRICAL SYMBOL LIST

DESCRIPTION	SYMBOLS
WIRE INTERNAL TO ENCLOSURE	
WIRE EXTERNAL TO ENCLOSURE	
WIRE NOT CONNECTED	
WIRE CONNECTED	
TERMINAL	
GROUND (EARTH)	
PLUG & RECEPTACLE	
MAGNETIC CONTACTOR COIL	M
AUX. RELAY COIL	CR
TIMER COIL	T

DESCRIPTION	SYMBOLS
CONTROLLER OR REMOTE CONTROLLER CONTACTOR	
UPPER LIMIT SWITCH (LS-II)	
THERMAL RELAY	
PILOT(SIGNAL) LAMP	
ROTARY LAMP	
WARING SIREN	
BUZZER	
AMMETER	A AC, A DC
VOLT METER	V AC, V DC
FLUORENCE LAMP	

DESCRIPTION	SYMBOLS
SOLENOID COIL	
RESISTER	
VARIABLE RESISTOR	
SLIP RING	
CABLE REEL	
SPACE HEATER	
SURGE ABSORBER	
LOAD CELL	
BALLAST WITH RECEPTACLE	
FAN	

DESCRIPTION	SYMBOLS
FLOOD LIGHTING	
RECEPTACLE	

MK	DATE	REVISIONS	CHK.	APP.

CUSTOMER

DRAWING TITLE: SYMBOL LIST 2/2

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

국동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO: KDSM0002

ELECTRICAL SPECIFICATION

. POWER SOURCE : AC 3Φ 220V, 380V, 440V ,460V,480V 60Hz
. CONTROL SOURCE : AC 1Φ 110V(120V) 60Hz

OBJECT		MOTOR OUTPUT	220V		380V		440V	460V	480V	440,460,480V	BRAKE	REMARK
			STATOR CURRENT	1st CABLE SIZE	STATOR CURRENT	1st CABLE SIZE	STATOR CURRENT	STATOR CURRENT	STATOR CURRENT	1st CABLE SIZE		
MAIN HOIST		5.5KW x 4P 30 MIN	22.80 A	6.0 sq	12.20 A	6.0 sq	10.50 A	10.00 A	9.60 A	4.0 sq	DC MAG. BRAKE	
CREEP HOIST		1.5KW x 4P 30 MIN	7.30 A	4.0 sq	4.20 A	4.0 sq	3.70 A	3.50 A	3.40 A	4.0 sq	DC MAG. BRAKE	
TRAVERSING	HIGH	0.75KW x 4P 30 MIN	4.10 A	4.0 sq	2.40 A	4.0 sq	2.00 A	2.00 A	1.90 A	4.0 sq	DC MAG. BRAKE	1 DRIVE
	LOW	0.5KW x 6P 30 MIN	3.40 A	4.0 sq	2.00 A	4.0 sq	1.70 A	1.70 A	1.60 A	4.0 sq	DC MAG. BRAKE	1 DRIVE
	HIGH/LOW	0.8/0.4KWx4/8P 30 MIN	4.80 A	4.0 sq	2.78 A	4.0 sq	2.40 A	2.30 A	2.30 A	4.0 sq	DC MAG. BRAKE	1 DRIVE
	HIGH/LOW	0.5/0.25KWx6/12P 30MIN	3.20 A	4.0 sq	1.85 A	4.0 sq	1.80 A	1.78 A	1.76 A	4.0 sq	DC MAG. BRAKE	1 DRIVE
CONTROL CIRCUIT			2 A	2.5 sq	2 A	2.5 sq	2 A	2 A	2 A	2.5 sq		
LIGHTING & ACC'Y CIRCUIT												
SUB TOTAL (PEAK LOAD)	HIGH		28.90 A	10.0 sq	16.60 A	6.0 sq	14.50 A	14.00 A	13.50 A	6.0 sq	I(A)=M/H + T/S + ASS'Y	
SUB TOTAL (NORMAL LOAD)	LOW		28.20 A	10.0 sq	16.20 A	6.0 sq	14.20 A	13.70 A	13.20 A	6.0 sq	I(A)=M/H + T/S + ASS'Y	

*. 위 계산은 HIGH(MAX.)일때와 LOW(MIN.)일때만 계산한것임.
*. 위 계산은 LIFT 6,9,12,18M에 적용.

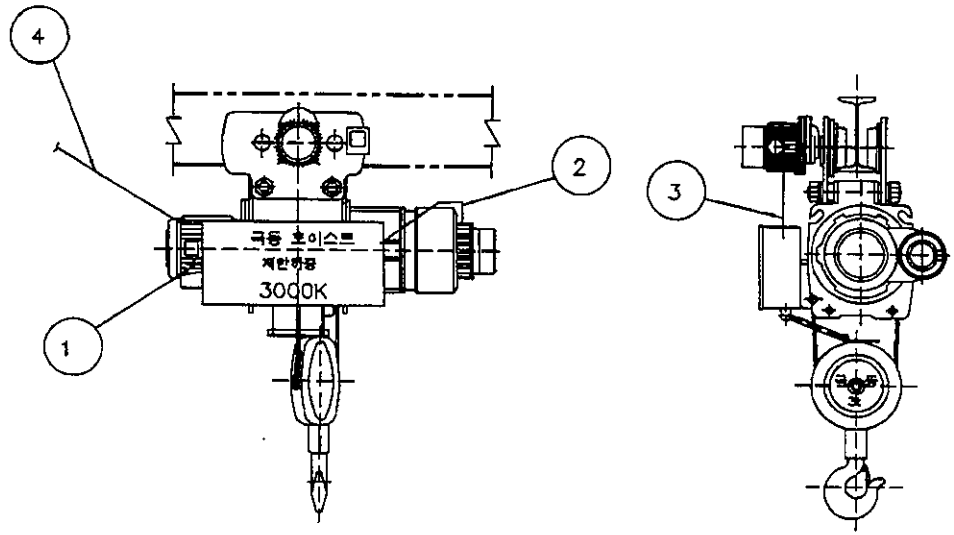
ELECTRICAL SPECIFICATION

. POWER SOURCE : AC 3Φ 220V, 380V, 440V,460V,480V 60Hz
. CONTROL SOURCE : AC 1Φ 110V 60Hz

OBJECT		MOTOR OUTPUT	220V		380V		440V	460V	480V	440,460,480V	BRAKE	REMARK
			STATOR CURRENT	1st CABLE SIZE	STATOR CURRENT	1st CABLE SIZE	STATOR CURRENT	STATOR CURRENT	STATOR CURRENT	1st CABLE SIZE		
MAIN HOIST		5.5KW x 4P 30 MIN	22.80 A	6.0 sq	12.20 A	6.0 sq	######	10.00 A	9.60 A	6.0 sq	DC MAG. BRAKE	
CREEP HOIST		1.5KW x 4P 30 MIN	7.30 A	4.0 sq	4.20 A	4.0 sq	3.70 A	3.50 A	3.40 A	4.0 sq	DC MAG. BRAKE	
TRAVERSING	HIGH	0.75KW x 4P 30 MIN	4.10 A	4.0 sq	2.40 A	4.0 sq	2.00 A	2.00 A	1.90 A	4.0 sq	DC MAG. BRAKE	2 DRIVE
	LOW	0.5KW x 6P 30 MIN	3.40 A	4.0 sq	2.00 A	4.0 sq	1.70 A	1.70 A	1.60 A	4.0 sq	DC MAG. BRAKE	2 DRIVE
	HIGH/LOW	0.8/0.4KWx4/8P 30 MIN	4.80 A	4.0 sq	2.78 A	4.0 sq	2.40 A	2.30 A	2.30 A	4.0 sq	DC MAG. BRAKE	2 DRIVE
	HIGH/LOW	0.5/0.25KWx6/12P 30 MIN	3.20 A	4.0 sq	1.85 A	4.0 sq	1.80 A	1.78 A	1.76 A	4.0 sq	DC MAG. BRAKE	2 DRIVE
CONTROL CIRCUIT			2 A	2.5 sq	2 A	2.5 sq	2 A	2 A	2 A	2.5 sq		
LIGHTING & ACC'Y CIRCUIT												
SUB TOTAL (NORMAL LOAD)		LOW	31.60 A	10.0 sq	18.20 A	6.0 sq	15.9 A	15.40 A	14.80 A	6.0 sq	I(A)=M/H + T/S + ASS'Y	
SUB TOTAL (PEAK LOAD)		HIGH	33.00 A	10.0 sq	19.00 A	6.0 sq	16.5 A	16.00 A	15.40 A	6.0 sq	I(A)=M/H + T/S + ASS'Y	

*. 위 계산은 HIGH(MAX.)일때와 LOW(MIN.)일때만 계산한것임.
*. 위 계산은 LIFT 24,30M에 적용.

* MAIN POWER : AC 3PH 220V,380V,440V,460V,480 60Hz (LIFT 6,9,12,18M)



본 도면은 EARTH를 명기하기 위한 도면으로서
실제 넥치와 다를 수 있으며 HOIST 본체와의
EARTH용 CABLE은 REFERENCE임.

*3종 접지공사 100Ω 이하 (AC 3PH 400V 미만)
*특3 종 접지공사 10Ω 이하 (AC 3PH 400V 이상)

NO	CABLE TYPE	SIZE 220V	SIZE 380V	TYPE	SIZE 440V,460V,480V	REMARK
1	HOIST VCT	6.0sq	6.0sq	VCT	4.0sq	HOIST MOTOR WITH EARTH
2	CREEP VCT	4.0sq	4.0sq	VCT	4.0sq	CREEP MOTOR WITH EARTH
3	T/S VCT	4.0sq	4.0sq	VCT	4.0sq	T/S MOTOR WITH EARTH
4	MAIN VFCT	10sq	6.0sq	VFCT	6.0sq	MAIN POWER WITH EARTH

등전위접지

1. 전기장비와 기계의 노출된 모든 도전부는 보호본딩회로에 연결되어야 하며 적절한 접지연속성 기능이 유지되야함.
2. 보호본딩회로에는 개폐기, 과전류보호장치가 부착되지 않아야 한다.

시험대상 전선의 최소 유효단면적	최고전압강하(V)
1.0	3.3
1.5	2.6
2.5	1.6
4.0	1.4
>6.0	1.0

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

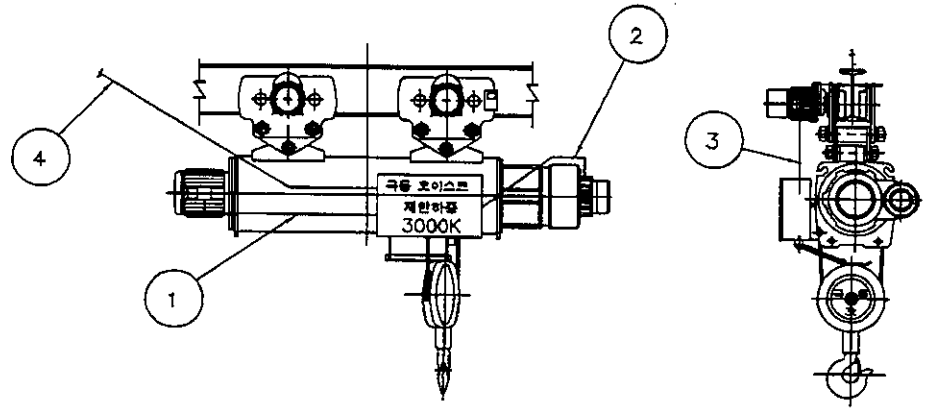
DRAWING TITLE: GROUND WIRE SYSTEM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO: KDC3E0601

* MAIN POWER : AC 3PH 220V,380V,440V,460V,480 60Hz (LIFT 24,30,36M)



본 도면은 EARTH를 명기하기 위한 도면으로서
실제 배치와 다를 수 있으며 HOIST 본체와의
EARTH용 CABLE은 REFERENCE임

*3종 접지공사 100Ω 이하 (AC 3PH 400V 미만
*특 종 접지공사 10Ω 이하 (AC 3PH 400V 이상

NO	TYPE	CABLE						REMARK
			SIZE		TYPE	SIZE		
			220V	380V	440V,460V,480V			
1	HOIST	VCT	6.0sq	6.0sq	VCT	4.0sq		HOIST MOTOR WITH EARTH
2	CREEP	VCT	4.0sq	4.0sq	VCT	4.0sq		CREEP MOTOR WITH EARTH
3	T/S	VCT	4.0sq	4.0sq	VCT	4.0sq		T/S MOTOR WITH EARTH
4	MAIN	VFCT	10sq	6.0sq	VFCT	6.0sq		MAIN POWER WITH EARTH

동전위접지

1.전기장비와 기계의 노출된 모든 도전부는 보호본딩회로에 연결되어야 하며 적절한 접지연속성 기능이 유지되야함.

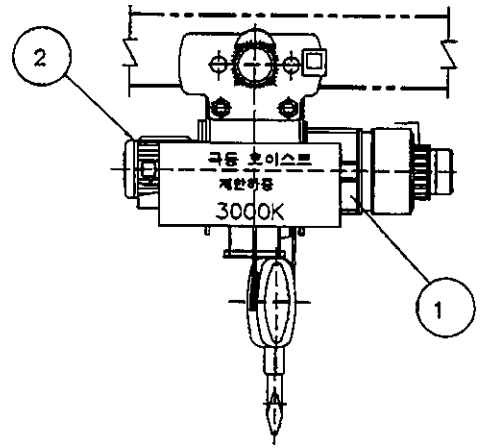
2. 보호본딩회로에는 개폐기, 과전류보호장치가 부착되지 않아야 한다.

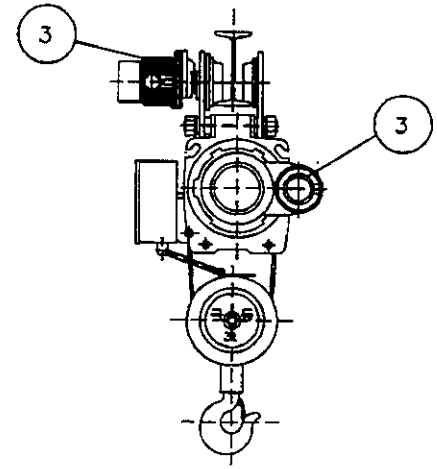
시험대상 전선의 최소 유효단면적	최고전압강하(V)
1.0	3.3
1.5	2.6
2.5	1.6
4.0	1.4
>6.0	1.0

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
CUSTOMER						NONE		
DRAWING TITLE	GROUND WIRE SYSTEM	KD 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3E0602	

* MAIN POWER : AC 3PH 220V,380V,440V,460V,480 60Hz (LIFT 6,9,12,18,24,30,36M)





(1)

KD ELECTRIC WIRE ROPE HOIST			
MODEL		RATING	min
CAPACITY	Kg	LIFT	m
HOIST SPEED	m/min	POWER SOURCE	V Hz
HOIST MOTOR	Kw P	AMP.S R&T HOIST	A
TRAV.SPEED	m/min	AMP.S R&T TRAV.	A
TRAV.MOTOR	Kw P	WIRE ROPE	Ø
WIDTH OF RAIL	mm	WEIGET	Kg
DATE		SERIAL	
KUKDONG HOIST CO.,LTD			

(2)

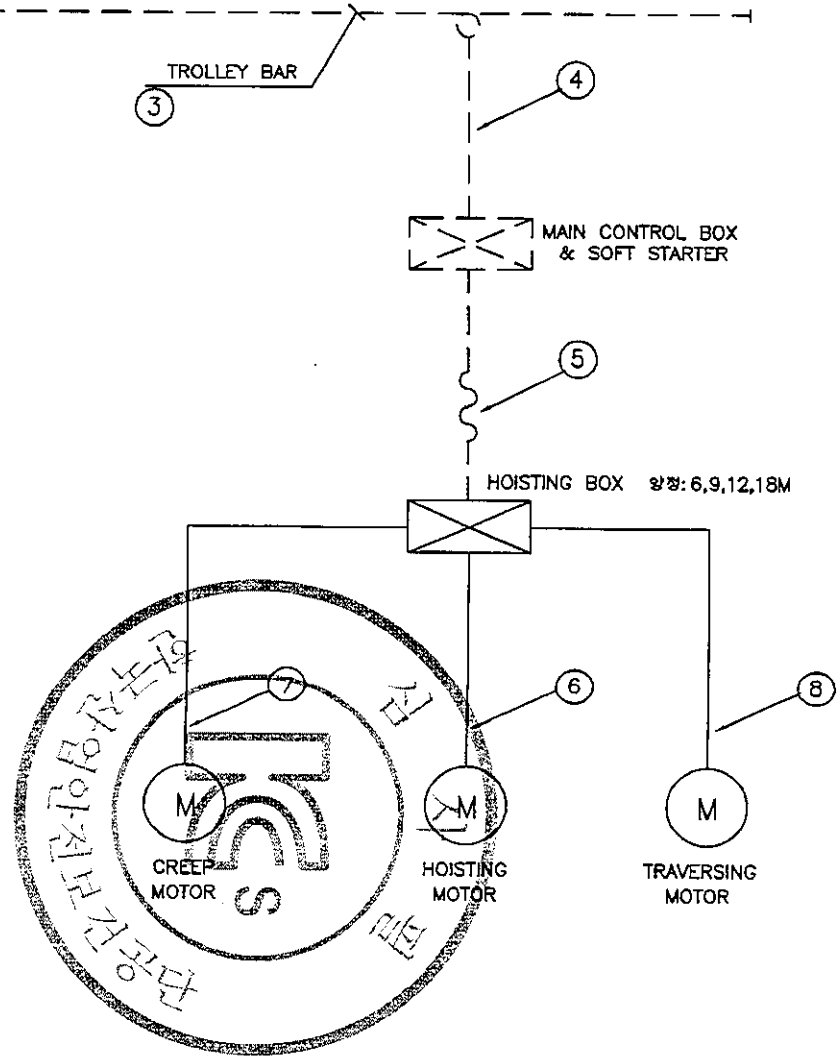
KD 3 PHASE INDUCTION MOTOR			
KW	P	TYPE	TENV
VOLTS	V	RATING	min
AMP.S	A	AMP.TEMP	40℃
HEARTS		INS.CLASS	F
R.P.M		BEARING	
ROTOR	C	BEARING	
SERIAL		DATE	
KUKDONG HOIST CO.,LTD			

(3)

KD 3 PHASE INDUCTION MOTOR			
KW	P	TYPE	TENV
VOLTS	V	RATING	min
AMP.S	A	AMP.TEMP	40
HEARTS		INS.CLASS	F
R.P.M		BEARING	
ROTOR	C	BEARING	
SERIAL		DATE	
KUKDONG HOIST CO.,LTD			

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	WIRE HOIST NAMEPLATE					NONE		
		KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3E0601	



NO	DESCRIPTION	CABLE SIZE
1	MAIN EARTH LINE	USER SCOPE
2	POWER SOURCE	USER SCOPE
3	TROLLEY BAR	USER SCOPE
4	POWER SOURCE WITH EARTH	USER SCOPE
5	HOIST POWER SOURCE WITH EARTH	VFCT 10SQ x 1C
6	HOISTING MOTOR WITH EARTH	VCT 6.0SQ x 1C
7	CREEP MOTOR WITH EARTH	VCT 4.0SQ x 1C
8	TRAVERSING MOTOR WITH EARTH	VCT 4.0SQ x 1C

* CV CABLE 4C중 1C는 EARTH로 사용함.

– NOTE –

1. 전동기 외함, 제어반의 프레임 등은 접지하여 그 접지 저항은

400V 이만 : 100오옴 이하일것.(3종 접지)
400V 이상 : 10오옴 이하일것.(특 3종접지)

2.MAIN S/W BOX는 3종 접지 요.

USER SCOPE

KUKDONG SCOPE

등전위접지

1.전기장비와 기계의 노출된 모든 도전부는 보호본딩회로에 연결되어야 하며 적절한 접지연속성 기능이 유지되어야함.

2. 보호본딩회로에는 개폐기, 과전류보호장치가 부착되지 않아야 한다.

시험대상 전선의 최소 유효단면적	최고전압강하(V)
1.0	3.3
1.5	2.6
2.5	1.6
4.0	1.4
>6.0	1.0

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: EARTH DETAILS DRAWING

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

국동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO: KDC3-EC000

NO	DESCRIPTION	CABLE SIZE
1	MAIN EARTH LINE	USER SCOPE
2	POWER SOURCE	USER SCOPE
3	TROLLEY BAR	USER SCOPE
4	POWER SOURCE WITH EARTH	USER SCOPE
5	HOIST POWER SOURCE WITH EARTH	VFCT 10SQ x 1C
6	HOISTING MOTOR WITH EARTH	VCT 6.0SQ x 1C
7	CREEP MOTOR WITH EARTH	VCT 4.0SQ x 1C
8	TRAVERSING MOTOR WITH EARTH	VCT 4.0SQ x 1C

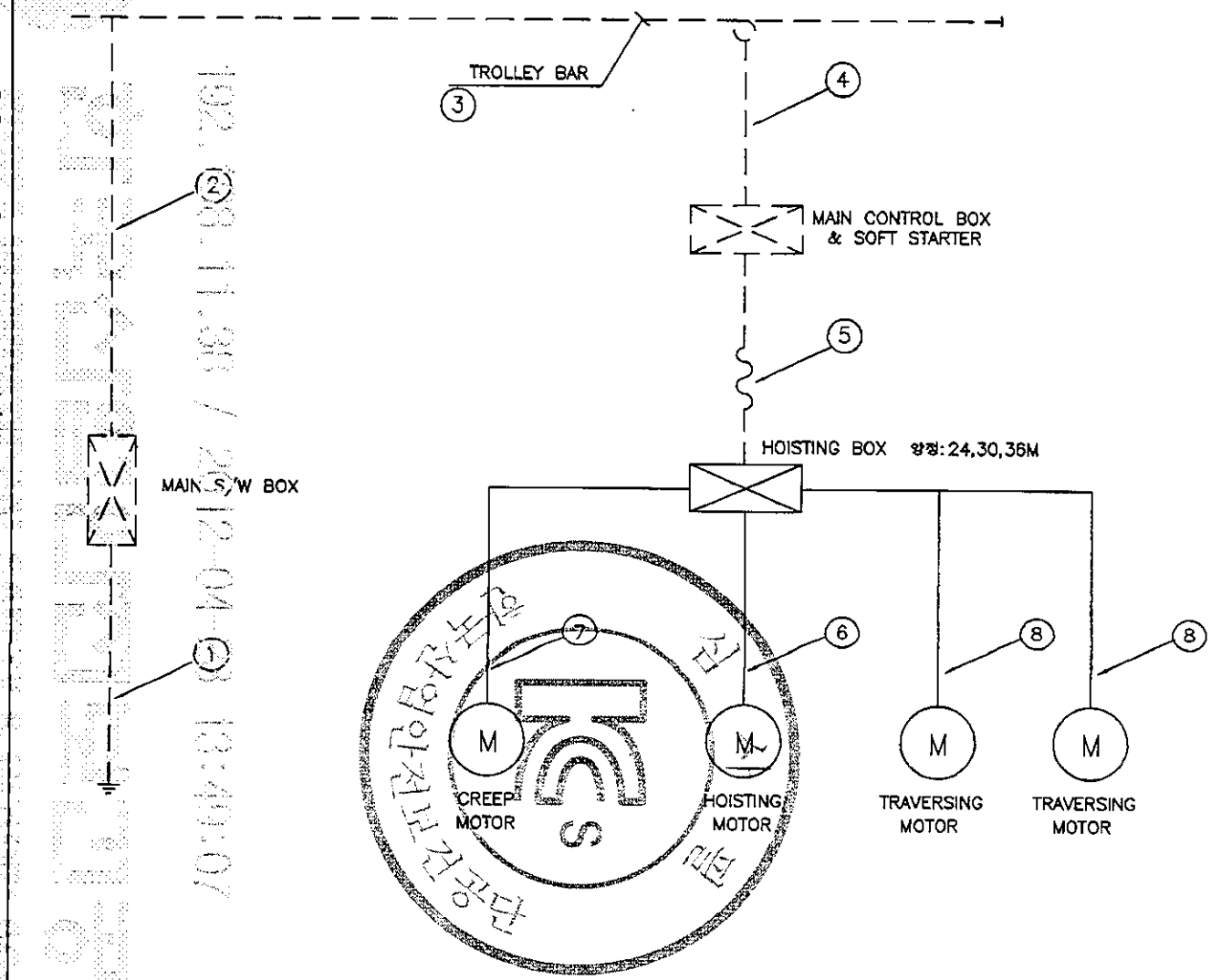
* CV CABLE 4C중 1C는 EARTH로 사용함.

– NOTE –

1. 전동기 외함, 제어반의 프레임 등은 접지하여 그 접지 저항은

400V 미만 : 100오옴 이하일것.(3종 접지)
400V 이상 : 10오옴 이하일것.(특 3종접지)

2.MAIN S/W BOX는 3종 접지 요.



USER SCOPE

KUKDONG SCOPE

등전위접지

1.전기장비와 기계의 노출된 모든 도전부는 보호본딩회로에 연결되어야 하며 적절한 접지연속성 기능이 유지되야함.

2. 보호본딩회로에는 계폐기, 과전류보호장치가 부착되지 않아야 한다.

시험대상 전선의 최소 유효단면적	최고전압강하(V)
1.0	3.3
1.5	2.6
2.5	1.6
4.0	1.4
>6.0	1.0

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: EARTH DETAILS DRAWING

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

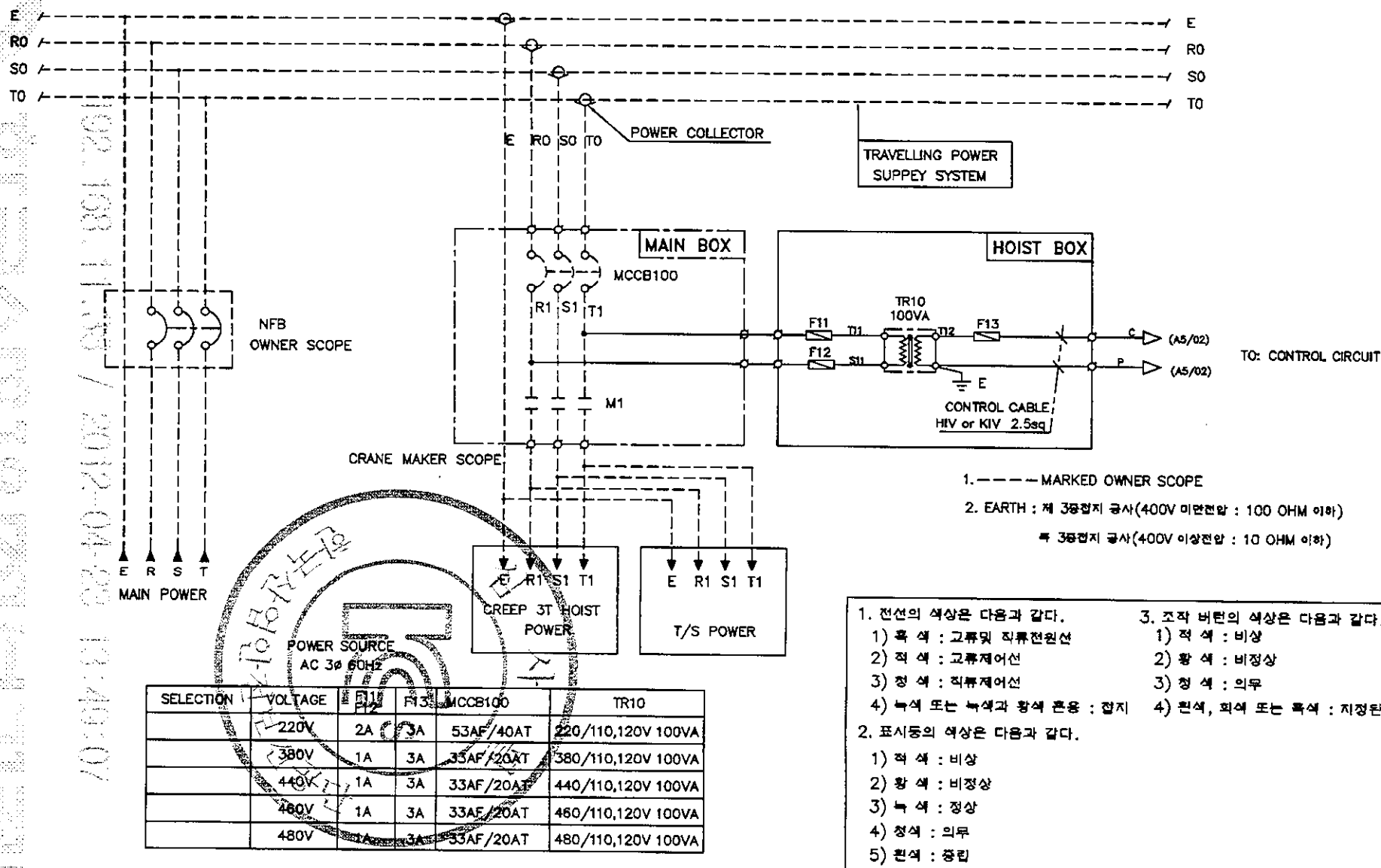
극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO. KDC3–EC001

POWER CIRCUIT

TRAVELLING POWER SUPPLY SYSTEM

ADR'S NO. A1



1. ---- MARKED OWNER SCOPE
2. EARTH : 제 3종접지 공사(400V 미만전압 : 100 OHM 이하)
   특 3종접지 공사(400V 이상전압 : 10 OHM 이하)

SELECTION	VOLTAGE	F11 F12	F13	MCCB100	TR10
	220V	2A	3A	53AF/40AT	220/110,120V 100VA
	380V	1A	3A	33AF/20AT	380/110,120V 100VA
	440V	1A	3A	33AF/20AT	440/110,120V 100VA
	460V	1A	3A	33AF/20AT	460/110,120V 100VA
	480V	1A	3A	33AF/20AT	480/110,120V 100VA

1. 전선의 색상은 다음과 같다.
   1) 흑 색 : 고류및 직류전원선
   2) 적 색 : 고류제어선
   3) 청 색 : 직류제어선
   4) 녹색 또는 녹색과 황색 혼용 : 접지
2. 표시등의 색상은 다음과 같다.
   1) 적 색 : 비상
   2) 황 색 : 비정상
   3) 녹 색 : 정상
   4) 청색 : 의무
   5) 흰색 : 중립
3. 조작 버튼의 색상은 다음과 같다.
   1) 적 색 : 비상
   2) 황 색 : 비정상
   3) 청 색 : 의무
   4) 흰색, 회색 또는 흑색 : 지정된 의미없음

MK	DATE	REVISIONS	CHK.	APP.

CUSTOMER

DRAWING TITLE: MAIN POWER CIRCUIT 1 DIAGRAM

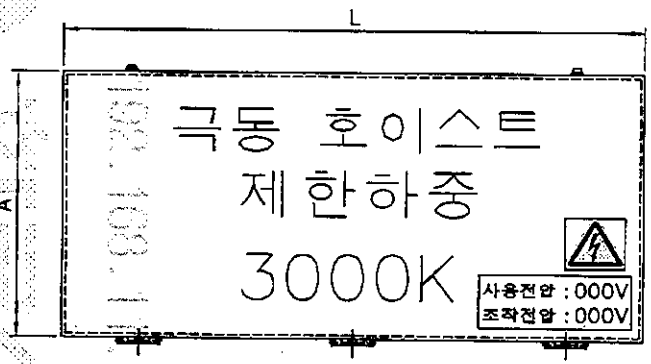
DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

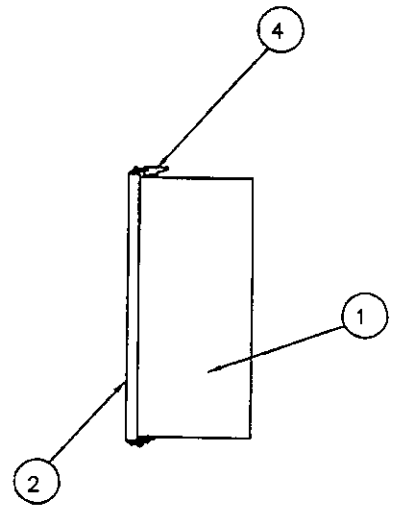
국동호이스트 주식회사
KUK DONG HOIST CO., LTD.

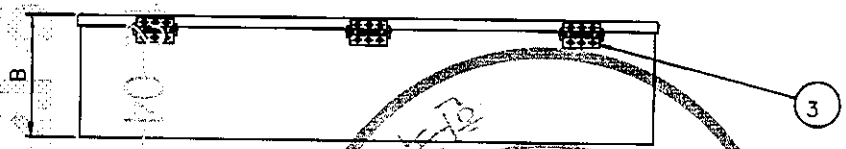
DWG. NO KDC3E001

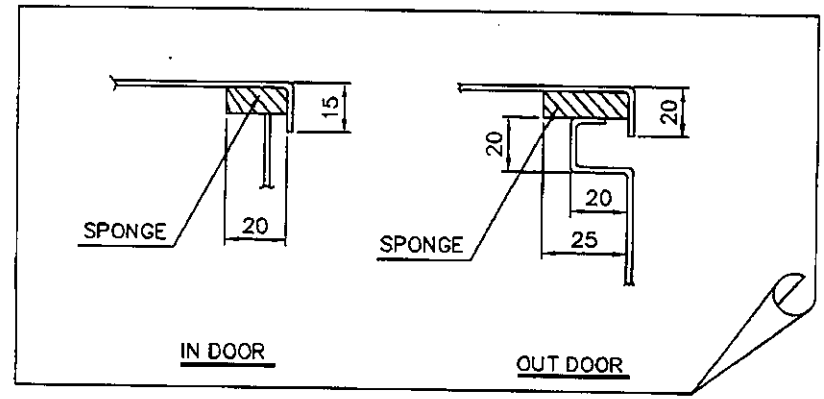
ADR'S NO.

NO	DESCRIPTION	MT'L	REMARKS
1	PANEL CASE	SPC	1.6t
2	PANEL COVER	SPC	1.6t
3	HINGE	PUR'	
4	CLAMP	PUR'	
5	SPONGE	PUR'	









SELECTION	HOIST CAPACITY	DESCRIPTION	IN DOOR			OUT DOOR			REMARK
			A	B	L	A	B	L	
	3 TON	NORMAL	360	170	790	360	170	810	
		CREEP	360	170	790	360	170	810	

N O T E

1.PROTECTION DEGREE ;

A, INDOOR TYPE : DUST PROOF

B, OUT DOOR TYPE : SPLASH PROOF

2.FINAL PAINTING COLOR (MUNSELL NO.)

A. IN SIDE : 10B 3/5

B. OUT SIDE : 10B 3/5

3.PAINTING THICKNESS : ABOVE 40 um

4.APPLICATION VOLTAGE : 220V,380V,440V,460V,480V

5.제어용 전선 : 2.5sq KIV,HIV

6.외함 개방 구조는 다음과 같다.

1) 외함 개방시 충전 부분이 차단되도록 한다.

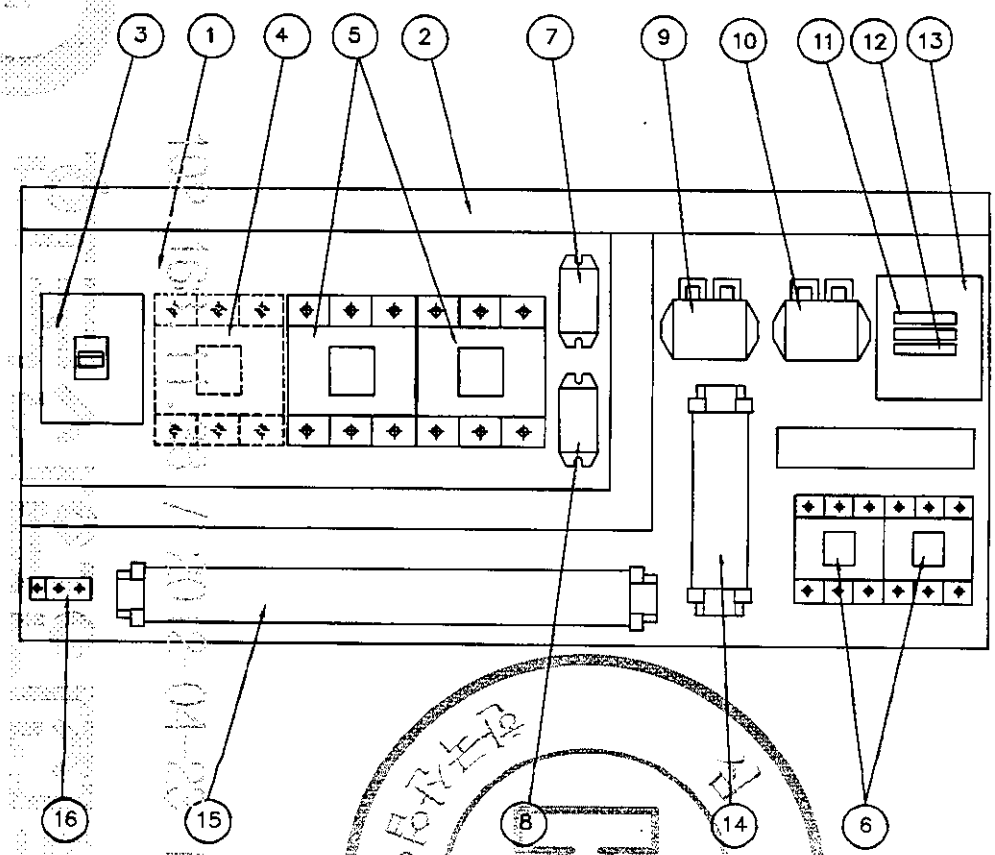
2) 외함 개방 후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호가 되어있을것.

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
CUSTOMER						NONE		
DRAWING TITLE	HOISTING CONTROL BOX	KD 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3EB00	
	LAY-OUT							

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20.

ADR'S NO.



NO	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	CHASSIS PLATE		1	아 연 도 금
2	CABLE DUCT	–	1	
3	N.F.B	53AF/40AT	1	HOISTING
4	MAGNET CONTACTOR	DMC40C	1	MAIN MAG.
5	MAGNET CONTACTOR	DMC65C	2	HOISTING
6	MAGNET CONTACTOR	DMC22C	2	CREEP HOIST
7	SILICON RECTIFIER	SR-60	1	HOISTING
8	SILICON RECTIFIER	SR-30	1	CREEP HOIST
9	E.O.C.R	SS-30	1	HOISTING
10	E.O.C.R	SS-30	1	CREEP HOIST
11	FUSE	2 A	2	
12	FUSE	3 A	1	
13	TRANSFORMER	220V/110V,120V, 100VA	1	
14	UPPER LIMIT	AC 600V/75A	1	
15	TERMINAL BLOCK	60A,15A		
16	EARTH TERMINAL	3tx20x50	1	

NOTE

1. UPPER LIMIT LS-1,LS-2의 접점 허용 전류 용량 : AC 600V, 75A
2. POWER SOURCE : AC. 3ø 220V 60HZ
3. EARTH TERMINAL RESISTANCE : 0.018 Ω

NOTE 1. 전선의 색상은 다음과 같다.

1) 흑색 : 고류 및 직류 전원선로
2) 적색 : 고류제어회로
3) 주황색 : 외부전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청 색 : 직류 제어회로

2. CABLE MATERIAL : KIV OR EQUIVALENT
   MIN SIZE : 2.5sq
3. 제어용 전선 : 2.5mm KIV,HIV
4. 제작시 다소 변경 될수있음.
5. 외함 개방구조는 다음과 같을것.
   1) 외함 개방시 충전부분이 차단되도록 할것.
   2) 외함 개방후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호가 되어있을것.

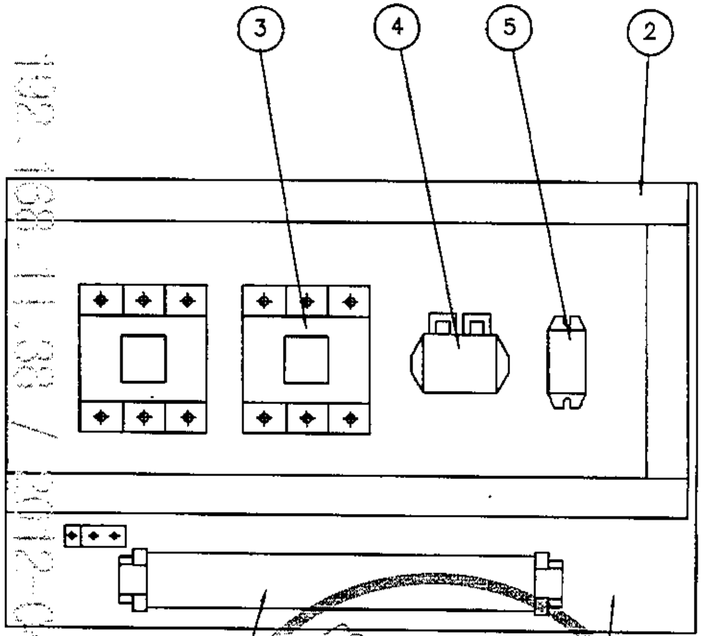
MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER	
DRAWING TITLE	HOIST CONTROL BOX
	ARRANGEMENT DRAWING

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO KDC3BA21

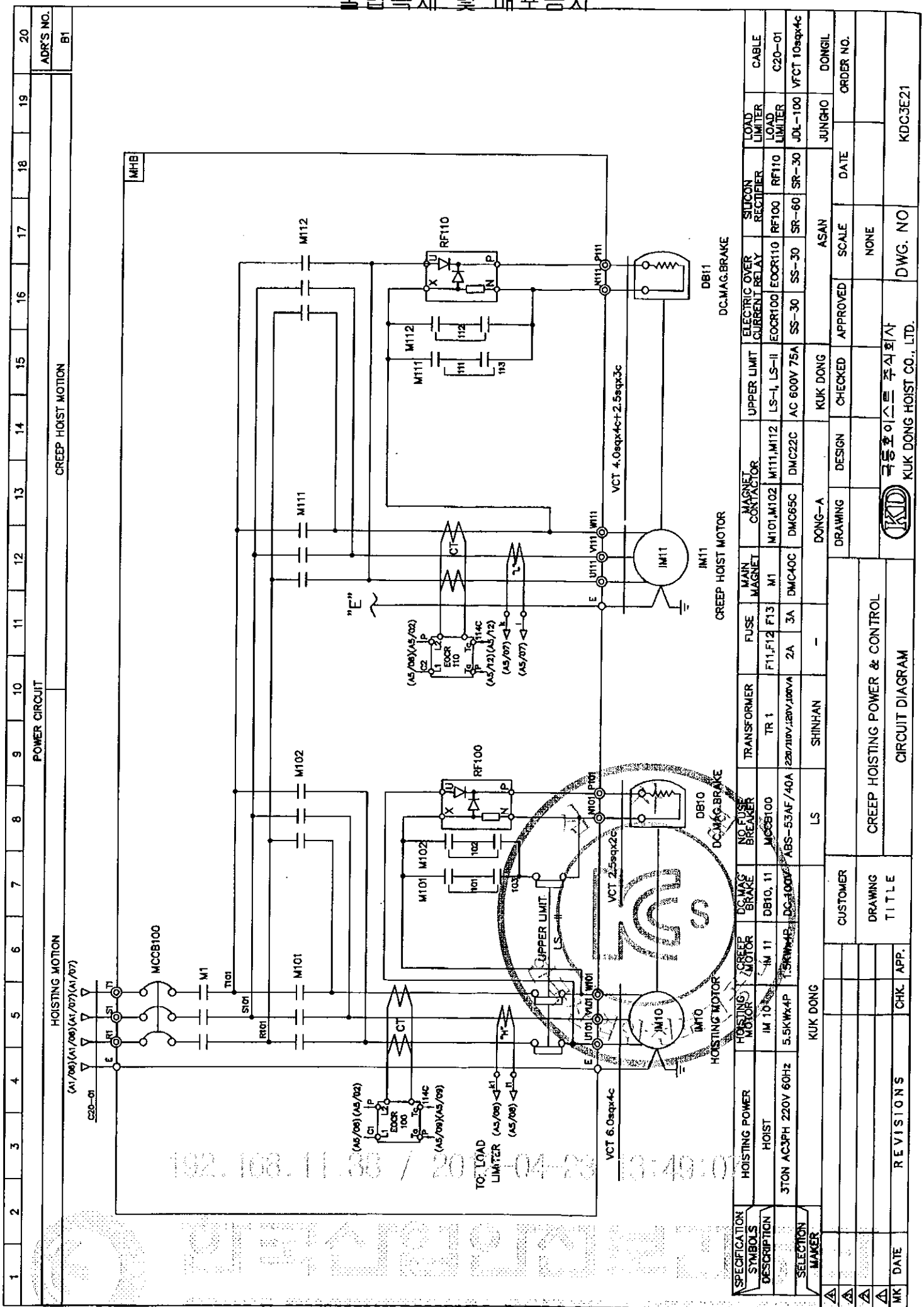


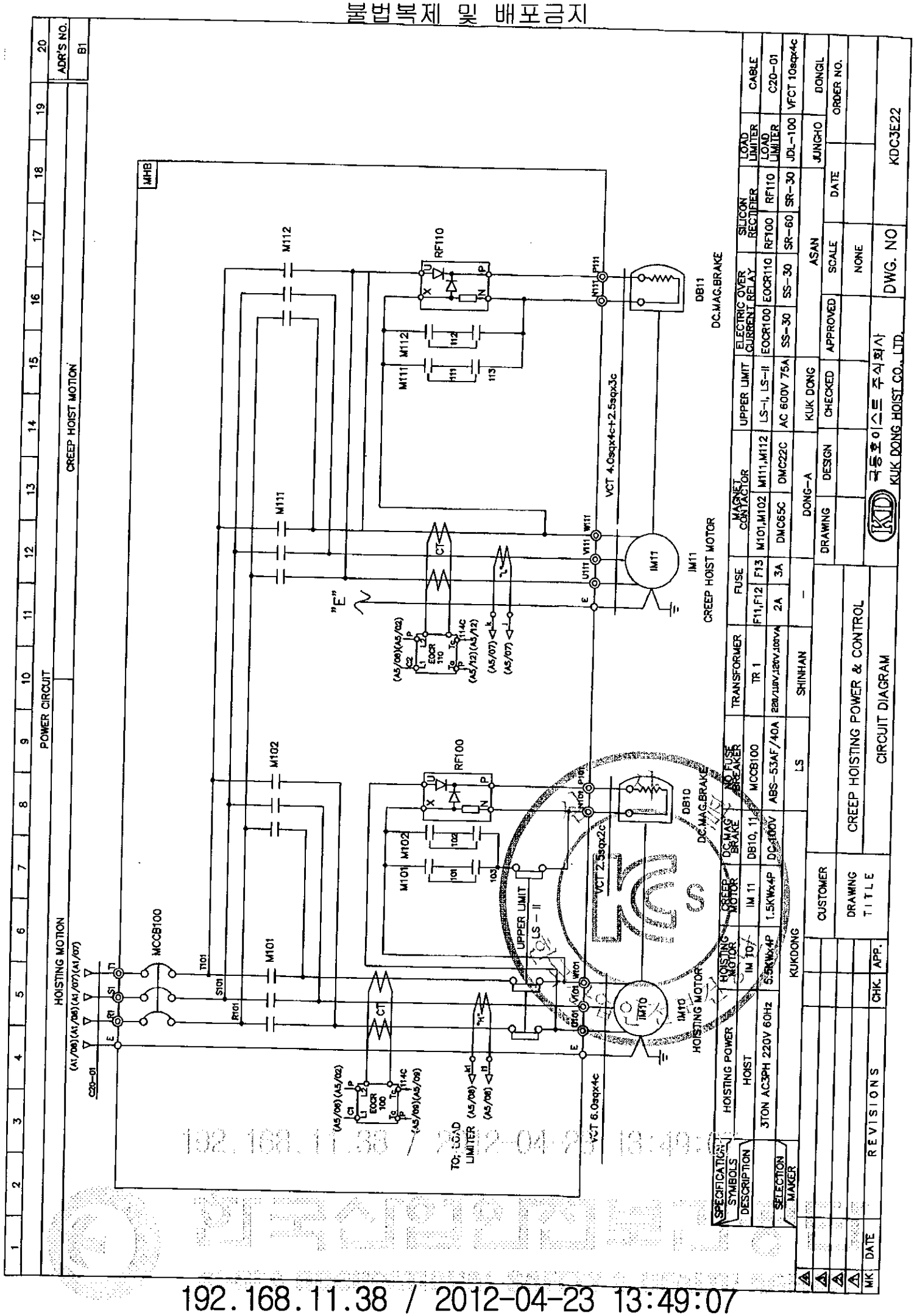
NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CHASSIS PLATE	–	1	아 연 도 금
2	CABLE DUCT	–	1	
3	MAGNET CONTACT	DMC22C	2	TRAVERSING
4	E.O.C.R	SS-05	1	TRAVERSING
5	SILICON RECTIFIER	SR-30	1	TRAVERSING
6	TERMINAL BLOCK	25A , 15A	1	TRAVERSING

NOTE

1. 전선의 색상은 다음과 같다.
   1) 흑색 : 고류 및 직류 전원선로
   2) 적색 : 고류제어회로
   3) 주황색 : 외부전원에서 공급되는 연동장치 제어회로
   4) 녹색 또는 녹색과 황색 혼용 : 접지선
   5) 청 색 : 직류 제어회로
2. CABLE MATERIAL : KIV OR EQUIVALENT
   MIN SIZE : 2.5sq
3. 제어용 전선 : 2.5mm KIV,HIV
4. 제작시 다소 변경 될수있음.
5. 외함 개방구조는 다음과 같을것.
   1) 외함 개방시 충전부분이 차단되도록 할것.
   2) 외함 개방후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호가 되어있을것.

MK	DATE	REVISIONS	CHK.	APP.	CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
					DRAWING TITLE	TRAVERSING POWER CONTROL BOX / ARRANGEMENT DRAWING					NONE		
							극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3bt22	

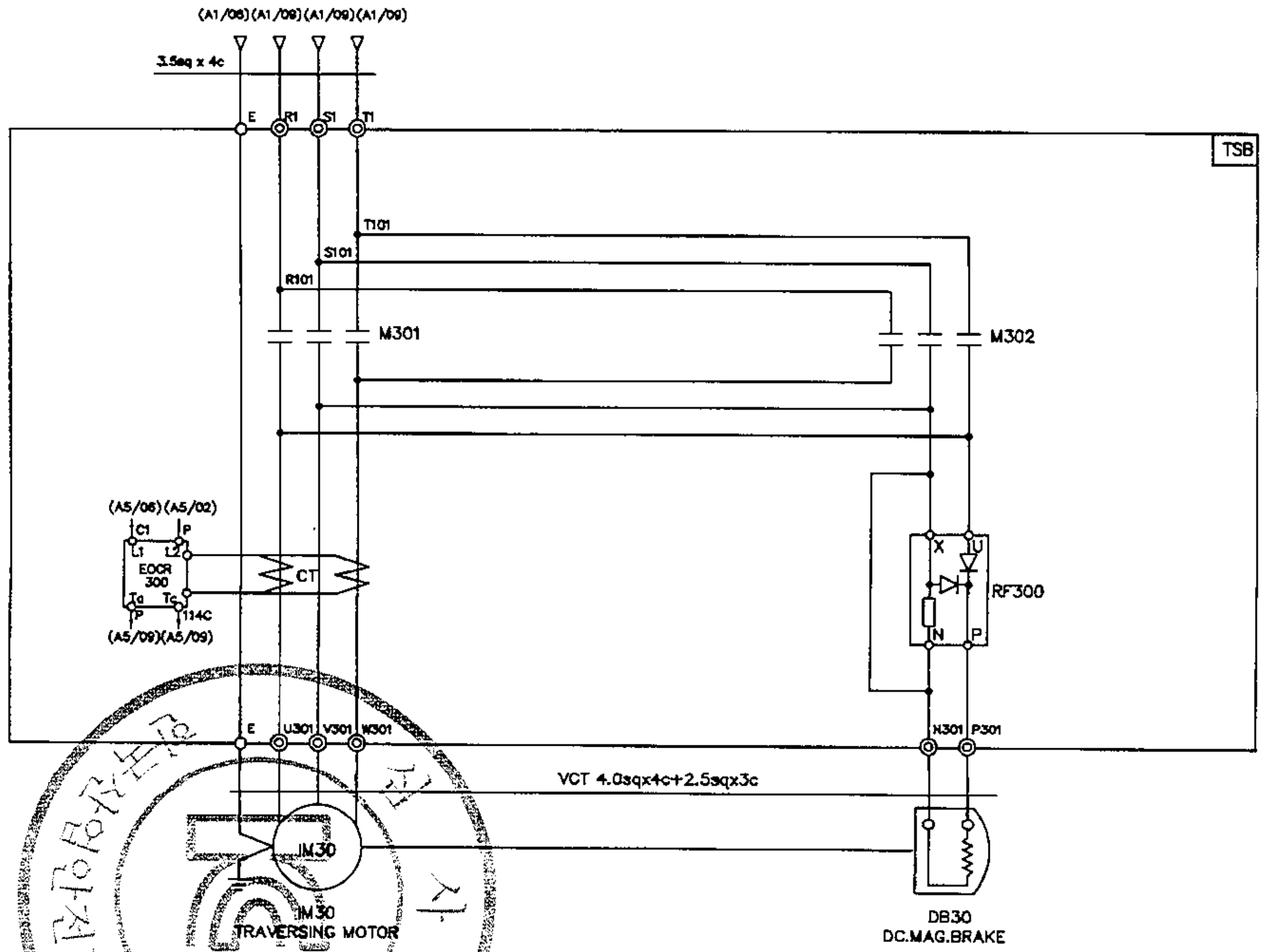




POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C1



SPECIFICATION / SYMBOLS / DESCRIPTION	TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR	SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	LIMIT SWTCH
	IM 30	DB 30	M301 , M302	RF 300	EOCR 300	LS-301 , LS-302
	0.75KW x 4P AC 3PH 220V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
	0.5KW x 6P AC 3PH 220V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
SELECTION MAKER	KUKDONG		DONG-A	ASAN		

MK	DATE	REVISIONS	CHK.	APP.

CUSTOMER	
DRAWING TITLE	TRAVERSING POWER CONTROL CIRCUIT
	DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

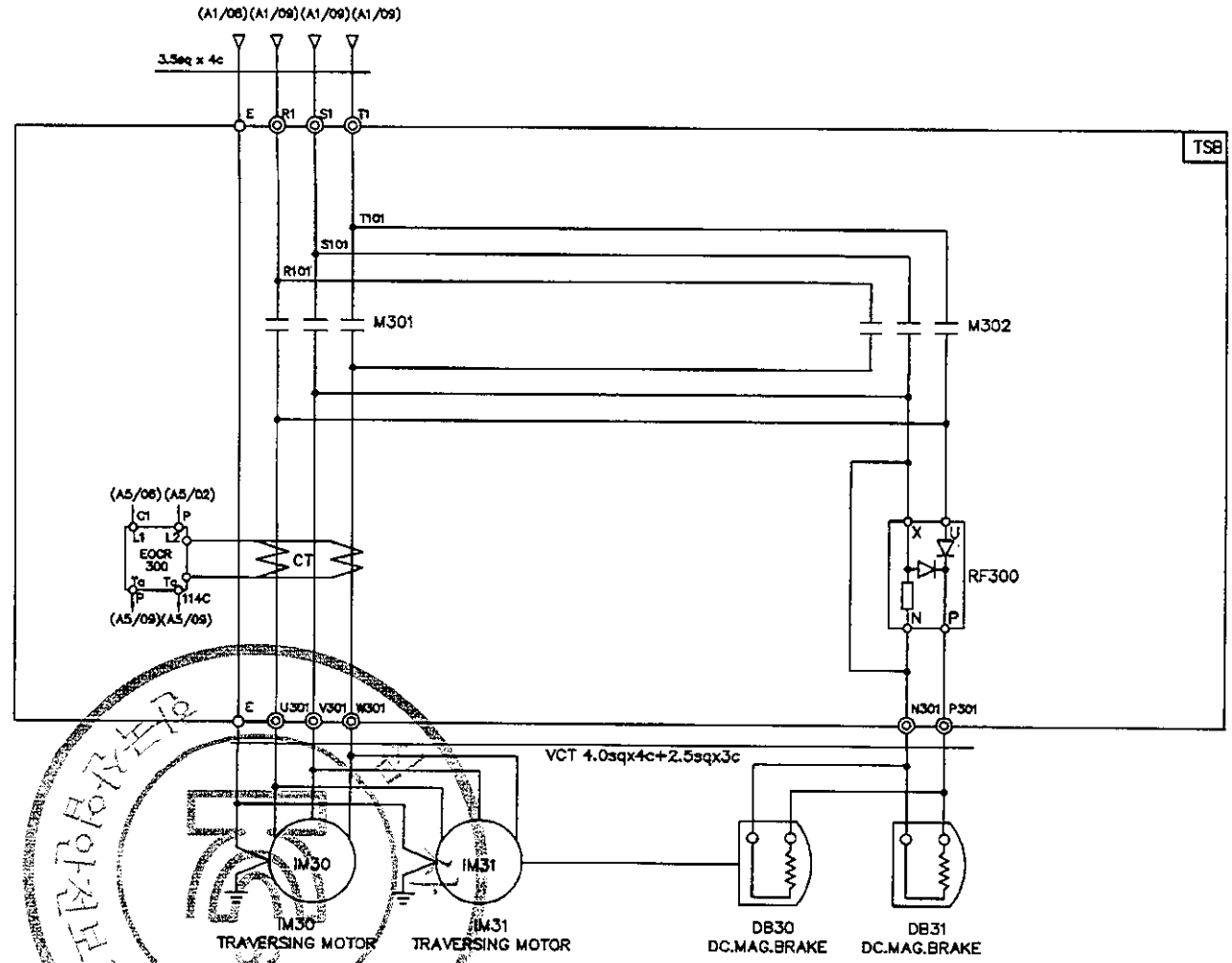
DWG. NO KDC3E23

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



SPECIFICATION / SYMBOLS / DESCRIPTION	TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR	SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	LIMIT SWTCH
	IM 30 , 1M31	DB 30	M301 , M302	RF 300	EOCR 300	LS-301 , LS-302
	0.75KW x 4P AC 3PH 220V 60Hz	DC 100V	DMC22C	SR-30	SS-30	HY - W904
	0.5KW x 6P AC 3PH 220V 60Hz	DC 100V	DMC22C	SR-30	SS-30	HY - W904
SELECTION / MAKER	KUK DONG		DONG-A	ASAN		

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

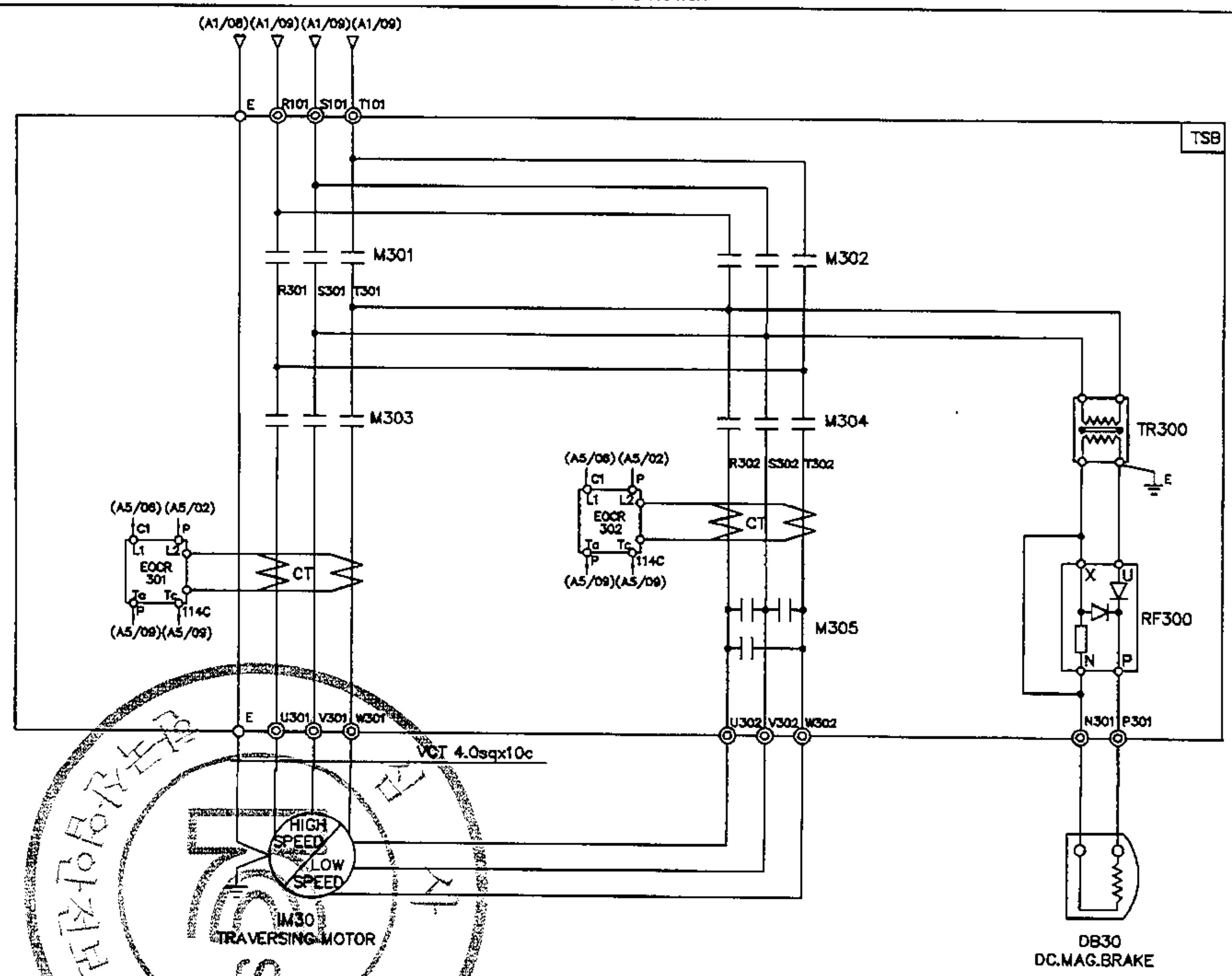
KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC3E24

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



SPECIFICATION / SYMBOLS / DESCRIPTION		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR		SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	TRANSFORMER
		IM 30	DB30	M301 , M302 , M303	M304 , M305	RF 300	EOCR 301,302	TR300
	220V	0.5/0.25KWx6/12P AC3PH 220V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC220/220V, 300VA
	220V	0.8/0.4KWx4/8P AC3PH 220V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC220/220V, 300VA
SELECTION MAKER		KUKDONG		DONG-A		ASECO		SHINHAN

MK	DATE	REVISIONS	CHK.	APP.
△				
△				
△				
△				

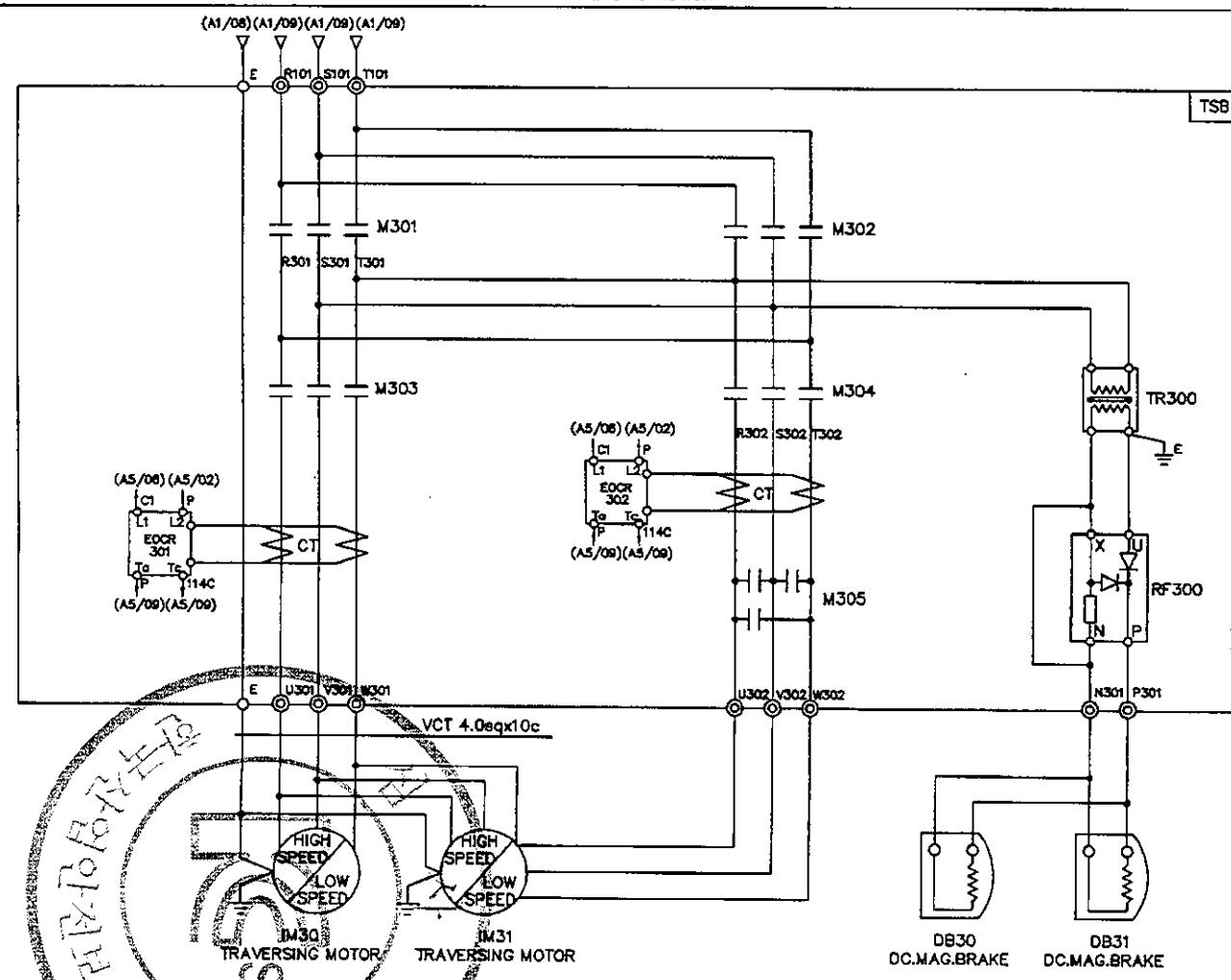
CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	TRAVERSING POWER CONTROL CIRCUIT DIAGRAM					NONE		
		극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3E25	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



SPECIFICATION / SYMBOLS / DESCRIPTION		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR		SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	TRANSFORMER
		IM 30 , IM31	DB30 , DB31	M301 , M302 , M303	M304 , M305	RF 300	EOCR 301,302	TR300
	220V	0.5/0.25KWx6/12P AC3PH 220V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-30	AC220/220V, 300VA
	220V	0.8/0.4KWx4/8P AC3PH 220V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-30	AC220/220V, 300VA
SELECTION / MAKER		KUKDONG		DONG-A		ASECO		SHINHAN

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

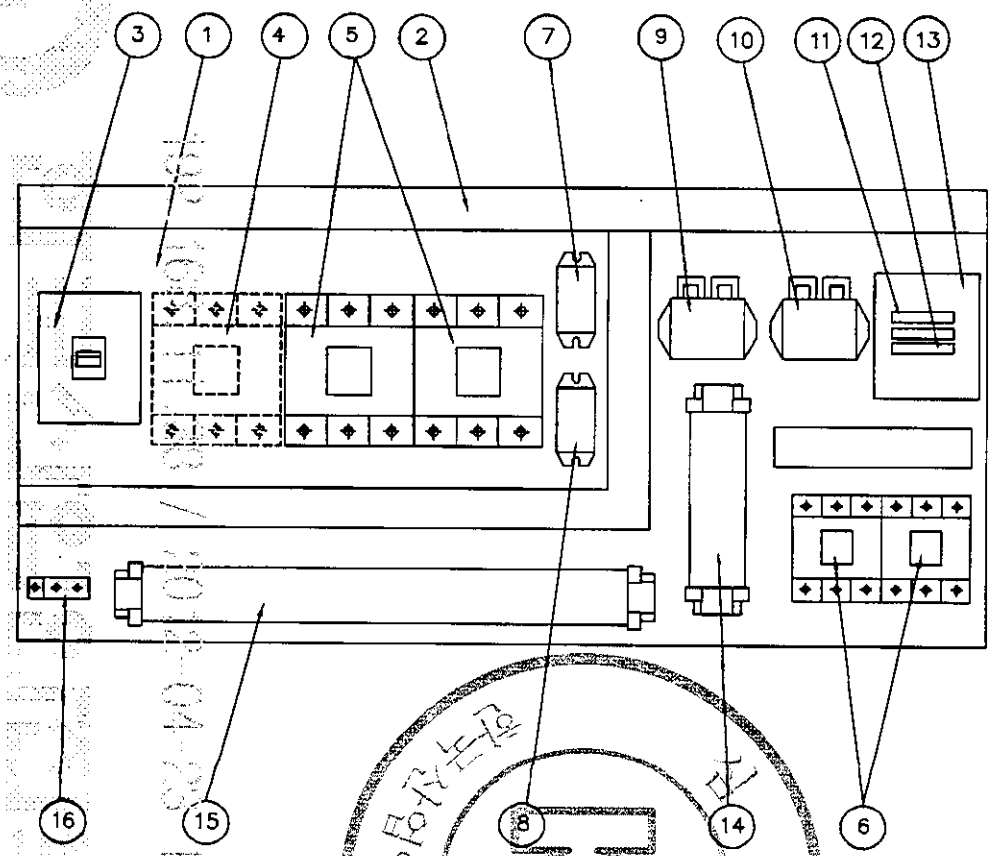
DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC3E26

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20.

ADR'S NO.



NO	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	CHASSIS PLATE		1	아 연 도 금
2	CABLE DUCT	-	1	
3	N.F.B	33AF/20AT	1	HOISTING
4	MAGNET CONTACTOR	DMC22C	1	MAIN MAG.
5	MAGNET CONTACTOR	DMC40C	2	HOISTING
6	MAGNET CONTACTOR	DMC22C	2	CREEP HOIST
7	SILICON RECTIFIER	SR-60	1	HOISTING
8	SILICON RECTIFIER	SR-30	1	CREEP HOIST
9	E.O.C.R	SS-30	1	HOISTING
10	E.O.C.R	SS-05	1	CREEP HOIST
11	FUSE	1 A	2	
12	FUSE	3 A	1	
13	TRANSFORMER	380V/110V,120V, 100VA	1	
14	UPPER LIMIT	AC 600V/75A	1	
15	TERMINAL BLOCK	60A,15A		
16	EARTH TERMINAL	3tx20x50	1	

NOTE

1. UPPER LIMIT LS-1,LS-2의 접점 허용 전류 용량 : AC 600V, 75A
2. POWER SOURCE : AC. 3ø 380V 60HZ
3. EARTH TERMINAL RESISTANCE : 0.018Ω

NOTE 1. 전선의 색상은 다음과 같다.

1) 흑색 : 교류 및 직류 전원선로
2) 적색 : 교류제어회로
3) 주황색 : 외부전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청 색 : 직류 제어회로

2. CABLE MATERIAL : KIV OR EQUIVALENT
   MIN SIZE : 2.5sq
3. 제어용 전선 : 2.5mm KIV,HIV
4. 제작시 다소 변경 될수있음.
5. 외함 개방구조는 다음과 같을것.
   1) 외함 개방시 충전부분이 차단되도록 할것.
   2) 외함 개방후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호가 되어있을것.

MK	DATE	REVISIONS	CHK.	APP.

CUSTOMER

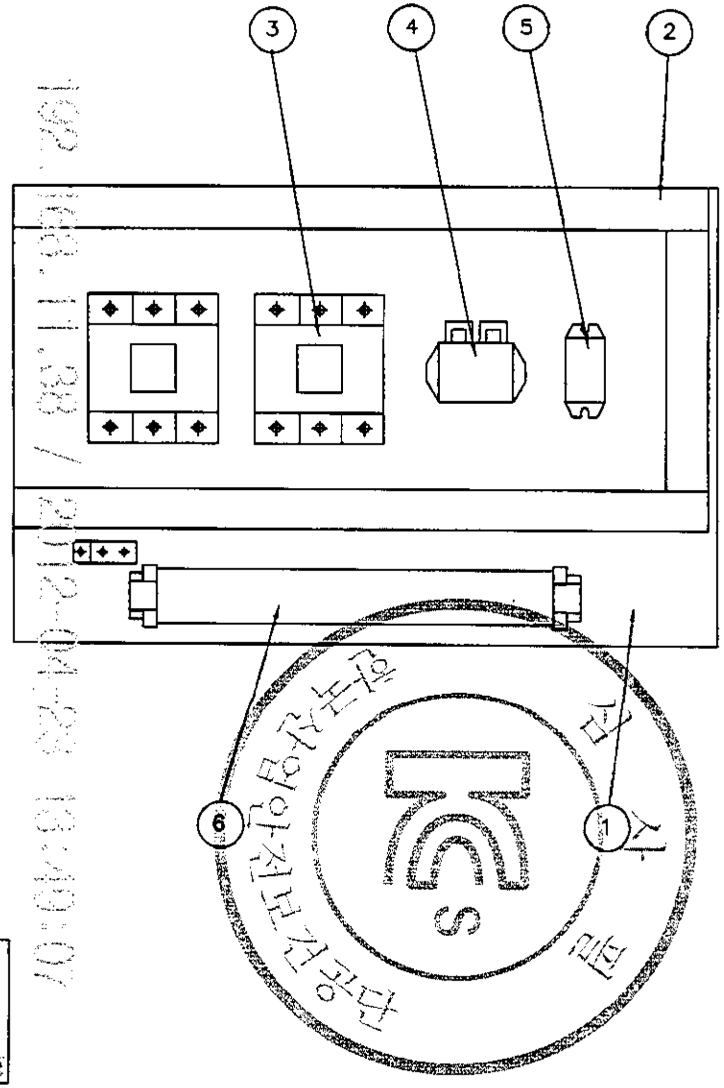
DRAWING TITLE: HOIST CONTROL BOX

ARRANGEMENT DRAWING

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO: KDC3BA31

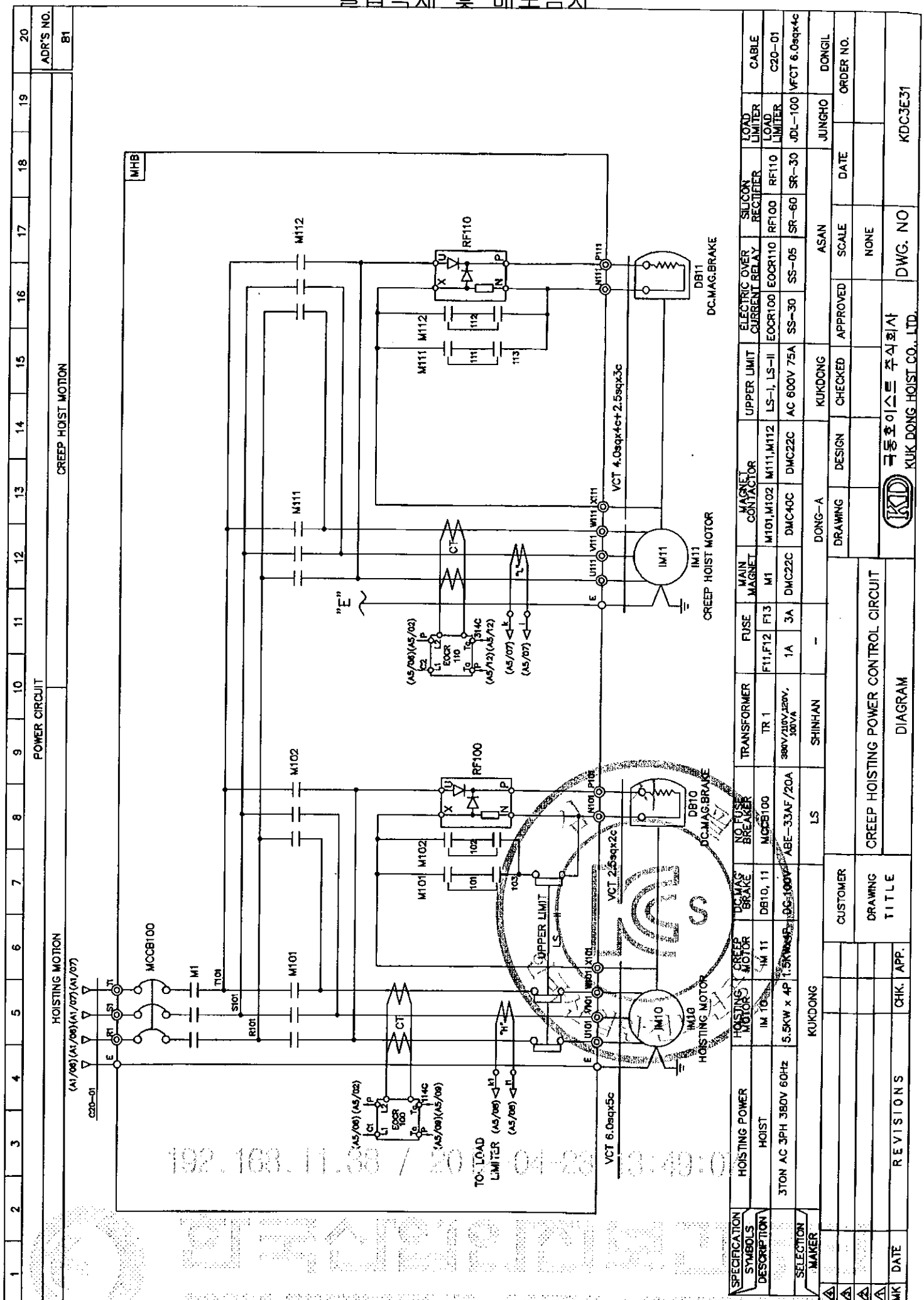


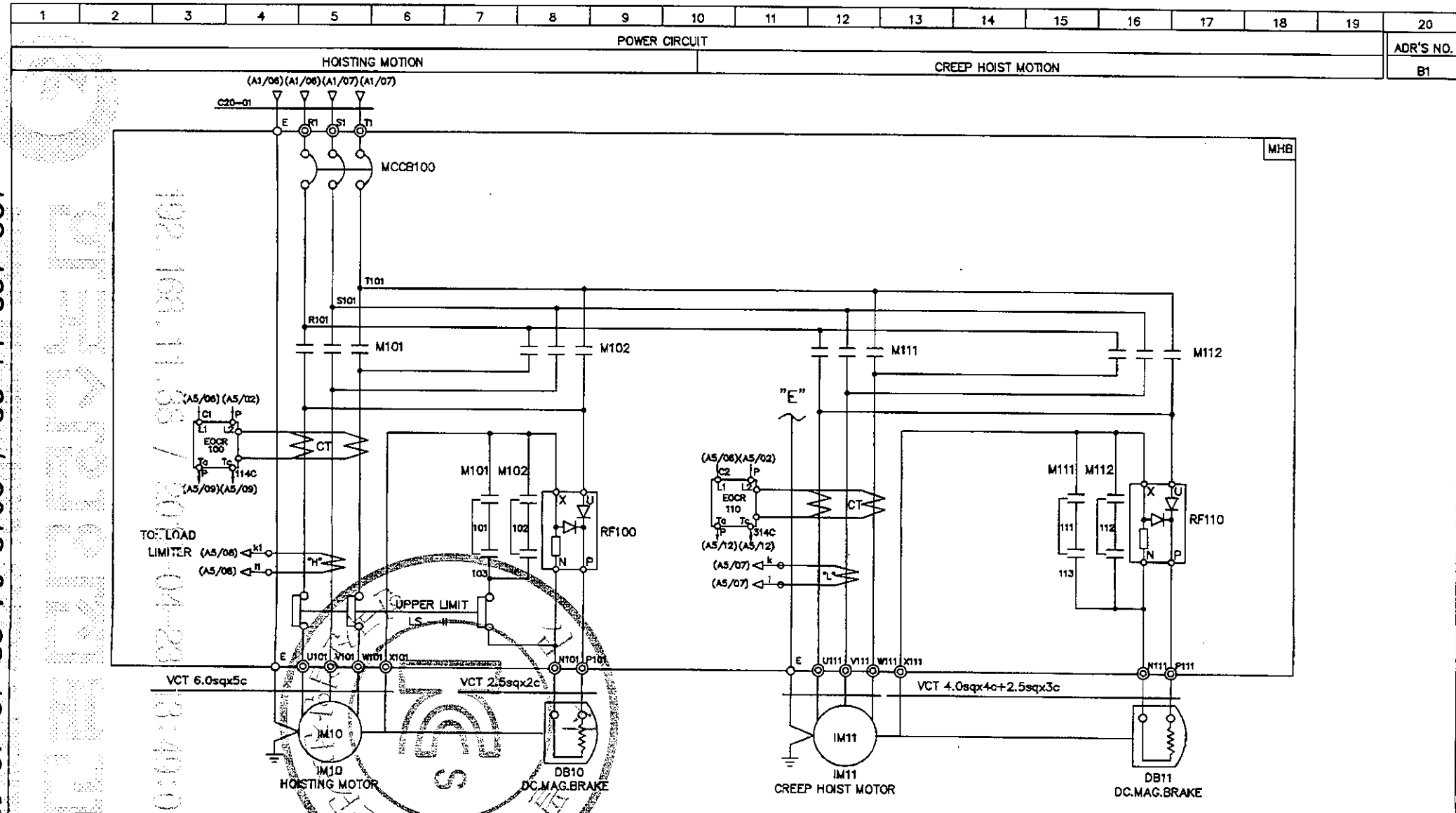
NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CHASSIS PLATE	–	1	아 연 도 금
2	CABLE DUCT	–	1	
3	MAGNET CONTACT	DMC22C	2	TRAVERSING
4	E.O.C.R	SS–05	1	TRAVERSING
5	SILICON RECTIFIER	SR–30	1	TRAVERSING
6	TERMINAL BLOCK	25A , 15A	1	TRAVERSING

NOTE
1. 전선의 색상은 다음과 같다.
   1) 흑색 : 고류 및 직류 전원선로
   2) 적색 : 고류제어회로
   3) 주황색 : 외부전원에서 공급되는 연동장치 제어회로
   4) 녹색 또는 녹색과 황색 혼용 : 접지선
   5) 청 색 : 직류 제어회로
2. CABLE MATERIAL : KIV OR EQUIVALENT, MIN SIZE : 2.5sq
3. 제어용 전선 : 2.5mm KIV,HIV
4. 제작시 다소 변경 될수있음.
5. 외함 개방구조는 다음과 같을것.
   1) 외함 개방시 충전부분이 차단되도록 할것.
   2) 외함 개방후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호가 되어있을것.

MK	DATE	REVISIONS	CHK.	APP.

CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	TRAVERSING POWER CONTROL BOX / ARRANGEMENT DRAWING					NONE		
		극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3bt32	





SPECIFICATION / SYMBOLS	HOISTING POWER	HOISTING MOTOR	CREEP MOTOR	DC.MAG BRAKE	NO FUSE BREAKER	TRANSFORMER	FUSE		MAGNET CONTACTOR		UPPER LIMIT	ELECTRIC OVER CURRENT RELAY		SILICON RECTIFIER		LOAD LIMITER	CABLE
DESCRIPTION	HOIST	IM 10	IM 11	DB10, 11	MCCB100	TR 1	F11,F12	F13	M101,M102	M111,M112	LS-I, LS-II	EOCR100	EOCR110	RF100	RF110	LOAD LIMITER	C20-01
	3TON AC 3PH 380V 60Hz	5.5KW x 4P	1.5KW x 4P	DC 100V	ABE-33AF/20A	380V/110V,120V, 100VA	1A	3A	DMC40C	DMC22C	AC 600V 75A	SS-30	SS-05	SR-60	SR-30	JDL-100	VFCT 6.0sqx4c
SELECTION / MAKER	KUKDONG				LS	SHINHAN	-		DONG-A		KUKDONG	ASAN				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

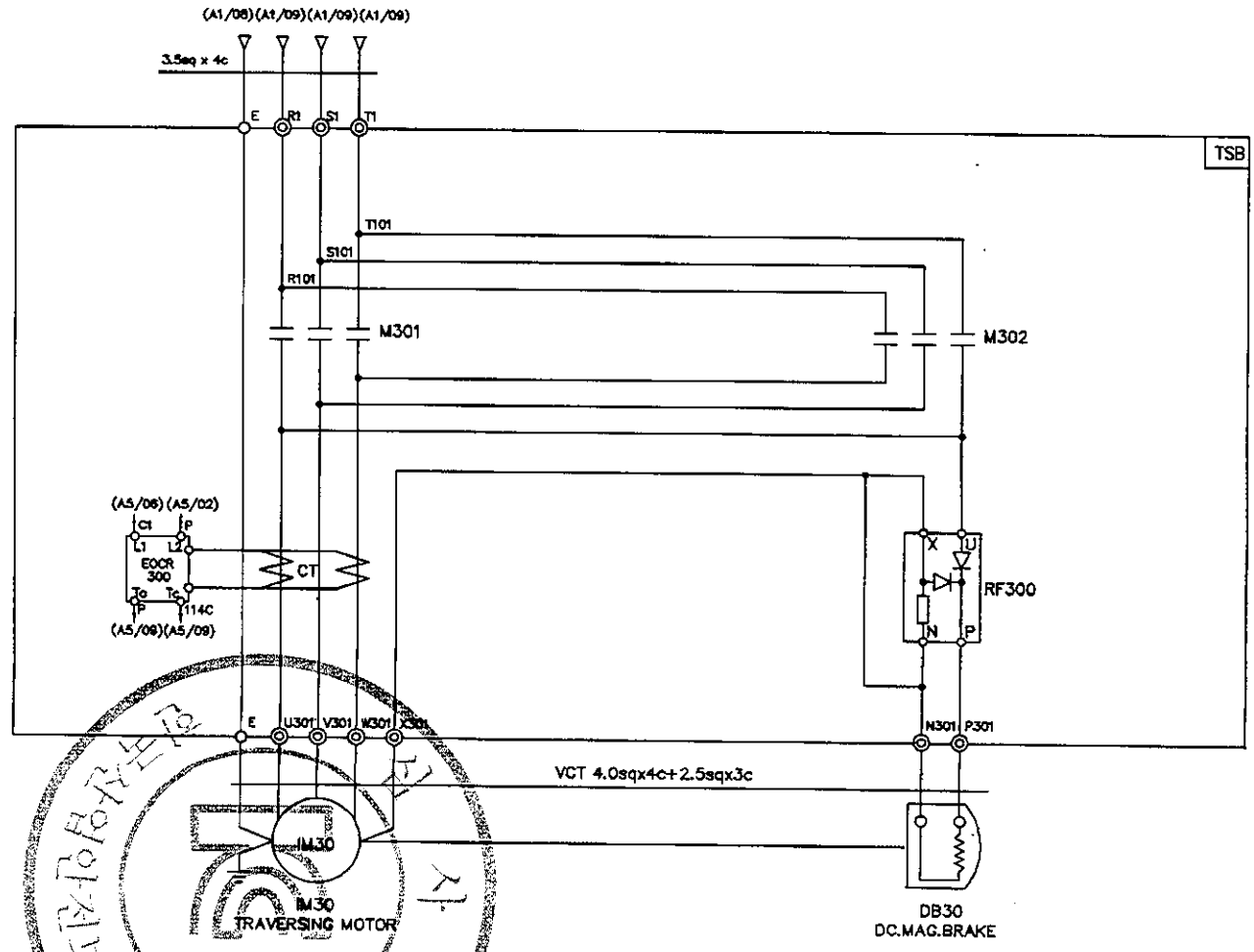
DWG. NO: KDC3E32

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C1



SPECIFICATION / SYMBOLS / DESCRIPTION	TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR	SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	LIMIT SWTCH
	IM 30	DB 30	M301 , M302	RF 300	EOCR 300	LS-301 , LS-302
	0.75KW x 4P AC 3PH 380V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
	0.5KW x 6P AC 3PH 380V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
SELECTION / MAKER	KUKDONG		DAESUNG	ASECO		

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

국동호이스트 주식회사
KUK DONG HOIST CO., LTD.

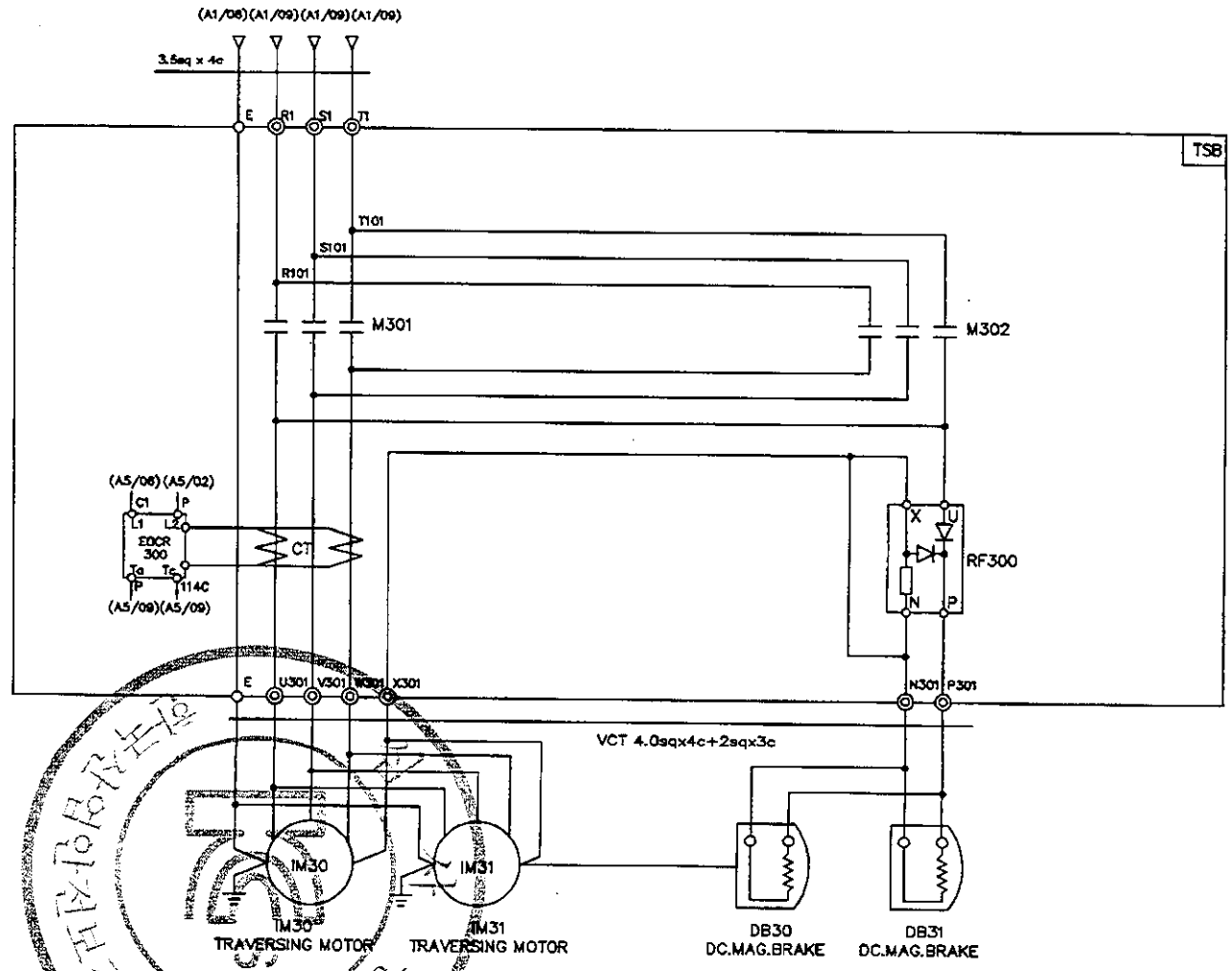
DWG. NO: KDC3E33

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



SPECIFICATION / SYMBOLS / DESCRIPTION	TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR	SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	LIMIT SWTCH
	IM 30 , 1M31	DB 30	M301 , M302	RF 300	EOCR 300	LS-301 , LS-302
	0.75KW x 4P AC 3PH 380V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
	0.5KW x 6P AC 3PH 380V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
SELECTION / MAKER	KUKDONG		DONG-A	ASECO		

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

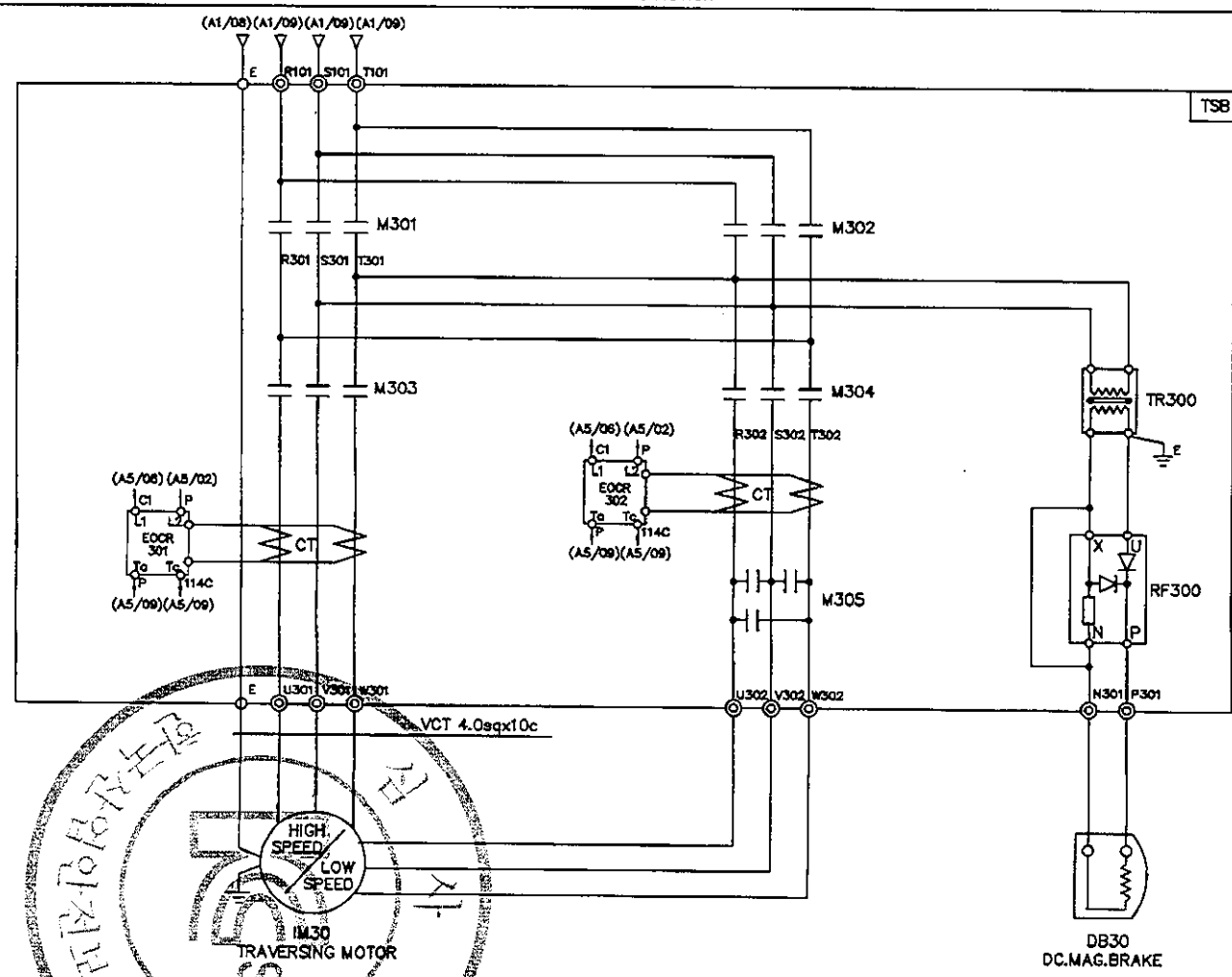
DWG. NO KDC3E34

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



SPECIFICATION / SYMBOLS / DESCRIPTION		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR		SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	TRANSFORMER
		IM-30	DB30	M301 , M302 , M303	M304 , M305	RF 300	EOCR 301,302	TR300
	380V	0.5/025KWx6/12P AC3PH 380V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC380/220V, 300VA
	380V	0.8/0.4KWx4/8P AC3PH 380V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC380/220V, 300VA
SELECTION MAKER		KUKDONG		DONG-A		ASECO		SHINHAN

MK	DATE	REVISIONS	CHK.	APP.
⚠4				
⚠3				
⚠2				
⚠1				

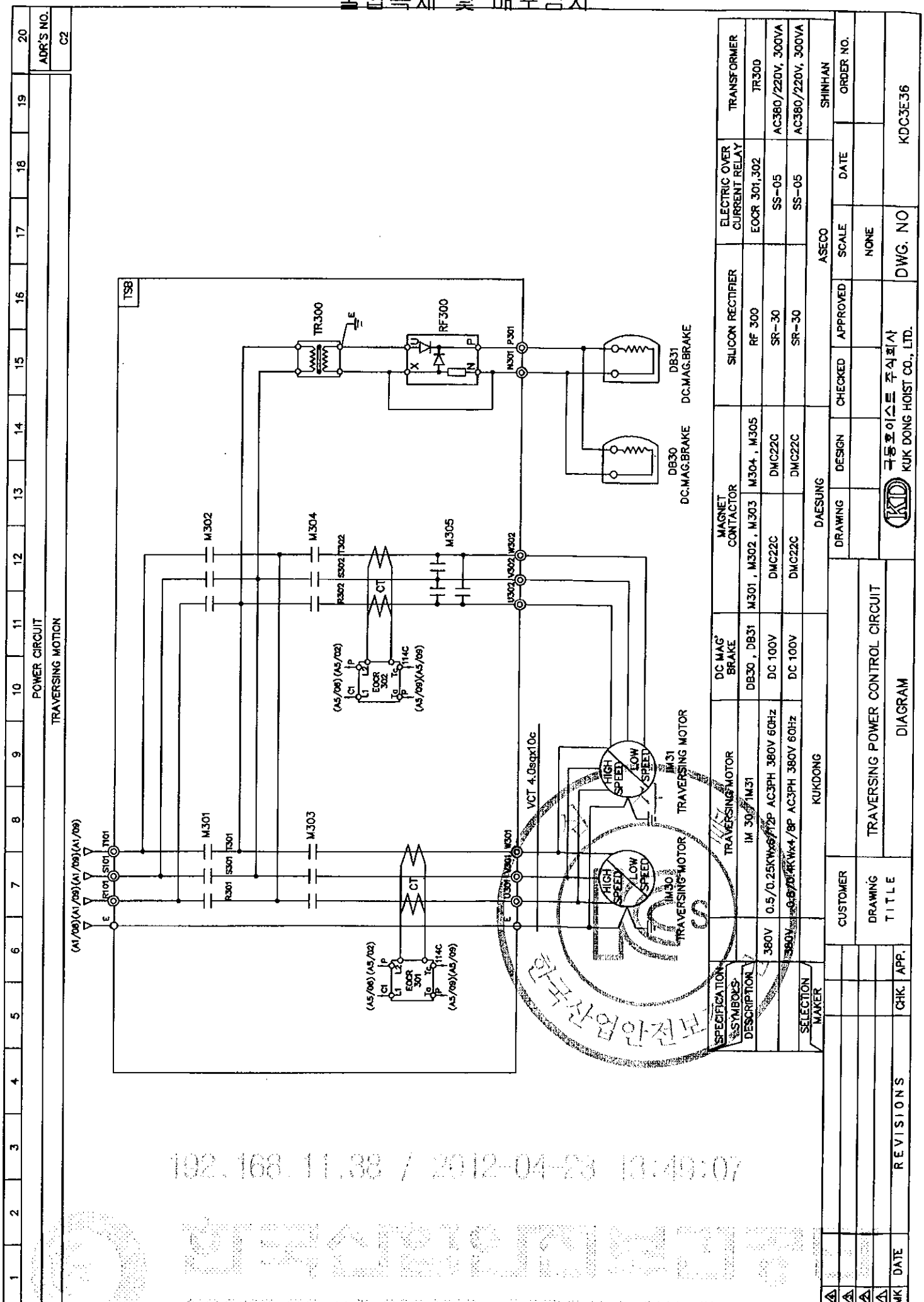
CUSTOMER

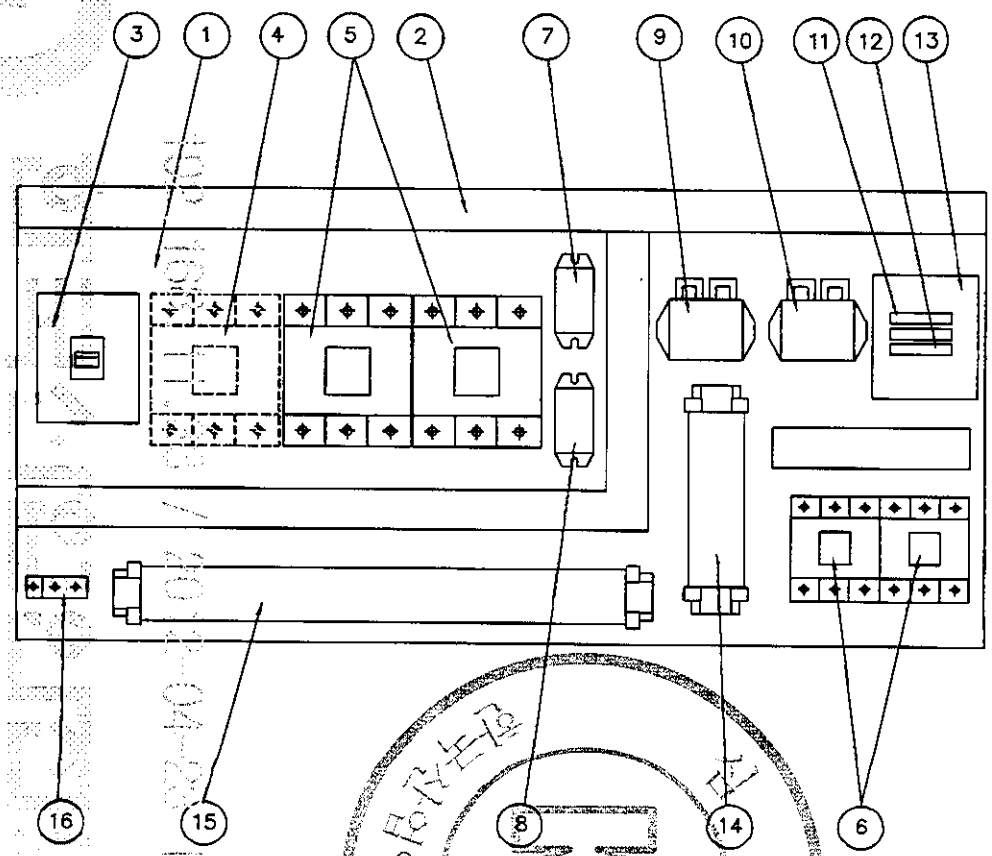
DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

구동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO: KDC3E35





NO	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	CHASSIS PLATE		1	아 연 도 금
2	CABLE DUCT	–	1	
3	N.F.B	33AF/20AT	1	HOISTING
4	MAGNET CONTACTOR	DMC22C	1	MAIN MAG.
5	MAGNET CONTACTOR	DMC40C	2	HOISTING
6	MAGNET CONTACTOR	DMC22C	2	CREEP HOIST
7	SILICON RECTIFIER	SR-60	1	HOISTING
8	SILICON RECTIFIER	SR-30	1	CREEP HOIST
9	E.O.C.R	SS-30	1	HOISTING
10	E.O.C.R	SS-05	1	CREEP HOIST
11	FUSE	1 A	2	
12	FUSE	3 A	1	
13	TRANSFORMER	440V/110V,120V, 100VA	1	
14	UPPER LIMIT	AC 600V/75A	1	
15	TERMINAL BLOCK	60A,15A		
16	EARTH TERMINAL	3tx20x50	1	

NOTE

1. UPPER LIMIT LS-1,LS-2의 접점 허용 전류 용량 : AC 600V, 75A
2. POWER SOURCE : AC 3ø 440V 60HZ
3. EARTH TERMINAL RESISTANCE : 0.018Ω

NOTE 1. 전선의 색상은 다음과 같다.

1) 흑색 : 교류 및 직류 전원선로
2) 적색 : 교류제어회로
3) 주황색 : 외부전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청 색 : 직류 제어회로

2. CABLE MATERIAL : KIV OR EQUIVALENT
   MIN SIZE : 2.5sq
3. 제어용 전선 : 2.5mm KIV,HIV
4. 제작시 다소 변경 될수있음.
5. 외함 개방구조는 다음과 같을것.
   1) 외함 개방시 충전부분이 차단되도록 할것.
   2) 외함 개방후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호가 되어있을것.

MK	DATE	REVISIONS	CHK.	APP.

CUSTOMER

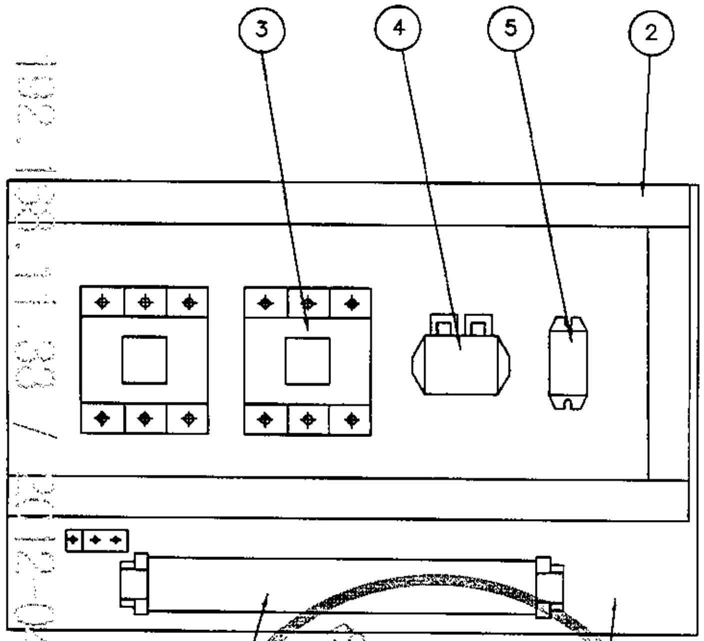
DRAWING TITLE: HOIST CONTROL BOX / ARRANGEMENT DRAWING

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC3BA41

ADR'S NO.



NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CHASSIS PLATE	–	1	아 연 도 금
2	CABLE DUCT	–	1	
3	MAGNET CONTACT	DMC22C	2	TRAVERSING
4	E.O.C.R	SS-05	1	TRAVERSING
5	SILICON RECTIFIER	SR-30	1	TRAVERSING
6	TERMINAL BLOCK	25A , 15A	1	TRAVERSING

NOTE 1. 전선의 색상은 다음과 같다.
1) 흑색 : 교류 및 직류 전원선로
2) 적색 : 교류제어회로
3) 주황색 : 외부전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청 색 : 직류 제어회로
2. CABLE MATERIAL : KIV OR EQUIVALENT
MIN SIZE : 2.5sq
3. 제어용 전선 : 2.5mm KIV,HIV
4. 제작시 다소 변경 될수있음.
5. 외함 개방구조는 다음과 같을것.
1) 외함 개방시 충전부분이 차단되도록 할것.
2) 외함 개방후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호가 되어있을것.

MK	DATE	REVISIONS	CHK.	APP.
△				
△				
△				
△				

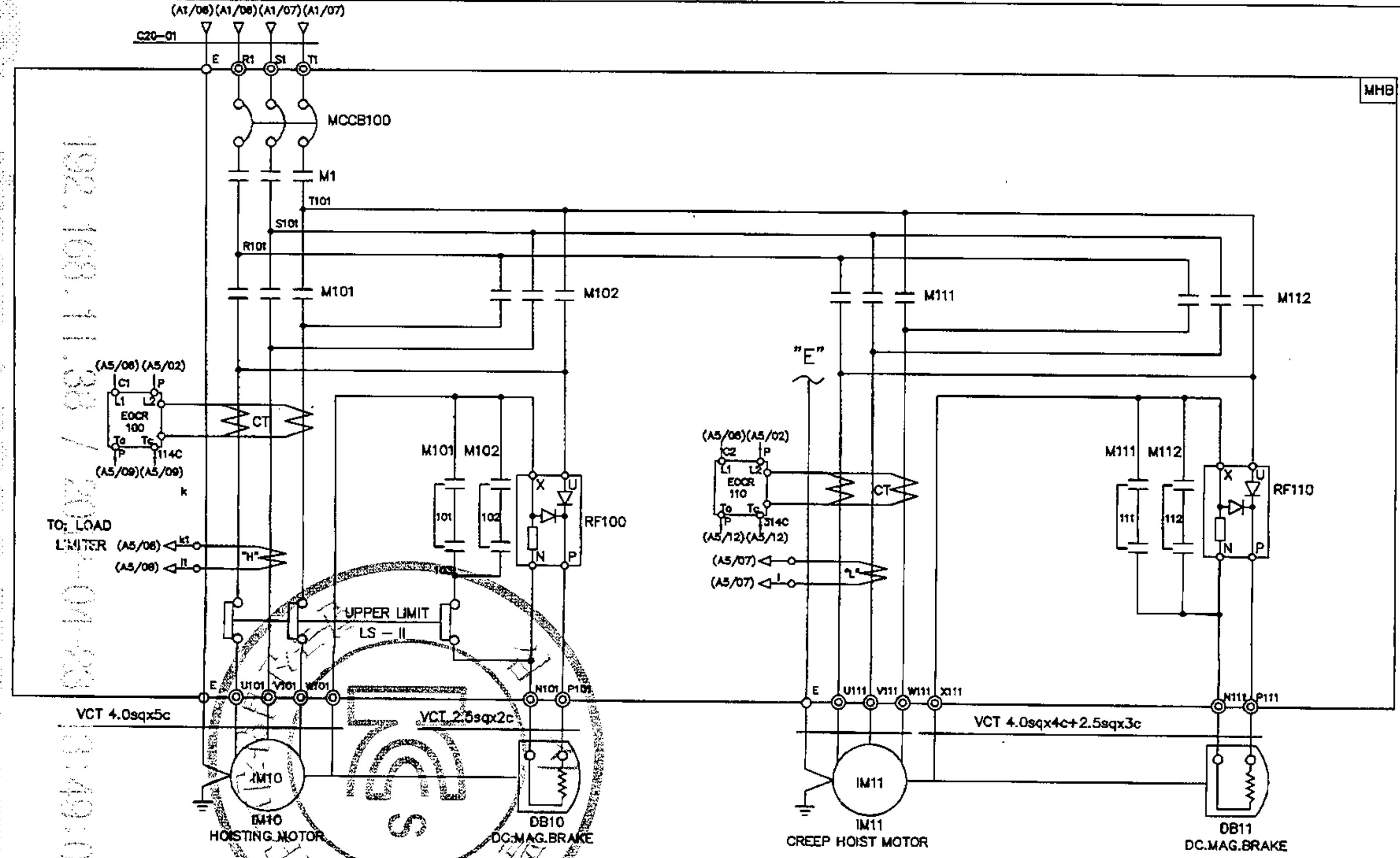
CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	TRAVERSING POWER CONTROL BOX / ARRANGEMENT DRAWING					NONE		
		국동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3bt42	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

HOISTING MOTION | CREEP HOIST MOTION

ADR'S NO. B1



SPECIFICATION / SYMBOLS	HOISTING POWER	HOISTING MOTOR	CREEP MOTOR	DC.MAG BRAKE	NO FUSE BREAKER	TRANSFORMER	FUSE		MAIN MAGNET	MAGNET CONTACTOR		UPPER LIMIT	ELECTRIC OVER CURRENT RELAY		SILICON RECTIFIER		LOAD LIMITER	CABLE
DESCRIPTION	HOIST	IM 10	IM 11	DB10, 11	MCCB100	TR 1	F11,F12	F13	M1	M101,M102	M111,M112	LS–I, LS–II	EOCR100	EOCR110	RF100	RF110	LOAD LIMITER	C20–01
	3TON AC 3PH 440V 60Hz	5.5KW x 4P	1.5KWx4P	DC100V	ABE–33AF/20A	440/110V,120V,100VA	1A	3A	DMC22C	DMC40C	DMC22C	AC 600V 75A	SS–30	SS–05	SR–60	SR–30	JDL–100	VFCT 6sqx4c
SELECTION MAKER	KUKDONG				LS	SHINHAN	–		DONG–A			KUKDONG	ASAN				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
△				
△				
△				
△				

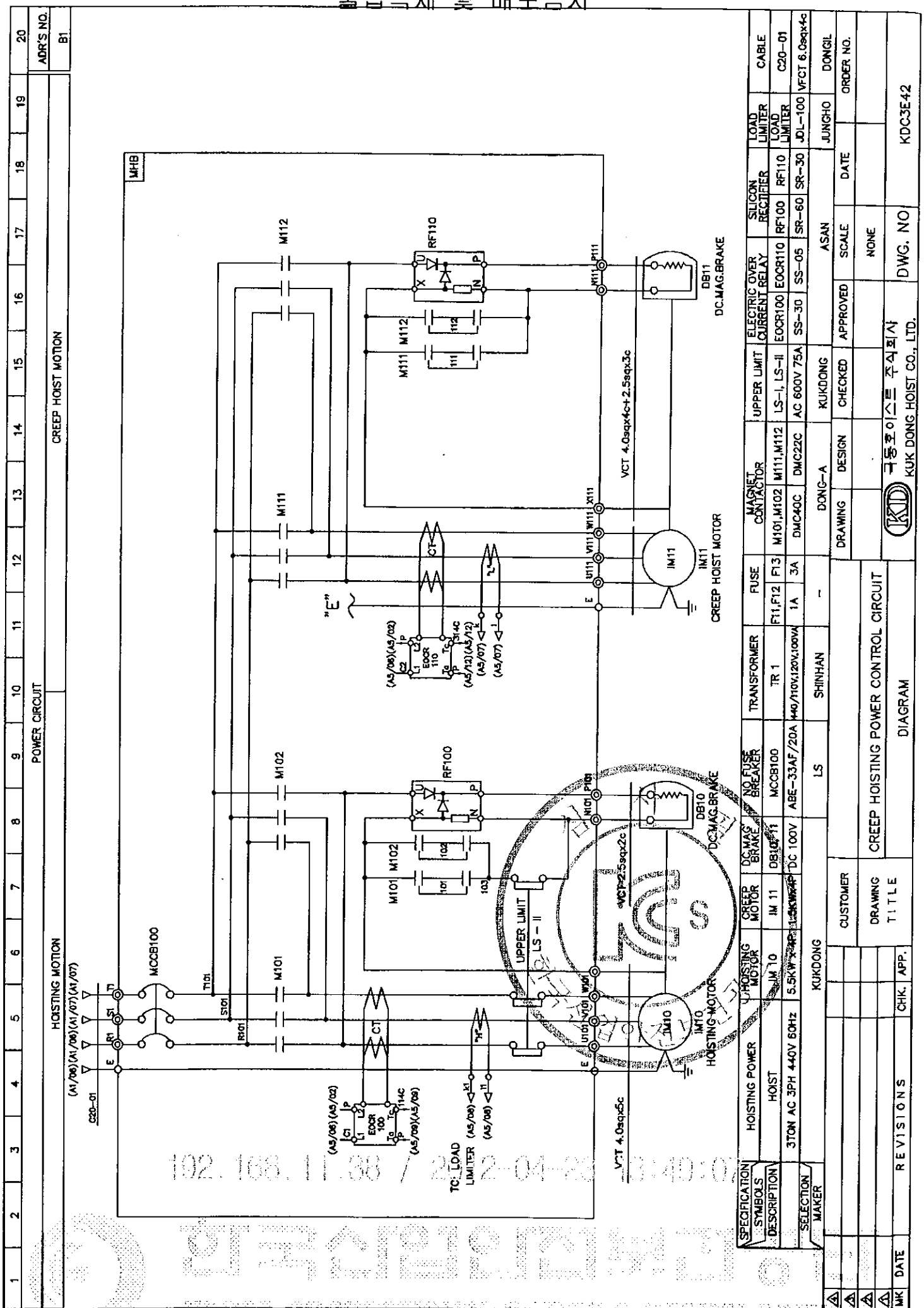
CUSTOMER

DRAWING TITLE: CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.

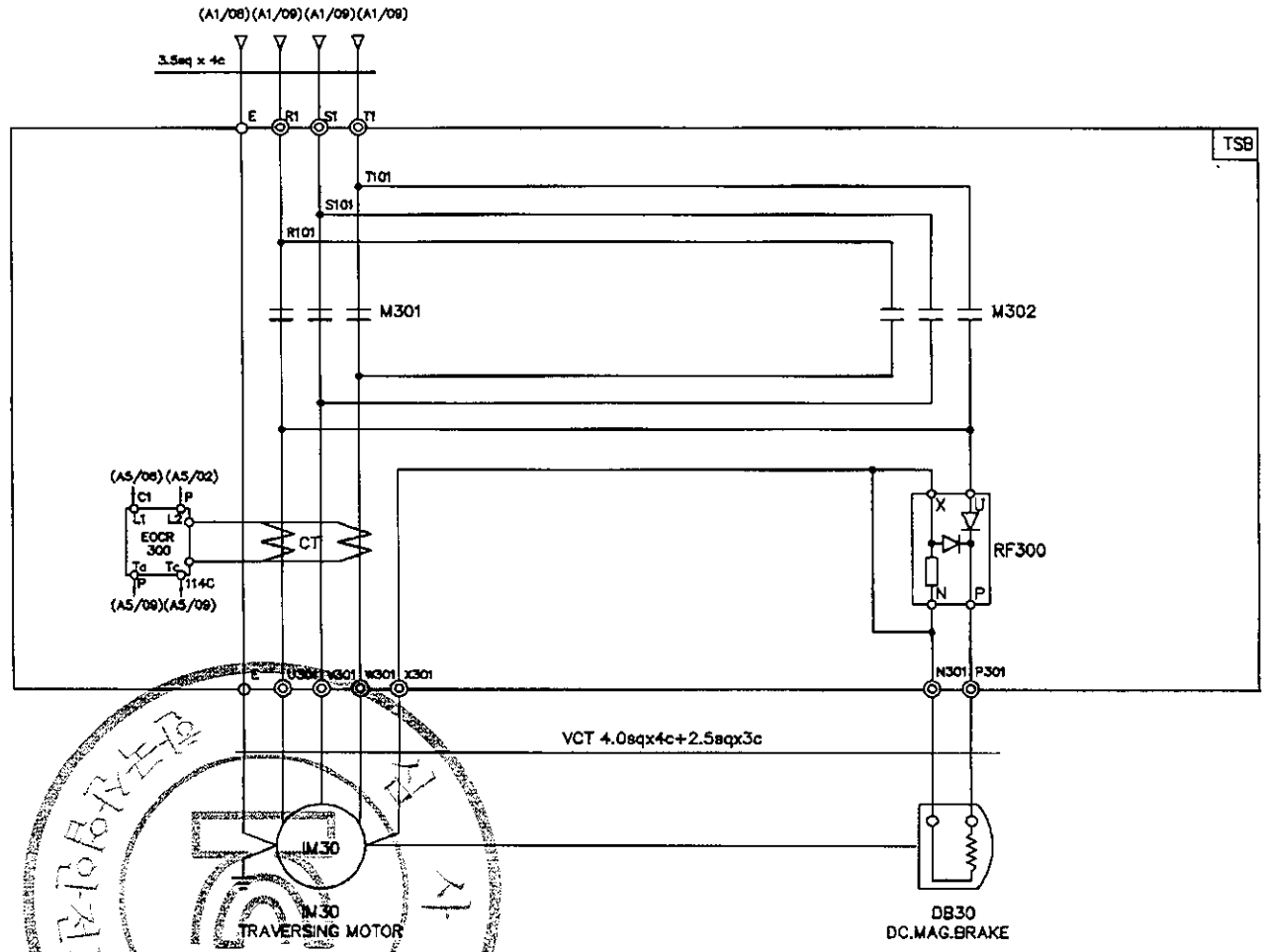
DWG. NO KDC3E41



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT | ADR'S NO.

TRAVERSING MOTION | C1



SPECIFICATION / SYMBOLS / DESCRIPTION		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR	SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	LIMIT SWTCH
	440V	0.75KW x 4P AC 3PH 440V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
		0.5KW x 6P AC 3PH 440V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
SELECTION / MAKER		KUKDONG		DONG-A	ASAN		

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

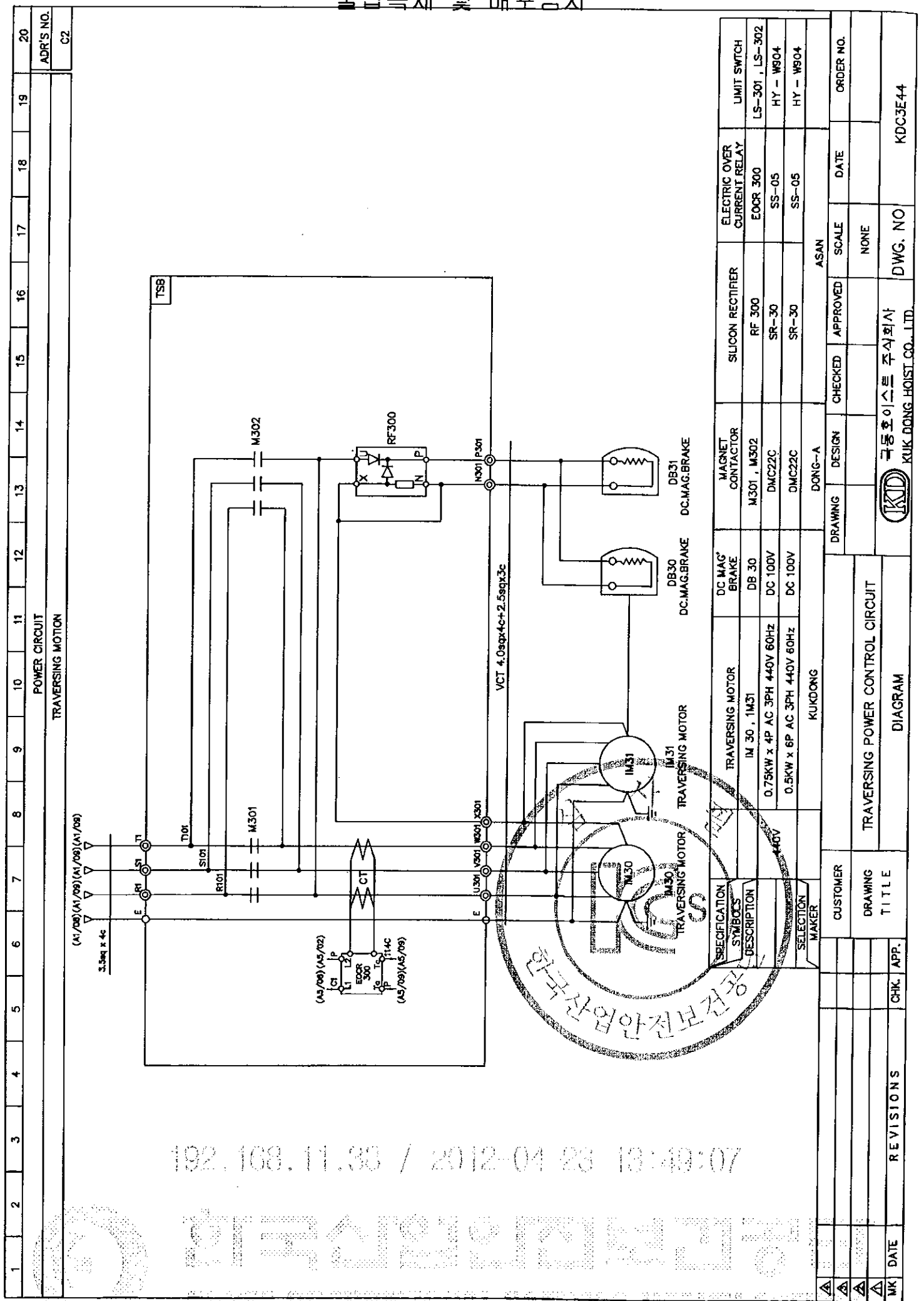
CUSTOMER

DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC3E43

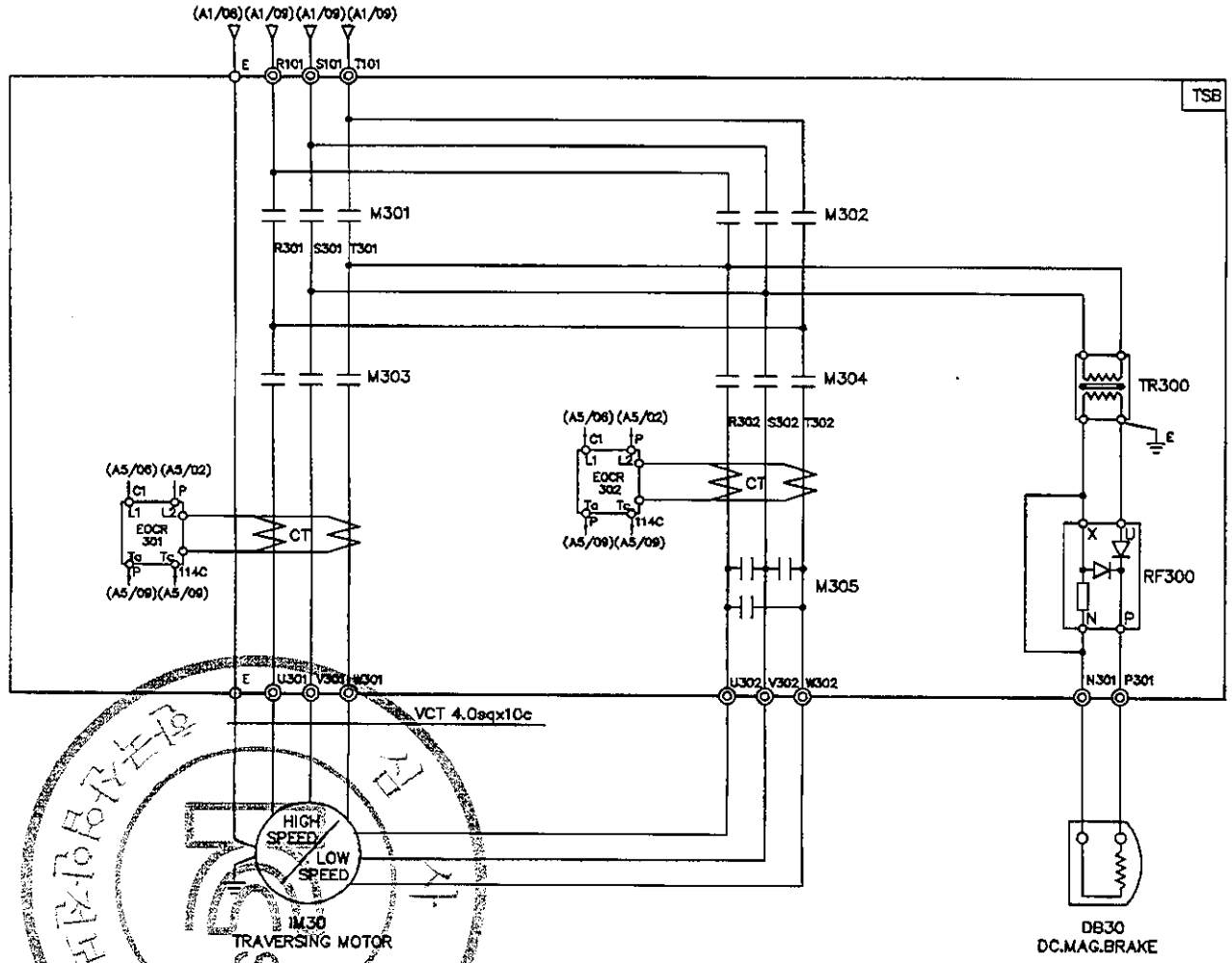


1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



SPECIFICATION / SYMBOLS		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR		SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	TRANSFORMER
DESCRIPTION		IM 30	DB30	M301 , M302 , M303	M304 , M305	RF 300	EOCR 301,302	TR300
	440V	0.5/025KWx6/12P AC3PH 440V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC440/220V, 300VA
	440V	0.8/0.4KWx4/8P AC3PH 440V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC440/220V, 300VA
SELECTION / MAKER		KUKDONG		DONG-A		ASAN		SHINHAN

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

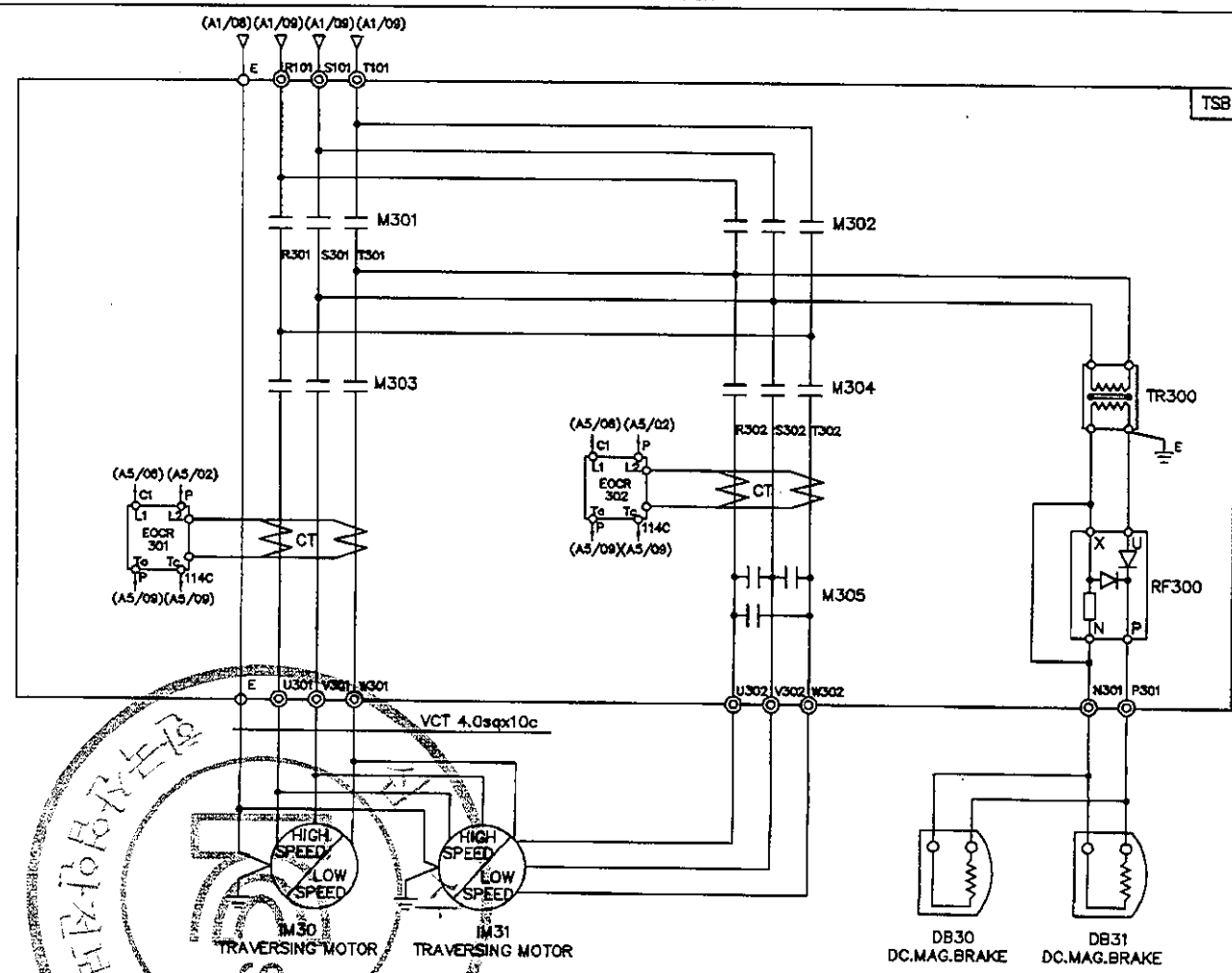
DWG. NO: KDC3E45

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



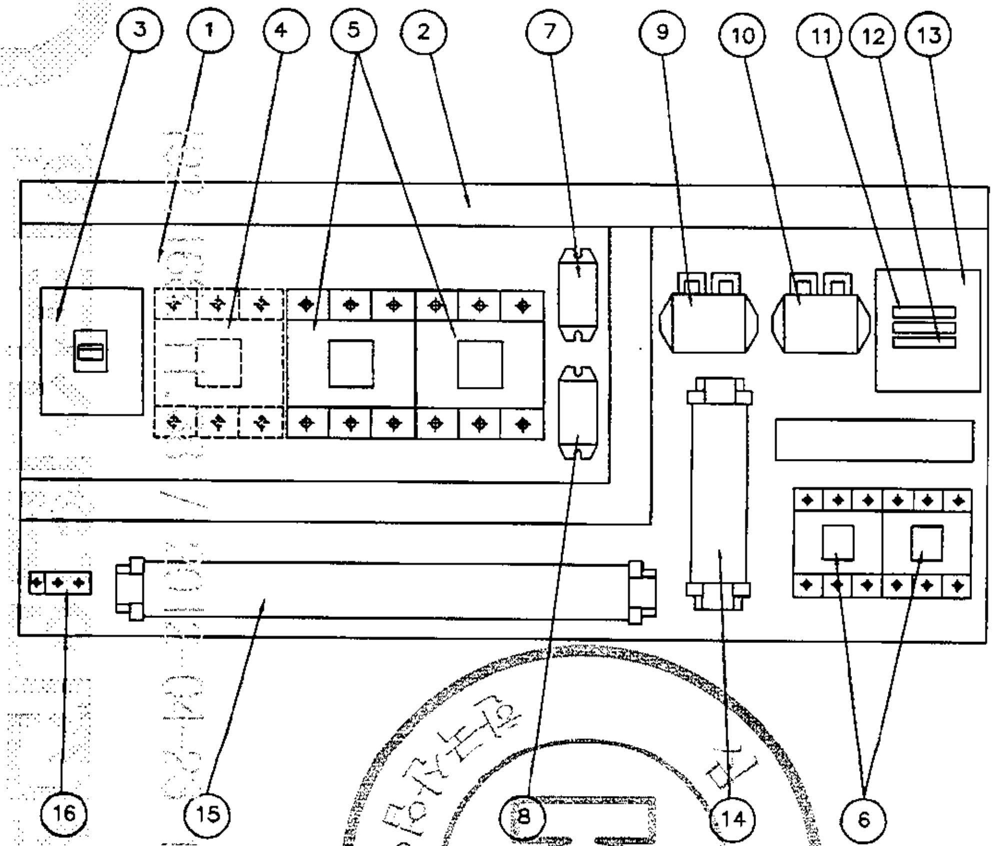
SPECIFICATION / SYMBOLS / DESCRIPTION		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR		SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	TRANSFORMER
		IM 30 , IM31	DB30 , DB31	M301 , M302 , M303	M304 , M305	RF 300	EOCR 301,302	TR300
	440V	0.5/0.25KWx8/12P AC3PH 440V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC440/220V, 300VA
	440V	0.8/0.4KWx4/8P AC3PH 440V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC440/220V, 300VA
SELECTION / MAKER		KUKDONG		DONG-A		ASAN		SHINHAN

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	TRAVERSING POWER CONTROL CIRCUIT DIAGRAM					NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO KDC3E46



N O T E

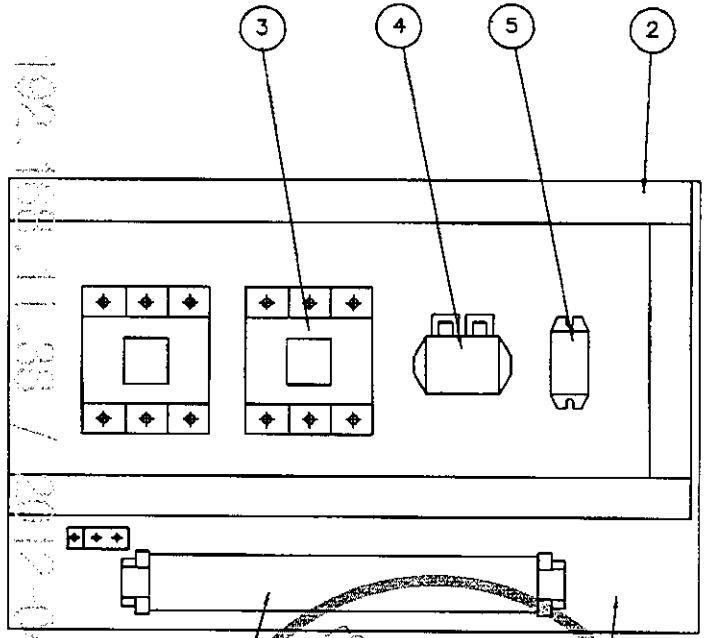
1. UPPER LIMIT LS-1,LS-2의 접점 허용 전류 용량. : AC 600V, 75A
2. POWER SOURCE : AC. 3ø 460V 60HZ
3. EARTH TERMINAL RESISTANCE : 0.018

NO	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	CHASSIS PLATE		1	아 연 도 금
2	CABLE DUCT	–	1	
3	N.F.B	33AF/20AT	1	HOISTING
4	MAGNET CONTACTOR	DMC22C	1	MAIN MAG.
5	MAGNET CONTACTOR	DMC40C	2	HOISTING
6	MAGNET CONTACTOR	DMC22C	2	CREEP HOIST
7	SILICON RECTIFIER	SR-60	1	HOISTING
8	SILICON RECTIFIER	SR-30	1	CREEP HOIST
9	E.O.C.R	SS-30	1	HOISTING
10	E.O.C.R	SS-05	1	CREEP HOIST
11	FUSE	1 A	2	
12	FUSE	3 A	1	
13	TRANSFORMER	460V/110V,120V, 100VA	1	
14	UPPER LIMIT	AC 600V/75A	1	
15	TERMINAL BLOCK	60A,15A		
16	EARTH TERMINAL	3tx20x50	1	

NOTE 1. 전선의 색상은 다음과 같다.
1) 흑색 : 교류 및 직류 전원선로
2) 적색 : 교류제어회로
3) 주황색 : 외부전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청 색 : 직류 제어회로
2. CABLE MATERIAL : KIV OR EQUIVALENT, MIN SIZE : 2.5sq
3. 제어용 전선 : 2.5mm KIV,HIV
4. 제작시 다소 변경 될수있음.
5. 외함 개방구조는 다음과 같을것.
1) 외함 개방시 충전부분이 차단되도록 할것.
2) 외함 개방후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호가 되어있을것.

CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	HOIST CONTROL BOX / ARRANGEMENT DRAWING					NONE		
		극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3BA51	

MK	DATE	REVISIONS	CHK.	APP.



NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CHASSIS PLATE	–	1	아 연 도 금
2	CABLE DUCT	–	1	
3	MAGNET CONTACT	DMC22C	2	TRAVERSING
4	E.O.C.R	SS-05	1	TRAVERSING
5	SILICON RECTIFIER	SR-30	1	TRAVERSING
6	TERMINAL BLOCK	25A , 15A	1	TRAVERSING

NOTE 1. 전선의 색상은 다음과 같다.
1) 흑색 : 교류 및 직류 전원선로
2) 적색 : 교류제어회로
3) 주황색 : 외부전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청 색 : 직류 제어회로

2. CABLE MATERIAL : KIV OR EQUIVALENT
MIN SIZE : 2.5sq
3. 제어용 전선 : 2.5mm KIV,HIV
4. 제작시 다소 변경 될수있음.
5. 외함 개방구조는 다음과 같을것.
1) 외함 개방시 충전부분이 차단되도록 할것.
2) 외함 개방후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호가 되어있을것.

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER
DRAWING TITLE: TRAVERSING POWER CONTROL BOX
ARRANGEMENT DRAWING

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

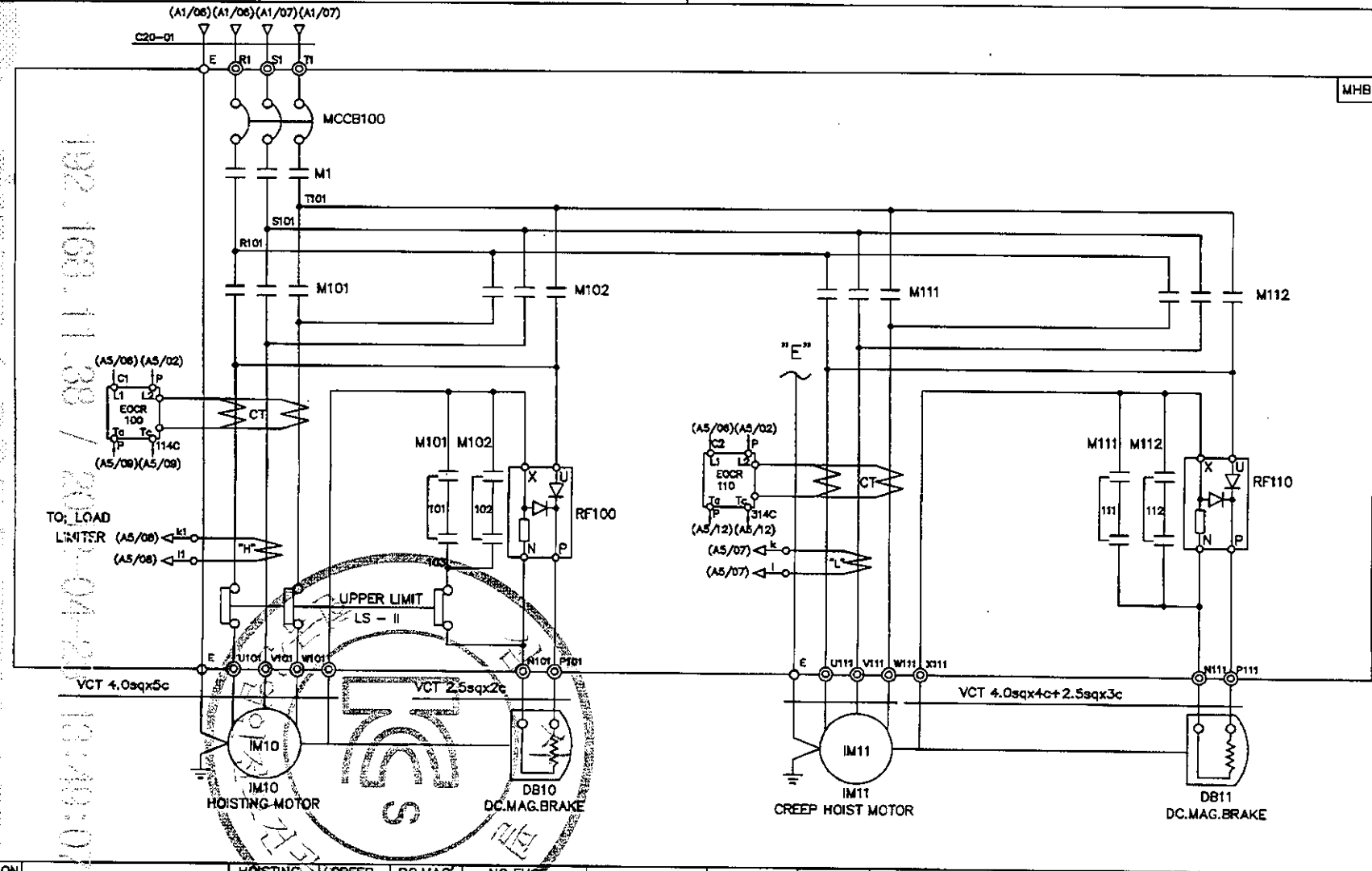
DWG. NO: KDC3bt52

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

ADR'S NO. B1

HOISTING MOTION | CREEP HOIST MOTION



SPECIFICATION / SYMBOLS / DESCRIPTION	HOISTING POWER	HOISTING MOTOR	CREEP MOTOR	DC.MAG BRAKE	NO FUSE BREAKER	TRANSFORMER	FUSE		MAIN MAGNET	MAGNET CONTACTOR		UPPER LIMIT	ELECTRIC OVER CURRENT RELAY		SILICON RECTIFIER		LOAD LIMITER	CABLE
HOIST	3TON AC 3PH 460V 60Hz	IM 10	IM 11	DB10, 11	MCCB100	TR 1	F11,F12	F13	M1	M101,M102	M111,M112	LS-I, LS-II	SS-30	EOCR110	RF100	RF110	LOAD LIMITER	C20-01
SELECTION / MAKER		5.5KW x 4P	1.5KW4P	DC 100V	ABE-33AF/20AT	460/110V,120V,100VA	1A	3A	DM-22C	DMC40C	DMC22C	AC 600V 75A	EOCR100	SS-05	SR-60	SR-30	JDL-100	VFCT 6sqx4c
	KUKDONG				LS	SHINHAN	-		DONG-A			KUKDONG	ASAN				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

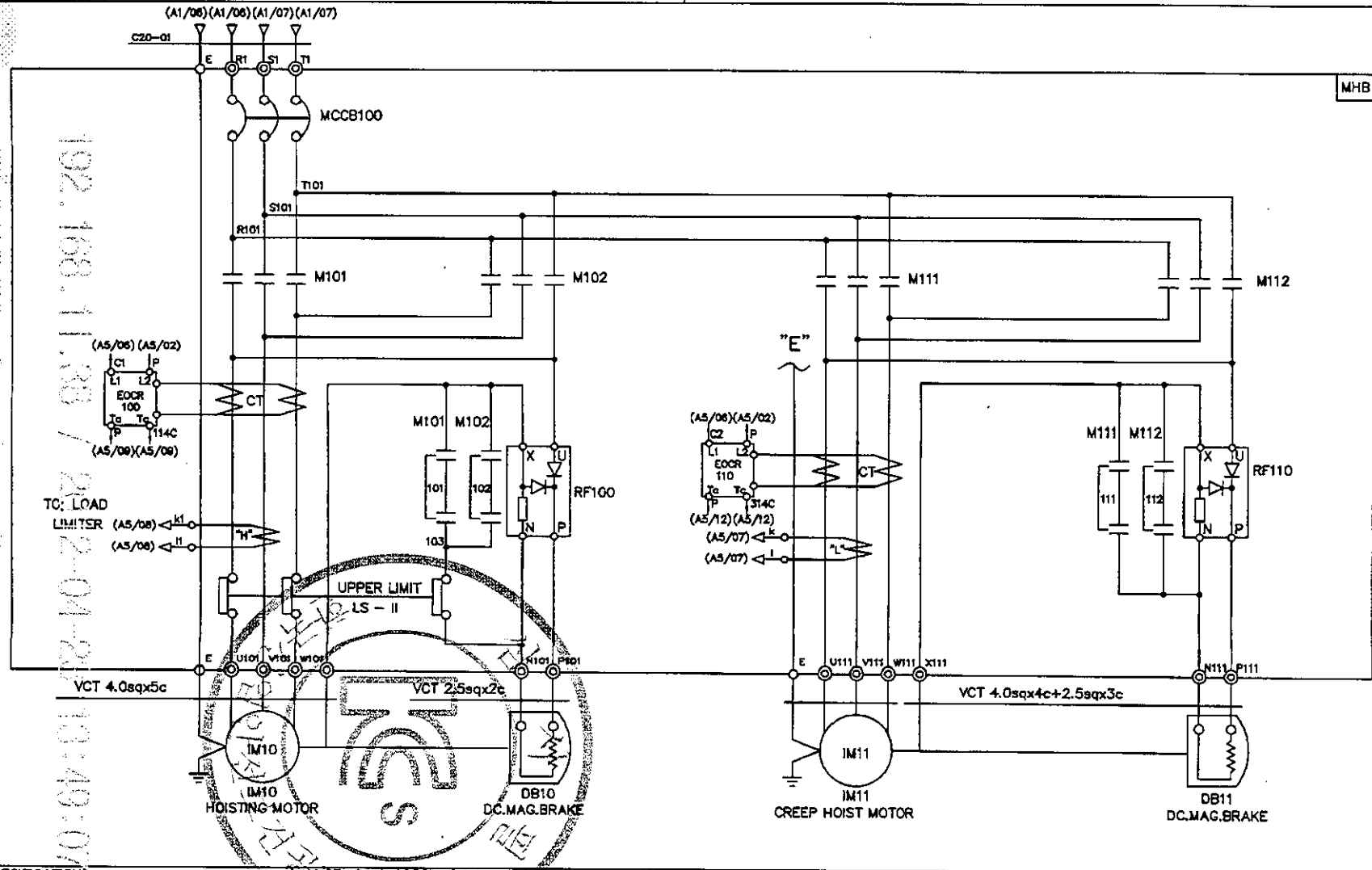
DWG. NO: KDC3E51

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

ADR'S NO. B1

HOISTING MOTION | CREEP HOIST MOTION



SPECIFICATION / SYMBOLS	HOISTING POWER	HOISTING MOTOR	CREEP MOTOR	DC.MAG BRAKE	NO FUSE BREAKER	TRANSFORMER	FUSE		MAGNET CONTACTOR		UPPER LIMIT	ELECTRIC OVER CURRENT RELAY		SILICON RECTIFIER		LOAD LIMITER	CABLE
DESCRIPTION	HOIST	IM 10	IM 11	DB10, 11	MCCB100	TR 1	F11,F12	F13	M101,M102	M111,M112	LS-I, LS-II	EOCR100	EOCR110	RF100	RF110	LOAD LIMITER	C20-01
	3TON AC 3PH 460V 60Hz	5.5KW x 4P	1.5KW x 4P	DC 100V	ABE-33AF/20A	460/110V,120V,100VA	1A	3A	DMC40C	DMC22C	AC 600V 75A	SS-30	SS-05	SR-60	SR-30	JDL-100	VFCT 6sqx4c
SELECTION / MAKER	KUKDONG				LS	SHINHAN	-		DONG-A		KUKDONG	ASAN				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

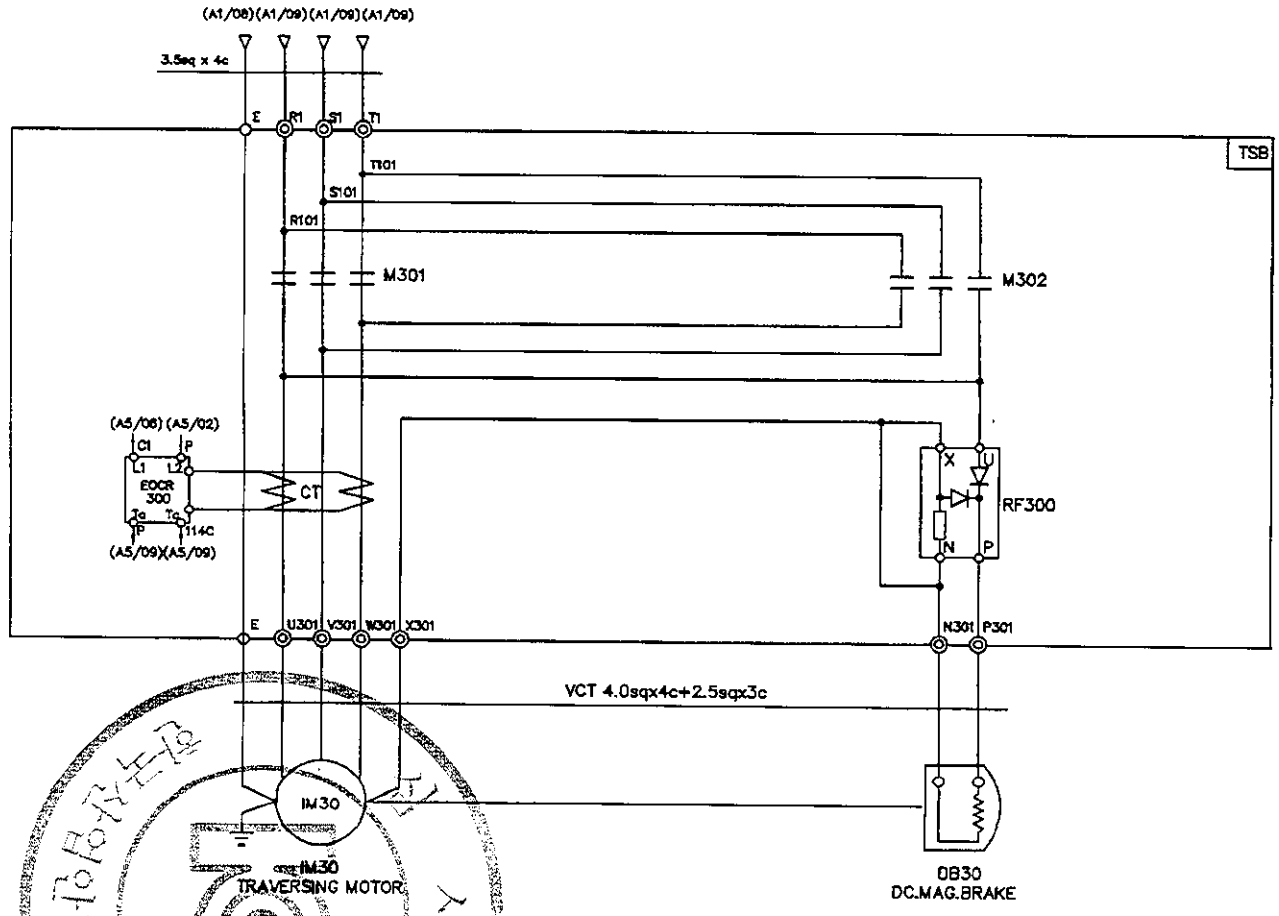
DWG. NO: KDC3E52

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C1



SPECIFICATION / SYMBOLS / DESCRIPTION		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR	SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	LIMIT SWTCH
	460V	IM 30	DB 30	M301 , M302	RF 300	EOCR 300	LS-301 , LS-302
		0.75KW x 4P AC 3PH 460V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
		0.5KW x 6P AC 3PH 460V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
SELECTION / MAKER		KUKDONG		DONG-A	ASECO		

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

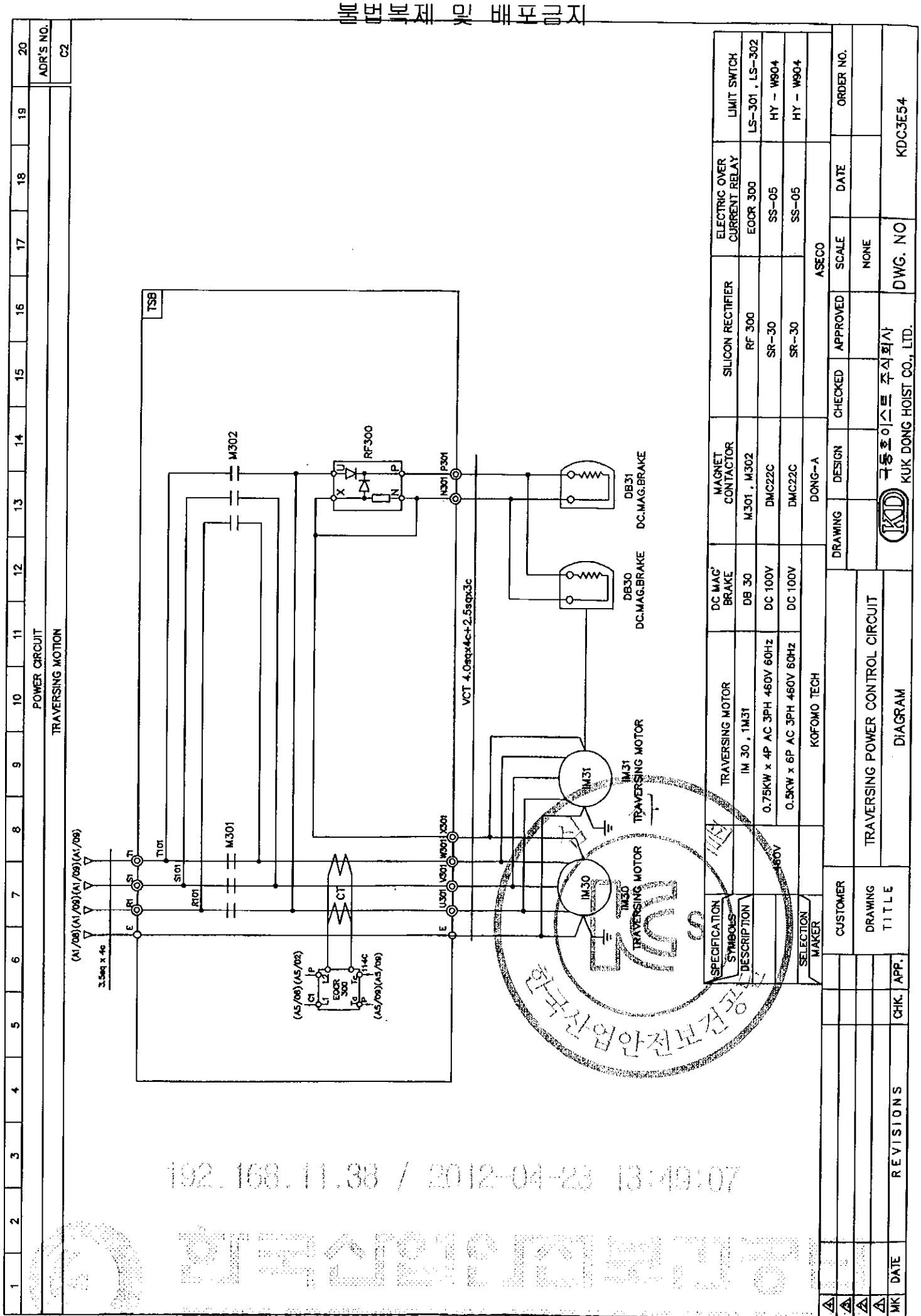
CUSTOMER

DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC3E53

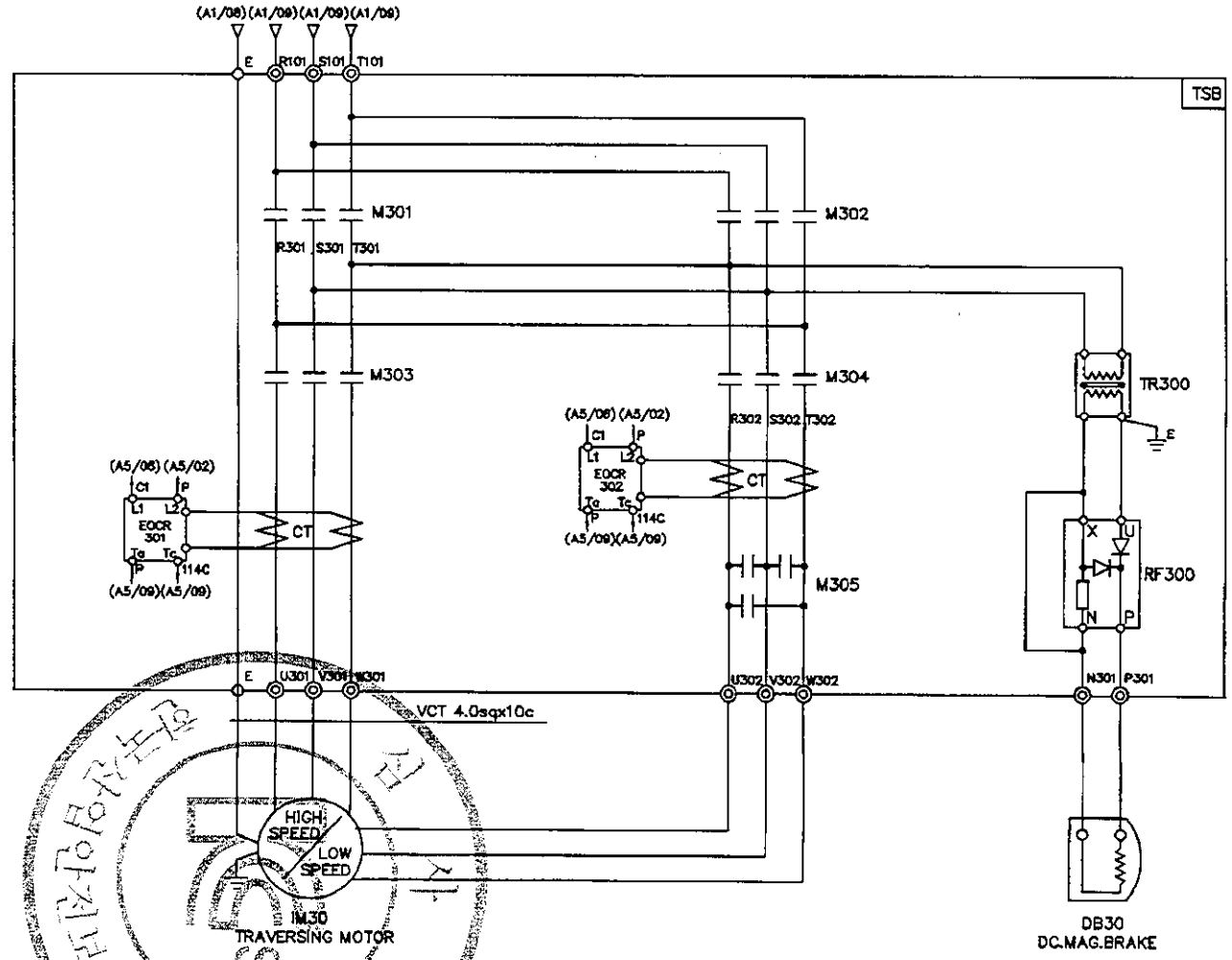


1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



SPECIFICATION / SYMBOLS / DESCRIPTION		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR		SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	TRANSFORMER
		IM-30	DB30	M301 , M302 , M303	M304 , M305	RF 300	EOCR 301,302	TR300
	460V	0.5/025KWx6/12P AC3PH 460V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC460/220V, 300VA
	460V	0.8/0.4KWx4/8P AC3PH 460V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC460/220V, 300VA
SELECTION MAKER		KUKDONG		DONG-A		ASECO		SHINHAN

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

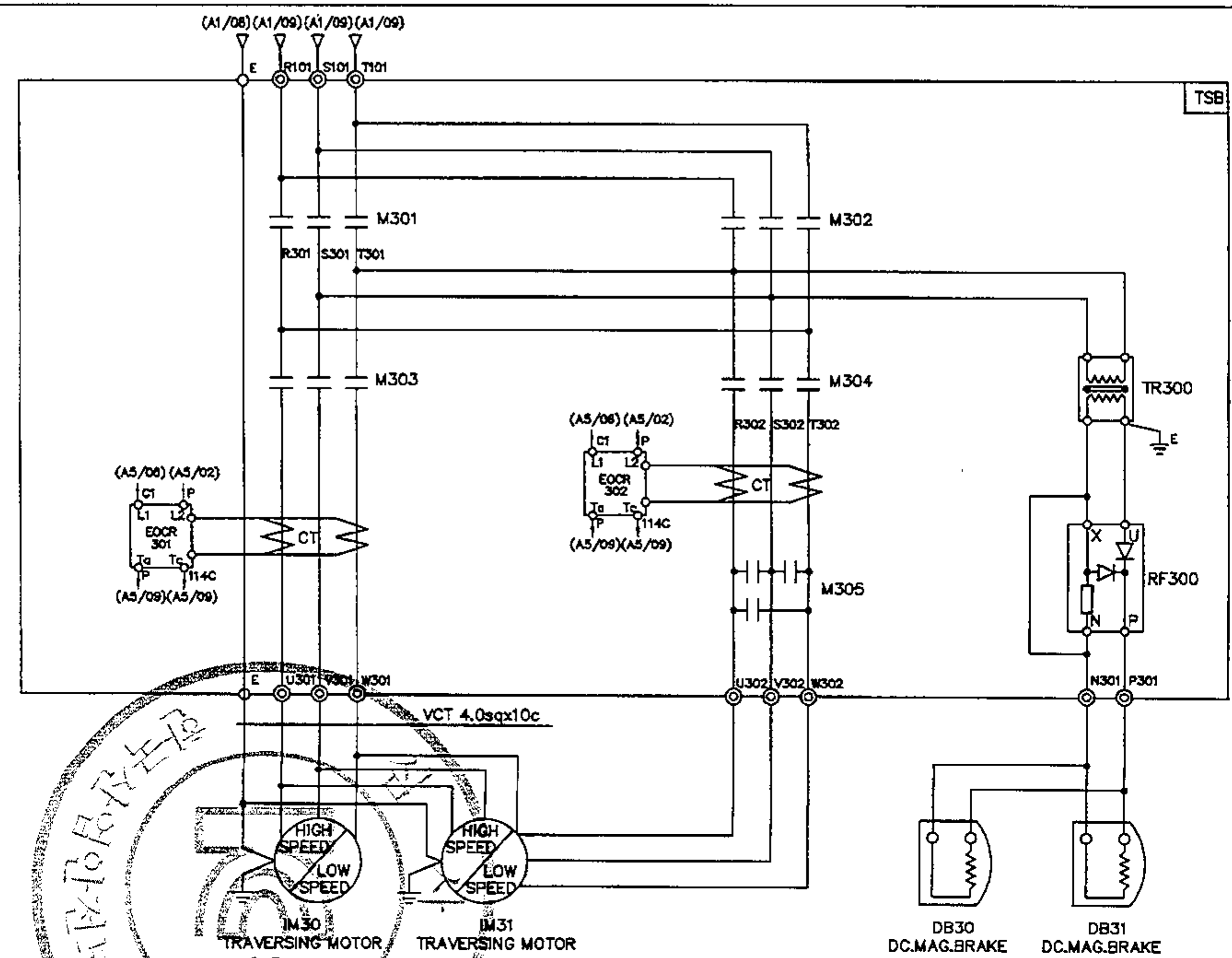
KD 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC3E55

POWER CIRCUIT

TRAVERSING MOTION

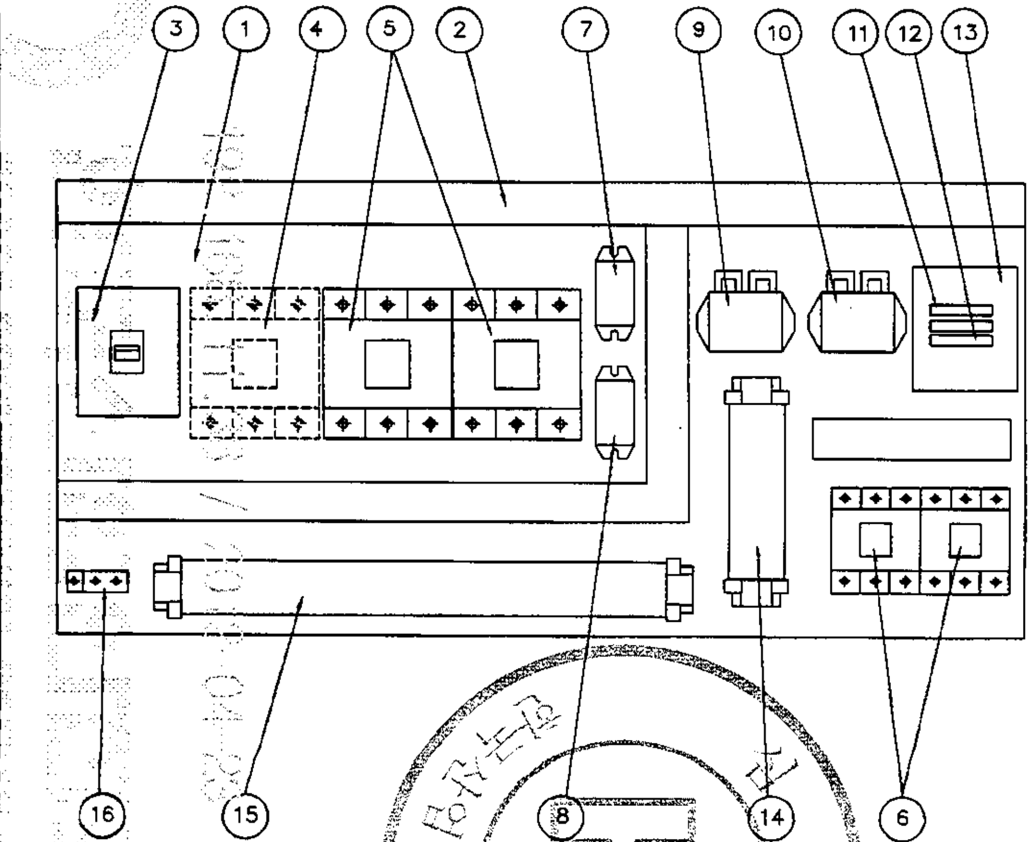
ADR'S NO. C2



SPECIFICATION / SYMBOLS / DESCRIPTION		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR		SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	TRANSFORMER
		IM 30 , IM31	DB30 , DB31	M301 , M302 , M303	M304 , M305	RF 300	EOCR 301,302	TR300
	460V	0.5/0.25KWx8/12P AC3PH 460V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC460/220V, 300VA
	460V	0.8/0.4KWx4/8P AC3PH 460V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC460/220V, 300VA
SELECTION / MAKER		KUKDONG		DONG-A		ASECO		SHINHAN

MK	DATE	REVISIONS	CHK.	APP.
△				
△				
△				
△				

CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	TRAVERSING POWER CONTROL CIRCUIT					NONE		
	DIAGRAM	극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3E56	



NO	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	CHASSIS PLATE		1	아 연 도 금
2	CABLE DUCT	–	1	
3	N.F.B	33AF/20AT	1	HOISTING
4	MAGNET CONTACTOR	DMC22C	1	MAIN MAG.
5	MAGNET CONTACTOR	DMC40C	2	HOISTING
6	MAGNET CONTACTOR	DMC22C	2	CREEP HOIST
7	SILICON RECTIFIER	SR-60	1	HOISTING
8	SILICON RECTIFIER	SR-30	1	CREEP HOIST
9	E.O.C.R	SS-30	1	HOISTING
10	E.O.C.R	SS-05	1	CREEP HOIST
11	FUSE	1 A	2	
12	FUSE	3 A	1	
13	TRANSFORMER	480V/110V,120V, 100VA	1	
14	UPPER LIMIT	AC 600V/75A	1	
15	TERMINAL BLOCK	60A,15A		
16	EARTH TERMINAL	3tx20x50	1	

NOTE

1. 전선의 색상은 다음과 같다.
   1) 흑색 : 교류 및 직류 전원선로
   2) 적색 : 교류제어회로
   3) 주황색 : 외부전원에서 공급되는 연동장치 제어회로
   4) 녹색 또는 녹색과 황색 혼용 : 접지선
   5) 청 색 : 직류 제어회로
2. CABLE MATERIAL : KIV OR EQUIVALENT; MIN SIZE : 2.5sq
3. 제어용 전선 : 2.5mm KIV,HIV
4. 제작시 다소 변경 될수있음.
5. 외함 개방구조는 다음과 같을것.
   1) 외함 개방시 충전부분이 차단되도록 할것.
   2) 외함 개방후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호가 되어있을것.

N O T E

1. UPPER LIMIT LS-1,LS-2의 접점 허용 전류 용량 : AC 600V, 75A
2. POWER SOURCE : AC 3ø 480V 60HZ
3. EARTH TERMINAL RESISTANCE : 0.018Ω

MK	DATE	REVISIONS	CHK.	APP.
△				
△				
△				
△				

CUSTOMER	
DRAWING TITLE	HOIST CONTROL BOX ARRANGEMENT DRAWING

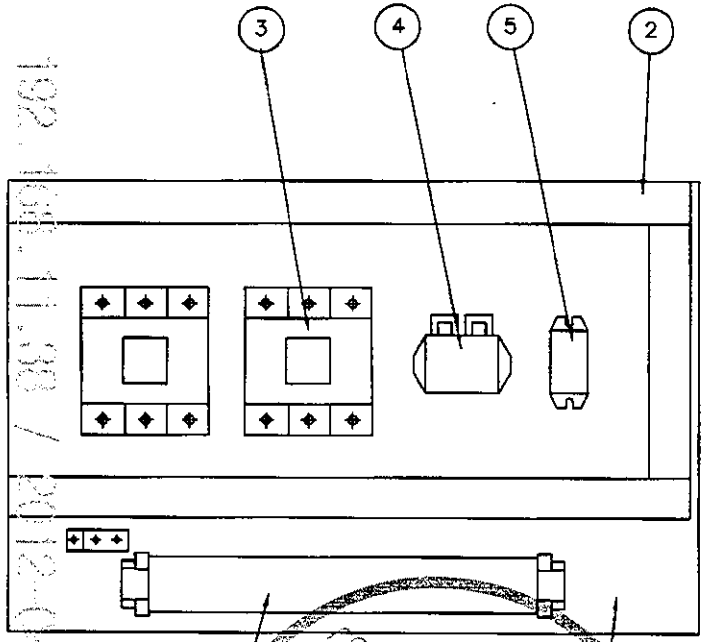
DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC3BA61

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20.

ADR'S NO.



NO	DESCRIPTION	SPEC	Q'TY	REMARK
1	CHASSIS PLATE	–	1	아 연 도 금
2	CABLE DUCT	–	1	
3	MAGNET CONTACT	DMC22C	2	TRAVERSING
4	E.O.C.R	SS-05	1	TRAVERSING
5	SILICON RECTIFIER	SR-30	1	TRAVERSING
6	TERMINAL BLOCK	25A , 15A	1	TRAVERSING

NOTE 1. 전선의 색상은 다음과 같다.
- 1) 흑색 : 교류 및 직류 전원선로
- 2) 적색 : 교류제어회로
- 3) 주황색 : 외부전원에서 공급되는 연동장치 제어회로
- 4) 녹색 또는 녹색과 황색 혼용 : 접지선
- 5) 청 색 : 직류 제어회로

2. CABLE MATERIAL : KIV OR EQUIVALENT
   MIN SIZE : 2.5sq
3. 제어용 전선 : 2.5mm KIV,HIV
4. 제작시 다소 변경 될수있음.
5. 외함 개방구조는 다음과 같을것.
   1) 외함 개방시 충전부분이 차단되도록 할것.
   2) 외함 개방후 충전되어있는 부분은 IP2X 이상의 직접 접촉 방호기 되어있을것.

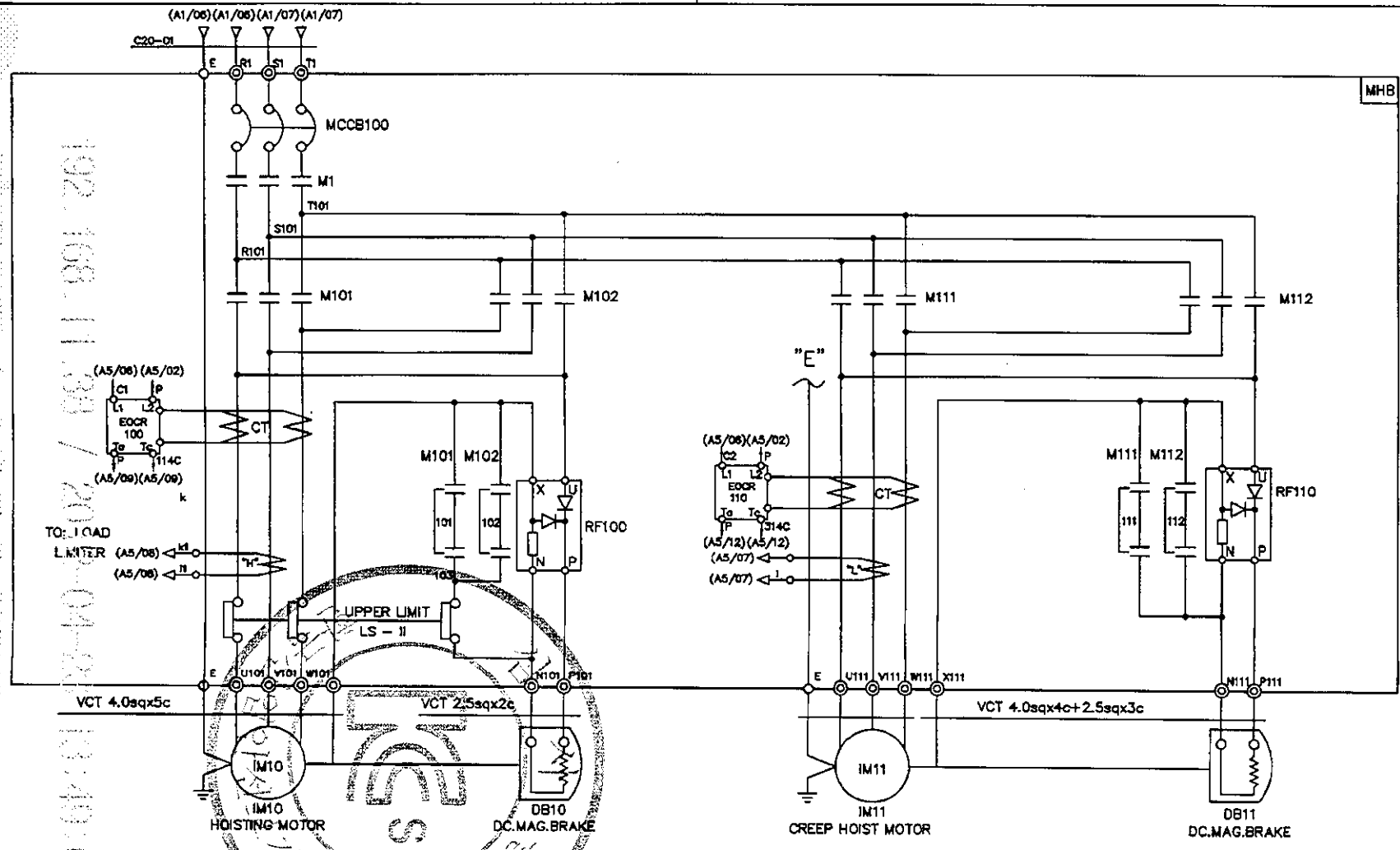
MK	DATE	REVISIONS	CHK.	APP.

CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	TRAVERSING POWER CONTROL BOX					NONE		
	ARRANGEMENT DRAWING	극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3bt62	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT — ADR'S NO. B1

HOISTING MOTION | CREEP HOIST MOTION



SPECIFICATION / SYMBOLS	HOISTING POWER	HOISTING MOTOR	CREEP MOTOR	DC.MAG BRAKE	NO FUSE BREAKER	TRANSFORMER	FUSE		MAIN MAGNET	MAGNET CONTACTOR		UPPER LIMIT	ELECTRIC OVER CURRENT RELAY		SILICON RECTIFIER		LOAD LIMITER	CABLE
DESCRIPTION	HOIST	IM 10	IM 11	DB10, 11	MCCB100	TR 1	F11,F12	F13	M1	M101,M102	M111,M112	LS-I, LS-II	EOCR100	EOCR110	RF100	RF110	LOAD LIMITER	C20-01
	3TON AC 3PH 480V 60Hz	5.5KW x 4P	1.5KWx4P	DC 100V	ABE-33AF/20AT	480/110V,120V,100VA	1A	3A	DMC22C	DMC40C	DMC22C	AC 600V 75A	SS-30	SS-05	SR-60	SR-30	JDL-100	VFCT 6.0sqx4c
SELECTION MAKER	KUKDONG				LS	SHINHAN	-		DONG-A			KUKDONG	ASAN				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

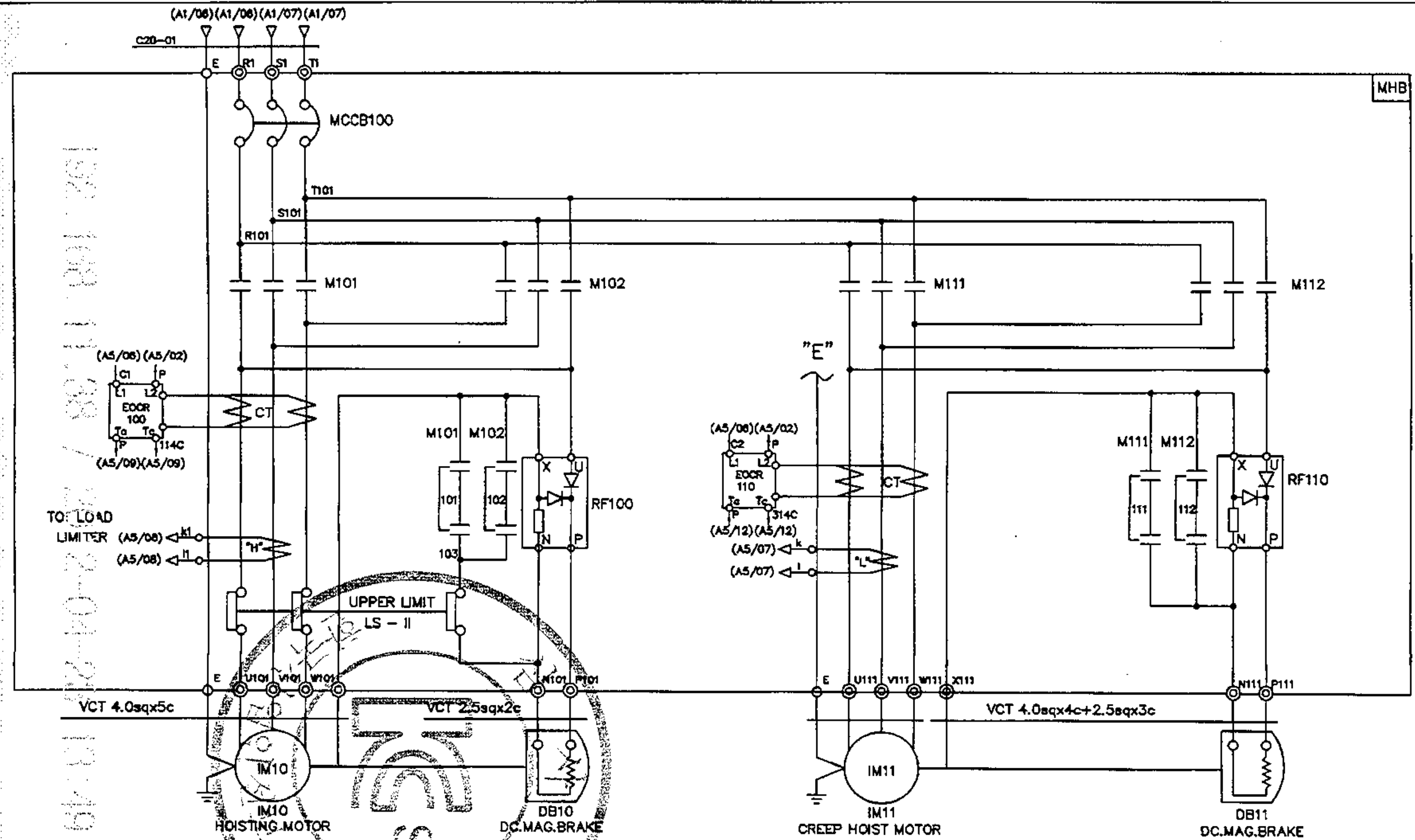
KID 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC3E61

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT — ADR'S NO. B1

HOISTING MOTION | CREEP HOIST MOTION



SPECIFICATION / SYMBOLS / DESCRIPTION	HOISTING POWER	HOISTING MOTOR	CREEP MOTOR	DC.MAG BRAKE	NO FUSE BREAKER	TRANSFORMER	FUSE		MAGNET CONTACTOR		UPPER LIMIT	ELECTRIC OVER CURRENT RELAY		SILICON RECTIFIER		LOAD LIMITER	CABLE
	HOIST	IM 10	IM 11	DB10,11	MCCB100	TR 1	F11,F12	F13	M101,M102	M111,M112	LS-I, LS-II	EOCR100	EOCR110	RF100	RF110	LOAD LIMITER	C20-01
	3TON AC 3PH 480V 60Hz	5.5KW x 4P	1.5KW x 4P	DC 100V	ABE-33AF/20AT	480/110V,120V,100VA	1A	3A	DMC40C	DMC22C	AC 600V 75A	SS-30	SS-05	SR-60	SR-30	JDL-100	VFCT 6.0sqx4c
SELECTION / MAKER	KUKDONG				LS	SHINHAN	-		DONG-A		KUKDONG	ASAN				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
△				
△				
△				
△				

CUSTOMER	
DRAWING TITLE	CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사 KUK DONG HOIST CO., LTD.

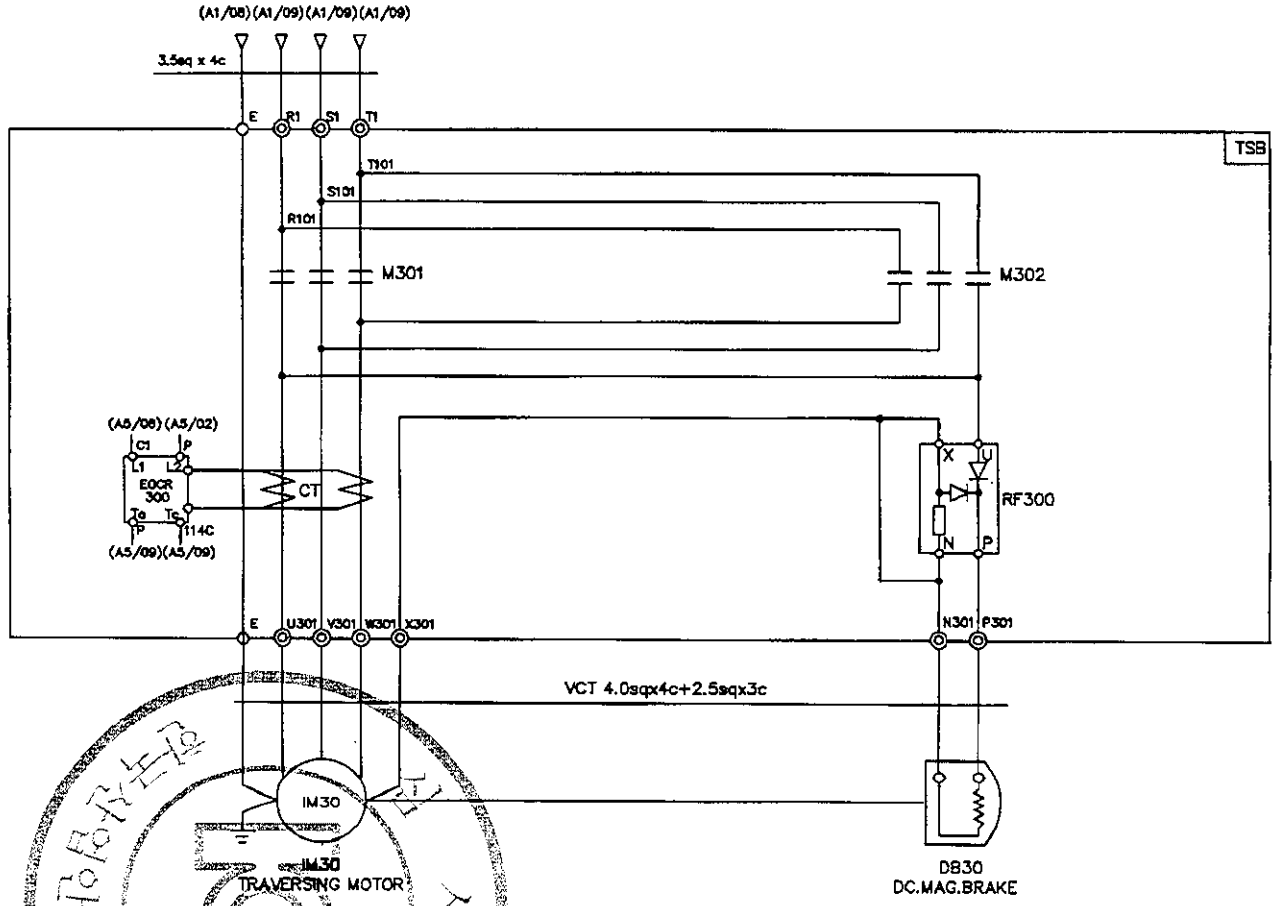
DWG. NO KDC3E62

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C1



SPECIFICATION / SYMBOLS / DESCRIPTION		IM 30	DC MAG' BRAKE	MAGNET CONTACTOR	SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	LIMIT SWTCH
		TRAVERSING MOTOR	DB 30	M301 , M302	RF 300	EOCR 300	LS-301 , LS-302
	480V	0.75KW x 4P AC 3PH 480V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
		0.5KW x 6P AC 3PH 480V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
SELECTION / MAKER		KUKDONG		DONG-A	ASECO		

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

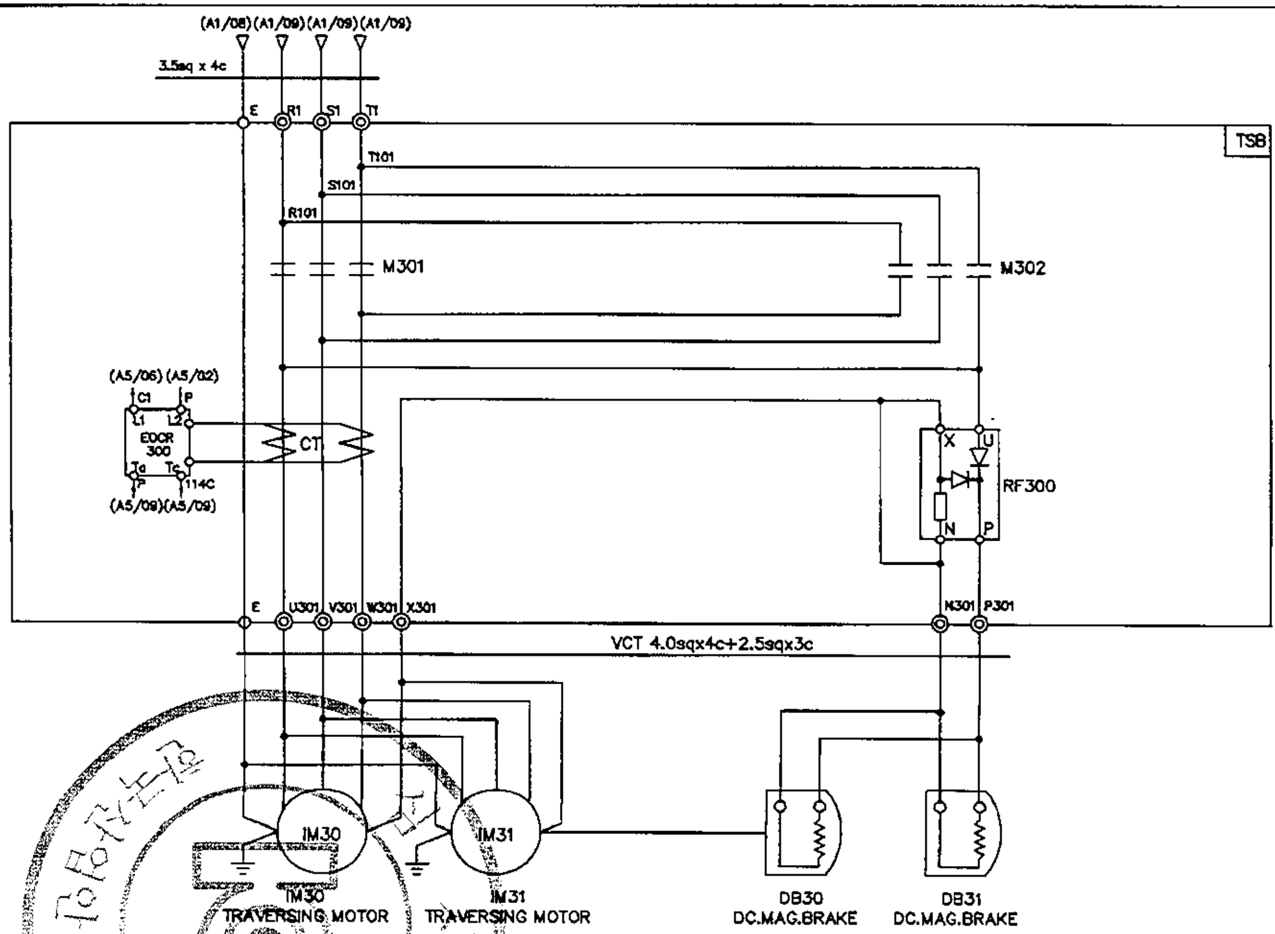
		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
CUSTOMER						NONE		
DRAWING TITLE	TRAVERSING POWER CONTROL CIRCUIT	극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3E63	
	DIAGRAM							

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



SPECIFICATION	TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR	SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	LIMIT SWTCH
SYMBOLS DESCRIPTION	IM 30 , 1M31	DB 30	M301 , M302	RF 300	EOCR 300	LS-301 , LS-302
480V	0.75KW x 4P AC 3PH 480V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
	0.5KW x 6P AC 3PH 480V 60Hz	DC 100V	DMC22C	SR-30	SS-05	HY - W904
SELECTION MAKER	KUKDONG		DONG-A	ASECO		

MK	DATE	REVISIONS	CHK.	APP.
△				
△				
△				
△				

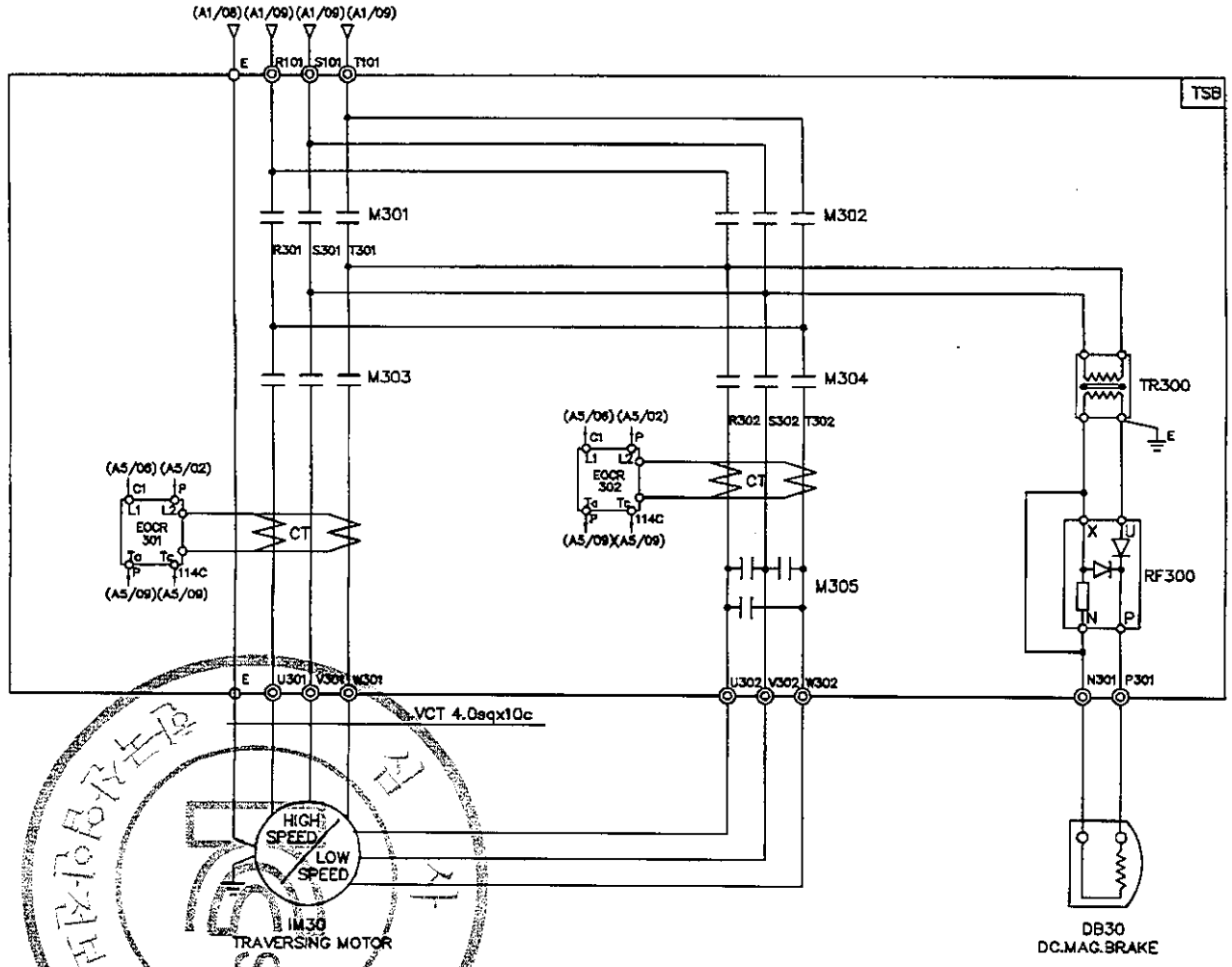
CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	TRAVERSING POWER CONTROL CIRCUIT DIAGRAM					NONE		
		극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC3E64	

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



SPECIFICATION / SYMBOLS		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR		SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	TRANSFORMER
DESCRIPTION		IM 30	DB30	M301 , M302 , M303	M304 , M305	RF 300	EOCR 301,302	TR300
	480V	0.5/025KWx6/12P AC3PH 480V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC480/220V, 300VA
	480V	0.8/0.4KWx4/8P AC3PH 480V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC480/220V, 300VA
SELECTION MAKER		KUKDONG		DONG-A		ASECO		SHINHAN

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

CUSTOMER

DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

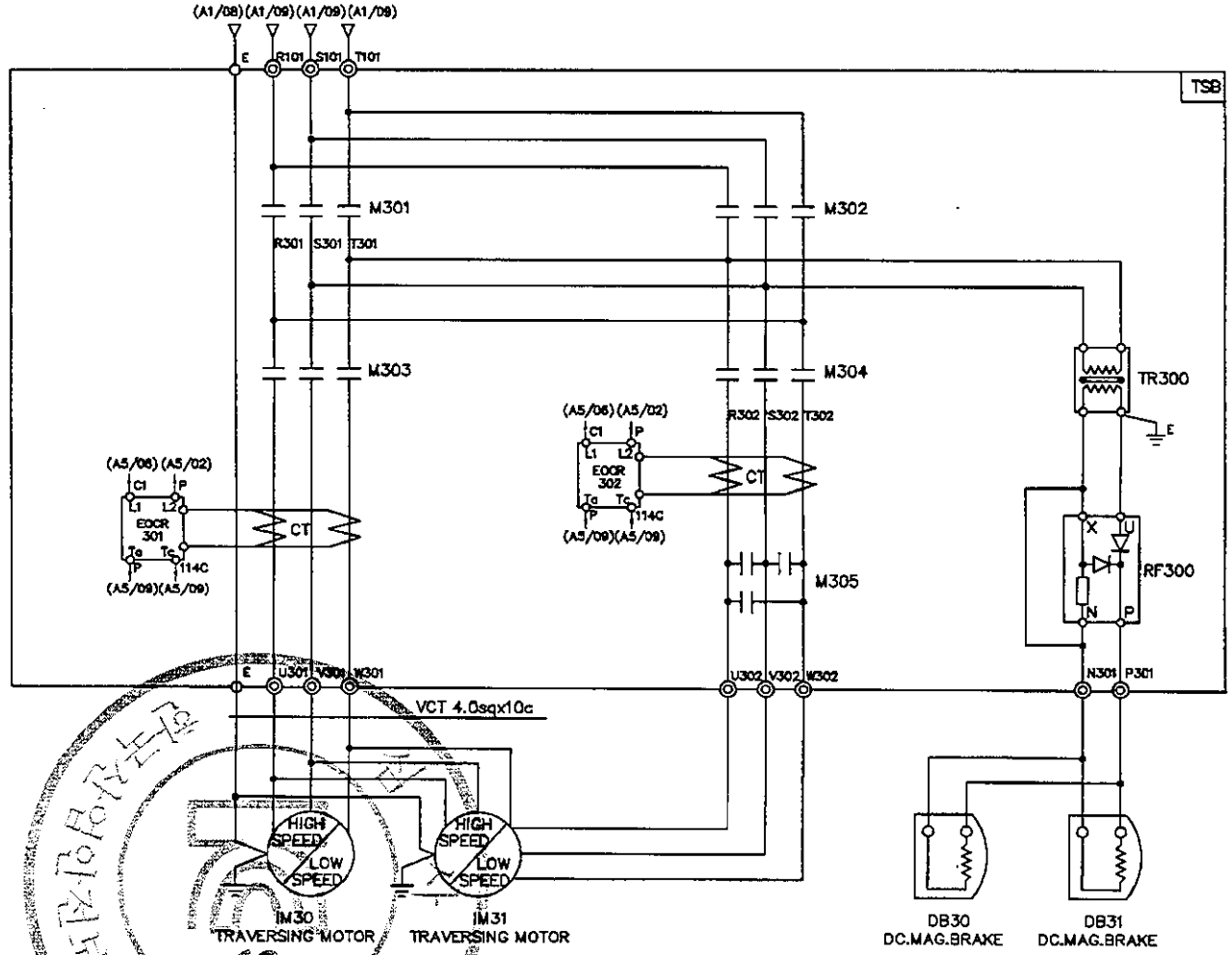
DWG. NO: KDC3E65

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

POWER CIRCUIT

TRAVERSING MOTION

ADR'S NO. C2



SPECIFICATION / SYMBOLS / DESCRIPTION		TRAVERSING MOTOR	DC MAG' BRAKE	MAGNET CONTACTOR		SILICON RECTIFIER	ELECTRIC OVER CURRENT RELAY	TRANSFORMER
		IM 30 , IM31	DB30 , DB31	M301 , M302 , M303	M304 , M305	RF 300	EOCR 301,302	TR300
	480V	0.5/0.25KWx6/12P AC3PH 480V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC480/220V, 300VA
	480V	0.8/0.4KWx4/8P AC3PH 480V 60Hz	DC 100V	DMC22C	DMC22C	SR-30	SS-05	AC480/220V, 300VA
SELECTION MAKER		KUKDONG		DONG-A		ASECO		SHINHAN

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				
⚠				

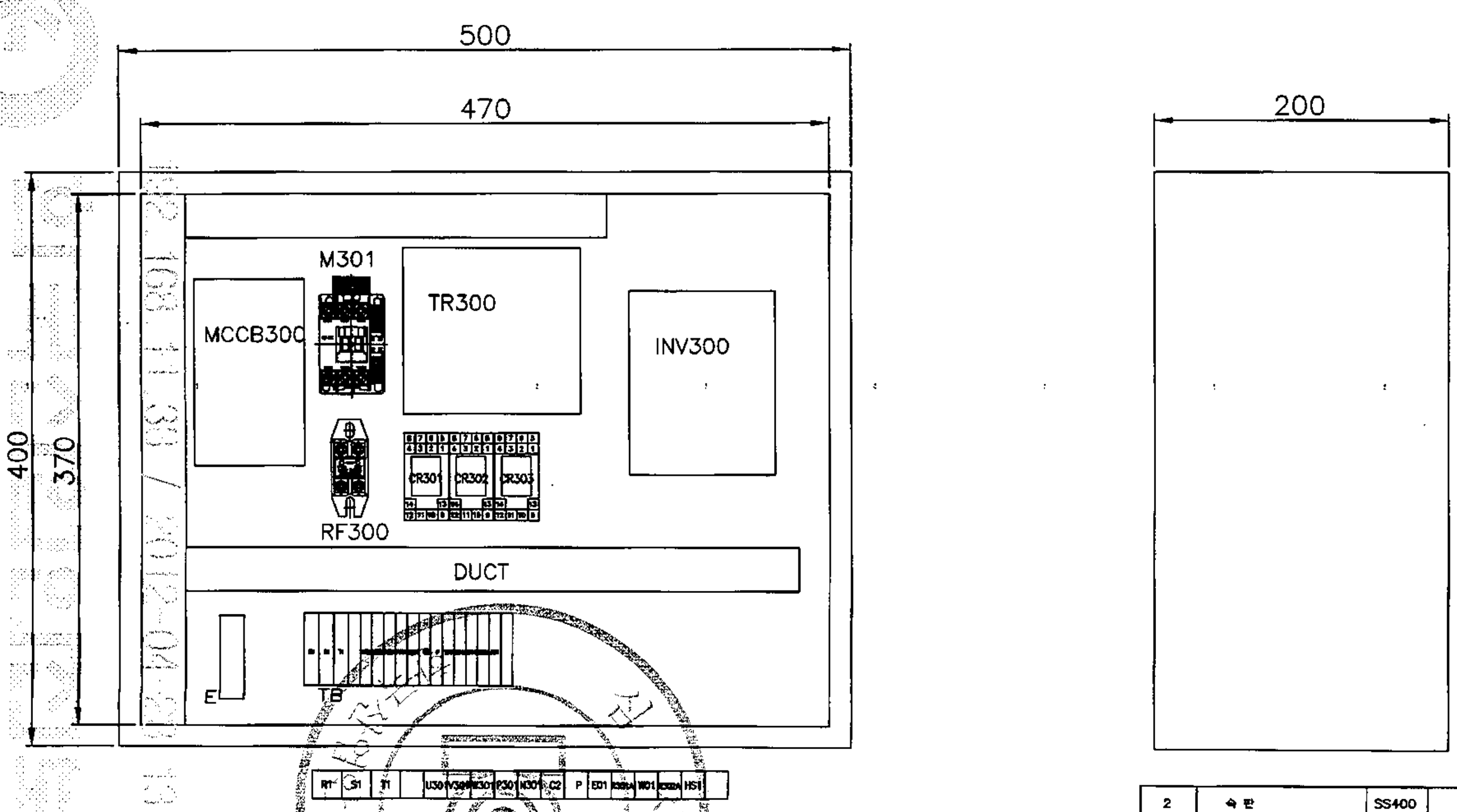
CUSTOMER

DRAWING TITLE: TRAVERSING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC3E66



NO.	DESCRIPTION	MT'L	QTY SUB	QTY TOTAL	WEIGHT(Kg) SUB	WEIGHT(Kg) TOTAL	REMARKS.
11	EARTH BUS BAR	PUR		1			
10	DUCT	PUR		1			
9	TERMINAL BLOCK	PUR		1			
8	INVERTER	PUR		1			
7	TR	PUR		1			
6	RELAY & SCOKET	PUR		1			
5	RF	PUR		1			
4	MC	PUR		1			
3	MCCB	PUR		1			
2	속판	SS400		1			
1	T/S BOX	PUR		1			

PROJECT		DATE	DIM
			mm
TITLE	T/S CONTROL PANEL(INVERTER)	SCALE	PROJECTION
		A3/3	3rd

DRAWN	DESIGNED	CHECKED	APPROVED	REF. DRAWING

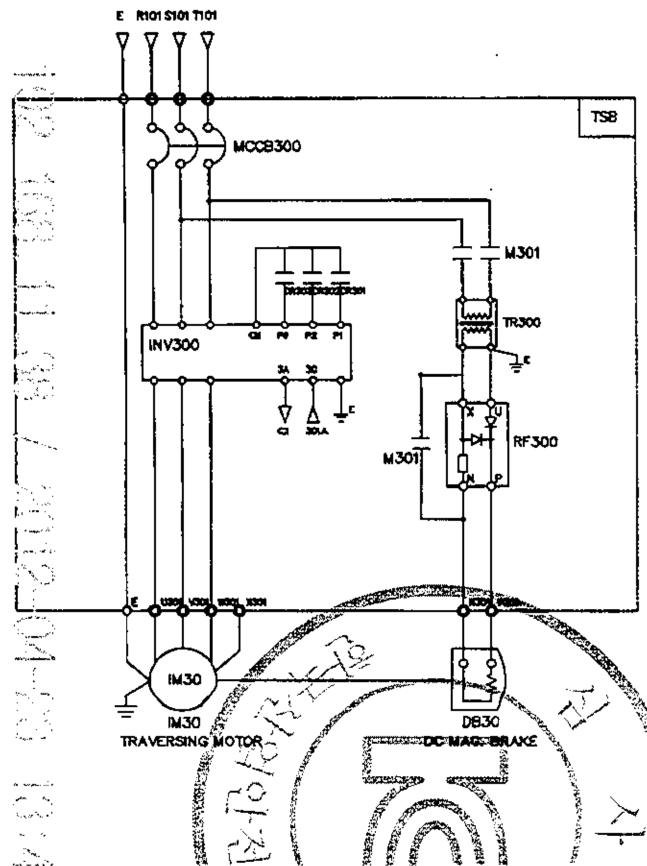
극동호이스트 주식회사 KUK DONG HOIST CO., LTD.	SHEET No.	DWG No. KD2EI001

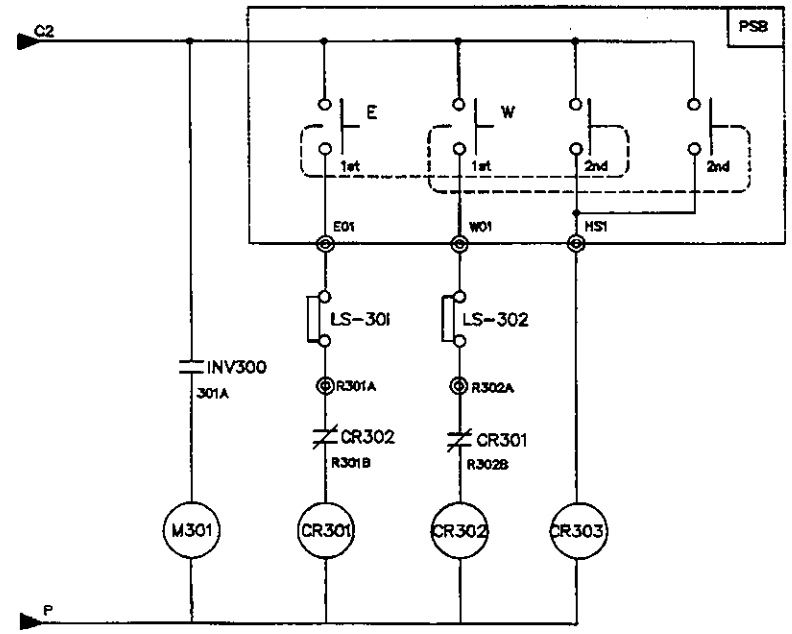
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

TRAVERSING MOTION — ADR'S NO.

POWER CIRCUIT DIAGRAM

CONTROL CIRCUIT DIAGRAM: BRAKE | EAST | WEST | HIGH SPEED





SPECIFICATION / SYMBOLS / DESCRIPTION	TRAVERSING POWER	TRAVERSING MOTOR	DC MAG BRAKE	NO FUSE BREAKER	TRANSFORMER	BRAKE MAGNET	CONTROL RELAY	INVERTER	SILICON RECTIFIER
		IM 30	DB30	MCCB300	TR 300	M301	CR301,302,303	INV300	RF300
	AC 3PH 220V 60Hz	0.5KW x 6P	DC 100V	ABE-33AF/10AT	220/220V,200VA	DM-22C	MINI 4a4b(Coil AC110V)	SV015IG5A-2	SR-30
	AC 3PH 380(440,460,480)V 60Hz	0.5KW x 6P	DC 100V	ABE-33AF/10AT	380(440,460,480)/220V,200VA	DM-22C	MINI 4a4b(Coil AC110V)	SV015IG5A-4	SR-30
	AC 3PH 220V 60Hz	0.75KW x 4P	DC 100V	ABE-33AF/10AT	220/220V,200VA	DM-22C	MINI 4a4b(Coil AC110V)	SV008IG5A-2	SR-30
	AC 3PH 380(440,460,480)V 60Hz	0.75KW x 4P	DC 100V	ABE-33AF/10AT	380(440,460,480)/220V,200VA	DM-22C	MINI 4a4b(Coil AC110V)	SV008IG5A-4	SR-30
SELECTION / MAKER	KUK DONG HOIST							LS	ASAN

MK	DATE	REVISIONS	CHK.	APP.
△				
△				
△				
△				

CUSTOMER	INVERTER CONTROL
DRAWING TITLE	TRAVERSING POWER & CONTROL CIRCUIT DIAGRAM

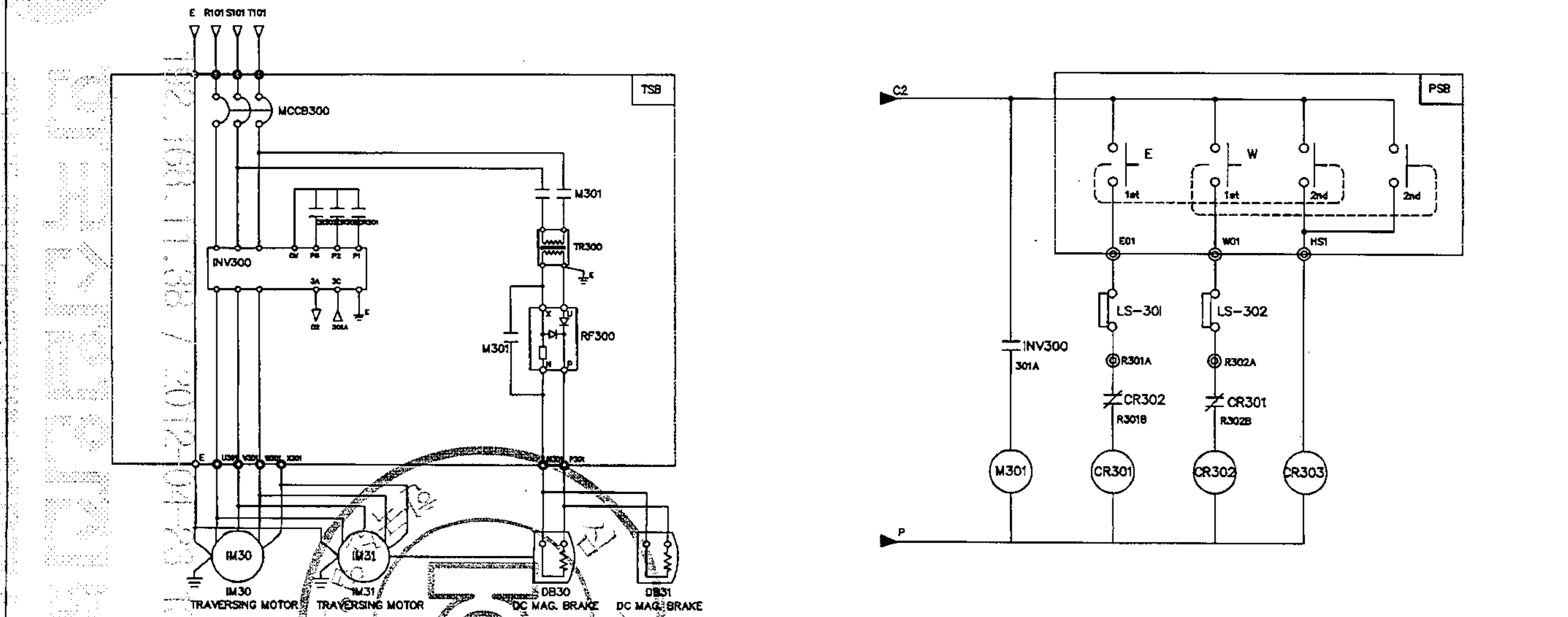
DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.

KD 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO KD03EI002

TRAVERSING MOTION

POWER CIRCUIT DIAGRAM | CONTROL CIRCUIT DIAGRAM (BRAKE / EAST / WEST / HIGH SPEED)



SPECIFICATION / SYMBOLS / DESCRIPTION	TRAVERSING POWER	TRAVERSING MOTOR	DC MAG' BRAKE	NO FUSE BREAKER	TRANSFORMER	BRAKE MAGNET	CONTROL RELAY	INVERTER	SILICON RECTIFIER
		IM 30,31	DB30,31	MCCB300	TR 300	M301	CR301,302,303	INV300	RF300
	AC 3PH 220V 60Hz	0.5KW x 6P	DC 100V	ABE-33AF/20AT	220/220V,300VA	DMC22C	MINI 4a4b(Coil AC110V)	SV015IG5A-2	SR-30
	AC 3PH 380(440,460,480)V 60Hz	0.5KW x 6P	DC 100V	ABE-33AF/20AT	380(440,460,480)/220V,300VA	DMC22C	MINI 4a4b(Coil AC110V)	SV015IG5A-4	SR-30
	AC 3PH 220V 60Hz	0.75KW x 4P	DC 100V	ABE-33AF/20AT	220/220V,300VA	DMC22C	MINI 4a4b(Coil AC110V)	SV015IG5A-2	SR-30
	AC 3PH 380(440,460,480)V 60Hz	0.75KW x 4P	DC 100V	ABE-33AF/20AT	380(440,460,480)/220V,300VA	DMC22C	MINI 4a4b(Coil AC110V)	SV015IG5A-4	SR-30
SELECTION / MAKER	KUK DONG HOIST							LS	ASAN

MK	DATE	REVISIONS	CHK.	APP.

CUSTOMER	INVERTER CONTROL
DRAWING TITLE	TRAVERSING POWER & CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.

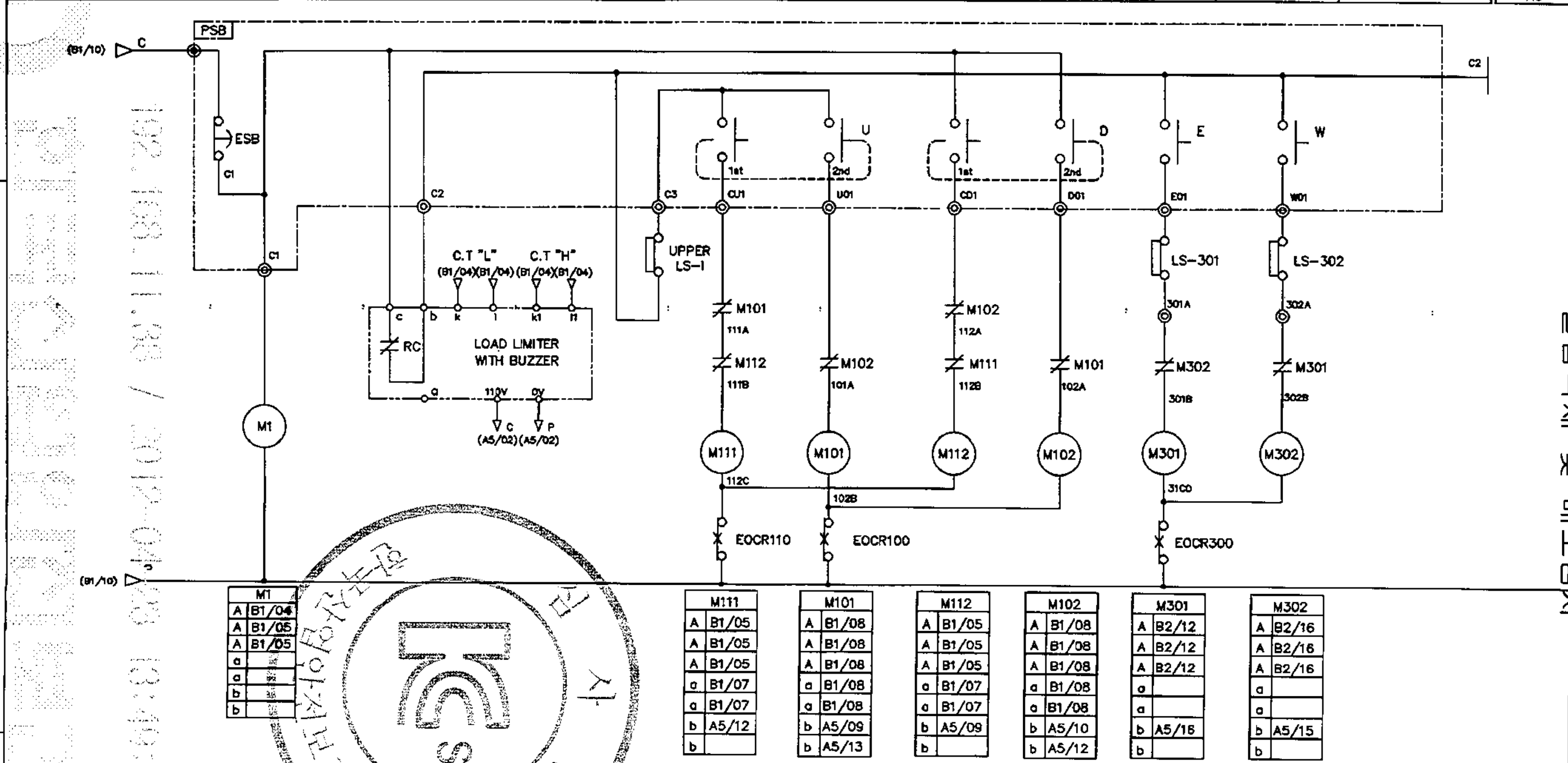
극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO KD03EI003

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20.

CONTROL CIRCUIT — ADR'S NO. A5

EM. STOP | OVER LOAD BUZZER | UPPER LIMIT | CREEP UP | UP | CREEP DOWN | DOWN | EAST | WEST



SPECIFICATION / SYMBOLS / DESCRIPTION	UPPER LIMIT	PENDANT P.B.S/W	LOAD LIMITER	LIMIT SWITCH
	LS-1	E.S.B	LOAD LIMITER	LS-301,302
	AC 600V 75A	250V 3A	JDL-100	HY - W904
	AC 600V 3A	250V 3A	JDL-100	HY - W904
MAKER	KUKDONG	KGAUTO	JEUNGHO	HANYOUNG

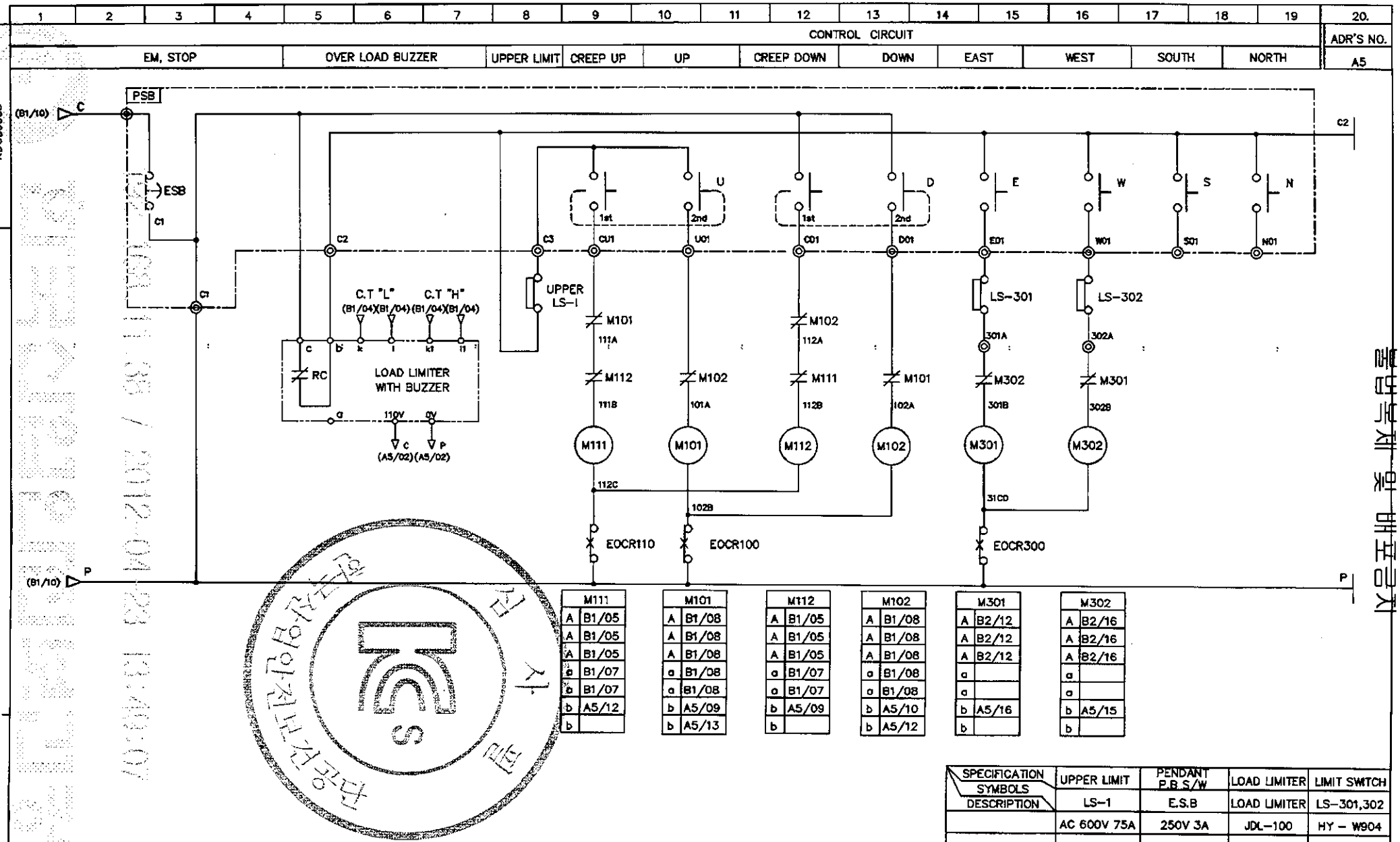
MK	DATE	REVISIONS	CHK.	APP.
△				
△				
△				
△				

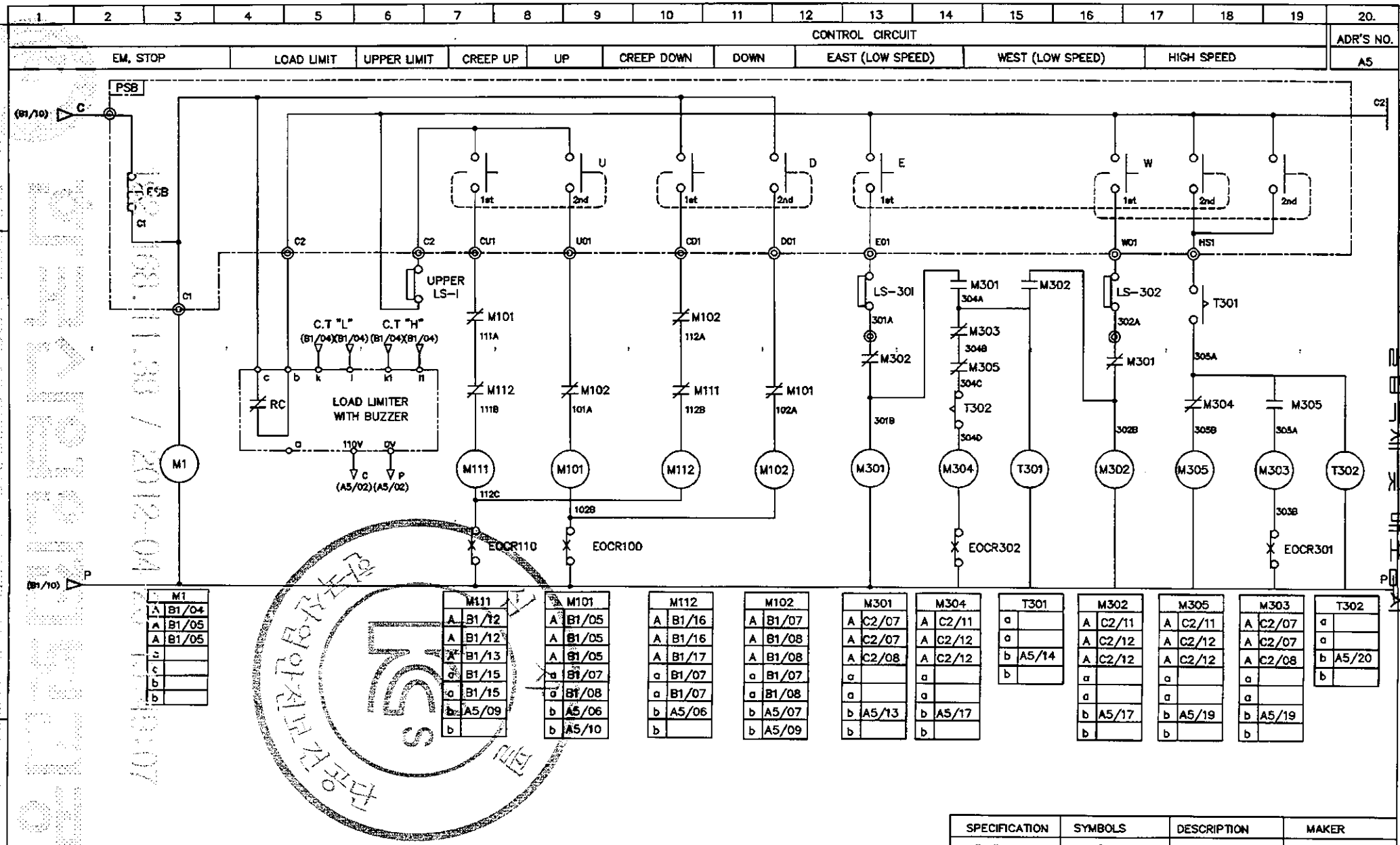
CUSTOMER	
DRAWING TITLE	MAIN POWER 2 & CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO KDC3E405





SPECIFICATION	SYMBOLS	DESCRIPTION	MAKER
TIME RELAY	T301	LA2DT2	LG
TIME RELAY	T302	LA3DR2	LG

MK	DATE	REVISIONS	CHK.	APP.
⚠4				
⚠3				
⚠2				
⚠1				

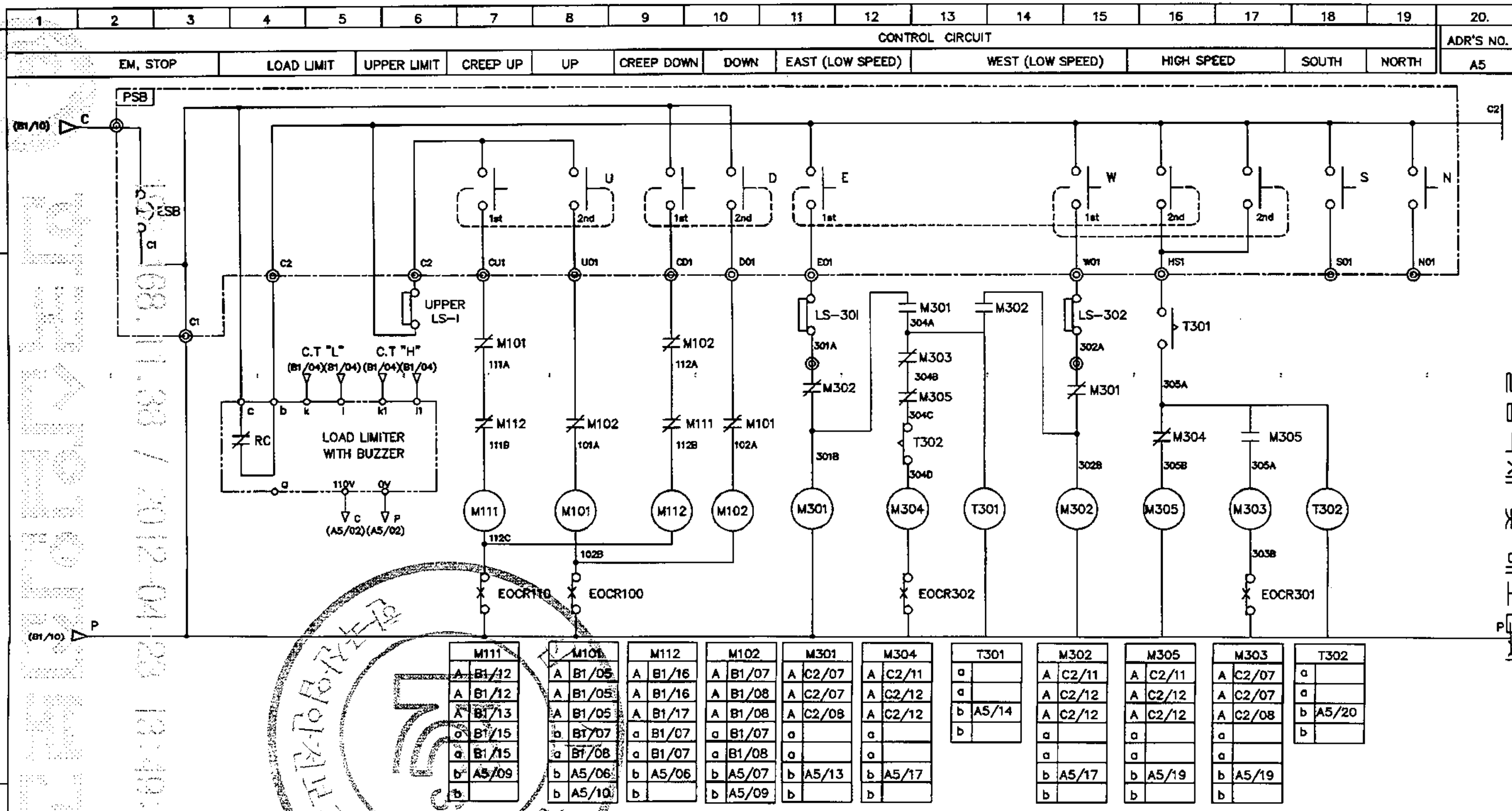
CUSTOMER

DRAWING TITLE: MAIN POWER 2 & CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC3E406



SPECIFICATION	SYMBOLS	DESCRIPTION	MAKER
TIME RELAY	T301	LA2DT2	LG
TIME RELAY	T302	LA3DR2	LG

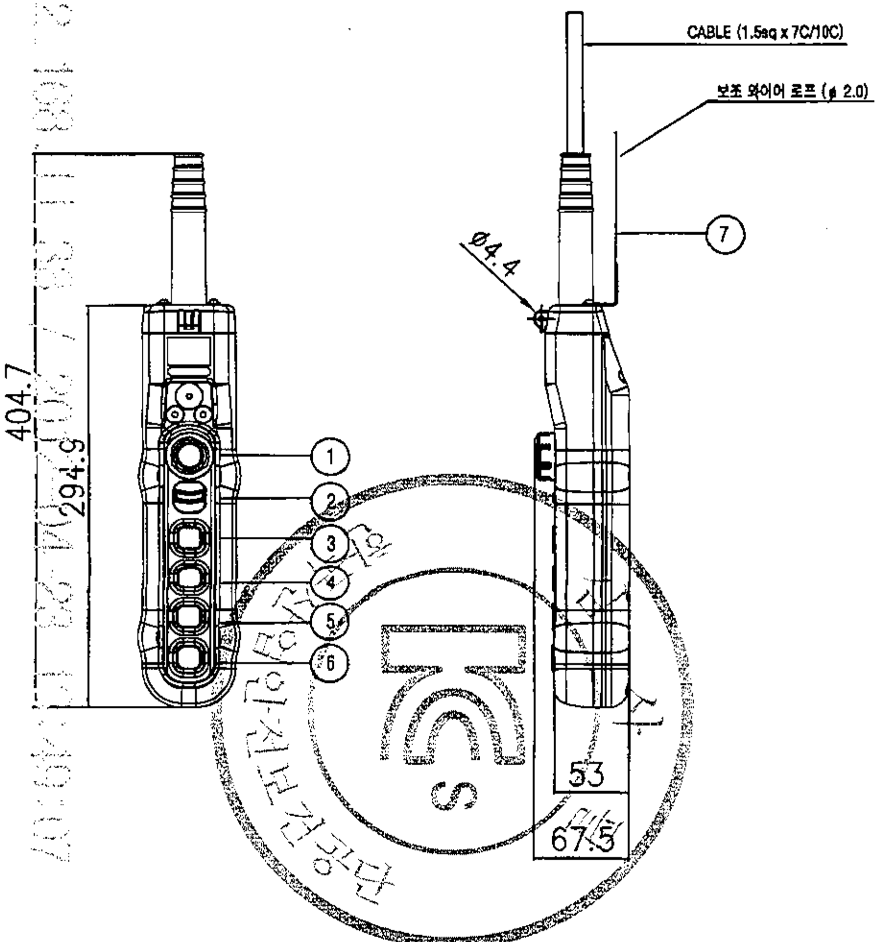
MK	DATE	REVISIONS	CHK.	APP.

CUSTOMER	
DRAWING TITLE	MAIN POWER 2 & CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO KDC3E006

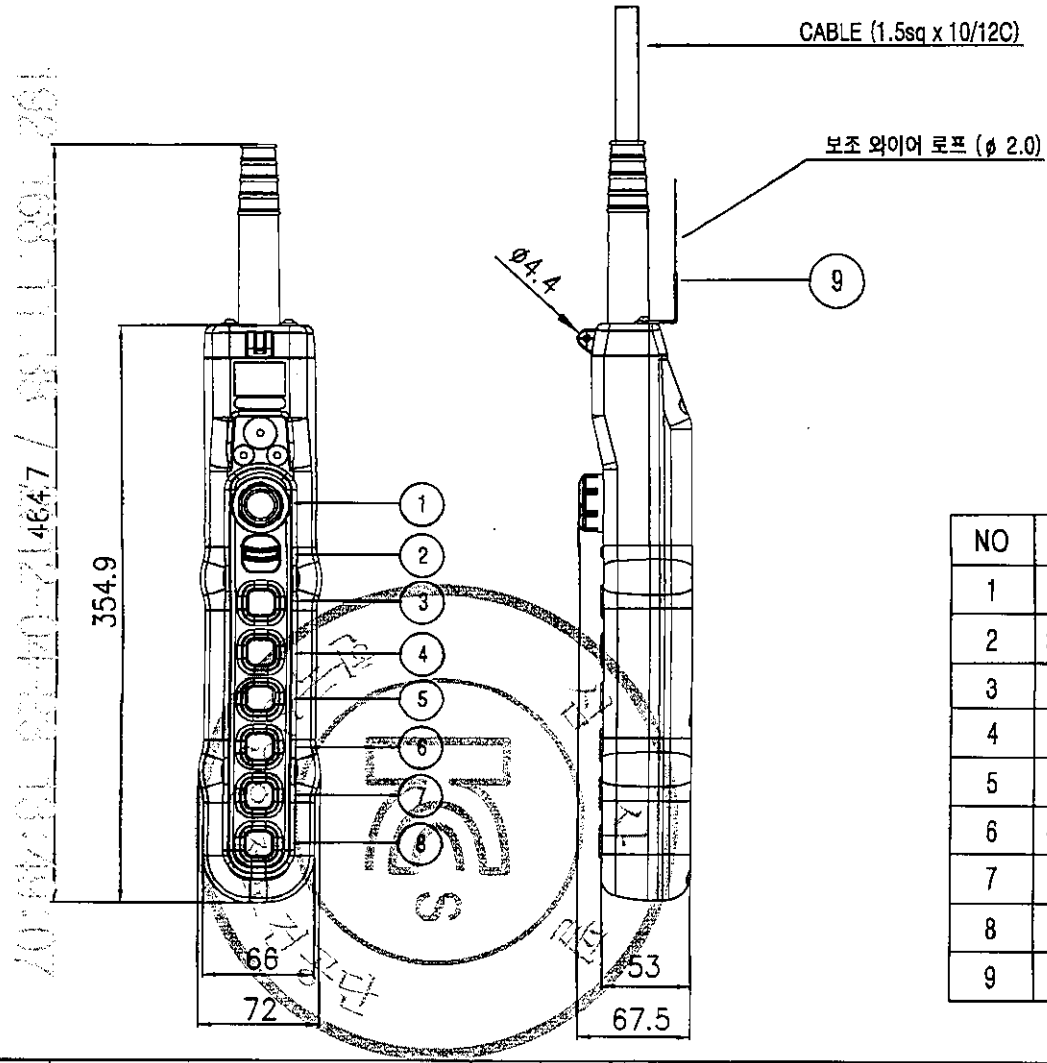


색상 \ 구분	조작버튼	표시등
적색	비상	비상
황색	비정상	비정상
녹색	정상	정상
청색	의무	의무
흰색,회색–흑색	지정된의미없음	기타

* MATERIAL : POLYCARBOBATE(PLASTIC)
* BODY COLOR : YELLOW, BLACK
* IP : 55 이상

NO	SYMBOL	TYPE	SPEC.	COLOR
1	E.B.S	PUSH LOCK TURN RESET TYPE	250VAC x 6A	RED
2	SPARE			BLACK
3	상	1PUSH BUTTON 2STEP		
4	하	1PUSH BUTTON 2STEP		
5	동(전)	1PUSH BUTTON 1STEP		
6	서(후)	1PUSH BUTTON 1STEP		
7	보조 와이어	ϕ 2.0		

MK	DATE	REVISIONS	CHK.	APP.								
3					CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE
2					DRAWING TITLE	PENDANT PUSH BUTTON SWITCH						
1						LAY OUT	KD KUK DONG HOIST CO., LTD.			DWG. NO		



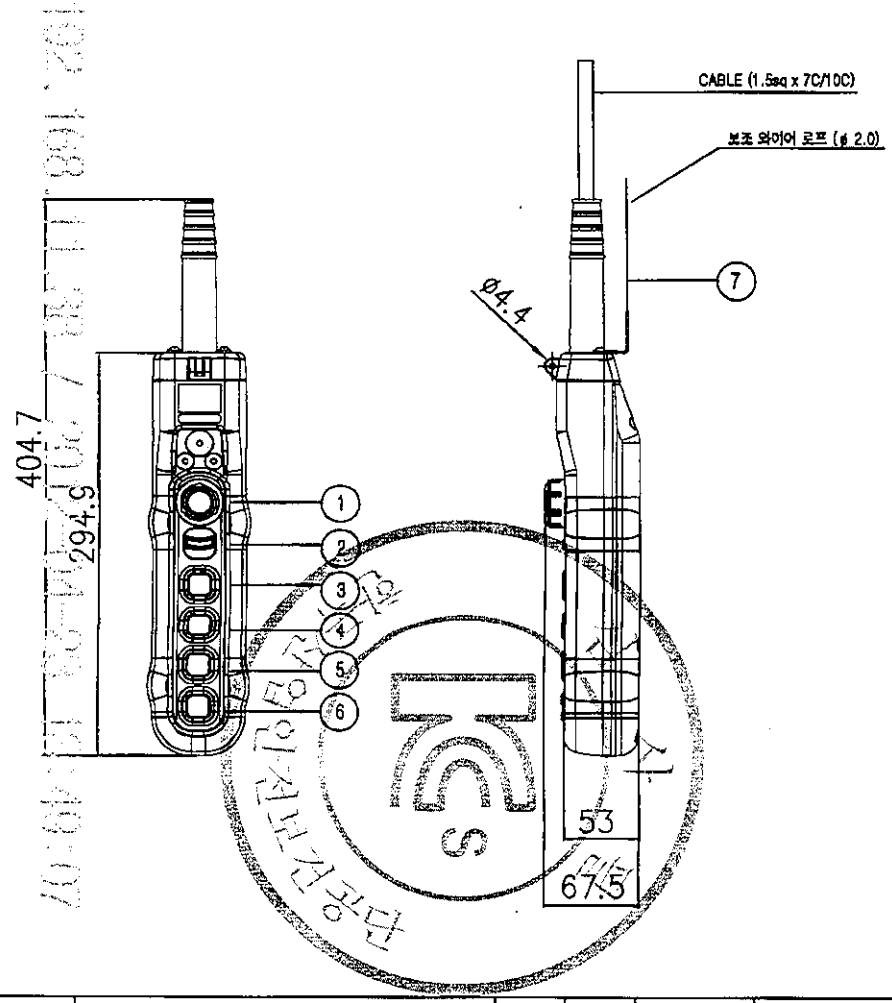
구분 / 색상	조작버튼	표시등
적색	비상	비상
황색	비정상	비정상
녹색	정상	정상
청색	의무	의무
흰색,화색-흑색	지정된의미없음	기타

* MATERIAL : POLYCARBOBATE(PLASTIC)
* BODY COLOR : YELLOW, BLACK
* IP : 55 이상

NO	SYMBOL	TYPE	SPEC.	COLOR
1	E.B.S	PUSH LOCK TURN RESET TYPE	250VAC x 6A	RED
2	SPARE			BLACK
3	상	1PUSH BUTTON 2STEP		
4	하	1PUSH BUTTON 2STEP		
5	동 (좌)	1PUSH BUTTON 1STEP		
6	서 (우)	1PUSH BUTTON 1STEP		
7	남 (전)	1PUSH BUTTON 1STEP		
8	북 (후)	1PUSH BUTTON 1STEP		
9	보조WIRE	φ 2.0		

MK	DATE	REVISIONS	CHK.	APP.
3				
2				
1				

CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE
DRAWING TITLE	PENDANT PUSH BUTTON SWITCH						
	LAY OUT	KD KUK DONG HOIST CO., LTD.			DWG. NO		



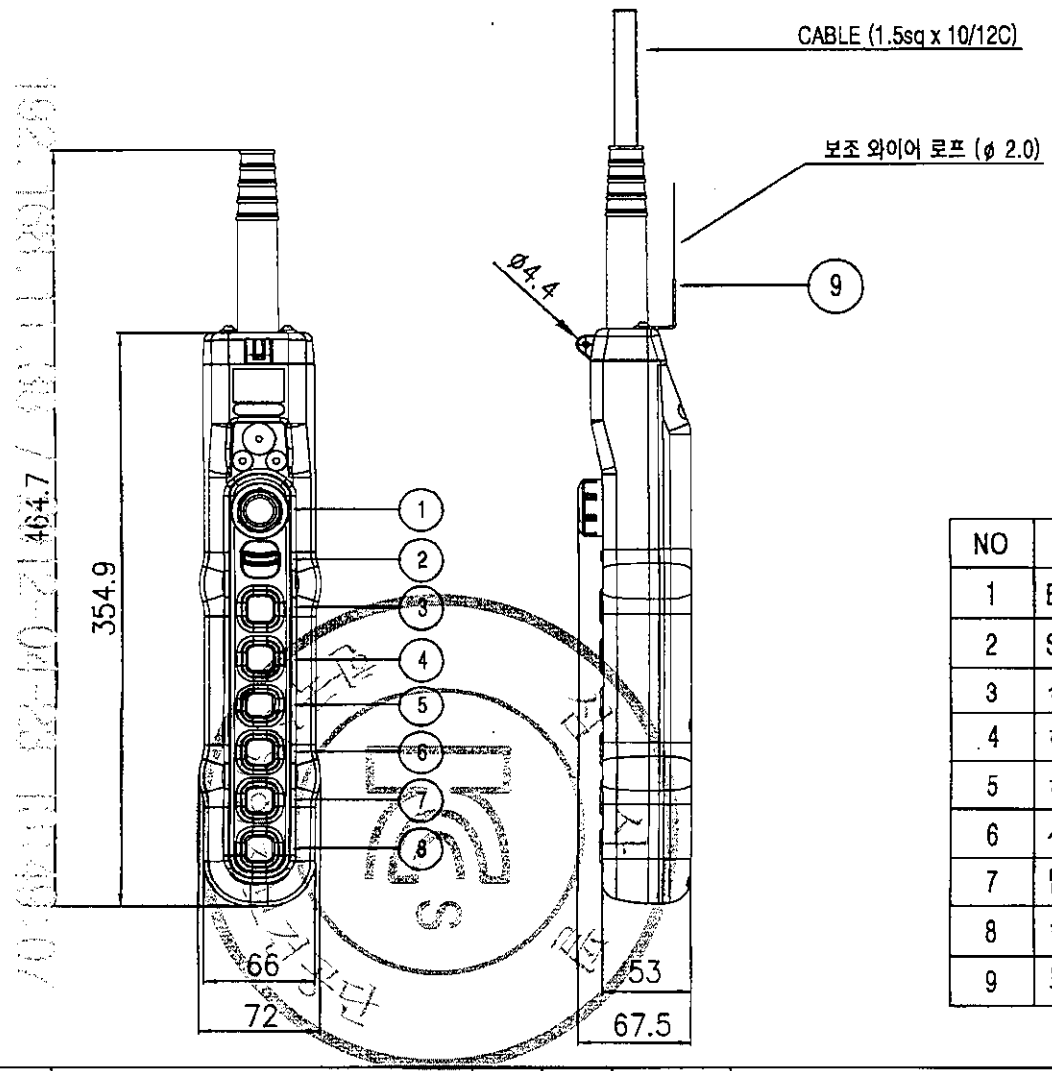
색상 \ 구분	조작버튼	표시등
적색	비상	비상
황색	비정상	비정상
녹색	정상	정상
청색	의무	의무
흰색,회색-흑색	지정된의미없음	기타

* MATERIAL : POLYCARBOBATE(PLASTIC)
* BODY COLOR : YELLOW, BLACK
* IP : 55 이상

NO	SYMBOL	TYPE	SPEC.	COLOR
1	E.B.S	PUSH LOCK TURN RESET TYPE	250VAC x 6A	RED
2	SPARE			BLACK
3	상	1PUSH BUTTON 2STEP		
4	하	1PUSH BUTTON 2STEP		
5	동(전)	1PUSH BUTTON 2STEP		
6	서(후)	1PUSH BUTTON 2STEP		
7	보조 와이어	ø 2.0		

MK	DATE	REVISIONS	CHK.	APP.

CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE
DRAWING TITLE	PENDANT PUSH BUTTON SWITCH						
	LAY OUT	KD KUK DONG HOIST CO., LTD.			DWG. NO		



색상 \ 구분	조작버튼	표시등
적색	비상	비상
황색	비정상	비정상
녹색	정상	정상
청색	의무	의무
흰색,회색-흑색	지정된의미없음	기타

* MATERIAL : POLYCARBOBATE(PLASTIC)
* BODY COLOR : YELLOW, BLACK
* IP : 55 이상

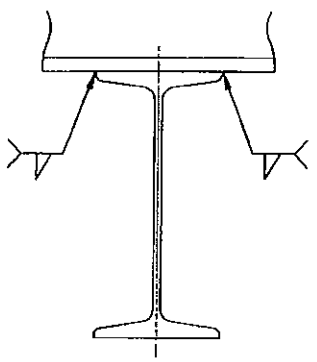
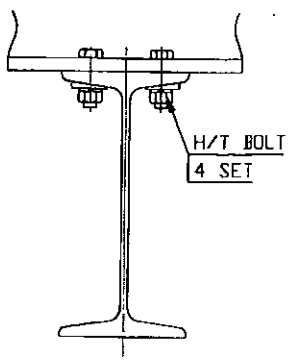
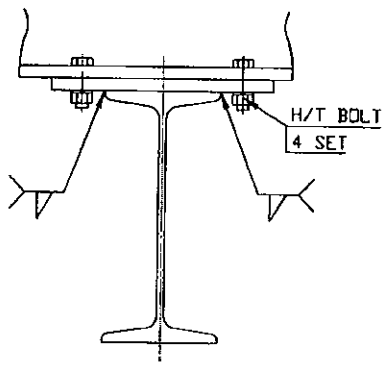
NO	SYMBOL	TYPE	SPEC.	COLOR
1	E.B.S	PUSH LOCK TURN RESET TYPE	250VAC x 6A	RED
2	SPARE			BLACK
3	상	1PUSH BUTTON 2STEP		
4	하	1PUSH BUTTON 2STEP		
5	동 (좌)	1PUSH BUTTON 2STEP		
6	서 (우)	1PUSH BUTTON 2STEP		
7	남 (전)	1PUSH BUTTON 1STEP		
8	북 (후)	1PUSH BUTTON 1STEP		
9	보조WIRE	ø 2.0		

MK	DATE	REVISIONS	CHK.	APP.
⚠				
⚠				
⚠				

CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE
DRAWING TITLE	PENDANT PUSH BUTTON SWITCH						
	LAY OUT	KD KUK DONG HOIST CO., LTD.			DWG. NO		

Ⅰ-4. Ⅰ-BEAM의 고정방법 및 사양

1. Ⅰ-BEAM의 고정방법

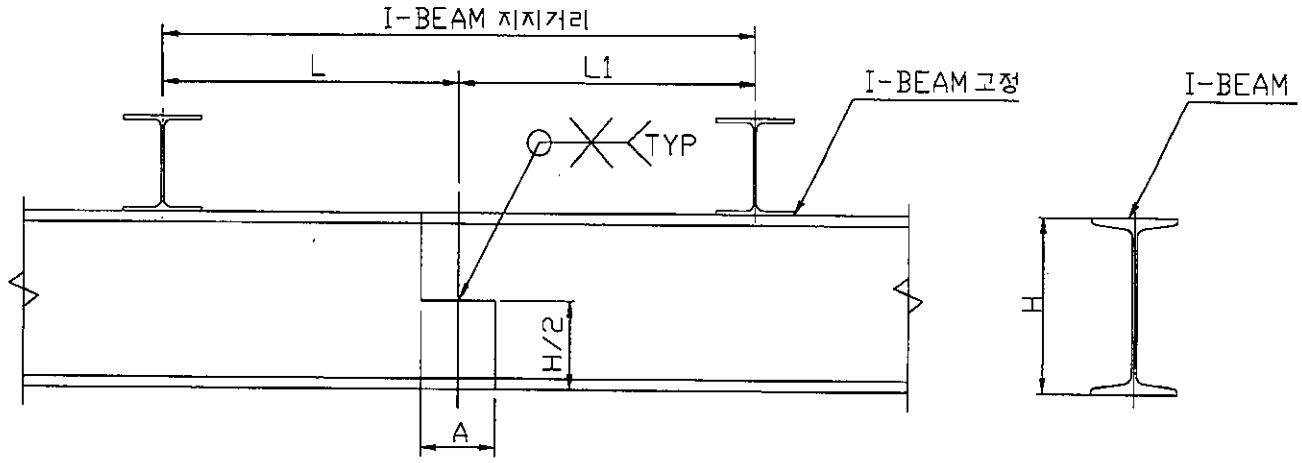
용 접 구 조	BOLT 체 결 구 조	복 합 구 조
		

2. 기본조건 및 사양

* 동하중에 의한 용접이음의 허용응력 (필렛용접 효율 80% 포함) : 560 kg/㎠
* H/T BOLT의 허용 인장응력 : 2500kg/㎠

정격하중 (TON)	용 접 구 조 (mm)		BOLT 체결구조
	용접두께	최소 용접길이	최소 BOLT SIZE
3.0	6	125 × 2개소	M12 × 4 SET

3. I-BEAM의 연결방법



* I-BEAM의 용접 연결부위는 I-BEAM 고정 지점과 동일 선상에 위치하지 않도록 한다.

* 고정 지점 사이 중앙에 용접 연결부위가 일치하지 않도록 한다.

구조 (단위 : mm)

사용 I-BEAM	A	H	H/2	최대 지지거리				
				1 T	2 T	2.8 T	3 T	5 T
250×125×t7.5/12.5	200	250	125					
300×150×t10/18.5	300	300	150				3700	
350×150×t9/15	300	350	175				5800	
400×150×t10/18	300	400	200				6000	
450×175×t11/20	300	450	225				7700	
							9900	

단, 사용 I-BEAM은 MODEL별 기술사양서의 BEAM 폭을 참조 할 것

* I-BEAM 고정 방법 중 용접 구조의 용접 강도

$$\text{용접부 강도 } \sigma = 1.14 \times \frac{\text{I-BEAM자중} + 1.25 \times (\text{정격하중} + \text{Hoist자중})}{0.707 \times \text{용접두께} \times \text{용접길이}} \leqq 560 \text{ kg/㎠}$$

I-BEAM 규격	BEAM 자중 (kg/m)	용접 두께 (cm)	최소 용접길이 (cm)	1 T		2 T		2.8 T		3 T		5 T	
				HOIST 자중(kg)	용접강도 (kg/㎠)	HOIST 자중(kg)	용접강도 (kg/㎠)	HOIST 자중(kg)	용접강도 (kg/㎠)	HOIST 자중(kg)	용접강도 (kg/㎠)	HOIST 자중(kg)	용접강도 (kg/㎠)
250×125×t7.5/12.5	38.3	0.6	12.5×2							460	469.0		
300×150×t10/18.5	65.5	0.6	15.0×2							460	393.3		
350×150×t9/15	58.5	0.6	15.0×2							460	392.7		
400×150×t10/18	72.0	0.8	15.0×2							460	393.9		
450×175×t11/20	91.7	0.8	17.5×2							460	339.1		

사용 I-BEAM은 MODEL 별 기술사양서의 BEAM 폭을 참조할 것

* I-BEAM 고정 방법 중 BOLT 고정 강도

$$\text{BOLT 강도 } \sigma = 1.14 \frac{\text{I-BEAM자중} + 1.25 \times (\text{정격하중} + \text{Hoist자중})}{\text{BOLT 단면적} \times \text{BOLT 수}} \leqq 2500 \text{ kg/cm}^2$$

I-BEAM 규격	BEAM 자중 (kg/m)	BOLT 규 격	BOLT 수	BOLT 단면적 (cm^2)	1 T		2 T		2.8 T		3 T		5 T	
					HOIST 자중(kg)	BOLT강도 (kg/cm²)	HOIST 자중(kg)	BOLT강도 (kg/cm²)	HOIST 자중(kg)	BOLT강도 (kg/cm²)	HOIST 자중(kg)	BOLT강도 (kg/cm²)	HOIST 자중(kg)	BOLT강도 (kg/cm²)
250×125×t7.5/12.5	38.3	M12	4	1.13							460	1100.5		
300×150×t10/18.5	65.5	M12	4	1.13							460	1107.3		
350×150×t9/15	58.5	M12	4	1.13							460	1105.6		
400×150×t10/18	72.0	M16	4	2.01							460	623.5		
450×175×t11/20	91.7	M16	4	2.01							460	626.2		

Ⅰ-5. Ⅰ-BEAM의 최대 지지거리

5-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

BEAM 자중에 의한 MOMENT : $Ms = \dfrac{M \times \text{I-BEAM 자중} \times (\text{지지거리})^2}{8}$ kg-cm

$Ms = \dfrac{1.05 * 38.3 * 370\text{^}2}{8} = 6882$ kg-cm

이동하중에 의한 MOMENT : $M_d = F \times \dfrac{(\text{정격하중}+\text{호이스트 자중}) \times \text{지지거리}}{4}$ kg-cm

$M_d = 1.254 \times \dfrac{(3000 + 460) * 370}{4} = 401343$ kg-cm

* 호이스트 자중 = 460 KG 용 량 : 3000 KG

* DYNAMIC COEFFICIENT : F = 1.254

* STATIC COEFFICIENT : M = 1.05

굽힘 MOMENT 합계 : $\Sigma M_v = M_s + M_d$ = 6882 + 401343 = 408224 kg-cm

2. 풍하중에 의한 굽힘 MOMENT

풍하중에 의한 MOMENT : $M_w = \dfrac{\text{풍하중(W)} \times \text{지지거리}}{2}$

$M_w = \dfrac{35.46 * 370}{2} = 7206.5$ kg-cm

풍하중 : W = 속도압(q) × 속도계수(C) × 압력을 받는 면적(A) (kg)

= 23.66 x 1.2 x 1.372 = 38.95 (kg)

속도압 : $q = 8.5 \times \sqrt[4]{h(kg/m^2)} = 8.5 \times \sqrt[4]{60} =$ 23.66 (kg/m^2)

속도계수 : C = 1.2 (크레인 제작기준 참조)

풍압을 받는 면적 A = I-BEAM의 면적 + HOIST의 면적 (m^2)

= 0.925 + 0.447 = 1.372 (m^2)

* 호이스트의 풍압을 받는 면적 늑 0.8㎡

I-BEAM 규격	BEAM 자중 (kg/m)	최 대 지지거리 (cm)	Ms (kg-cm)	M_d (kg-cm)	ΣMV (kg-cm)	W (kg)	Mw (kg-cm)	A (m^2)
250×125×t7.5/12.5	38.3	370	6882	401343	408224	38.95	7206.5	1.37
300×150×t10/18.5	65.5	580	28920	629132	658052	62.09	18007.1	2.187
350×150×t9/15	53.5	600	27641	650826	678467	52.81	15842.7	1.87
400×150×t10/18	72.0	770	56029	835227	891256	100.14	38553.4	3.527
450×175×t11/20	91.7	990	117961	1073863	1191824	75.81	37524.3	2.67

단, 사용 I-BEAM은 MODEL별 기술사양서의 BEAM 폭을 참조 할 것

5-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

$$* \sigma_v = \frac{\text{수직 굽힘 MOMENT 합계 : } \Sigma M_v}{\text{단면 계수 : } Z_x} \quad (kg/cm^2)$$

$$= \frac{408224}{414} = 986.0 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

$$* \sigma_w = \frac{\text{풍하중에 의한 굽힘 MOMENT : } M_w}{\text{단면 계수 : } Z_y} \quad (kg/cm^2)$$

$$= \frac{7206.5}{53.9} = 133.7 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

$$* \Sigma\sigma = \sigma v + \sigma w \leqq 0.8 \times 1449 = 1159 \ kg/cm^2$$

I-BEAM 규격	단면계수 Zx	단면계수 Zy	ΣMv (kg-cm)	Mw (kg-cm)	σv (kg/cm²)	σw (kg/cm²)	Σσ (kg/cm²)
250×125×t7.5/12.5	414	53.9	408224	7206.5	986.0	133.7	1119.8
300×150×t10/18.5	849	118	658052	18007.1	775.1	152.6	927.7
350×150×t9/15	870	93.5	678467	15842.7	779.8	169.4	949.3
400×150×t10/18	1200	115	891256	38553.4	742.7	335.2	1078.0
450×175×t11/20	1740	173	1191824	68892.9	685.0	216.9	901.9

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

5-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

$$* \delta_s = \frac{5 \times \text{I-BEAM자중} \times \text{지지거리}^3}{384 \times 2100000 \times I_x} \quad (cm)$$

$$= \frac{5 * 38.3 * 370\text{^}3}{384 * 2100000 * 5180} = 0.0232 \quad (cm)$$

2. 이동하중에 의한 처짐 (DEFLECTION)

$$* \delta_d = \frac{(\text{정격하중} + \text{호이스트자중}) \times \text{지지거리}^3}{48 \times 2100000 \times I_x} (cm)$$

$$= \frac{(3000 + 460) \times 370\text{^}3}{48 * 2100000 * 5180} = 0.336 \quad (cm)$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

$$\frac{\text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{1000}$$

$$= \frac{0.336}{370} = \frac{1}{1102} < \frac{1}{1000}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

$$\frac{\text{I-BEAM 자중에 의한 처짐} : \delta_s + \text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{800}$$

$$= \frac{0.0232+0.336}{370} = \frac{1}{1031} < \frac{1}{800}$$

I-BEAM 규격	단면2차 MOMENT Ix	BEAM 자중 (kg/m)	δ_s (cm)	δ_d (cm)	이동하중에 의한 처짐 판정	처짐량 합계에의한 처짐판정
250×125×t7.5/12.5	5180	38.3	0.023	0.336	1 / 1102	1 / 1031
300×150×t10/18.5	12700	65.5	0.0624	0.527	1 / 1100	1 / 983
350×150×t9/15	15200	58.5	0.0515	0.488	1 / 1230	1 / 1112
400×150×t10/18	24100	72	0.0846	0.650	1 / 1184	1 / 1048
450×175×t11/20	39200	91.7	0.1407	0.850	1 / 1165	1 / 1000

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

Ⅰ-6. Ⅰ-BEAM의 최대 지지거리

6-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

BEAM 자중에 의한 MOMENT : $Ms = \frac{M \times \text{I-BEAM 자중} \times (\text{지지거리})^2}{8}$ kg-cm

$Ms = \frac{1.05 * 65.5 * 580\text{^}2}{8} = 28920$ kg-cm

이동하중에 의한 MOMENT : $M_d = F \times \frac{(\text{정격하중+호이스트 자중}) \times \text{지지거리}}{4}$ kg-cm

$M_d = 1.254 \times \frac{(3000 + 460) * 580}{4} = 629132$ kg-cm

* 호이스트 자중 = 460 KG 용 량 : 3000 KG

* DYNAMIC COEFFICIENT : F = 1.254
* STATIC COEFFICIENT : M = 1.05

굽힘 MOMENT 합계 : $\Sigma M_v = M_s + M_d = 28920 + 629132 = 658052$ kg-cm

2. 풍하중에 의한 굽힘 MOMENT

풍하중에 의한 MOMENT : $M_w = \frac{\text{풍하중(W)} \times \text{지지거리}}{2}$

$M_w = \frac{58.6 * 580}{2} = 18007.1$ kg-cm

풍하중 : W = 속도압(q) × 속도계수(C) × 압력을 받는 면적(A) (kg)
= 23.66 x 1.2 x 2.187 = 62.09 (kg)

속도압 : $q = 8.5 \times \sqrt[4]{h(kg/m^2)} = 8.5 \times \sqrt[4]{60} =$ 23.66 (kg/㎡)

속도계수 : C = 1.2 (크레인 제작기준 참조)

풍압을 받는 면적 A = I-BEAM의 면적 + HOIST의 면적 (㎡)
= 1.74 + 0.447 = 2.187 (m^2)

* 호이스트의 풍압을 받는 면적 ≒ 0.8㎡

I-BEAM 규격	BEAM 자중 (kg/m)	최 대 지지거리 (cm)	Ms (kg-cm)	M_d (kg-cm)	ΣMv (kg-cm)	W (kg)	Mw (kg-cm)	A (m^2)
250×125×t7.5/12.5	38.3	370	6882	401343	408224	38.95	7206.5	1.37
⇨ 300×150×t10/16.5	65.5	580	28920	629132	658052	62.09	18007.1	2.187
350×150×t9/15	58.5	600	27641	650826	678467	52.81	15842.7	1.87
400×150×t10/18	72.0	770	56029	835227	891256	100.05	38519.3	3.527
450×175×t11/20	91.7	990	117961	1073863	1191824	75.81	37524.3	2.67

단, 사용 I-BEAM은 MODEL별 기술사양서의 BEAM 폭을 참조 할 것

6-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

$$* \sigma_v = \frac{\text{수직 굽힘 MOMENT 합계 : } \Sigma M_v}{\text{단면 계수 : } Z_x} \quad (kg/cm^2)$$

$$= \frac{658052}{849} = 775.1 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

$$* \sigma_w = \frac{\text{풍하중에 의한 굽힘 MOMENT : } M_w}{\text{단면 계수 : } Z_y} \quad (kg/cm^2)$$

$$= \frac{18007.1}{118} = 152.6 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

* $\Sigma\sigma = \sigma v + \sigma w \leqq 0.8 \times 1449 = 1159$ kg/㎠

I-BEAM 규격	단 면 계 수 Zx	단 면 계 수 Zy	ΣMv (kg-cm)	Mw (kg-cm)	σv (kg/㎠)	σw (kg/㎠)	Σσ (kg/㎠)
250×125×t7.5/12.5	414	53.9	408224	7206.5	986.0	133.7	1119.8
⇨ 300×150×t10/18.5	849	118	658052	18007.1	775.1	152.6	927.7
350×150×t9/15	870	93.5	678467	15842.7	779.8	169.4	949.3
400×150×t10/18	1200	115	891256	38519.3	742.7	335.0	1077
450×175×t11/20	1740	173	1191824	37524.3	685.0	216.9	901.9

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

6-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

$$* \delta_s = \frac{5 \times \text{I-BEAM자중} \times \text{지지거리}^3}{384 \times 2100000 \times I_x} \quad (cm)$$

$$= \frac{5 * 65.5 * 580\text{^}3}{384 * 2100000 * 5180} = 0.0624 \quad (cm)$$

2. 이동하중에 의한 처짐 (DEFLECTION)

$$* \delta_d = \frac{(\text{정격하중} + \text{호이스트자중}) \times \text{지지거리}^3}{48 \times 2100000 \times I_x} (cm)$$

$$= \frac{(3000 + 460) \times 580\text{^}3}{48 * 2100000 * 5180} = 0.527 \quad (cm)$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

$$\frac{\text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{1000}$$

$$= \frac{0.527}{580} = \frac{1}{1100} < \frac{1}{1000}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

$$\frac{\text{I-BEAM 자중에 의한 처짐} : \delta_s + \text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{800}$$

$$= \frac{0.0624+0.527}{580} \quad \frac{1}{983} < \frac{1}{800}$$

I-BEAM 규격	단면2차 MOMENT Ix	BEAM 자중 (kg/m)	δ_s (cm)	δ_d (cm)	이동하중에 의한 처짐 판정	처짐량 합계에의한 처짐판정
250×125×t7.5/12.5	5180	38.3	0.023	0.336	1 / 1102	1 / 1031
⇨ 300×150×t10/18.5	12700	65.5	0.0624	0.527	1 / 1100	1 / 983
350×150×t9/15	15200	58.5	0.0515	0.488	1 / 1230	1 / 1112
400×150×t10/18	24100	72	0.0846	0.650	1 / 1184	1 / 1048
450×175×t11/20	33200	91.7	0.1407	0.850	1 / 1155	1 / 1000

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

Ⅰ-7. Ⅰ-BEAM의 최대 지지거리

7-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

BEAM 자중에 의한 MOMENT : $Ms = \dfrac{M \times \text{I-BEAM 자중} \times (\text{지지거리})^2}{8}$ kg-cm

$Ms = \dfrac{1.05 * 58.5 * 600\text{^}2}{8} = 27641$ kg-cm

이동하중에 의한 MOMENT : $M_d = F \times \dfrac{(\text{정격하중+호이스트 자중}) \times \text{지지거리}}{4}$ kg-cm

$M_d = 1.254 \times \dfrac{(3000 + 460) * 600}{4} = 650826$ kg-cm

* 호이스트 자중 = 460 KG 용 량 : 3000 KG

* DYNAMIC COEFFICIENT : F = 1.254
* STATIC COEFFICIENT : M = 1.05

굽힘 MOMENT 합계 : $\Sigma M_v = M_s + M_d$ = 27641 + 650826 = 678467 kg-cm

2. 풍하중에 의한 굽힘 MOMENT

풍하중에 의한 MOMENT : $M_w = \dfrac{\text{풍하중(W)} \times \text{지지거리}}{2}$

$M_w = \dfrac{51.11 * 600}{2} = 15842.7$ kg-cm

풍하중 : W = 속도압(q) × 속도계수(C) × 압력을 받는 면적(A) (kg)
= 23.66 x 1.2 x 1.86 = 52.81 (kg)

속도압 : $q = 8.5 \times \sqrt[4]{h}(kg/m^2) = 8.5 \times \sqrt[4]{60}$ = 23.66 (kg/㎡)

속도계수 : C = 1.2 (크레인 제작기준 참조)

풍압을 받는 면적 A = I-BEAM의 면적 + HOIST의 면적 (㎡)
= 1.41 + 0.447 = 1.86 (m^2)

* 호이스트의 풍압을 받는 면적 ≒ 0.8㎡

I-BEAM 규격	BEAM 자중 (kg/m)	최 대 지지거리 (cm)	Ms (kg-cm)	M_d (kg-cm)	ΣMv (kg-cm)	W (kg)	Mw (kg-cm)	A (m^2)
250×125×t7.5/12.5	38.3	370	6882	401343	408224	38.95	7206.5	1.37
300×150×t10/18.5	65.5	580	28920	629132	658052	62.09	18007.1	2.187
⇨ 350×150×t9/15	58.5	600	27641	650826	678467	52.81	15842.7	1.87
400×150×t10/16	72.0	770	56029	835227	891256	100.14	38553.4	3.527
450×175×t11/20	91.7	990	117961	1073863	1191824	75.81	37524.3	2.67

단, 사용 I-BEAM은 MODEL별 기술사양서의 BEAM 특을 참조 할 것

7-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

$$* \ \sigma_v = \frac{\text{수직 굽힘 MOMENT 합계 : } \Sigma M_v}{\text{단면 계수 : } Z_x} \ (kg/cm^2)$$

$$= \frac{678467}{870} = 779.8 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

$$* \ \sigma_w = \frac{\text{풍하중에 의한 굽힘 MOMENT : } M_w}{\text{단면 계수 : } Z_y} \ (kg/cm^2)$$

$$= \frac{15842.7}{93.5} = 169.4 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

* $\Sigma\sigma = \sigma v + \sigma w \leqq 0.8 \times 1449 = 1159 \ kg/cm^2$

I-BEAM 규격	단면계수 Zx	단면계수 Zy	ΣMv (kg-cm)	Mw (kg-cm)	σv (kg/cm²)	σw (kg/cm²)	Σσ (kg/cm²)
250×125×t7.5/12.5	414	53.9	408224	7206.5	986.0	133.7	1119.8
300×150×t10/18.5	849	118	658052	18007.1	775.1	152.6	927.7
⇨ 350×150×t9/15	870	93.5	678467	15842.7	779.8	169.4	949.3
400×150×t10/18	1200	115	891256	38553.4	742.7	335.2	1078.0
450×175×t11/20	1740	173	1191824	37524.3	685.0	216.9	901.9

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

7-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

$$* \delta_s = \frac{5 \times \text{I-BEAM자중} \times \text{지지거리}^3}{384 \times 2100000 \times I_x} \quad (cm)$$

$$= \frac{5 * 58.5 * 600\text{^}3}{384 * 2100000 * 15200} = 0.0515 \quad (cm)$$

2. 이동하중에 의한 처짐 (DEFLECTION)

$$* \delta_d = \frac{(\text{정격하중} + \text{호이스트자중}) \times \text{지지거리}^3}{48 \times 2100000 \times I_x} (cm)$$

$$= \frac{(3000 + 460) \times 600\text{^}3}{48 * 2100000 * 15200} = 0.488 \quad (cm)$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

$$\frac{\text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{1000}$$

$$= \frac{0.488}{600} = \frac{1}{1230} < \frac{1}{1000}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

$$\frac{\text{I-BEAM 자중에 의한 처짐} : \delta_s + \text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} \quad \frac{1}{800}$$

$$= \frac{0.0515+0.488}{600} = \frac{1}{1112} < \frac{1}{800}$$

I-BEAM 규격	단면2차 MOMENT Ix	BEAM 자중 (kg/m)	δ_s (cm)	δ_d (cm)	이동하중에 의한 처짐 판정	처짐량 합계에의한 처짐판정
250×125×t7.5/12.5	5180	38.3	0.023	0.336	1 / 1102	1 / 1031
300×150×t10/18.5	12700	65.5	0.0624	0.527	1 / 1100	1 / 983
⇨ 350×150×t9/15	15200	58.5	0.0515	0.488	1 / 1230	1 / 1112
400×150×t10/18	24100	72	0.0846	0.650	1 / 1184	1 / 1048
450×175×t11/20	39200	91.7	0.1407	0.850	1 / 1165	1 / 1000

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

Ⅰ-8. Ⅰ-BEAM의 최대 지지거리

8-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

BEAM 자중에 의한 MOMENT : $Ms = \dfrac{M \times \text{I-BEAM 자중} \times (\text{지지거리})^2}{8}$ kg-cm

$Ms = \dfrac{1.05 * 72 * 770\text{^}2}{8} = 56029$ kg-cm

이동하중에 의한 MOMENT : $M_d = F \times \dfrac{(\text{정격하중}+\text{호이스트 자중}) \times \text{지지거리}}{4}$ kg-cm

$M_d = 1.254 \times \dfrac{(3000 + 460) * 770}{4} = 835227$ kg-cm

* 호이스트 자중 = 460 KG 용 량 : 3000 KG

* DYNAMIC COEFFICIENT : F = 1.254
* STATIC COEFFICIENT : M = 1.05

굽힘 MOMENT 합계 : $\Sigma M_v = M_s + M_d$ = 56029 + 835227 = 891256 kg-cm

2. 풍하중에 의한 굽힘 MOMENT

풍하중에 의한 MOMENT : $M_w = \dfrac{\text{풍하중(W)} \times \text{지지거리}}{2}$

$M_w = \dfrac{100.05 * 770}{2} = 38553.4$ kg-cm

풍하중 : W = 속도압(q) × 속도계수(C) × 압력을 받는 면적(A) (kg)
= 23.66 x 1.2 x 3.527 = 100.14 (kg)

속도압 : $q = 8.5 \times \sqrt[4]{h}$ (kg/㎡) = $8.5 \times \sqrt[4]{60}$ = 23.66 (kg/㎡)

속도계수 : C = 1.2 (크레인 제작기준 참조)

풍압을 받는 면적 A = I-BEAM의 면적 + HOIST의 면적 (㎡)
= 3.08 + 0.447 = 3.527 (m^2)

* 호이스트의 풍압을 받는 면적 ≒ 0.8㎡

I-BEAM 규격	BEAM 자중 (kg/m)	최 대 지지거리 (cm)	Ms (kg-cm)	M_d (kg-cm)	ΣMv (kg-cm)	W (kg)	Mw (kg-cm)	A (m^2)
250×125×t7.5/12.5	38.3	370	6882	401343	408224	38.95	7206.5	1.37
300×150×t10/18.5	65.5	580	28920	629132	658052	62.09	18007.1	2.187
350×150×t9/15	58.5	600	27641	650826	678467	52.51	15842.7	1.87
⇨ 400×150×t10/18	72.0	770	56029	835227	891256	100.14	38553.4	3.527
450×175×t11/20	91.7	990	117961	1073863	1191824	75.81	37524.3	2.67

단, 사용 I-BEAM은 MODEL별 기술사양서의 BEAM 폭을 참조할 것

8-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

$$* \sigma_v = \frac{\text{수직 굽힘 MOMENT 합계 : } \Sigma M_v}{\text{단면 계수 : } Z_x} \quad (kg/cm^2)$$

$$= \frac{891256}{1200} = 742.7 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

$$* \sigma_w = \frac{\text{풍하중에 의한 굽힘 MOMENT : } M_w}{\text{단면 계수 : } Z_y} \quad (kg/cm^2)$$

$$= \frac{38553.4}{115} = 335.2 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

* $\Sigma\sigma = \sigma v + \sigma w \leqq 0.8 \times 1449 = 1159\ kg/cm^2$

I-BEAM 규격	단면계수 Zx	단면계수 Zy	ΣMv (kg-cm)	Mw (kg-cm)	σv (kg/cm²)	σw (kg/cm²)	Σσ (kg/cm²)
250×125×t7.5/12.5	414	53.9	408224	7206.5	986.0	133.6	1119.8
300×150×t10/18.5	849	118	658052	18007.1	775.1	152.6	927.7
350×150×t9/15	870	93.5	678467	15842.7	779.8	169.4	949.3
⇨ 400×150×t10/18	1200	115	891256	38553.4	742.7	335.2	1078.0
450×175×t11/20	1740	173	1191824	37524.8	685.0	216.9	901.9

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

8-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

$$* \delta_s = \frac{5 \times \text{I-BEAM자중} \times \text{지지거리}^3}{384 \times 2100000 \times I_x} \quad (cm)$$

$$= \frac{5 * 72 * 770\text{^}3}{384 * 2100000 * 24100} = 0.0846 \quad (cm)$$

2. 이동하중에 의한 처짐 (DEFLECTION)

$$* \delta_d = \frac{(\text{정격하중} + \text{호이스트자중}) \times \text{지지거리}^3}{48 \times 2100000 \times I_x} (cm)$$

$$= \frac{(3000 + 460) \times 770\text{^}3}{48 * 2100000 * 24100} = 0.650 \quad (cm)$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

$$\frac{\text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{1000}$$

$$= \frac{0.650}{770} = \frac{1}{1184} < \frac{1}{1000}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

$$\frac{\text{I-BEAM 자중에 의한 처짐} : \delta_s + \text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} \leq \frac{1}{800}$$

$$= \frac{0.0846+0.65}{770} = \frac{1}{1048} < \frac{1}{800}$$

I-BEAM 규격	단면2차 MOMENT Ix	BEAM 자중 (kg/m)	δ_s (cm)	δ_d (cm)	이동하중에 의한 처짐 판정	처짐량 합계에의한 처짐판정
250×125×t7.5/12.5	5180	38.3	0.023	0.336	1 / 1102	1 / 1031
300×150×t10/18.5	12700	65.5	0.0624	0.527	1 / 1100	1 / 983
350×150×t9/15	15200	58.5	0.0515	0.488	1 / 1230	1 / 1112
⇨ 400×150×t10/13	24100	72	0.0846	0.650	1 / 1184	1 / 1048
450×175×t11/20	39200	91.7	0.1407	0.850	1 / 1165	1 / 1000

단, I-BEAM의 사용은 MODEL별 기술사양서에 따른다.

Ⅰ-9. Ⅰ-BEAM의 최대 지지거리

9-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

BEAM 자중에 의한 MOMENT : $Ms = \frac{M \times \text{I-BEAM 자중} \times (\text{지지거리})^2}{8}$ kg-cm

$Ms = \frac{1.05 * 91.7 * 990^2}{8} = 117961$ kg-cm

이동하중에 의한 MOMENT : $M_d = F \times \frac{(\text{정격하중+호이스트 자중}) \times \text{지지거리}}{4}$ kg-cm

$M_d = 1.254 \times \frac{(3000 + 460) * 990}{4} = 1073863$ kg-cm

* 호이스트 자중 = 460 KG 용 량 : 3000 KG

* DYNAMIC COEFFICIENT : F = 1.254
* STATIC COEFFICIENT : M = 1.05

굽힘 MOMENT 합계 : $\Sigma M_v = M_s + M_d$ = 117961 + 1073863 = 1191824 kg-cm

2. 풍하중에 의한 굽힘 MOMENT

풍하중에 의한 MOMENT : $M_w = \frac{\text{풍하중(W)} \times \text{지지거리}}{2}$

$M_w = \frac{136.96 * 990}{2} = 68892.9$ kg-cm

풍하중 : W = 속도압(q) × 속도계수(C) × 압력을 받는 면적(A) (kg)
= 23.66 x 1.2 x 4.902 = 139.18 (kg)

속도압 : $q = 8.5 \times \sqrt[4]{h(kg/m^2)} = 8.5 \times \sqrt[4]{60}$ = 23.66 (kg/㎡)

속도계수 : C = 1.2 (크레인 제작기준 참조)

풍압을 받는 면적 A = I-BEAM의 면적 + HOIST의 면적 (㎡)
= 4.455 + 0.447 = 4.902 (m^2)

* 호이스트의 풍압을 받는 면적 ≒ 0.8㎡

I-BEAM 규격	BEAM 자중 (kg/m)	최 대 지지거리 (cm)	Ms (kg-cm)	M_d (kg-cm)	ΣMv (kg-cm)	W (kg)	Mw (kg-cm)	A (m^2)
250×125×t7.5/12.5	38.3	370	6882	401343	408224	38.95	7206.5	1.37
300×150×t10/18.5	65.5	580	28920	629132	658052	62.09	18007.1	2.187
350×150×t9/15	56.5	600	27641	650826	678467	52.81	15842.7	1.87
400×150×t10/18	72.0	770	56029	835227	891256	100.14	38553.4	3.527
⇨ 450×175×t11/20	91.7	990	117961	1073863	1191824	139.18	68892.9	4.902

단, 사용 I-BEAM은 MODEL별 기술사양서의 BEAM 폭을 참조할 것

9-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

$$* \ \sigma_v = \frac{\text{수직 굽힘 MOMENT 합계 : } \Sigma M_v}{\text{단면 계수 : } Z_x} \ (kg/cm^2)$$

$$= \frac{1191824}{1740} = 685.0 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

$$* \ \sigma_w = \frac{\text{풍하중에 의한 굽힘 MOMENT : } M_w}{\text{단면 계수 : } Z_y} \ (kg/cm^2)$$

$$= \frac{68892.9}{173} = 398.2 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

* $\Sigma\sigma = \sigma v + \sigma w \leqq 0.8 \times 1449 = 1159 \ kg/cm^2$

I-BEAM 규격	단면계수 Zx	단면계수 Zy	ΣMv (kg-cm)	Mw (kg-cm)	σv (kg/cm²)	σw (kg/cm²)	Σσ (kg/cm²)
250×125×t7.5/12.5	414	53.9	408224	7206.5	986.0	133.7	1119.8
300×150×t10/18.5	849	118	658052	18007.1	775.1	152.6	927.7
350×150×t9/15	870	93.5	678467	15842.7	779.8	169.4	949.3
400×150×t10/18	1200	115	891256	38553.4	742.7	335.2	1078.0
⇨ 450×175×t11/20	1740	173	1191824	68892.9	685.0	398.2	1083.2

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

192.168.11.38 / 2012-04-23 13:49:07

9-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

$$* \delta_s = \frac{5 \times \text{I-BEAM자중} \times \text{지지거리}^3}{384 \times 2100000 \times I_x} \quad (cm)$$

$$= \frac{5 * 91.7 * 990\text{^}3}{384 * 2100000 * 39200} = 0.1407 \quad (cm)$$

2. 이동하중에 의한 처짐 (DEFLECTION)

$$* \delta_d = \frac{(\text{정격하중} + \text{호이스트자중}) \times \text{지지거리}^3}{48 \times 2100000 \times I_x} (cm)$$

$$= \frac{(3000 + 460) \times 990\text{^}3}{48 * 2100000 * 39200} = 0.850 \quad (cm)$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

$$\frac{\text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{1000}$$

$$= \frac{0.850}{990} = \frac{1}{1165} < \frac{1}{1000}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

$$\frac{\text{I-BEAM 자중에 의한 처짐} : \delta_s + \text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} \quad \text{사} \quad \text{인정} \quad \frac{1}{800}$$

$$= \frac{0.1407+0.85}{990} \quad \frac{1}{1000} \quad \frac{1}{800}$$

I-BEAM 규격	단면2차 MOMENT Ix	BEAM 자중 (kg/m)	δ_s (cm)	δ_d (cm)	이동하중에 의한 처짐 판정	처짐량 합계에의한 처짐판정
250×125×t7.5/12.5	5180	38.3	0.023	0.336	1 / 1102	1 / 1031
300×150×t10/18.5	12700	65.6	0.0625	0.527	1 / 1100	1 / 983
350×150×t9/15	15200	58.5	0.0515	0.488	1 / 1230	1 / 1112
400×150×t10/18	24100	72	0.0846	0.650	1 / 1184	1 / 1048
⇨ 450×175×t11/20	39200	91.7	0.1407	0.850	1 / 1165	1 / 1000

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

Ⅳ. 참 고 도 서

1 LOAD LIMITER 권고 SETTING 치
2 E.O.C.R 권고 SETTING치
3 MOTOR DATA SHEET
4 WIRE ROPE 성적서
5 SUB VENDOR LIST
6 HOIST 취급설명서
7 과부하 방지장치 취급설명서
8 INVERTER 취급설명서

LOAD LIMITER 권고 SETTING치

* POWER SOURCE : AC 3¢ 220V 60Hz

극동호이스트(주)

HOIST	MOTOR 용량	LOAD LIMITER 권고 SETTING치			LOAD CURRENT		C.T MODEL	연결단자 NO	C.T 용량	REMARK
		LOAD CURRENT	ADJ START TIME	SHOCK TIME	100%	110%				
C1 TON	2.4KW x 4P	110%	1 SEC	1 SEC	10 A	11.2 A	CT-2	K-K1, L-L1	5 V.A	
	0.4KW x 4P	110%	1 SEC	1 SEC	2.7 A	3.1 A	CT-1	K-K1, L-L1	5 V.A	
C2 TON	3.7KW x 4P	110%	1 SEC	1 SEC	16.0 A	17.4 A	CT-2	K-K1, L-L1	5 V.A	
	0.4KW x 4P	110%	1 SEC	1 SEC	2.7 A	3.1 A	CT-1	K-K1, L-L1	5 V.A	
C2.8 TON	5.0KW x 4P	110%	1 SEC	1 SEC	22.8 A	24.2 A	CT-2	K-K1, L-L1	5 V.A	
	1.5KW x 4P	110%	1 SEC	1 SEC	7.3 A	8.3 A	CT-1	K-K1, L-L1	5 V.A	
C3 TON	5.5KW x 4P	110%	1 SEC	1 SEC	22.8 A	24.3 A	CT-2	K-K1, L-L1	5 V.A	
	1.5KW x 4P	110%	1 SEC	1 SEC	7.3 A	8.3 A	CT-1	K-K1, L-L1	5 V.A	
C5 TON	5.5KW x 6P	110%	1 SEC	1 SEC	28.2 A	30.1 A	CT-2	K-K1, L-L1	5 V.A	
	1.0KW x 6P	110%	1 SEC	1 SEC	6.7 A	8.1 A	CT-1	K-K1, L-L1	5 V.A	
C7.5 TON	5.5KW x 6P	110%	1 SEC	1 SEC	28.2 A	30.1 A	CT-2	K-K1, L-L1	5 V.A	
	1.0KW x 6P	110%	1 SEC	1 SEC	6.7 A	8.1 A	CT-1	K-K1, L-L1	5 V.A	
C10 TON	9.0KW x 8P	110%	1 SEC	1 SEC	45.0 A	49.1 A	CT-2	K-K1, L-L1	5 V.A	
	1.1KW x 8P	110%	1 SEC	1 SEC	8.0 A	9.6 A	CT-2	K-K1, L-L1	5 V.A	

NOTE

1. 상기 TABLE의 수치는 권고 SETTING 수치이며 MOTOR의 특성 및 현장 조건에 따라 변경 가능함.

LOAD LIMITER 권고 SETTING치

* POWER SOURCE : AC 3Φ 380V 60Hz

극동호이스트(주)

HOIST	MOTOR 용량	LOAD LIMITER 권고 SETTING치			LOAD CURRENT		C.T MODEL	연결단자 NO	C.T 용량	REMARK
		LOAD CURRENT	ADJ START TIME	SHOCK TIME	100%	110%				
C1 TON	2.4KW x 4P	110%	1 SEC	1 SEC	5.8 A	6.3 A	CT-2	K-K1, L-L1	5 V.A	
	0.4KW x 4P	110%	1 SEC	1 SEC	1.6 A	2.1 A	CT-1	K-K1, L-L1	5 V.A	
C2 TON	3.7KW x 4P	110%	1 SEC	1 SEC	9.3 A	11.3 A	CT-2	K-K1, L-L1	5 V.A	
	0.4KW x 4P	110%	1 SEC	1 SEC	1.6 A	2.1 A	CT-1	K-K1, L-L1	5 V.A	
C2.8 TON	5.0KW x 4P	110%	1 SEC	1 SEC	12.2 A	13.6 A	CT-2	K-K1, L-L1	5 V.A	
	1.5KW x 4P	110%	1 SEC	1 SEC	4.2 A	5.4 A	CT-1	K-K1, L-L1	5 V.A	
⇨ C3 TON	5.5KW x 4P	110%	1 SEC	1 SEC	12.2 A	13.6 A	CT-2	K-K1, L-L1	5 V.A	
	1.5KW x 4P	110%	1 SEC	1 SEC	4.2 A	5.4 A	CT-1	K-K1, L-L1	5 V.A	
C5 TON	5.5KW x 6P	110%	1 SEC	1 SEC	16.3 A	17.8 A	CT-2	K-K1, L-L1	5 V.A	
	1.0KW x 6P	110%	1 SEC	1 SEC	3.9 A	5.3 A	CT-1	K-K1, L-L1	5 V.A	
C7.5 TON	5.5KW x 6P	110%	1 SEC	1 SEC	16.3 A	17.8 A	CT-2	K-K1, L-L1	5 V.A	
	1.0KW x 6P	110%	1 SEC	1 SEC	3.9 A	5.3 A	CT-1	K-K1, L-L1	5 V.A	
C10 TON	9.0KW x 8P	110%	1 SEC	1 SEC	26.0 A	28.6 A	CT-2	K-K1, L-L1	5 V.A	
	1.1KW x 8P	110%	1 SEC	1 SEC	4.6 A	6.1 A	CT-2	K-K1, L-L1	5 V.A	

NOTE

1. 상기 TABLE의 수치는 권고 SETTING 수치이며 MOTOR의 특성 및 현장 조건에 따라 변경 가능함.

LOAD LIMITER 권고 SETTING치

* POWER SOURCE : AC 3¢ 440V 60Hz

극동호이스트(주)

HOIST	MOTOR 용량	LOAD LIMITER 권고 SETTING치			LOAD CURRENT		C.T MODEL	연결단자 NO	C.T 용량	REMARK
		LOAD CURRENT	ADJ START TIME	SHOCK TIME	100%	110%				
C1 TON	2.4KW x 4P	110%	1 SEC	1 SEC	5.0 A	7.3 A	CT-2	K-K1, L-L1	5 V.A	
	0.4KW x 4P	110%	1 SEC	1 SEC	1.4 A	1.8 A	CT-1	K-K1, L-L1	5 V.A	
C2 TON	3.7KW x 4P	110%	1 SEC	1 SEC	8.0 A	10.8 A	CT-2	K-K1, L-L1	5 V.A	
	0.4KW x 4P	110%	1 SEC	1 SEC	1.4 A	1.8 A	CT-1	K-K1, L-L1	5 V.A	
C2.8 TON	5.0KW x 4P	110%	1 SEC	1 SEC	10.5 A	13.7 A	CT-2	K-K1, L-L1	5 V.A	
	1.5KW x 4P	110%	1 SEC	1 SEC	3.7 A	4.3 A	CT-1	K-K1, L-L1	5 V.A	
C3 TON	5.5KW x 4P	110%	1 SEC	1 SEC	10.5 A	13.7 A	CT-2	K-K1, L-L1	5 V.A	
	1.5KW x 4P	110%	1 SEC	1 SEC	3.7 A	4.3 A	CT-1	K-K1, L-L1	5 V.A	
C5 TON	5.5KW x 6P	110%	1 SEC	1 SEC	14.1 A	18.5 A	CT-2	K-K1, L-L1	5 V.A	
	1.0KW x 6P	110%	1 SEC	1 SEC	3.3 A	4.7 A	CT-1	K-K1, L-L1	5 V.A	
C7.5 TON	5.5KW x 6P	110%	1 SEC	1 SEC	14.1 A	18.5 A	CT-2	K-K1, L-L1	5 V.A	
	1.0KW x 6P	110%	1 SEC	1 SEC	3.3 A	4.7 A	CT-1	K-K1, L-L1	5 V.A	
C10 TON	9.0KW x 8P	110%	1 SEC	1 SEC	22.5 A	24.8 A	CT-2	K-K1, L-L1	5 V.A	
	1.1KW x 8P	110%	1 SEC	1 SEC	4.0 A	5.4 A	CT-1	K-K1, L-L1	5 V.A	

NOTE

1. 상기 TABLE의 수치는 권고 SETTING 수치이며 MOTOR의 특성 및 현장 조건에 따라 변경 가능함.

LOAD LIMITER 권고 SETTING치

* POWER SOURCE : AC 3¢ 460V 60Hz

극동호이스트(주)

HOIST	MOTOR 용량	LOAD LIMITER 권고 SETTING치			LOAD CURRENT		C.T MODEL	연결단자 NO	C.T 용량	REMARK
		LOAD CURRENT	ADJ START TIME	SHOCK TIME	100%	110%				
C1 TON	2.4KW x 4P	110%	1 SEC	1 SEC	4.8 A	5.2 A	CT-2	K-K1, L-L1	5 V.A	
	0.4KW x 4P	110%	1 SEC	1 SEC	1.3 A	1.5 A	CT-1	K-K1, L-L1	5 V.A	
C2 TON	3.7KW x 4P	110%	1 SEC	1 SEC	7.7 A	8.5 A	CT-2	K-K1, L-L1	5 V.A	
	0.4KW x 4P	110%	1 SEC	1 SEC	1.3 A	1.5 A	CT-1	K-K1, L-L1	5 V.A	
C2.8 TON	5.0KW x 4P	110%	1 SEC	1 SEC	10.0 A	11.5 A	CT-2	K-K1, L-L1	5 V.A	
	1.5KW x 4P	110%	1 SEC	1 SEC	3.5 A	4.3 A	CT-1	K-K1, L-L1	5 V.A	
C3 TON	5.5KW x 4P	110%	1 SEC	1 SEC	10.0 A	11.5 A	CT-2	K-K1, L-L1	5 V.A	
	1.5KW x 4P	110%	1 SEC	1 SEC	3.5 A	4.3 A	CT-1	K-K1, L-L1	5 V.A	
C5 TON	5.5KW x 6P	110%	1 SEC	1 SEC	13.5 A	14.7 A	CT-2	K-K1, L-L1	5 V.A	
	1.0KW x 6P	110%	1 SEC	1 SEC	3.2 A	3.6 A	CT-1	K-K1, L-L1	5 V.A	
C7.5 TON	5.5KW x 6P	110%	1 SEC	1 SEC	13.5 A	14.7 A	CT-2	K-K1, L-L1	5 V.A	
	1.0KW x 6P	110%	1 SEC	1 SEC	3.2 A	3.6 A	CT-1	K-K1, L-L1	5 V.A	
C10 TON	9.0KW x 8P	110%	1 SEC	1 SEC	21.5 A	23.7 A	CT-2	K-K1, L-L1	5 V.A	
	1.1KW x 8P	110%	1 SEC	1 SEC	3.8 A	5.4 A	CT-1	K-K1, L-L1	5 V.A	

NOTE

1. 상기 TABLE의 수치는 권고 SETTING 수치이며 MOTOR의 특성 및 현장 조건에 따라 변경 가능함.

LOAD LIMITER 권고 SETTING치

* POWER SOURCE : AC 3¢ 480V 60Hz

극동호이스트(주)

HOIST	MOTOR 용량	LOAD LIMITER 권고 SETTING치			LOAD CURRENT		C.T MODEL	연결단자 NO	C.T 용량	REMARK
		LOAD CURRENT	ADJ START TIME	SHOCK TIME	100%	110%				
C1 TON	2.4KW x 4P	110%	1 SEC	1 SEC	4.6 A	5.0 A	CT-2	K-K1, L-L1	5 V.A	
	0.4KW x 4P	110%	1 SEC	1 SEC	1.2 A	1.35 A	CT-1	K-K1, L-L1	5 V.A	
C2 TON	3.7KW x 4P	110%	1 SEC	1 SEC	7.3 A	8.2 A	CT-2	K-K1, L-L1	5 V.A	
	0.4KW x 4P	110%	1 SEC	1 SEC	1.2 A	1.35 A	CT-1	K-K1, L-L1	5 V.A	
C2.8 TON	5.0KW x 4P	110%	1 SEC	1 SEC	9.6 A	11.2 A	CT-2	K-K1, L-L1	5 V.A	
	1.5KW x 4P	110%	1 SEC	1 SEC	3.4 A	4.3 A	CT-1	K-K1, L-L1	5 V.A	
C3 TON	5.5KW x 4P	110%	1 SEC	1 SEC	9.6 A	11.2 A	CT-2	K-K1, L-L1	5 V.A	
	1.5KW x 4P	110%	1 SEC	1 SEC	3.4 A	4.3 A	CT-1	K-K1, L-L1	5 V.A	
C5 TON	5.5KW x 6P	110%	1 SEC	1 SEC	12.9 A	14.2 A	CT-2	K-K1, L-L1	5 V.A	
	1.0KW x 6P	110%	1 SEC	1 SEC	3.1 A	3.5 A	CT-1	K-K1, L-L1	5 V.A	
C7.5 TON	5.5KW x 6P	110%	1 SEC	1 SEC	12.9 A	14.2 A	CT-2	K-K1, L-L1	5 V.A	
	1.0KW x 6P	110%	1 SEC	1 SEC	3.1 A	3.5 A	CT-1	K-K1, L-L1	5 V.A	
C10 TON	9.0KW x 8P	110%	1 SEC	1 SEC	20.6 A	22.7 A	CT-2	K-K1, L-L1	5 V.A	
	1.1KW x 8P	110%	1 SEC	1 SEC	3.6 A	5.4 A	CT-1	K-K1, L-L1	5 V.A	

NOTE

1. 상기 TABLE의 수치는 권고 SETTING 수치이며 MOTOR의 특성 및 현장 조건에 따라 변경 가능함.

E.O.C.R 권고 SETTING치

* POWER SOURCE : AC 3¢ 220V 60Hz

극동호이스트(주)

HOIST	MOTOR 용량	MOTOR 정격 전류	DRIVE TYPE	E.O.C.R TYPE	권고 SETTING 치			REMARK
					DELAY TIME	OPERATION TIME	CURRENT	
C1 TON	2.4KW x 4P	10.0 A	1 DRAVE	SS-30	3 SEC	1 SEC	10.0 A	
	0.4KW x 4P	2.7 A	1 DRAVE	SS-05	3 SEC	1 SEC	2.7 A	
C2 TON	3.7KW x 4P	16.0 A	1 DRAVE	SS-30	3 SEC	1 SEC	16.0 A	
	0.4KW x 4P	2.7 A	1 DRAVE	SS-05	3 SEC	1 SEC	2.7 A	
C2.8 TON	5.0KW x 4P	22.8 A	1 DRAVE	SS-30	3 SEC	1 SEC	22.8 A	
	1.5KW x 4P	7.3 A	1 DRAVE	SS-30	3 SEC	1 SEC	7.3 A	
C3 TON	5.5KW x 4P	22.8 A	1 DRAVE	SS-30	3 SEC	1 SEC	22.8 A	
	1.5KW x 4P	7.3 A	1 DRAVE	SS-30	3 SEC	1 SEC	7.3 A	
C5 TON	5.5KW x 6P	28.2 A	1 DRAVE	SS-30	3 SEC	1 SEC	28.2 A	
	1.0KW x 6P	6.7 A	1 DRAVE	SS-30	3 SEC	1 SEC	6.7 A	
C7.5 TON	5.5KW x 6P	28.2 A	1 DRAVE	SS-30	3 SEC	1 SEC	28.2 A	
	1.0KW x 6P	6.7 A	1 DRAVE	SS-30	3 SEC	1 SEC	6.7 A	
C10 TON	9.0KW x 8P	45.0 A	1 DRAVE	SS-60	3 SEC	1 SEC	45.0 A	
	1.1KW x 8P	8.0 A	1 DRAVE	SS-30	3 SEC	1 SEC	8.0 A	

NOTE

1. 상기 TABLE의 수치는 권고 SETTING 수치이며 MOTOR의 특성 및 현장 조건에 따라 변경 가능함.

E.O.C.R 권고 SETTING치

* POWER SOURCE : AC 3¢ 380V 60Hz

극동호이스트(주)

HOIST	MOTOR 용량	1 정격 전류	DRIVE TYPE	E.O.C.R TYPE	권고 SETTING 치			REMARK
					DELAY TIME	OPERATION TIME	CURRENT	
C1 TON	2.4KW x 4P	5.8 A	1 DRAVE	SS-30	3 SEC	1 SEC	5.8 A	
	0.4KW x 4P	1.6 A	1 DRAVE	SS-05	3 SEC	1 SEC	1.6 A%	
C2 TON	3.7KW x 4P	9.3 A	1 DRAVE	SS-30	3 SEC	1 SEC	9.3 A	
	0.4KW x 4P	1.6 A	1 DRAVE	SS-05	3 SEC	1 SEC	1.6 A	
C2.8 TON	5.0KW x 4P	12.2 A	1 DRAVE	SS-30	3 SEC	1 SEC	12.2 A	
	1.5KW x 4P	4.2 A	1 DRAVE	SS-05	3 SEC	1 SEC	4.2 A	
C3 TON	5.5KW x 4P	12.2 A	1 DRAVE	SS-30	3 SEC	1 SEC	12.2 A	
	1.5KW x 4P	4.2 A	1 DRAVE	SS-05	3 SEC	1 SEC	4.2 A	
C5 TON	5.5KW x 6P	16.3 A	1 DRAVE	SS-30	3 SEC	1 SEC	16.3 A	
	1.0KW x 6P	3.9 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.9 A	
C7.5 TON	5.5KW x 6P	16.3 A	1 DRAVE	SS-30	3 SEC	1 SEC	16.3 A	
	1.0KW x 6P	3.9 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.9 A	
C10 TON	9.0KW x 8P	26.0 A	1 DRAVE	SS-30	3 SEC	1 SEC	26.0 A	
	1.1KW x 8P	4.6 A	1 DRAVE	SS-05	3 SEC	1 SEC	4.6 A	

NOTE

1. 상기 TABLE의 수치는 권고 SETTING 수치이며 MOTOR의 특성 및 현장 조건에 따라 변경 가능함.

E.O.C.R 권고 SETTING치

* POWER SOURCE : AC 3Φ 440V 60Hz

극동호이스트(주)

HOIST	MOTOR 용량	MOTOR 정격 전류	DRIVE TYPE	E.O.C.R TYPE	권고 SETTING 치			REMARK
					DELAY TIME	OPERATION TIME	CURRENT	
C1 TON	2.4KW x 4P	5.0 A	1 DRAVE	SS-30	3 SEC	1 SEC	5.0 A	
	0.4KW x 4P	1.4 A	1 DRAVE	SS-05	3 SEC	1 SEC	1.4 A	
C2 TON	3.7KW x 4P	8.0 A	1 DRAVE	SS-30	3 SEC	1 SEC	8.0 A	
	0.4KW x 4P	1.4 A	1 DRAVE	SS-05	3 SEC	1 SEC	1.4 A	
C2.8 TON	5.0KW x 4P	10.5 A	1 DRAVE	SS-30	3 SEC	1 SEC	10.5 A	
	1.5KW x 4P	3.7 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.7 A	
C3 TON	5.5KW x 4P	10.5 A	1 DRAVE	SS-30	3 SEC	1 SEC	10.5 A	
	1.5KW x 4P	3.7 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.7 A	
C5 TON	5.5KW x 6P	14.1 A	1 DRAVE	SS-30	3 SEC	1 SEC	14.1 A	
	1.0KW x 6P	3.3 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.3 A	
C7.5 TON	5.5KW x 6P	14.1 A	1 DRAVE	SS-30	3 SEC	1 SEC	14.1 A	
	1.0KW x 6P	3.3 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.3 A	
C10 TON	9.0KW x 8P	22.5 A	1 DRAVE	SS-30	3 SEC	1 SEC	22.5 A	
	1.1KW x 8P	4.0 A	1 DRAVE	SS-05	3 SEC	1 SEC	4.0 A	

NOTE

1. 상기 TABLE의 수치는 권고 SETTING 수치이며 MOTOR의 특성 및 현장 조건에 따라 변경 가능함.

E.O.C.R 권고 SETTING치

* POWER SOURCE : AC 3¢ 460V 60Hz

극동호이스트(주)

HOIST	MOTOR 용량	MOTOR 정격 전류	DRIVE TYPE	E.O.C.R TYPE	권고 SETTING 치			REMARK
					DELAY TIME	OPERATION TIME	CURRENT	
C1 TON	2.4KW x 4P	4.8 A	1 DRAVE	SS-30	3 SEC	1 SEC	4.8 A	
	0.4KW x 4P	1.3 A	1 DRAVE	SS-05	3 SEC	1 SEC	1.4 A	
C2 TON	3.7KW x 4P	7.7 A	1 DRAVE	SS-30	3 SEC	1 SEC	7.7 A	
	0.4KW x 4P	1.3 A	1 DRAVE	SS-05	3 SEC	1 SEC	1.4 A	
C2.8 TON	5.0KW x 4P	10.0 A	1 DRAVE	SS-30	3 SEC	1 SEC	10.0 A	
	1.5KW x 4P	3.5 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.5 A	
C3 TON	5.5KW x 4P	10.0 A	1 DRAVE	SS-30	3 SEC	1 SEC	10.0 A	
	1.5KW x 4P	3.5 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.5 A	
C5 TON	5.5KW x 6P	13.5 A	1 DRAVE	SS-30	3 SEC	1 SEC	13.5 A	
	1.0KW x 6P	3.2 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.2 A	
C7.5 TON	5.5KW x 6P	13.5 A	1 DRAVE	SS-30	3 SEC	1 SEC	13.5 A	
	1.0KW x 6P	3.2 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.2 A	
C10 TON	9.0KW x 8P	21.5 A	1 DRAVE	SS-30	3 SEC	1 SEC	21.5 A	
	1.1KW x 8P	3.8 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.8 A	

NOTE

1. 상기 TABLE의 수치는 권고 SETTING 수치이며 MOTOR의 특성 및 현장 조건에 따라 변경 가능함.

E.O.C.R 권고 SETTING치

★ POWER SOURCE : AC 3¢ 480V 60Hz

극동호이스트(주)

HOIST	MOTOR 용량	MOTOR 정격 전류	DRIVE TYPE	E.O.C.R TYPE	권고 SETTING 치			REMARK
					DELAY TIME	OPERATION TIME	CURRENT	
C1 TON	2.4KW x 4P	4.6 A	1 DRAVE	SS-30	3 SEC	1 SEC	4.6 A	
	0.4KW x 4P	1.2 A	1 DRAVE	SS-05	3 SEC	1 SEC	1.4 A	
C2 TON	3.7KW x 4P	7.3 A	1 DRAVE	SS-30	3 SEC	1 SEC	7.3 A	
	0.4KW x 4P	1.2 A	1 DRAVE	SS-05	3 SEC	1 SEC	1.4 A	
C2.8 TON	5.0KW x 4P	9.6 A	1 DRAVE	SS-30	3 SEC	1 SEC	9.6 A	
	1.5KW x 4P	3.4 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.4 A	
C3 TON	5.5KW x 4P	9.6 A	1 DRAVE	SS-30	3 SEC	1 SEC	9.6 A	
	1.5KW x 4P	3.4 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.4 A	
C5 TON	5.5KW x 6P	12.9 A	1 DRAVE	SS-30	3 SEC	1 SEC	12.9 A	
	1.0KW x 6P	3.1 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.1 A	
C7.5 TON	5.5KW x 6P	12.9 A	1 DRAVE	SS-30	3 SEC	1 SEC	12.9 A	
	1.0KW x 6P	3.1 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.1 A	
C10 TON	9.0KW x 8P	20.6 A	1 DRAVE	SS-30	3 SEC	1 SEC	20.6 A	
	1.1KW x 8P	3.6 A	1 DRAVE	SS-05	3 SEC	1 SEC	3.6 A	

NOTE

1. 상기 TABLE의 수치는 권고 SETTING 수치이며 MOTOR의 특성 및 현장 조건에 따라 변경 가능함.

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	132 S
4. RATED POWER	5.5 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	220 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 RPM
11. FULL LOAD CURRENT	28.8 A
12. LOCKED ROTOR CURRENT	136.6 A
13. MINIMUM STARTING VOLTAGE	200 V
14. EFFICIENCY AT 100% RATED LOAD	81.5 %
15. POWER FACTOR AT 100% RATED LOAD	77 %
16. FULL LOAD TORQUE	8.3 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6206zz OPL : 6206zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	132 S
4. RATED POWER	5.5 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	380 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 RPM
11. FULL LOAD CURRENT	12.2 A
12. LOCKER ROTOR CURRENT	72.9 A
13. MINIMUM STARTING VOLTAGE	345 V
14. EFFICIENCY AT 100% RATED LOAD	81.5 %
15. POWER FACTOR AT 100% RATED LOAD	77 %
16. FULL LOAD TORQUE	8.31 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6206zz OPL : 6206zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	132 S
4. RATED POWER	5.5 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	440 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 RPM
11. FULL LOAD CURRENT	10.5 A
12. LOCKER ROTOR CURRENT	63.0 A
13. MINIMUM STARTING VOLTAGE	400 V
14. EFFICIENCY AT 100% RATED LOAD	81.5 %
15. POWER FACTOR AT 100% RATED LOAD	77 %
16. FULL LOAD TORQUE	8.3 KGM
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6206zz OPL : 6206zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	132 S
4. RATED POWER	5.5 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	460 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 RPM
11. FULL LOAD CURRENT	10.0 A
12. LOCKER ROTOR CURRENT	60.0 A
13. MINIMUM STARTING VOLTAGE	418 V
14. EFFICIENCY AT 100% RATED LOAD	81.5 %
15. POWER FACTOR AT 100% RATED LOAD	77 %
16. FULL LOAD TORQUE	8.31 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6206zz OPL : 6206zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	132 S
4. RATED POWER	5.5 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	480 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 RPM
11. FULL LOAD CURRENT	9.6 A
12. LOCKER ROTOR CURRENT	57.5 A
13. MINIMUM STARTING VOLTAGE	436 V
14. EFFICIENCY AT 100% RATED LOAD	81.5 %
15. POWER FACTOR AT 100% RATED LOAD	77 %
16. FULL LOAD TORQUE	8.3 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6206zz OPL : 6206zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	1.5 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	220 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 RPM
11. FULL LOAD CURRENT	7.3 A
12. LOCKED ROTOR CURRENT	41.8 A
13. MINIMUM STARTING VOLTAGE	200 V
14. EFFICIENCY AT 100% RATED LOAD	73 %
15. POWER FACTOR AT 100% RATED LOAD	75 %
16. FULL LOAD TORQUE	1.95 KG/M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6206zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	1.5 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	380 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 RPM
11. FULL LOAD CURRENT	4.2 A
12. LOCKED ROTOR CURRENT	24.2 A
13. MINIMUM STARTING VOLTAGE	345 V
14. EFFICIENCY AT 100% RATED LOAD	73 %
15. POWER FACTOR AT 100% RATED LOAD	75 %
16. FULL LOAD TORQUE	1.95 KG·M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T.E.N.V
19. TYPE OF BEARING	PL : 6205zz OPL : 6206zz
20. MOUNTING	HORIZONTAL
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	GREASE
23. STARTING METHOD	FULL VOLTAGE

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	1.5 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	440 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 RPM
11. FULL LOAD CURRENT	3.7 A
12. LOCKED ROTOR CURRENT	20.9 A
13. MINIMUM STARTING VOLTAGE	400 V
14. EFFICIENCY AT 100% RATED LOAD	73 %
15. POWER FACTOR AT 100% RATED LOAD	75 %
16. FULL LOAD TORQUE	1.95 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6206zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	1.5 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	460 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 RPM
11. FULL LOAD CURRENT	3.5 A
12. LOCKED ROTOR CURRENT	20.0 A
13. MINIMUM STARTING VOLTAGE	418 V
14. EFFICIENCY AT 100% RATED LOAD	73 %
15. POWER FACTOR AT 100% RATED LOAD	75 %
16. FULL LOAD TORQUE	1.95 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6206zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	1.5 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	480 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 RPM
11. FULL LOAD CURRENT	3.4 A
12. LOCKED ROTOR CURRENT	19.2 A
13. MINIMUM STARTING VOLTAGE	436 V
14. EFFICIENCY AT 100% RATED LOAD	73 %
15. POWER FACTOR AT 100% RATED LOAD	75 %
16. FULL LOAD TORQUE	1.95 KGM
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6206zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 S
4. RATED POWER	0.75 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	220 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1760 RPM
11. FULL LOAD CURRENT	4.1 A
12. LOCKED ROTOR CURRENT	22.1 A
13. MINIMUM STARTING VOLTAGE	200 V
14. EFFICIENCY AT 100% RATED LOAD	66 %
15. POWER FACTOR AT 100% RATED LOAD	73.5 %
16. FULL LOAD TORQUE	1.02 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1.SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 S
4. RATED POWER	0.75 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	380 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1760 RPM
11. FULL LOAD CURRENT	2.4 A
12. LOCKED ROTOR CURRENT	12.8 A
13. MINIMUM STARTING VOLTAGE	345 V
14. EFFICIENCY AT 100% RATED LOAD	66 %
15. POWER FACTOR AT 100% RATED LOAD	73.5 %
16. FULL LOAD TORQUE	1.02 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 S
4. RATED POWER	0.75 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	440 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1760 RPM
11. FULL LOAD CURRENT	2.0 A
12. LOCKED ROTOR CURRENT	11.1 A
13. MINIMUM STARTING VOLTAGE	400 V
14. EFFICIENCY AT 100% RATED LOAD	66 %
15. POWER FACTOR AT 100% RATED LOAD	73.5 %
16. FULL LOAD TORQUE	1.02 KGM
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 S
4. RATED POWER	0.75 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	460 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1760 RPM
11. FULL LOAD CURRENT	2.0 A
12. LOCKED ROTOR CURRENT	10.6 A
13. MINIMUM STARTING VOLTAGE	418 V
14. EFFICIENCY AT 100% RATED LOAD	66 %
15. POWER FACTOR AT 100% RATED LOAD	73.5 %
16. FULL LOAD TORQUE	1.02 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 S
4. RATED POWER	0.75 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	480 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1760 RPM
11. FULL LOAD CURRENT	1.9 A
12. LOCKED ROTOR CURRENT	10.2 A
13. MINIMUM STARTING VOLTAGE	436 V
14. EFFICIENCY AT 100% RATED LOAD	66 %
15. POWER FACTOR AT 100% RATED LOAD	73.5 %
16. FULL LOAD TORQUE	1.02 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 S
4. RATED POWER	0.5 KW x 6 P
5. RATED VOLTAGE AND FREQUENCY	220 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1160 RPM
11. FULL LOAD CURRENT	3.4 A
12. LOCKED ROTOR CURRENT	16.4 A
13. MINIMUM STARTING VOLTAGE	200 V
14. EFFICIENCY AT 100% RATED LOAD	64 %
15. POWER FACTOR AT 100% RATED LOAD	59.5 %
16. FULL LOAD TORQUE	0.80 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 S
4. RATED POWER	0.5 KW x 6 P
5. RATED VOLTAGE AND FREQUENCY	380 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1160 RPM
11. FULL LOAD CURRENT	2.0 A
12. LOCKED ROTOR CURRENT	9.5 A
13. MINIMUM STARTING VOLTAGE	345 V
14. EFFICIENCY AT 100% RATED LOAD	64 %
15. POWER FACTOR AT 100% RATED LOAD	59.5 %
16. FULL LOAD TORQUE	0.80 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 S
4. RATED POWER	0.5 KW x 6 P
5. RATED VOLTAGE AND FREQUENCY	440 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1160 RPM
11. FULL LOAD CURRENT	1.7 A
12. LOCKED ROTOR CURRENT	8.2 A
13. MINIMUM STARTING VOLTAGE	400 V
14. EFFICIENCY AT 100% RATED LOAD	64 %
15. POWER FACTOR AT 100% RATED LOAD	59.5 %
16. FULL LOAD TORQUE	0.80 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 S
4. RATED POWER	0.5 KW x 6 P
5. RATED VOLTAGE AND FREQUENCY	460 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1160 RPM
11. FULL LOAD CURRENT	1.7 A
12. LOCKED ROTOR CURRENT	7.9 A
13. MINIMUM STARTING VOLTAGE	418 V
14. EFFICIENCY AT 100% RATED LOAD	64 %
15. POWER FACTOR AT 100% RATED LOAD	59.5 %
16. FULL LOAD TORQUE	0.80 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 S
4. RATED POWER	0.5 KW x 6 P
5. RATED VOLTAGE AND FREQUENCY	480 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1160 RPM
11. FULL LOAD CURRENT	1.6 A
12. LOCKED ROTOR CURRENT	7.5 A
13. MINIMUM STARTING VOLTAGE	436 V
14. EFFICIENCY AT 100% RATED LOAD	64 %
15. POWER FACTOR AT 100% RATED LOAD	59.5 %
16. FULL LOAD TORQUE	0.80 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 M
4. RATED POWER	0.8/0.4 KW x 4/8 P
5. RATED VOLTAGE AND FREQUENCY	220 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 / 850 RPM
11. FULL LOAD CURRENT	4.8/4.25 A
12. LOCKED ROTOR CURRENT	14.2/13.6 A
13. MINIMUM STARTING VOLTAGE	200 V
14. EFFICIENCY AT 100% RATED LOAD	72.8/65.8 %
15. POWER FACTOR AT 100% RATED LOAD	82.3/75 %
16. FULL LOAD TORQUE	0.80 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 M
4. RATED POWER	0.8/0.4 KW x 4/8 P
5. RATED VOLTAGE AND FREQUENCY	380 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 / 850 RPM
11. FULL LOAD CURRENT	2.78/2.63 A
12. LOCKED ROTOR CURRENT	9.2/6.3 A
13. MINIMUM STARTING VOLTAGE	345 V
14. EFFICIENCY AT 100% RATED LOAD	72.8/65.8 %
15. POWER FACTOR AT 100% RATED LOAD.	82.3/75 %
16. FULL LOAD TORQUE	0.80 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 M
4. RATED POWER	0.8/0.4 KW x 4/8 P
5. RATED VOLTAGE AND FREQUENCY	440 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 / 850 RPM
11. FULL LOAD CURRENT	2.4/2.27 A
12. LOCKED ROTOR CURRENT	8.6/6.21 A
13. MINIMUM STARTING VOLTAGE	400 V
14. EFFICIENCY AT 100% RATED LOAD	72.8/65.8 %
15. POWER FACTOR AT 100% RATED LOAD	82.3/75 %
16. FULL LOAD TORQUE	0.80 KGM
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 M
4. RATED POWER	0.8/0.4 KW x 4/8 P
5. RATED VOLTAGE AND FREQUENCY	460 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 / 850 RPM
11. FULL LOAD CURRENT	2.3/2.17 A
12. LOCKED ROTOR CURRENT	8.5/6.18 A
13. MINIMUM STARTING VOLTAGE	418 V
14. EFFICIENCY AT 100% RATED LOAD	72.8/65.8 %
15. POWER FACTOR AT 100% RATED LOAD	82.3/75 %
16. FULL LOAD TORQUE	0.80 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL 6205zz OPL 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 M
4. RATED POWER	0.8/0.4 KW x 4/8 P
5. RATED VOLTAGE AND FREQUENCY	480 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1750 / 850 RPM
11. FULL LOAD CURRENT	2.3/2.1 A
12. LOCKED ROTOR CURRENT	8.4/6.15 A
13. MINIMUM STARTING VOLTAGE	436 V
14. EFFICIENCY AT 100% RATED LOAD	72.8/65.8 %
15. POWER FACTOR AT 100% RATED LOAD	82.3/75 %
16. FULL LOAD TORQUE	0.80 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	0.5/025 KW x 6/12 P
5. RATED VOLTAGE AND FREQUENCY	220 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1050/460 RPM
11. FULL LOAD CURRENT	3.2/3.6 A
12. STARTING CURRENT AT RATED VOLTAGE	12.8/10.8 A
13. MINIMUM STARTING VOLTAGE	200 V
14. EFFICIENCY AT 100% RATED LOAD	57.5/35 %
15. POWER FACTOR AT 100% RATED LOAD	64.5/50 %
16. STARTING TORQUE	0.757/0.506 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	0.5/025 KW x 6/12 P
5. RATED VOLTAGE AND FREQUENCY	380 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1050/460 RPM
11. FULL LOAD CURRENT	1.85/2.08 A
12. STARTING CURRENT AT RATED VOLTAGE	7.41/6.25 A
13. MINIMUM STARTING VOLTAGE	345 V
14. EFFICIENCY AT 100% RATED LOAD	57.5/35 %
15. POWER FACTOR AT 100% RATED LOAD	64.5/50 %
16. STARTING TORQUE	0.757/0.506 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	0.5/025 KW x 6/12 P
5. RATED VOLTAGE AND FREQUENCY	440 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1.0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1050/460 RPM
11. FULL LOAD CURRENT	1.6/1.8 A
12. STARTING CURRENT AT RATED VOLTAGE	6.4/5.4 A
13. MINIMUM STARTING VOLTAGE	400 V
14. EFFICIENCY AT 100% RATED LOAD	57.5/35 %
15. POWER FACTOR AT 100% RATED LOAD	64.5/50 %
16. STARTING TORQUE	0.757/0.506 SKG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T.E.N.V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	0.5/025 KW x 6/12 P
5. RATED VOLTAGE AND FREQUENCY	460 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1050/460 RPM
11. FULL LOAD CURRENT	1.5/1.72 A
12. STARTING CURRENT AT RATED VOLTAGE	6.2/5.3 A
13. MINIMUM STARTING VOLTAGE	418 V
14. EFFICIENCY AT 100% RATED LOAD	57.5/35 %
15. POWER FACTOR AT 100% RATED LOAD	64.5/50 .%
16. STARTING TORQUE	0.757/0.506 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	0.5/025 KW x 6/12 P
5. RATED VOLTAGE AND FREQUENCY	480 V 60 Hz
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. SERVICE FACTOR AND RATTING	1 . 0 , 30 MIN
8. LOCATION AND INSULATION CLASS	INDOOR, OUTDOOR, B CLASS
9. DESIGN TRMPERATURE RISE(BY RESISTANCE)	80 ℃
10. FULL LOAD SPEED	1050/460 RPM
11. FULL LOAD CURRENT	1.4/1.6 A
12. STARTING CURRENT AT RATED VOLTAGE	5.82/4.93 A
13. MINIMUM STARTING VOLTAGE	436 V
14. EFFICIENCY AT 100% RATED LOAD	57.5/35 %
15. POWER FACTOR AT 100% RATED LOAD	64.5/50 %
16. STARTING TORQUE	0.757/0.506 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6205zz OPL : 6204zz
20. MOUNTING	H O R I Z O N T A L
21. MAXIMUM AMBIENT TEMPURE	40 ℃
22. BEARING LUBRICATION	G R E A S E
23. STARTING METHOD	F U L L V O L T A G E

KISWIRE
KISWIRE QINGDAO LTD.
No.600 Chuangyu Road, Qingdao Development Zone, Shangdong, P.R. China
Tel : 86-532-86821916, Fax :86-532-86821949 www.kiswire.com

ISSUE NO. PW9034

DATE *Jan. 29, 2010*

MILL TEST CERTIFICATE

THIS IS TO CERTIFY THAT THE MATERIAL DESCRIBED BELOW WAS MANUFACTURED IN ACCORDANCE WITH KISWIRE LTD SPECIFICATION AND APPLICABLE SECTIONS OF KSD 3514 (B Grade)

TO MESSRS

MATERIAL DESCRIPTION UNGALVANIZED STEEL WIRE ROPE

06X37+FC 1000M X 5 REEL

EX NO. PW9034 T/T NO.

ORDER NO. REEL NO. 1~5 SAMPLING NO. 1

DIAMETER OF ROPE 12.5 mm TYPE OF CORE Fiber Core

SPECIFIED BREAKING LOAD 88.5 kN SAMPLE BROKE AT 91.7 kN

WT. OF ZINC COATING OF OUTER WIRE MIN. g/m² MAX. g/m²

ROPE LAY RHRL LAY LENGTH 81.9 mm

LUBRICATION A-2

CHEMICAL ANALYSIS OF WIRE ROD

CHARGE NO.	C×100	Si×100	Mn×100	P×1000	S×1000
050697E	70	23	72	15	8

DATE OF SAMPLE TEST *Jan. 15, 2010*

CHIEF INSPECTOR D.S.NA
KISWIRE QINGDAO LTD.

SUB VENDOR LIST

구분	NO	DESCRIPTION	SUB VENDOR	TEL NO.	REMARK
기계	1	WIRE ROPE	만호 로우프(주)	051-332-3131	
			고려제강 (주)	02-776-4131	
	2	MAGNET CORE	극동호이스트(주)	031-491-5311	
	3	DRUM	극동호이스트(주)	031-491-5311	
	4	GEAR	극동호이스트(주)	031-491-5311	
	5	HOOK ASS'Y	제 일 단 철	032-527-2817	
			대 흥 단 조	032-561-0541	
	6	MIDDLE SHAFT	극동호이스트(주)	031-491-5311	
	7	RAIL CHANNEL ANGLE	인천제철(주)	032-763-5000	
			강원산업(주)	032-756-8881	
전기	8	MAG CONTACTOR	L.G 전선 (주)	02-273-4140	전 품
			(주) 대 륙	02-242-4141	한국공업협회
			(주) 대성디에스	055-338-3125	
	9	E.O.C.R	삼화기연 (주)	032-62-1331	K.S
			아산 전기	02-2636-8035	
	10	PUSH BUTTON	한영전기 (주)	02-742-0430	전 품
			(주)케이지오토	02-247-3131	전 품
			반도기계 (주)	031-495-8353-4	전 품
	11	LOAD LIMITER	보 창 기 전	032-431-0150	산 안 검
			반도기계 (주)	031-495-8353-4	산 안 검
			정호 엔지니어링	02-681-0553	산 안 검
	12	SILICON	반도기계 (주)	031-495-8353-4	
			아산 전기	02-2636-8035	
			보 창 기 전	032-431-0150	

EN 60 947-5-1			
Clause	Requirement – Test	Result - Remark	Verdict
	Annex C of IEC 60947-1		P

Annex C	**Degree of protection of enclosed control circuit-devices**		P
C.1	**Scope**		
	This annex applies to degrees of protection of enclosed switchgear and control gear at rated voltages not exceeding 1000 V a.c. or 1500 V d.c. hereafter referred as "equipment"		
C.2	**Object**		
	Clause 2 of IEC 60529 applies with additional requirements of this annex		
C.3	**Definitions**		
	Clause 3 of IEC 60529 applies except that "Enclosure" is replaced by the following:		
	"A part providing a specified degree of protection of equipment against certain external influences and a specified degree of protection against approach to or contact with live parts and moving parts"		
C.4	**Designation**		
	Clause 4 of IEC 60529 applies except for letters H, M and S		N/A
C.5	**Degrees of protection against access to hazardous parts and against ingress of solid foreign objects indicated by the first characteristic numeral**		
	Clause 5 of IEC 60529 applies	6	P
C.6	**Degrees of protection against ingress of water indicated by the second characteristic numeral**		
	Clause 6 of IEC 60529 applies	5	P
C.7	**Degrees of protection against access to hazardous parts indicated by the additional letter**		N/A
	Clause7 of IEC 60529 applies		N/A
C.8	**Supplementary letters**		N/A
	Clause 8 of IEC 60529 applies		N/A
C.9	**Examples of designations with IP Code**		P
	Clause 9 of IEC 60529 applies		P
C.10	**Marking**		P

C.5, C.6항이 IP65 PASS를 뜻함.