제 2015 - 47427 호

안 전 인 증 서

(사업장명) 극동호이스트(주)

(소 재 지) (425-833)경기도 안산시 성곡동630-2 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

KD5 (5Ton) /15-AQ2AC-00229

인 증 기 준

고용노동부 고시 제2012 - 33호 (위험기계,기구 의무안전인증 고시)

인 증 조 건

2015년 01월 27일

한국산업안전보건공단이사장

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)	KD5	용 량 (등 급)	5 Ton

산업안전보건법 제 34조 및 같은 법 시행규칙 제58조의4에 따라 실시한

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

결과가 [√] 적 합 [ ] 부적합 함을 통지합니다.

2015년 01월 09일

인증심사원 강성두 변명수 (서명 또는 인)

한국산업안전보건공단 경기서부지사장

서 면 심 사 서 류

형식 번호 : KD5

극 동 호 이 스 트 (주)

工場 : 경기도 안산시 단원구 해봉로 119 (반월공단607-14)

電話 : 031) 491 - 5311

FAX : 031) 494 - 5315

불법복제 및 배포금지

동 일 형 식 일 람 표

사업장명	극동호이스트㈜	개정일자 및 번호	2015년 01월 06일	인증번호	
형식 및 모델		동일 형식 인정범위 및 내역			비 고
형식	모델	권상속도 (m/min)	횡행속도 (m/min)	양정(m)	횡행방식	
KD5	KD5-L6-M	8.4 5.6 4.2	고속:24m/min 저속:16m/min 듀얼고속: 24/12m/min 듀얼저속: 16/8m/min	6	모터구동식	
	KD5-L9-M			9		
	KD5-L12-M			12		
	KD5-L18-M			18		
	KD5-L24-M			24		
	KD5-L30-M			30		
	KD5-L36-M			36		추가
	KD5-L40-M			40		추가
	KD5-L18-M-H			18		
	KD5-L24-M-H			24		
	KD5-L30-M-H			30		
	KD5-L36-M-H			36		추가
	KD5-L40-M-H			40		추가
	KD5-L6-S		-	6	정치식	
	KD5-L9-S			9		
	KD5-L12-S			12		
	KD5-L18-S			18		
	KD5-L24-S			24		
	KD5-L30-S			30		
	KD5-L36-S			36		추가
	KD5-L40-S			40		추가
	KD5-L6-P			6	수동구동식	
	KD5-L9-P			9		
	KD5-L12-P			12		
	KDC5-L6-M	5.6/0.56	고속:24m/min 저속:16m/min 듀얼고속: 24/12m/min 듀얼저속: 16/8m/min	6	모터구동식	
	KDC5-L9-M			9		
	KDC5-L12-M			12		
	KDC5-L18-M			18		
	KDC5-L24-M			24		
	KDC5-L30-M			30		
	KDC5-L36-M			36		추가
	KDC5-L40-M			40		추가
	KDC5-L18-M-H			18		
	KDC5-L24-M-H			24		
	KDC5-L30-M-H			30		
	KDC5-L36-M-H			36		추가
	KDC5-L40-M-H			40		추가
	KDC5-L6-S		-	6	정치식	
	KDC5-L9-S			9		
	KDC5-L12-S			12		
	KDC5-L18-S			18		
	KDC5-L24-S			24		
	KDC5-L30-S			30		
	KDC5-L36-S			36		추가
	KDC5-L40-S			40		추가
	KDC5-L6-P			6	수동구동식	
	KDC5-L9-P			9		
	KDC5-L12-P			12		

제 2012-BJ-0009 호

안 전 인 증 서

정호엔지니어링

경기도 광명시 노동사동 440-5

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

품 목

양중기용 과부하방지장치

형식·모델/용량·등급/인증번호

형식·모델	용량·등급	인증번호
JDL-100	J-2	12-AV2BJ-0009

인 증 기 준

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

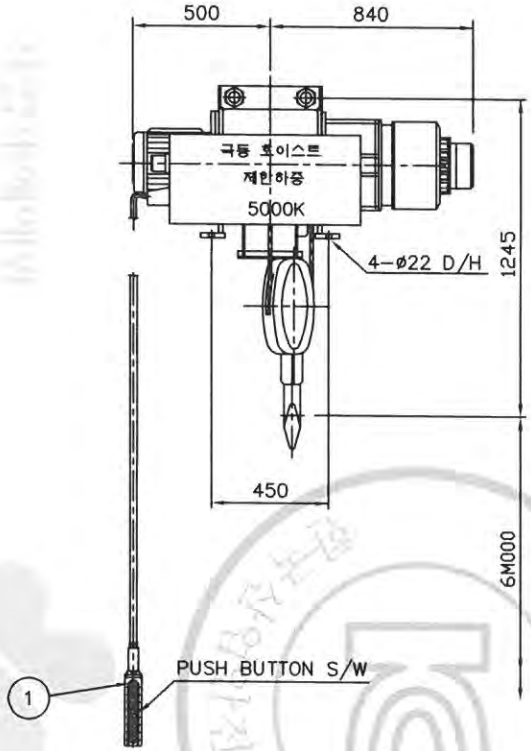
인 증 조 건

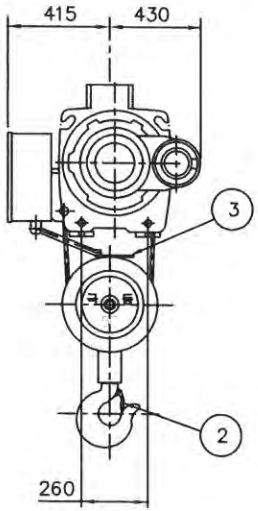
아래 주소에서 생산되는 제품에 한함.

정호엔지니어링, 경기도 광명시 노동사동 440-5

2012년 06월 11일

한국산업안전보건공단 이사장



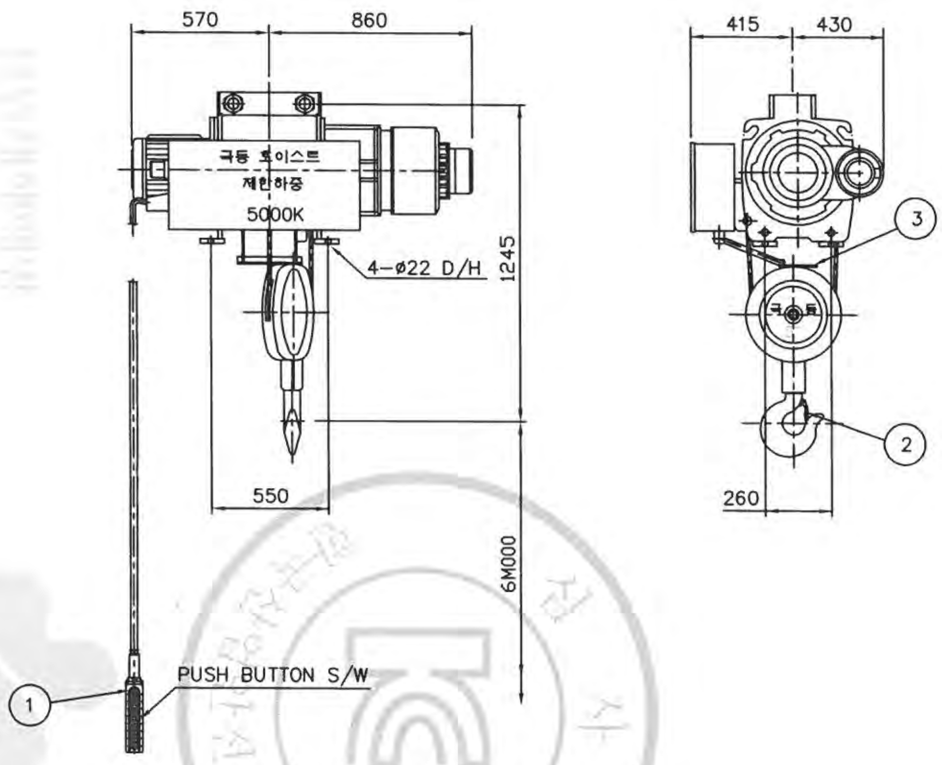


SPECIFICATION		
RATED LOAD		5000 KG
TESTING LOAD		6250 KG
LIFT		6 M
RATING		30 MIN
HOISTING	SPEED	5.6 / 0.56 M/MIN
	MOTOR	5.5 / 1.0 KW x 6 P
WIRE ROPE		(6x37) ø16 x 2 FALLS
POWER SOURCE		AC3ø 220V(380,440,460,480)V 60Hz
COLOR		10 B 3/5
WEIGHT		520 KG

NO.	DESCRIPTIONS	MT'L	SET QT'Y	SET QT'Y	UNIT WEIGHT KG.	TOTAL WEIGHT KG.	REAMERKS
4							
3	UPPER LIMIT S/W	SS400		1			
2	SAFETY LATCH	SPC		1			
1	EMERGENCY S/W	—		1			

PROJECT				DATE: 20 . . .
TITLE	KDC5 - L6 - S ARRANGEMENT DRAWING FOR HOIST			SCALE: A3/20 /
DRAWN	DESIGNED	CHECKED	APPROVED	REF DRAWING

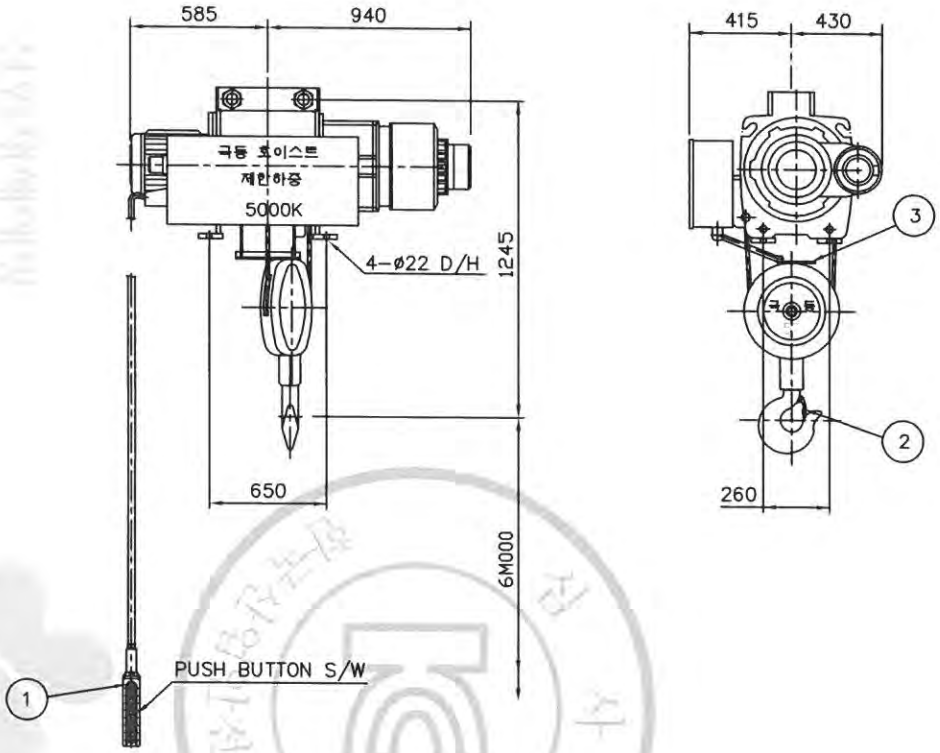
극동호이스트 주식회사 KUK DONG HOIST CO., LTD.	SHEET NO.	DRAWING NO. KDC5S6000



SPECIFICATION		
RATED LOAD		5000 KG
TESTING LOAD		6250 KG
LIFT		9 M
RATING		30 MIN
HOISTING	SPEED	5.6 / 0.56 M/MIN
	MOTOR	5.5 / 1.0 KW x 6 P
WIRE ROPE		(6x37) ø16 x 2 FALLS
POWER SOURCE		AC3ø 220V(380,440,460,480)V 60Hz
COLOR		10 B 3/5
WEIGHT		550 KG

NO.	DESCRIPTIONS	MT'L	SET QT'Y	SET QT'Y	UNIT WEIGHT KG.	TOTAL WEIGHT KG.	REAMERKS
5							
4							
3	UPPER LIMIT S/W	SS400		1			
2	SAFETY LATCH	SPC		1			
1	EMERGENCY S/W	—		1			

PROJECT				DATE: 20 . . .
TITLE	KDC5 – L9 – S ARRANGEMENT DRAWING FOR HOIST			SCALE: A3/20 /
DRAWN	DESIGNED	CHECKED	APPROVED	REF DRAWING
극동호이스트 주식회사 KUK DONG HOIST CO., LTD.		SHEET NO.		DRAWING NO. KDC5S9000



SPECIFICATION		
RATED LOAD		5000 KG
TESTING LOAD		6250 KG
LIFT		12 M
RATING		30 MIN
HOISTING	SPEED	5.6 / 0.56 M/MIN
	MOTOR	5.5 / 1.0 KW x 6 P
WIRE ROPE		(6x37) ø16 x 2 FALLS
POWER SOURCE		AC3ø 220V(380,440,460,480)V 60Hz
COLOR		10 B 3/5
WEIGHT		585 KG

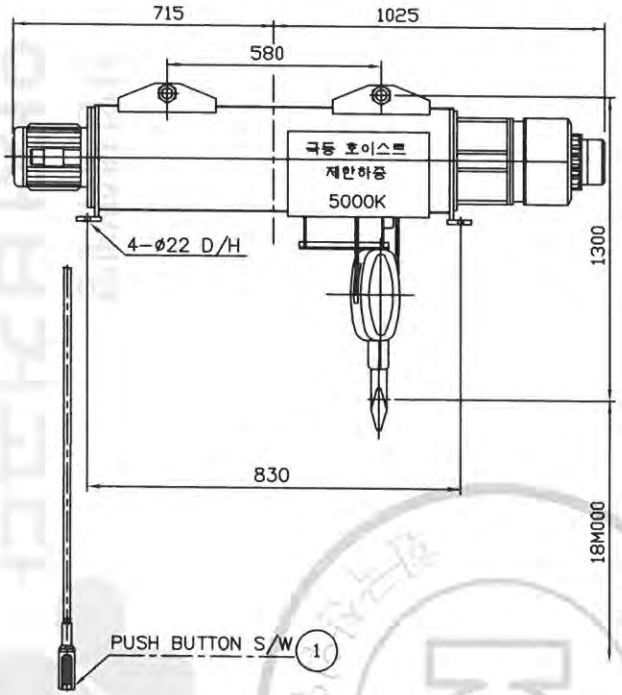
NO.	DESCRIPTIONS	MT'L	SET QT'Y	SET QT'Y	UNIT WEIGHT KG.	TOTAL WEIGHT KG.	REAMERKS
5							
4							
3	UPPER LIMIT S/W	SS41		1			
2	SAFETY LATCH	SPC		1			
1	EMERGENCY S/W	—		1			

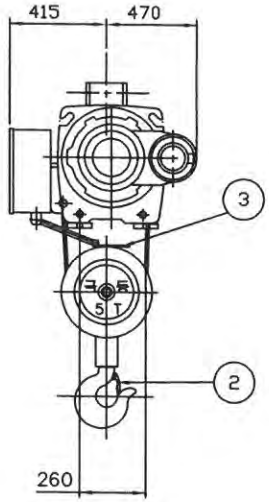
PROJECT				DATE: 20 . . .
TITLE	KDC5 - L12 - S ARRANGEMENT DRAWING FOR HOIST			SCALE: A3/20 /
DRAWN	DESIGNED	CHECKED	APPROVED	REF DRAWING

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

SHEET NO.

DRAWING NO. KDC5S1200

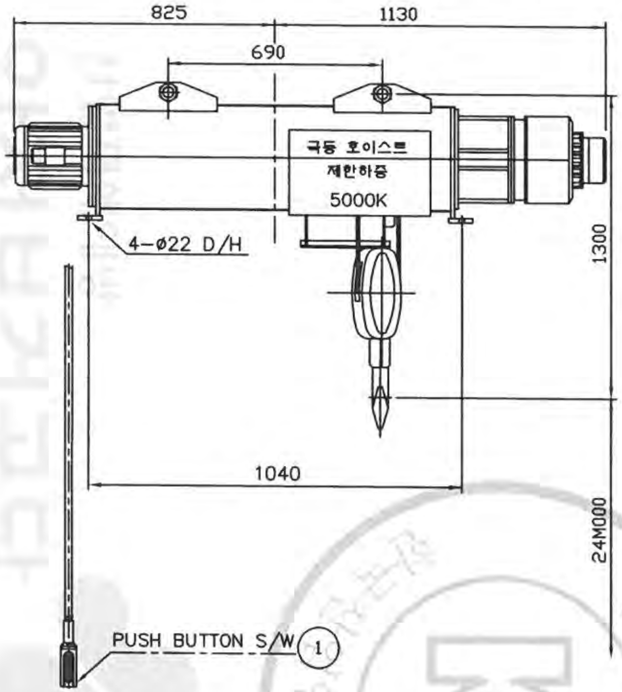


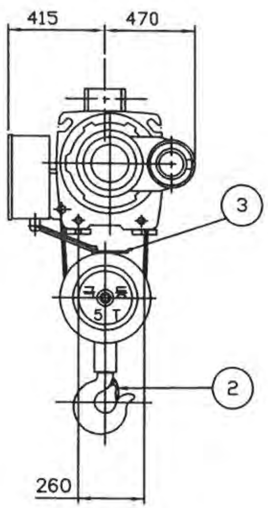


SPECIFICATION		
RATED LOAD		5000 KG
TESTING LOAD		6250 KG
LIFT		18 M
RATING		30 MIN
HOISTING	SPEED	5.6 / 0.56 M/MIN
	MOTOR	5.5 / 1.0 KW x 6 P
WIRE ROPE		(6x37) ø16 x 2 FALLS
POWER SOURCE		AC3ø 220V(380,440,460,480)V 60Hz
COLOR		10 B 3/5
WEIGHT		690 KG

NO.	DESCRIPTIONS	MT'L	SET QT'Y	SET QT'Y	UNIT WEIGHT KG.	TOTAL WEIGHT KG.	REAMERKS
4							
3	UPPER LIMIT S/W	SS400		1			
2	SAFETY LATCH	SPC		1			
1	EMERGENCY S/W	—		1			

PROJECT		DATE	20 . . .
TITLE	KDC5 - L18 - S ARRANGEMENT DRAWING FOR HOIST	SCALE	A3/20 /
DRAWN	DESIGNED / CHECKED / APPROVED	REF DRAWING	
KD 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.		SHEET NO.	DRAWING NO. KDC5S1800

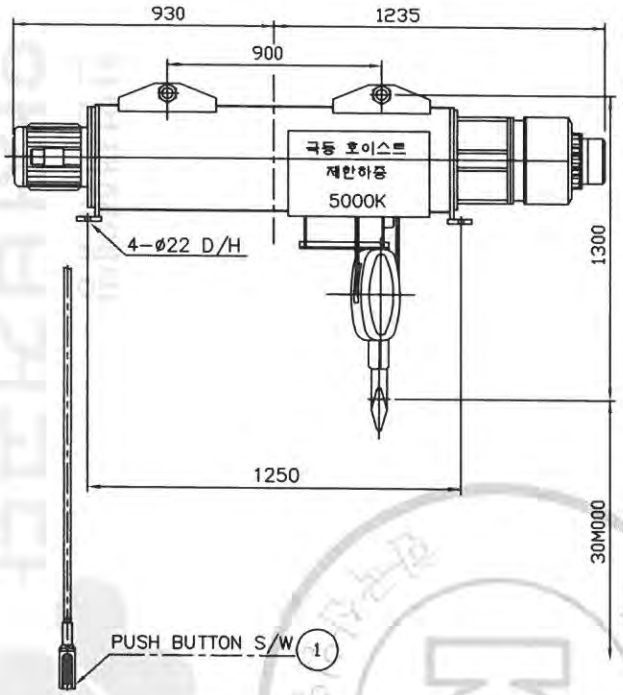


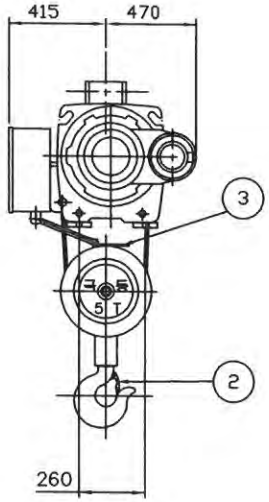


SPECIFICATION		
RATED LOAD		5000 KG
TESTING LOAD		6250 KG
LIFT		24 M
RATING		30 MIN
HOISTING	SPEED	5.6 / 0.56 M/MIN
	MOTOR	5.5 / 1.0 KW x 6 P
WIRE ROPE		(6x37) ø16 x 2 FALLS
POWER SOURCE		AC3ø 220V(380,440,460,480)V 60Hz
COLOR		10 B 3/5
WEIGHT		750 KG

NO.	DESCRIPTIONS	MT'L	SET QT'Y	SET QT'Y	UNIT WEIGHT KG.	TOTAL WEIGHT KG.	REAMERKS
4							
3	UPPER LIMIT S/W	SS400		1			
2	SAFETY LATCH	SPC		1			
1	EMERGENCY S/W	—		1			

PROJECT				DATE 20 . . .
TITLE	KDC5 – L24 – S ARRANGEMENT DRAWING FOR HOIST			SCALE A3/20 /
DRAWN	DESIGNED	CHECKED	APPROVED	REF DRAWING
극동호이스트 주식회사 KUK DONG HOIST CO., LTD.			SHEET NO.	DRAWING NO. KDC5S2400

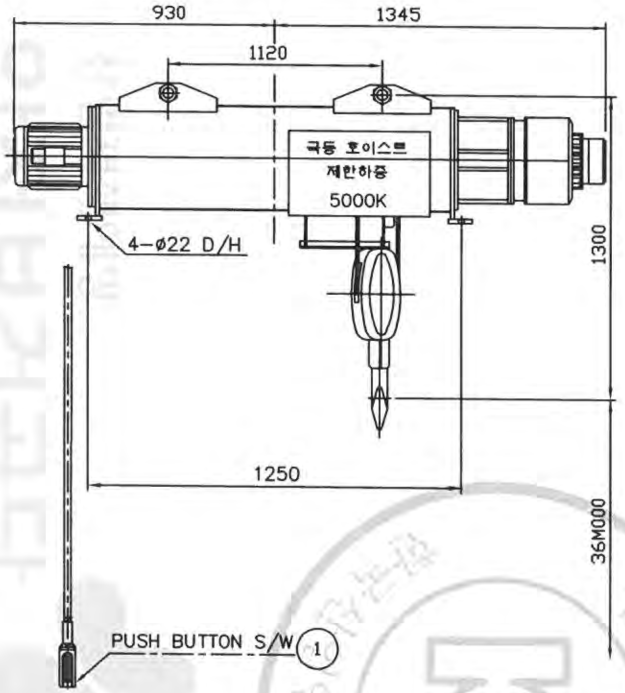


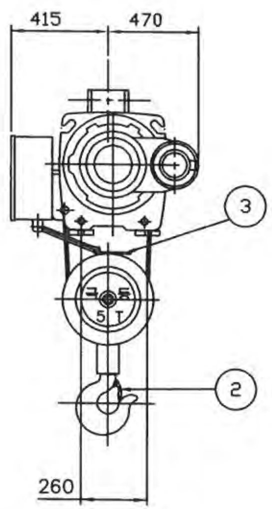


SPECIFICATION		
RATED LOAD		5000 KG
TESTING LOAD		6250 KG
LIFT		30 M
RATING		30 MIN
HOISTING	SPEED	5.6 / 0.56 M/MIN
	MOTOR	5.5 / 1.0 KW x 6 P
WIRE ROPE		(6x37) ø16 x 2 FALLS
POWER SOURCE		AC3ø 220V(380,440,460,480)V 60Hz
COLOR		10 B 3/5
WEIGHT		810 KG

NO.	DESCRIPTIONS	MT'L	SET QT'Y	SET QT'Y	UNIT WEIGHT KG.	TOTAL WEIGHT KG.	REAMERKS
4							
3	UPPER LIMIT S/W	SS400		1			
2	SAFETY LATCH	SPC		1			
1	EMERGENCY S/W	—		1			

PROJECT		DATE	20 . . .
TITLE	KDC5 - L30 - S ARRANGEMENT DRAWING FOR HOIST	SCALE	A3/20 /
DRAWN	DESIGNED / CHECKED / APPROVED	REF DRAWING	
극동호이스트 주식회사 KUK DONG HOIST CO., LTD.		SHEET NO.	DRAWING NO. KDC5S3000

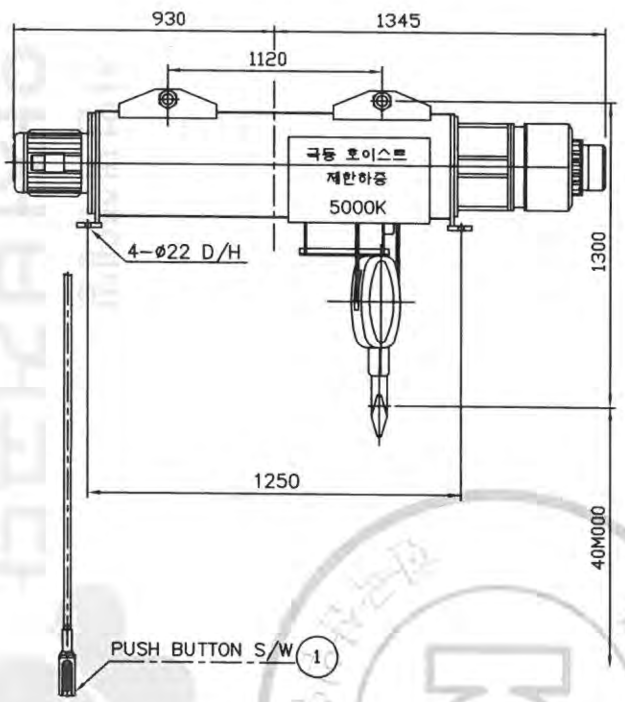


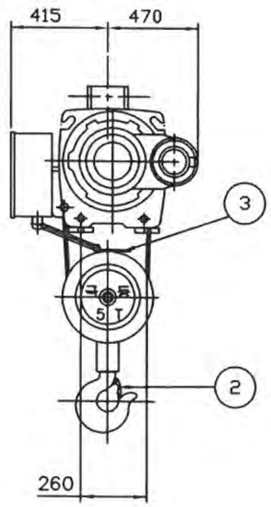


SPECIFICATION		
RATED LOAD		5000 KG
TESTING LOAD		6250 KG
LIFT		36 M
RATING		30 MIN
HOISTING	SPEED	5.6 / 0.56 M/MIN
	MOTOR	5.5 / 1.0 KW x 6 P
WIRE ROPE		(6x37) ø16 x 2 FALLS
POWER SOURCE		AC3ø 220V(380,440,460,480)V 60Hz
COLOR		10 B 3/5
WEIGHT		890 KG

NO.	DESCRIPTIONS	MT'L	SET	SET	UNIT	TOTAL	REAMERKS
			QT'Y		WEIGHT KG.		
4							
3	UPPER LIMIT S/W	SS400		1			
2	SAFETY LATCH	SPC		1			
1	EMERGENCY S/W	—		1			

PROJECT				DATE: 20 . . .
TITLE	KDC5 – L36 – S ARRANGEMENT DRAWING FOR HOIST			SCALE: A3/20 /
DRAWN	DESIGNED	CHECKED	APPROVED	REF DRAWING
극동호이스트 주식회사 KUK DONG HOIST CO., LTD.			SHEET NO.	DRAWING NO. KDC5S3600



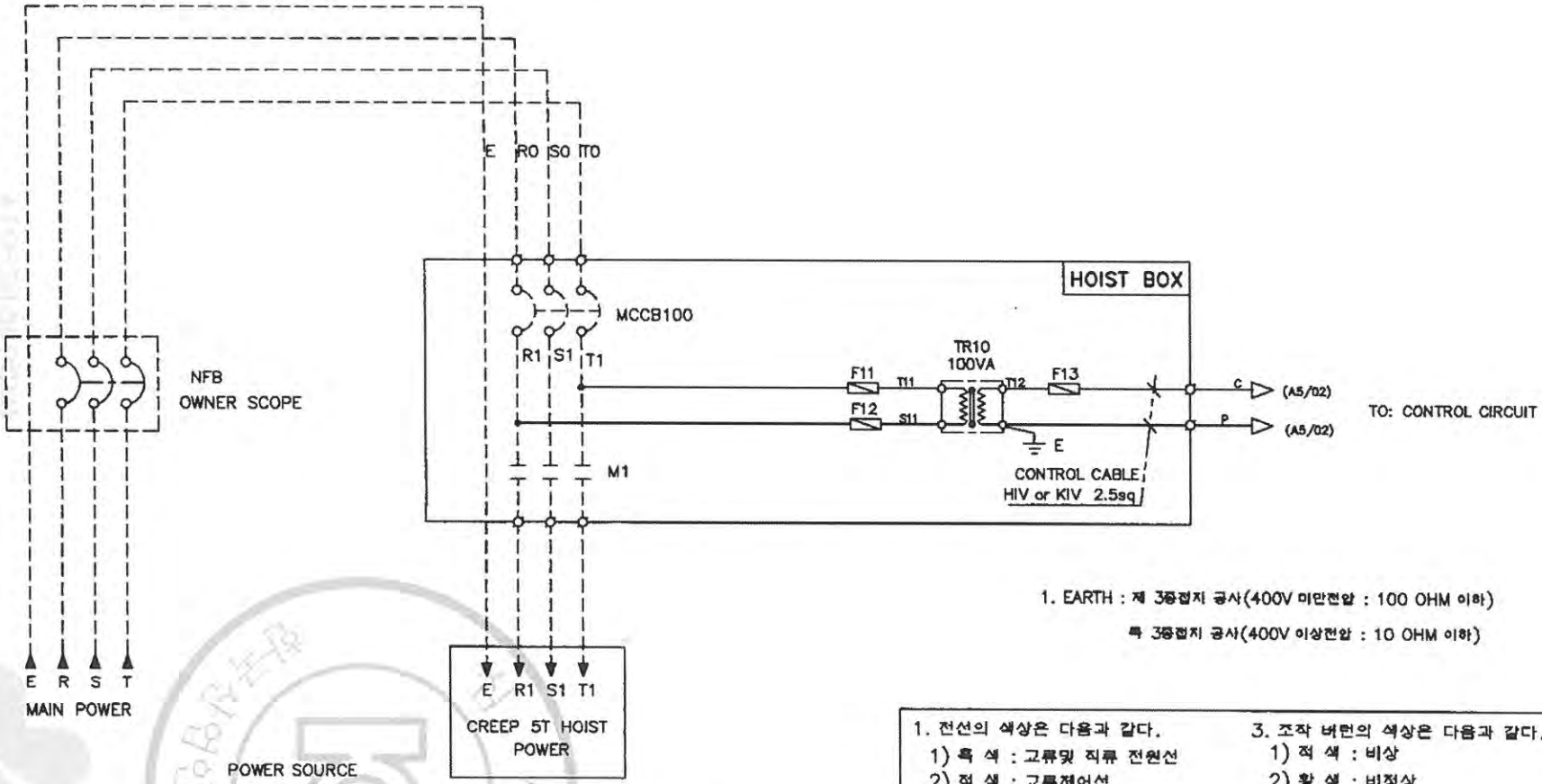


SPECIFICATION		
RATED LOAD		5000 KG
TESTING LOAD		6250 KG
LIFT		40 M
RATING		30 MIN
HOISTING	SPEED	5.6 / 0.56 M/MIN
	MOTOR	5.5 / 1.0 KW x 6 P
WIRE ROPE		(6x37) ø16 x 2 FALLS
POWER SOURCE		AC3ø 220V(380,440,460,480)V 60Hz
COLOR		10 B 3/5
WEIGHT		940 KG

NO.	DESCRIPTIONS	MT'L	SET	SET	UNIT	TOTAL	REAMERKS
			QT'Y		WEIGHT KG.		
4							
3	UPPER LIMIT S/W	SS400		1			
2	SAFETY LATCH	SPC		1			
1	EMERGENCY S/W	—		1			

PROJECT		DATE: 20 . . .
TITLE	KDC5 – L40 – S ARRANGEMENT DRAWING FOR HOIST	SCALE: A3/20 /
DRAWN	DESIGNED / CHECKED / APPROVED	REF DRAWING
극동호이스트 주식회사 KUK DONG HOIST CO., LTD.	SHEET NO.	DRAWING NO. KDC5S4000

1	3	4	5	6	7	8	9	11	12	13	14	15	16	17	19	20
POWER CIRCUIT																ADR'S NO.
TRAVELLING POWER SUPPLY SYSTEM																A1



POWER SOURCE
AC 3ø 60Hz

SELECTION	VOLTAGE	F11 F12	F13	MCCB100	TR10
	220V	2A	3A	53AF/40AT	220/110,120V 100VA
	380V	1A	3A	33AF/30AT	380/110,120V 100VA
	440V	1A	3A	33AF/30AT	440/110,120V 100VA
	460V	1A	3A	33AF/30AT	460/110,120V 100VA
	480V	1A	3A	33AF/30AT	480/110,120V 100VA

1. EARTH : 제 3종접지 공사(400V 미만전압 : 100 OHM 이하)
특 3종접지 공사(400V 이상전압 : 10 OHM 이하)

1. 전선의 색상은 다음과 같다.
   1) 흑 색 : 고류및 직류 전원선
   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.
4				
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CUSTOMER	
DRAWING TITLE	MAIN POWER CIRCUIT 1
	DIAGRAM

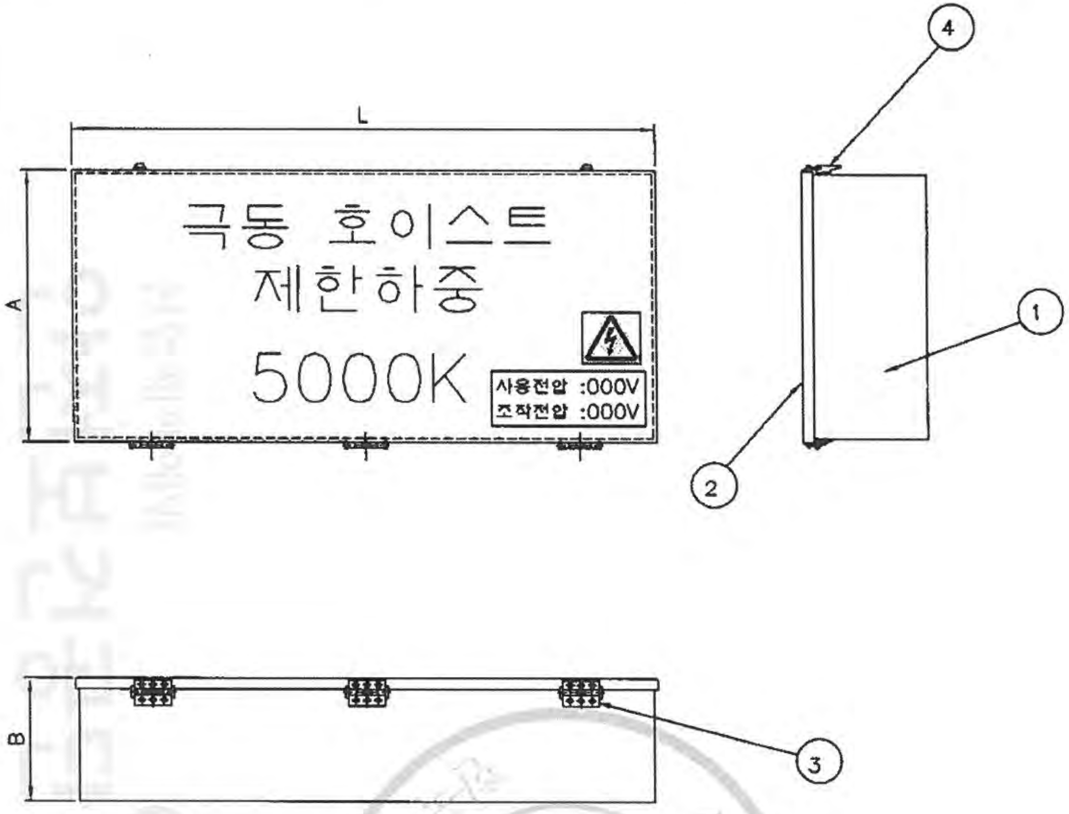
DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

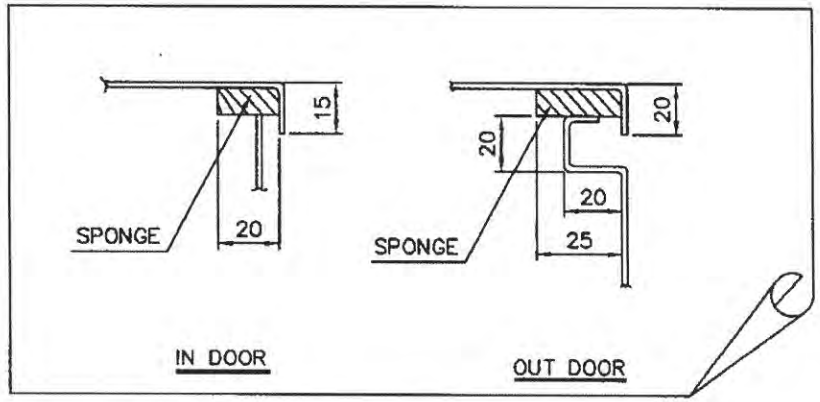
DWG. NO KDC5E001

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	MT'L	REMARKS
1	PANEL CASE	SPC	1.6t
2	PANEL COVER	SPC	1.6t
3	HINGE	PUR'	
4	CLAMP	PUR'	
5	SPONGE	PUR'	



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 충전부분이 차단되도록 한다.

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

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

MK	DATE	REVISIONS	CHK.	APP.
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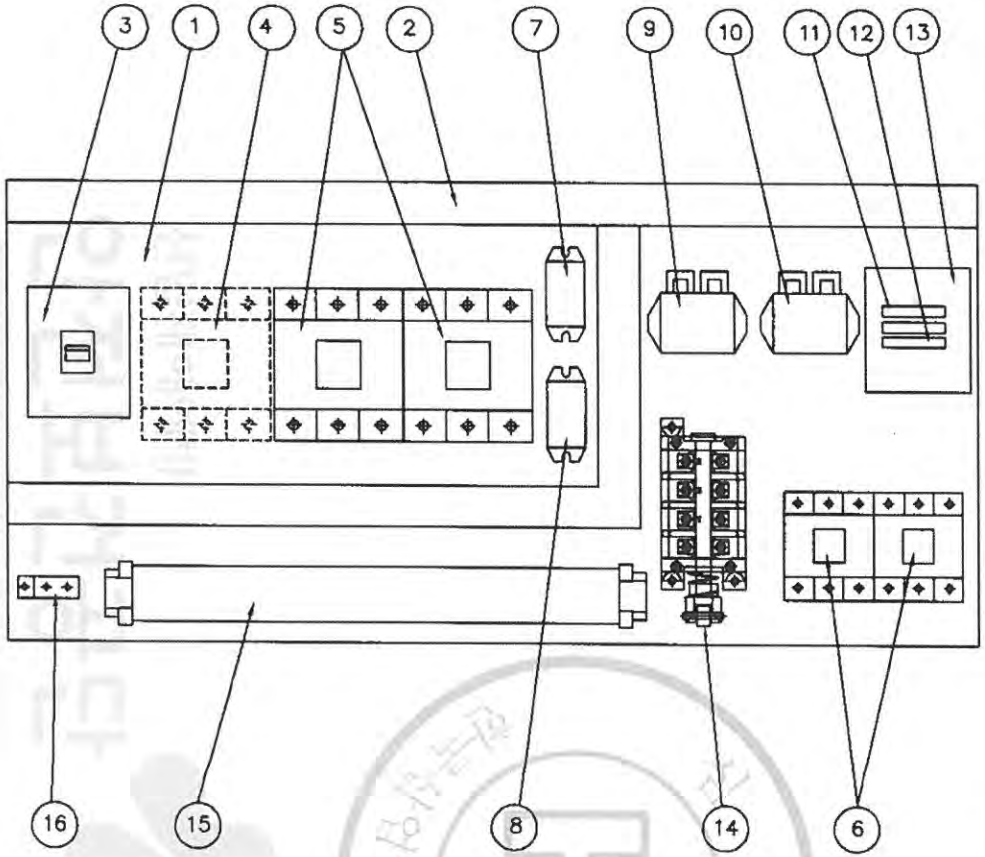
CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	HOISTING CONTROL BOX / LAY-OUT					NONE		
		극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC5EB00	



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	DMC48C	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 LIMITER	AC 600V, 75A	1	LS-1,2
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 : 0.018Ω

NOTE 1. 전선의 색상은 다음과 같다.

1) 흑색 : 고류 및 직류 전원선로
2) 적색 : 고류제어선
3) 주황색 : 외부 전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청색 : 직류 제어선로

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.
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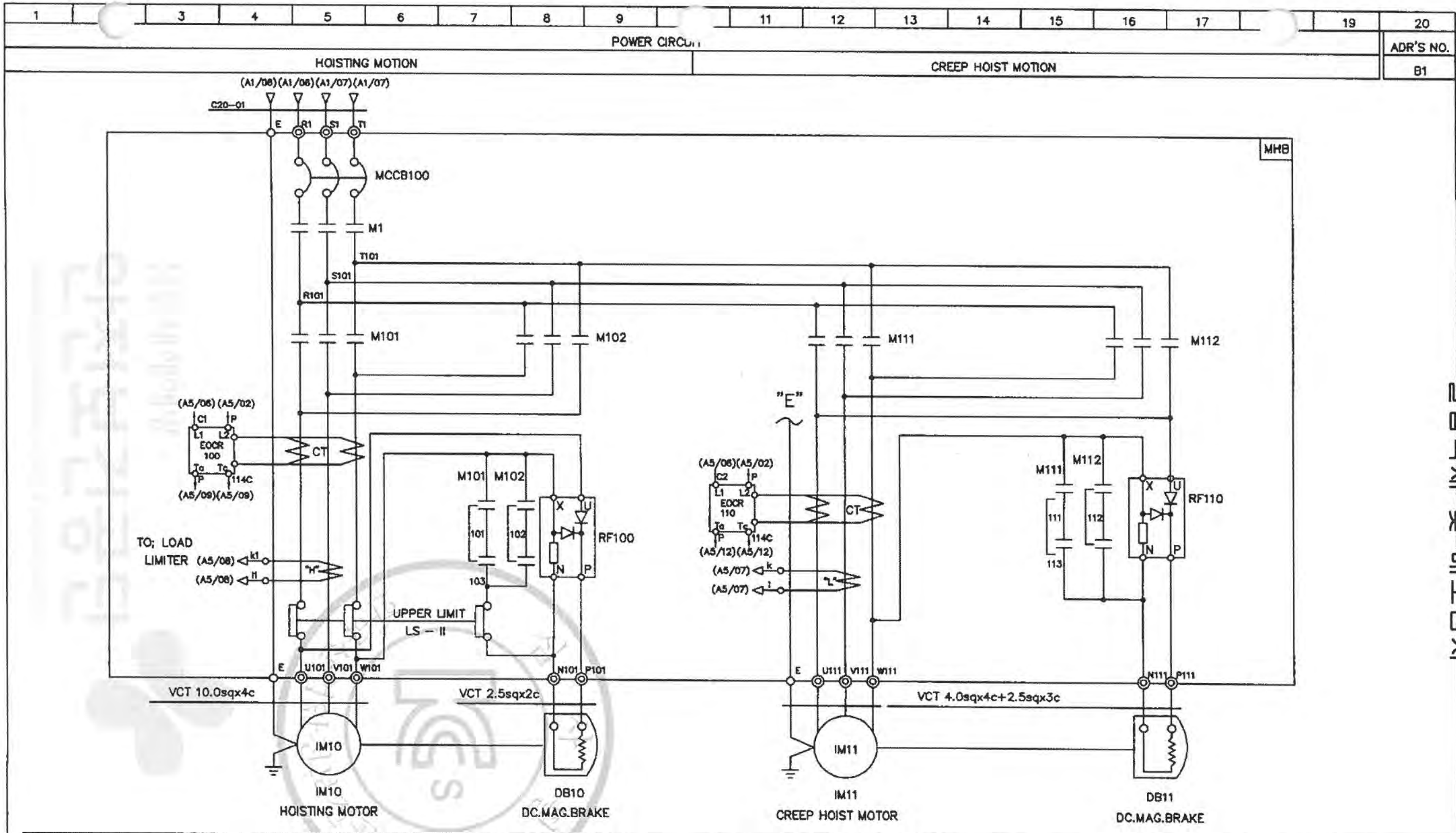
CUSTOMER

DRAWING TITLE: CREEP HOIST CONTROL BOX / ARRANGEMENT DRAWING

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO: KDC5BA21



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	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
SELECTION	5TON AC3PH 220V 60Hz	5.5KWx6P	1.0KWx6P	DC 100V	ABS-53AF/40A	220/110V,120V,100VA	2A	3A	DMC48C	DMC65C	DMC22C	AC 600V 75A	SS-30	SS-30	SR-60	SR-30	JDL-100	VFCT 16.0sqx4c
MAKER	KUK DONG				LS	SHINHAN	–		DONG-A			KUK DONG	ASECO				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
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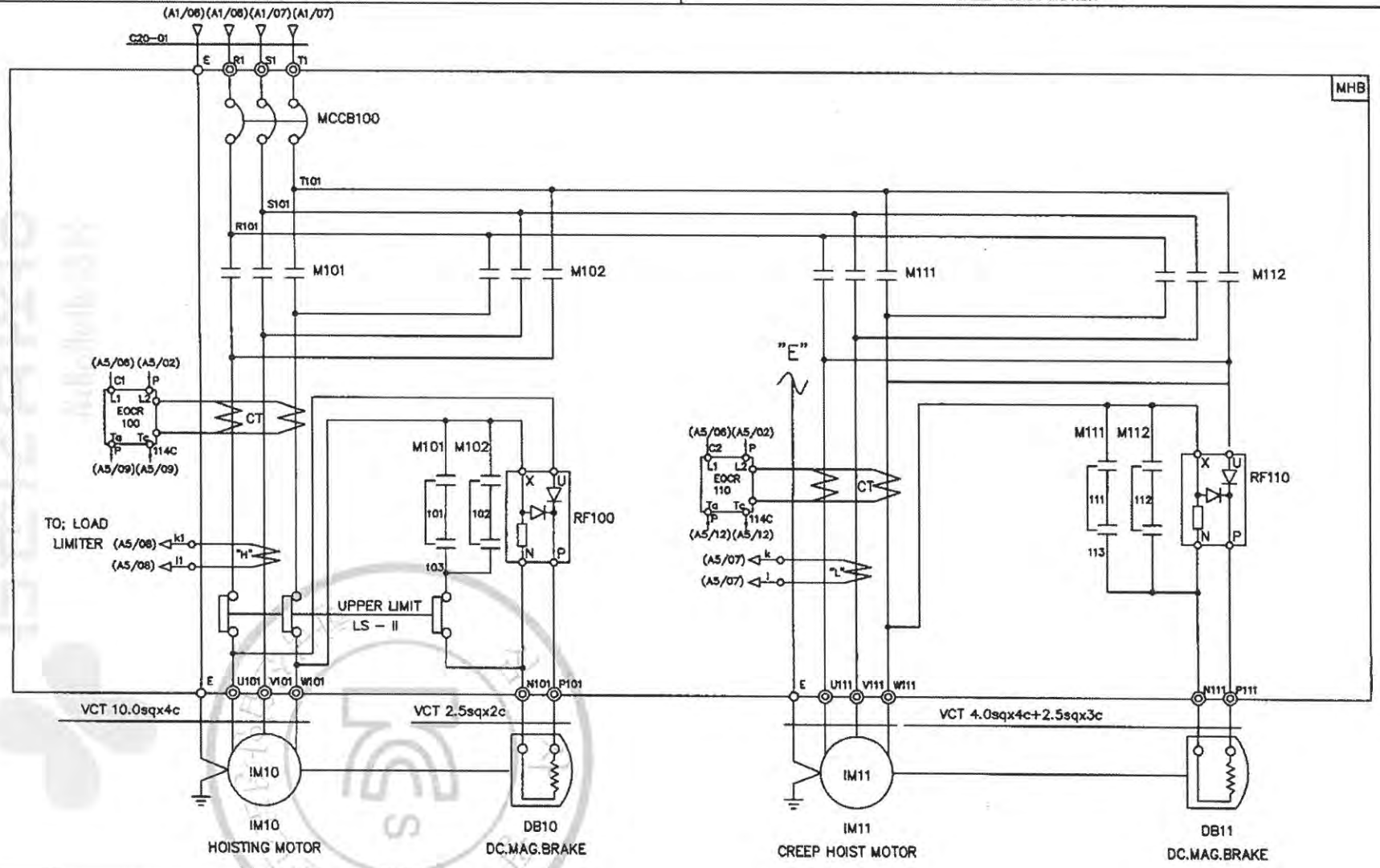
CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	CREEP HOISTING POWER & CONTROL					NONE		
	CIRCUIT DIAGRAM	극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC5E21	

1	3	4	5	6	7	8	9	11	12	13	14	15	16	17	19	20
POWER CIRCU..																ADR'S NO.
HOISTING MOTION								CREEP HOIST MOTION								B1



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
	5TON AC3PH 220V 60Hz	5.5KWx6P	1.0KWx6P	DC 100V	ABS-53AF/40A	220/110V,120V,100VA	2A	3A	DMC65C	DMC22C	AC 600V 75A	SS-30	SS-30	SR-60	SR-30	JDL-100	VFCT16.0sqx4c
SELECTION / MAKER	KUKDONG				LS	SHINHAN	-		DONG-A		KUK DONG	ASECO				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
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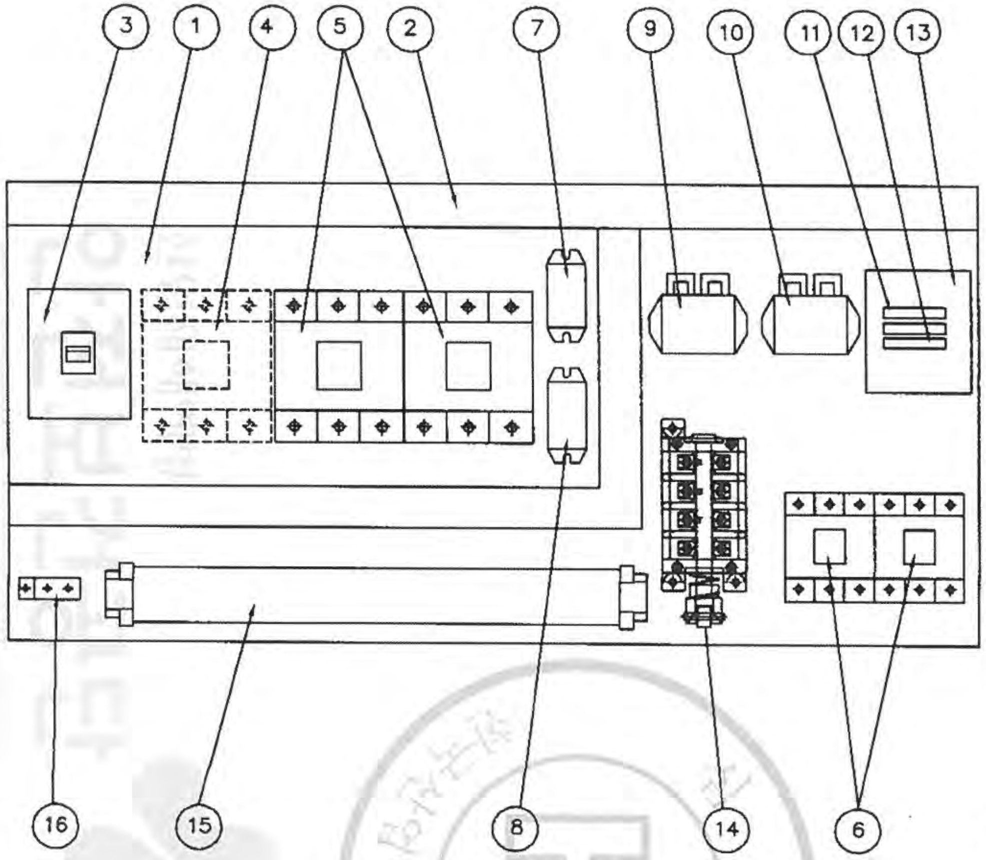
CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	CREEP HOISTING POWER & CONTROL					NONE		
	CIRCUIT DIAGRAM	KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC5E22	



NO	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	CHASSIS PLATE		1	아 연 도 금
2	CABLE DUCT	–	1	
3	N.F.B	33AF/30AT	1	HOISTING
4	MAGNET CONTACTOR	DMC32C	1	MAIN MAG.
5	MAGNET CONTACTOR	DMC48C	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 LIMITER	AC 600V, 75A	1	LS–1,2
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 : 교류제어선
3) 주황색 : 외부 전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청색 : 직류 제어선로
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.

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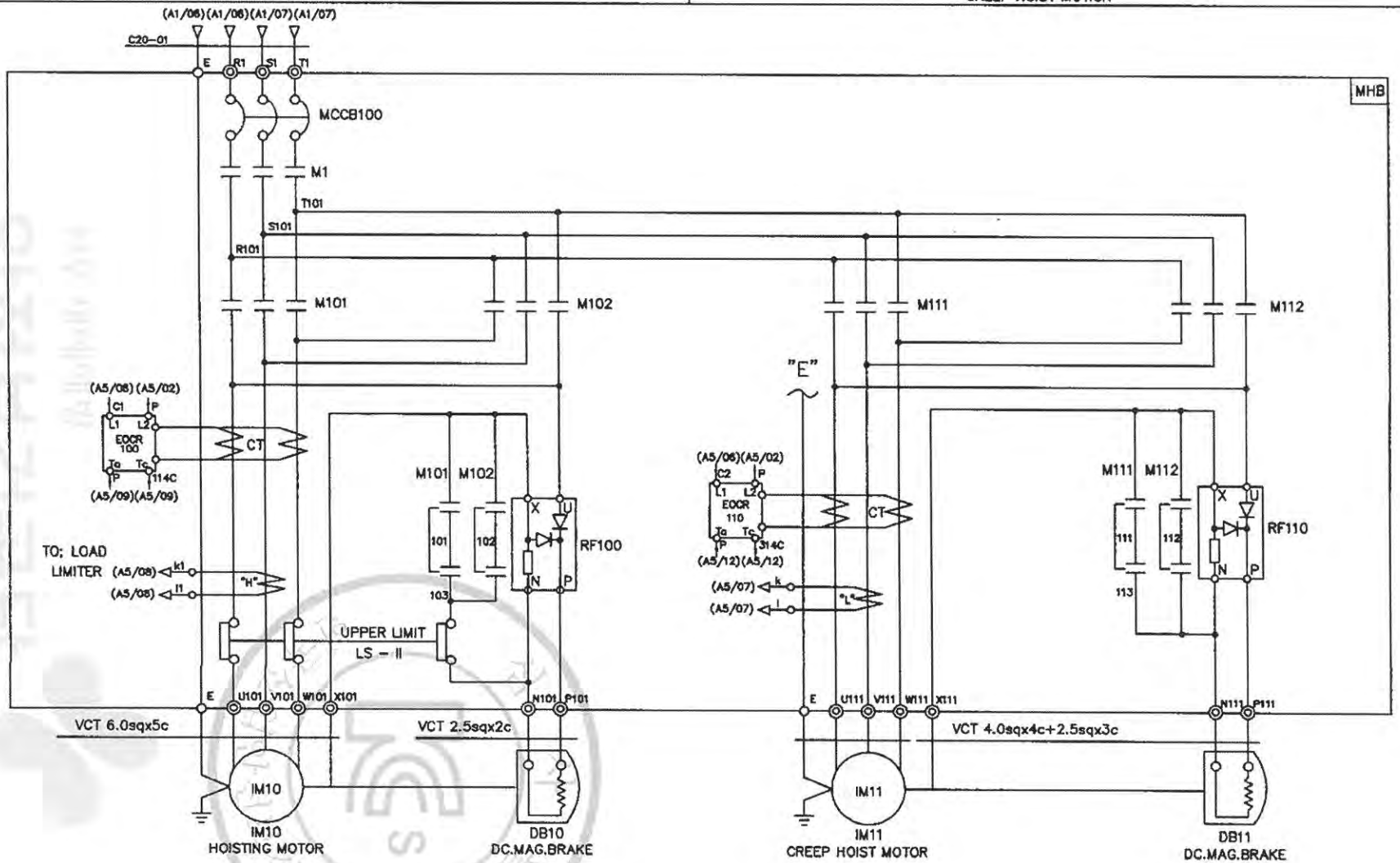
CUSTOMER	
DRAWING TITLE	CREEP HOIST CONTROL BOX ARRANGEMENT DRAWING

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO KDC5BA31

1		3	4	5	6	7	8	9		11	12	13	14	15	16	17		19	20
POWER CIRCUIT																			ADR'S NO.
HOISTING MOTION										CREEP HOIST MOTION									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
	5TON AC 3PH 380V 60Hz	5.5KW x 6P	1.0KWx6P	DC 100V	DBE-33AF/30A	380V/110V,120V, 100VA	1A	3A	DOC-32P	DOC-48P	DOC-22P	AC 600V 75A	SS-30	SS-05	SR-60	SR-30	JDL-100	VFCT 6.0sqx4c
SELECTION / MAKER	KUKDONG				DAERYUK	SHINHAN	-		DAERYUK			KUKDONG	ASECO				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
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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.

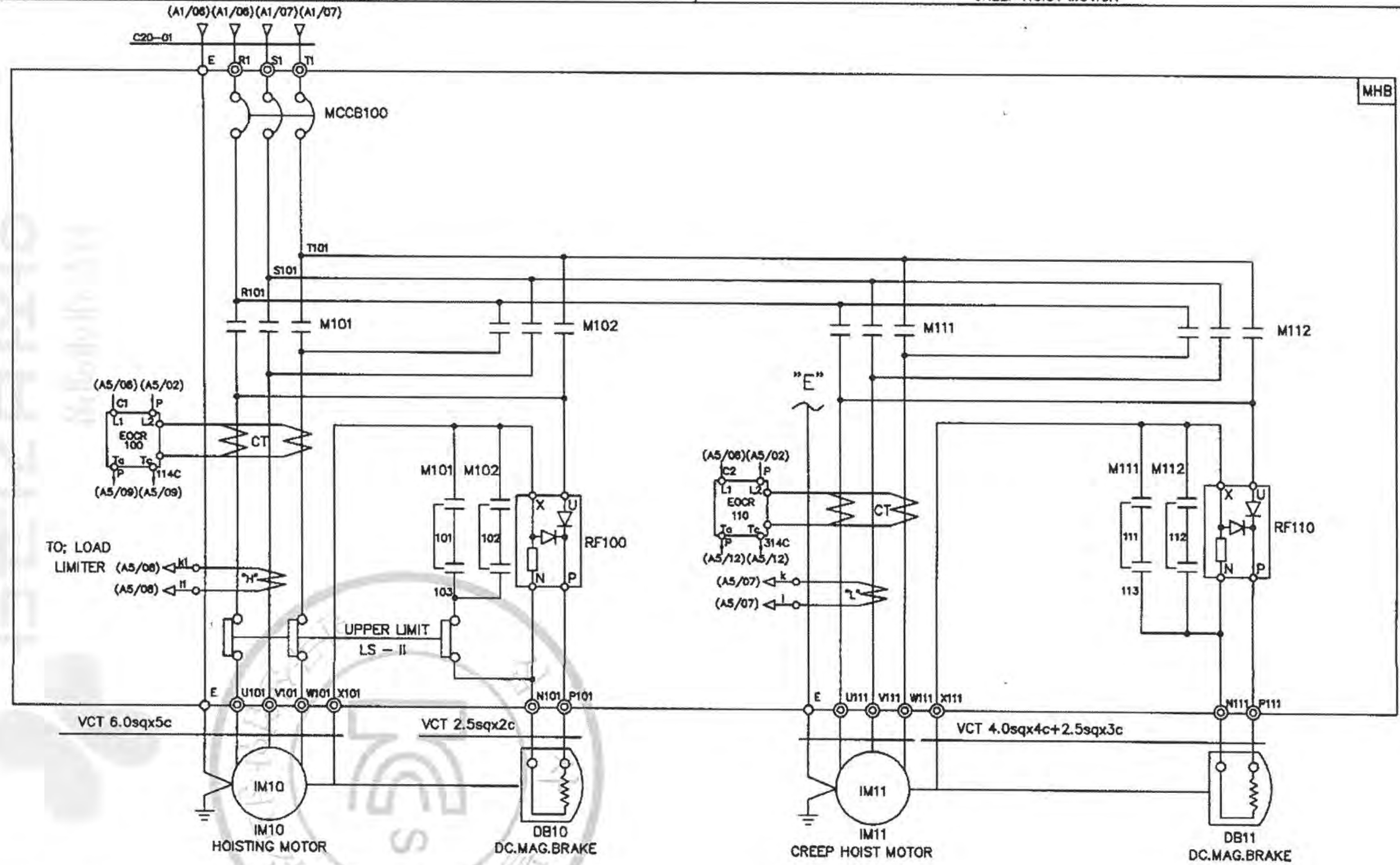
DWG. NO: KDC5E31

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

POWER CIRCU...

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
	5TON AC 3PH 380V 60Hz	5.5KW x 6P	1.0KWx6P	DC 100V	DBE–33AF/30A	380V/110V,120V, 100VA	1A	3A	DOC–48P	DOC–22P	AC 600V 75A	SS–30	SS–05	SR–60	SR–30	JDL–100	VFCT 6.0sqx4c
SELECTION / MAKER	KUKDONG				DAERYUK	SHINHAN	–		DAERYUK		KUKDONG	ASECO				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
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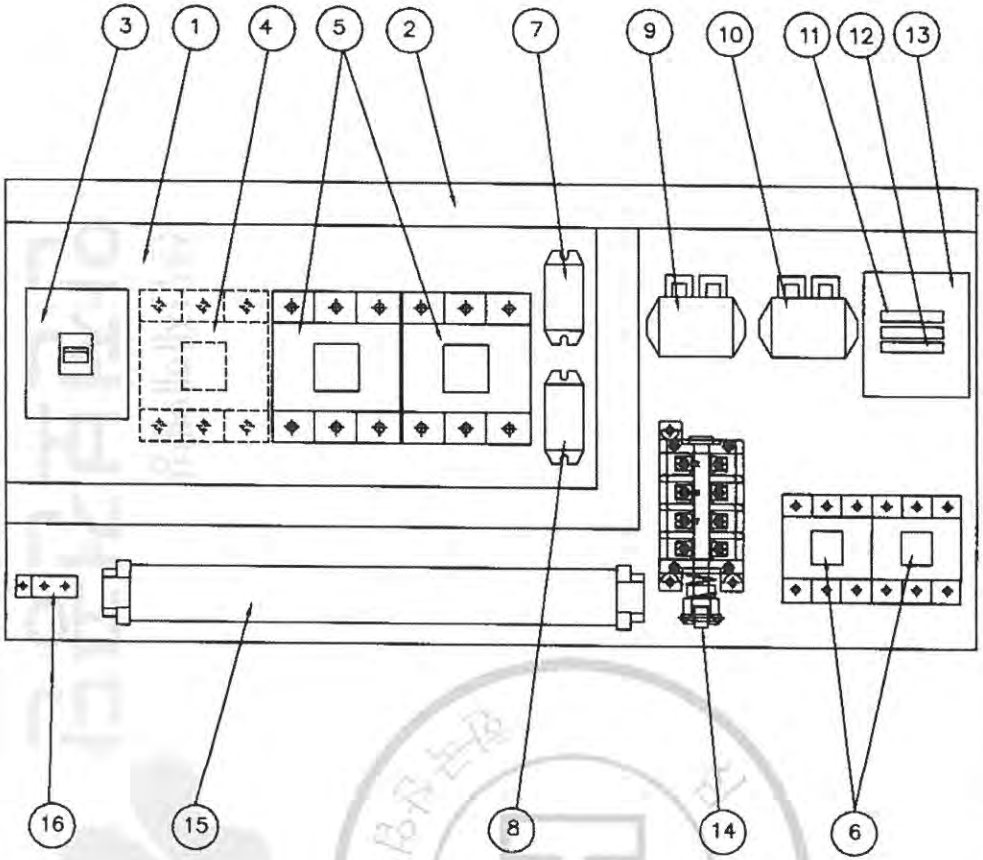
CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM					NONE		
						DWG. NO	KDC5E32	



NO	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	CHASSIS PLATE		1	아 연 도 금
2	CABLE DUCT	-	1	
3	N.F.B	33AF/30AT	1	HOISTING
4	MAGNET CONTACTOR	DMC32C	1	MAIN MAG.
5	MAGNET CONTACTOR	DMC48C	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 LIMITER	AC 600V, 75A	1	LS-1,2
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 : 교류제어선
3) 주황색 : 외부 전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청색 : 직류 제어선로

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.

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CUSTOMER

DRAWING TITLE: CREEP HOIST CONTROL BOX

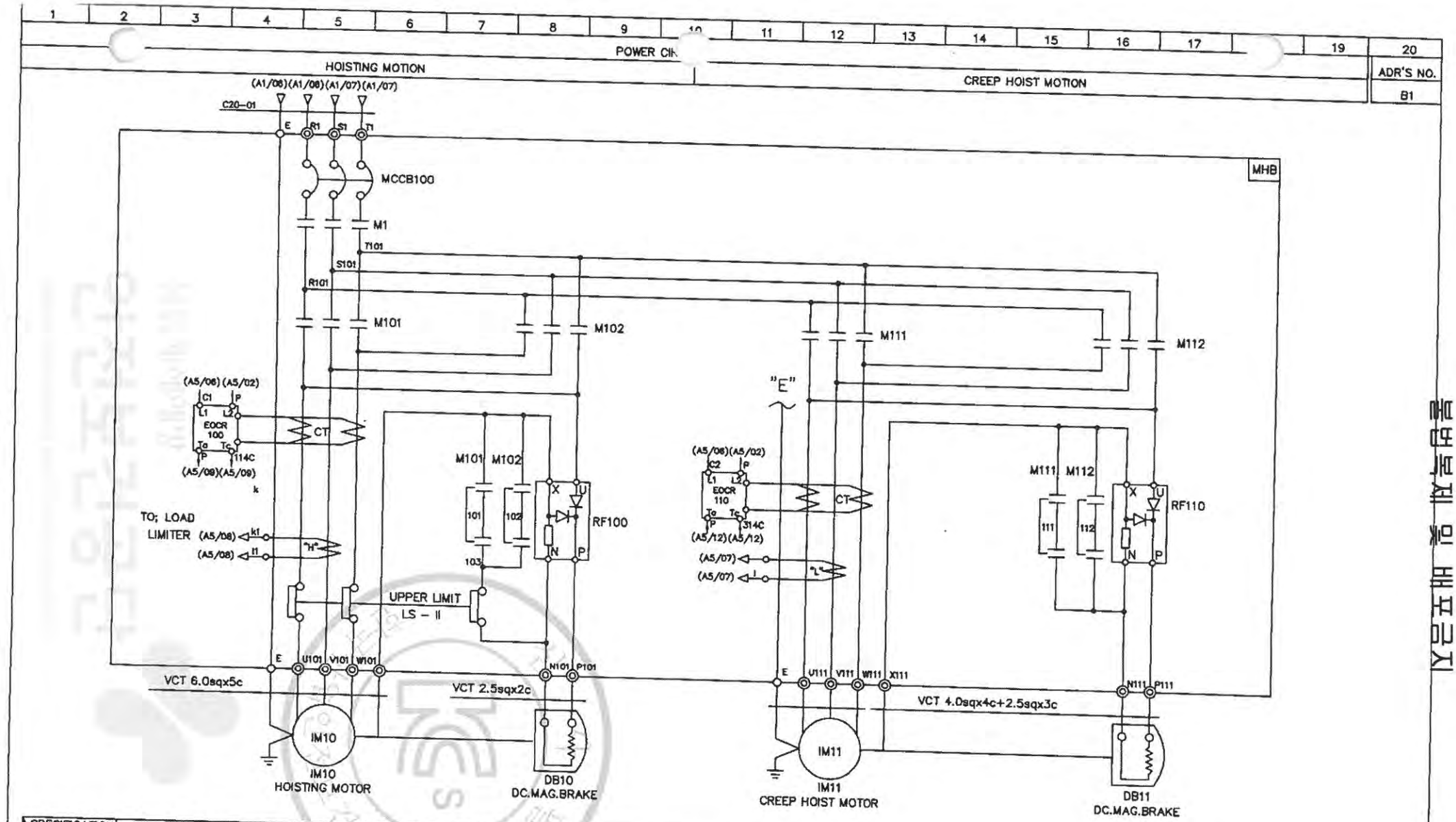
ARRANGEMENT DRAWING

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO: KDC5BA41

ADR'S NO.



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	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
SELECTION / MAKER	5TON AC 3PH 440V 60Hz	5.5KW x 6P	1.0KWx6P	DC 100V	ABE-33AF/30A	440/110V,120V,100VA	1A	3A	DMC32C	DMC48C	DMC22C	AC 600V 75A	SS-30	SS-05	SR-60	SR-30	JDL-100	VFCT 6sqx4c
	KUKDONG				LS	SHINHAN	-		DONG-A			KUKDONG	ASECO				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
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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.

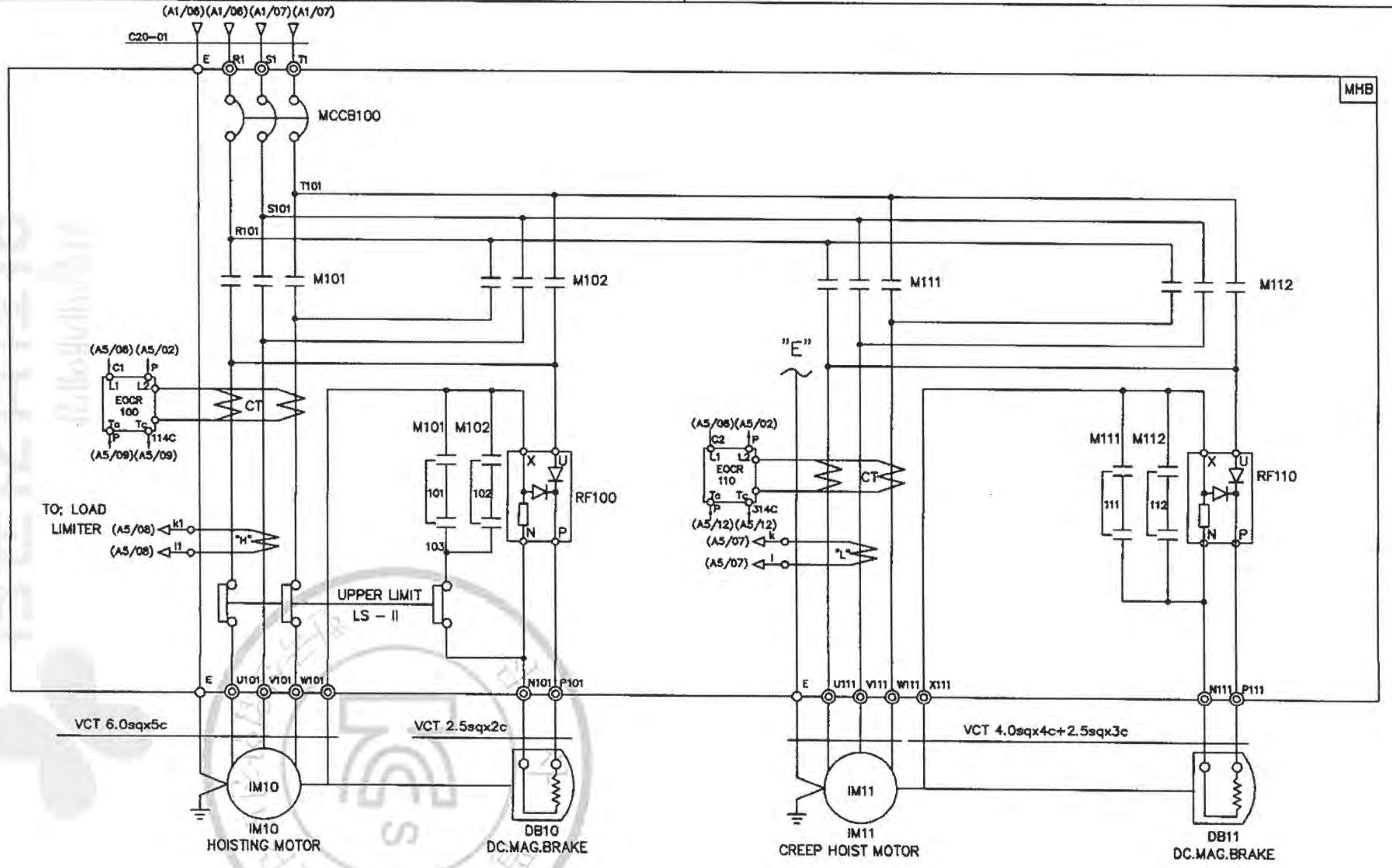
DWG. NO: KDC5E41

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

POWER CIRC...

HOISTING MOTION | CREEP HOIST MOTION

ADR'S NO. B1



SPECIFICATION	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
SYMBOLS / 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
SELECTION	5TON AC 3PH 440V 60Hz	5.5KW x 6P	1.0KWx6P	DC 100V	ABE-33AF/30A	440/110V,120V,100VA	1A	3A	DMC48C	DMC22C	AC 600V 75A	SS-30	SS-05	SR-60	SR-30	JDL-100	VFCT 6.0sqx4c
MAKER	KUKDONG				LS	SHINHAN	-		DONG-A		KUKDONG	ASECO				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
4				
3				
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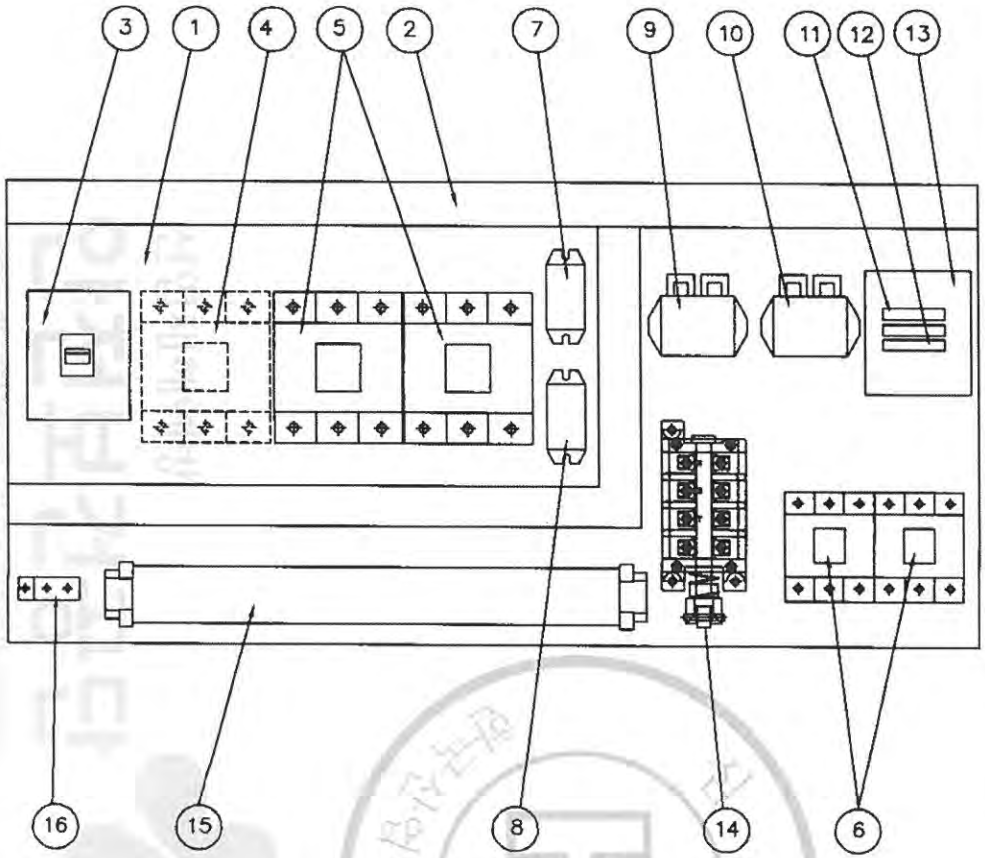
CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM					NONE		
		극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC5E42	



NO	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	CHASSIS PLATE		1	아연도금
2	CABLE DUCT	–	1	
3	N.F.B	33AF/30AT	1	HOISTING
4	MAGNET CONTACTOR	DMC32C	1	MAIN MAG.
5	MAGNET CONTACTOR	DMC48C	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 LIMITER	AC 600V, 75A	1	LS-1,2
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 460V 60HZ
3. EARTH TERMINAL RESISTANCE : 0.018Ω

NOTE 1. 전선의 색상은 다음과 같다.

1) 흑색 : 고류 및 직류 전원선로
2) 적색 : 고류제어선
3) 주황색 : 외부 전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청색 : 직류 제어선로

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.
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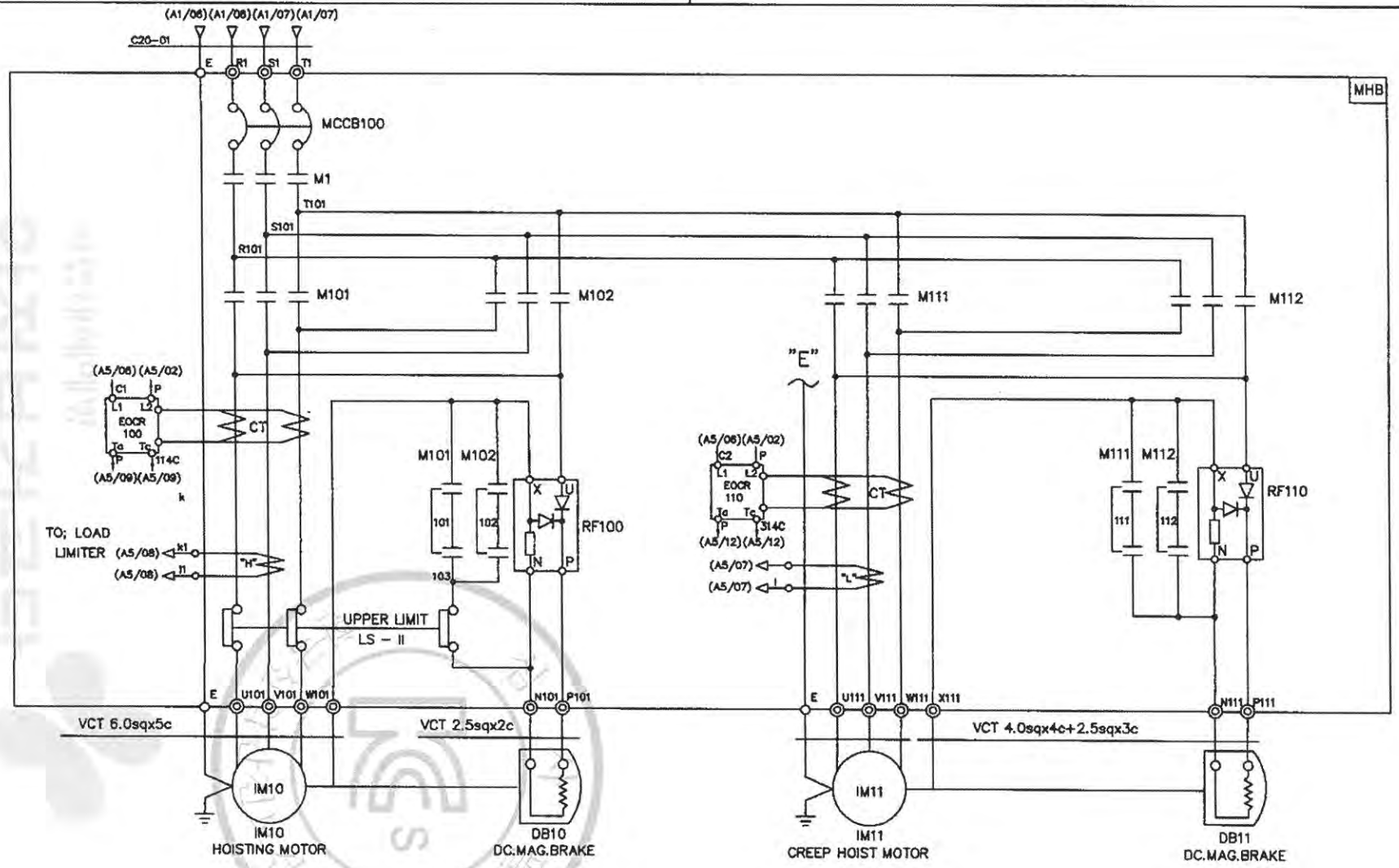
CUSTOMER		DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
DRAWING TITLE	CREEP HOIST CONTROL BOX					NONE		
	ARRANGEMENT DRAWING	KD 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.				DWG. NO	KDC5BA51	

POWER CIRCU..

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
	5TON AC 3PH 460V 60Hz	5.5KW x 6P	1.0KWx6P	DC 100V	ABE-33AF/30A	460/110V,120V,100VA	1A	3A	DMC32C	DMC48C	DMC22C	AC 600V 75A	SS-30	SS-05	SR-60	SR-30	JDL-100	VFCT 6sqx4c
SELECTION MAKER	KUKDONG				LS	SHINHAN	-		DONG-A			KUKDONG	ASECO				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
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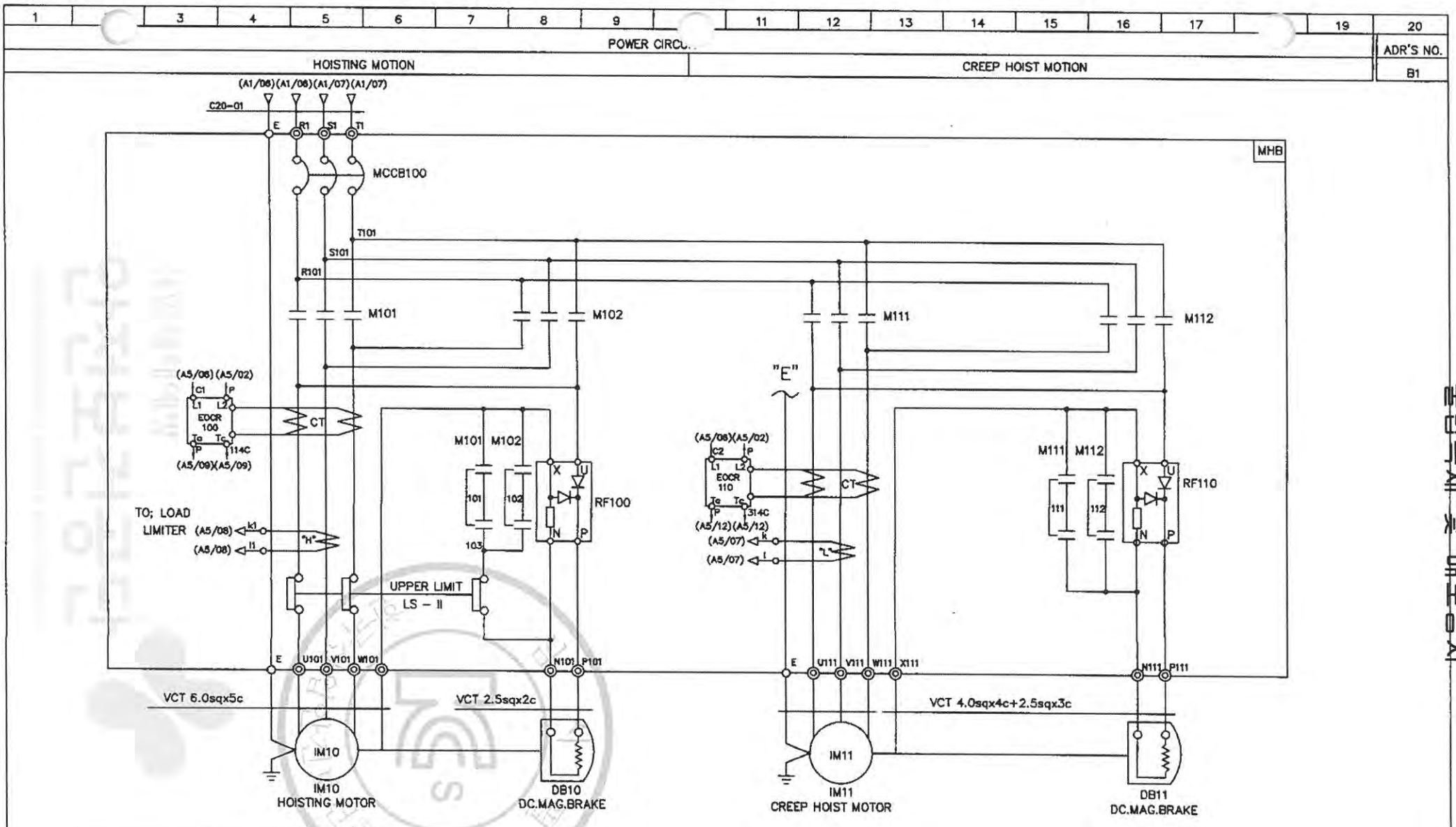
CUSTOMER

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: KDC5E51



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
	5TON AC 3PH 460V 60Hz	5.5KW x 6P	1.0KWx6P	DC 100V	ABE-33AF/30A	460/110V,120V,100VA	1A	3A	DMC48C	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	ASECO				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
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⚠				
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CUSTOMER

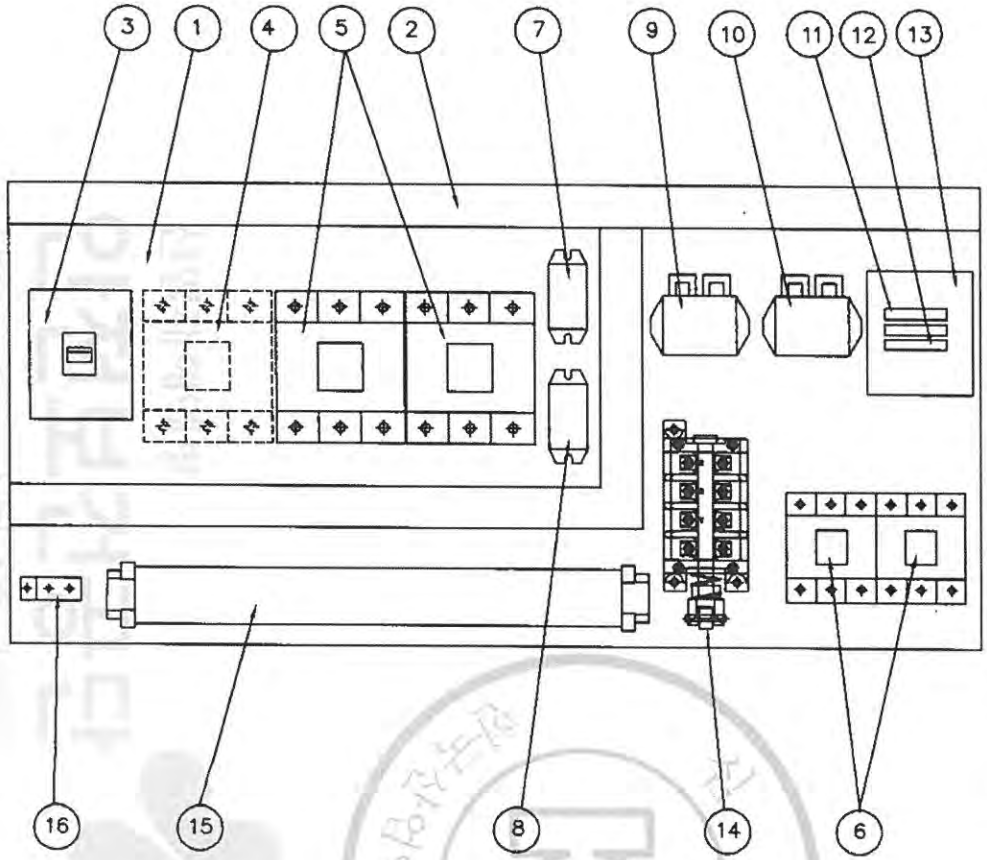
DRAWING TITLE: CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

국동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO: KDC5E52

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/30AT	1	HOISTING
4	MAGNET CONTACTOR	DMC32C	1	MAIN MAG.
5	MAGNET CONTACTOR	DMC48C	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 LIMITER	AC 600V, 75A	1	LS–1,2
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 480V 60HZ
3. EARTH TERMINAL RESISTANCE : 0.018Ω

NOTE 1. 전선의 색상은 다음과 같다.

1) 흑색 : 교류 및 직류 전원선로
2) 적색 : 교류제어선
3) 주황색 : 외부 전원에서 공급되는 연동장치 제어회로
4) 녹색 또는 녹색과 황색 혼용 : 접지선
5) 청색 : 직류 제어선로

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.
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CUSTOMER

DRAWING TITLE: CREEP HOIST CONTROL BOX / ARRANGEMENT DRAWING

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

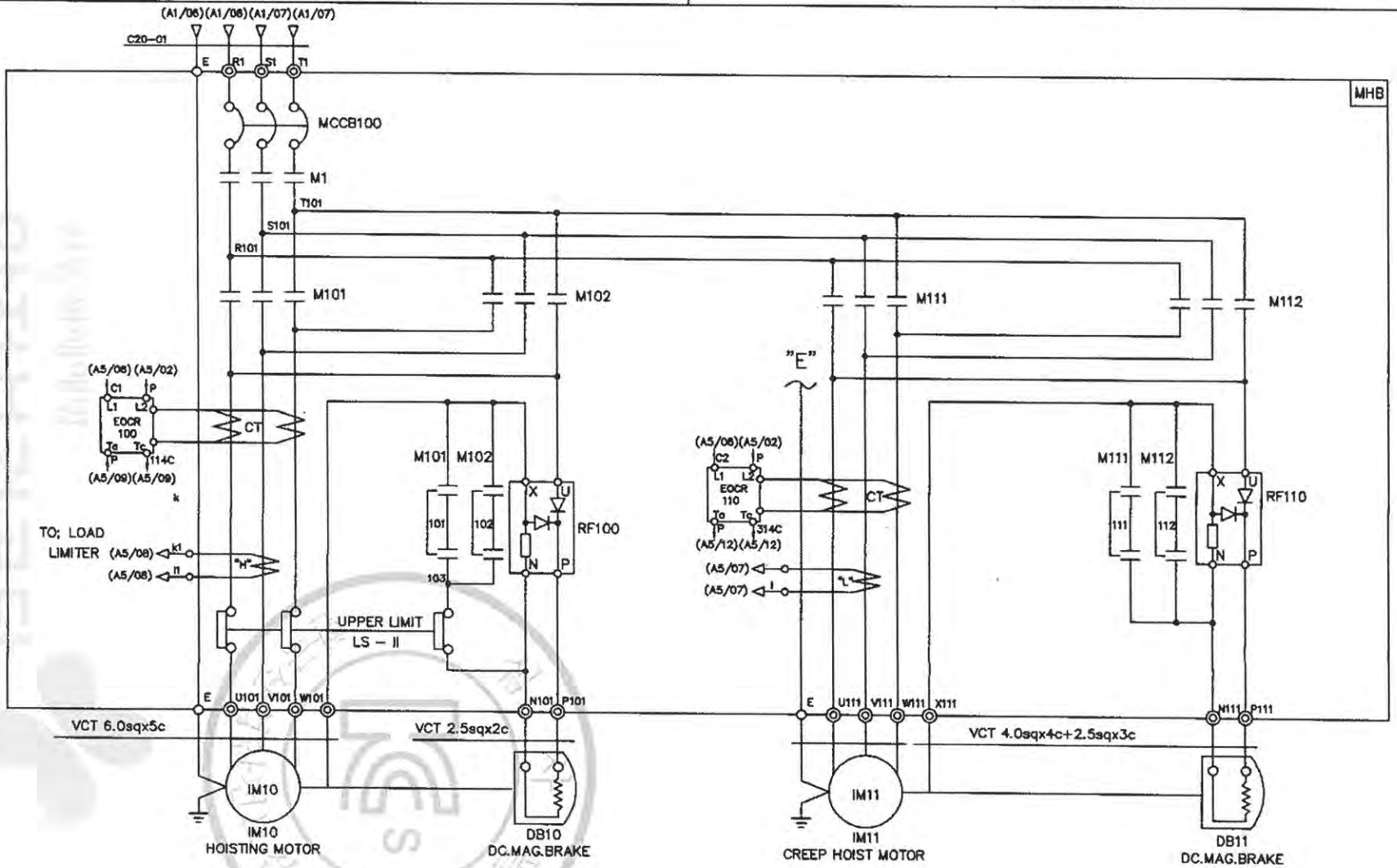
극동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC5BA61

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	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
	5TON AC 3PH 480V 60Hz	5.5KW x 6P	1.0KWx6P	DC 100V	ABE-33AF/30A	480/110V,120V,100VA	1A	3A	DMC32C	DMC48C	DMC22C	AC 600V 75A	SS-30	SS-05	SR-60	SR-30	JDL-100	VFCT 6sqx4c
SELECTION / MAKER	KUKDONG				LS	SHINHAN	-		DONG-A			KUKDONG	ASECO				JUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
4				
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CUSTOMER

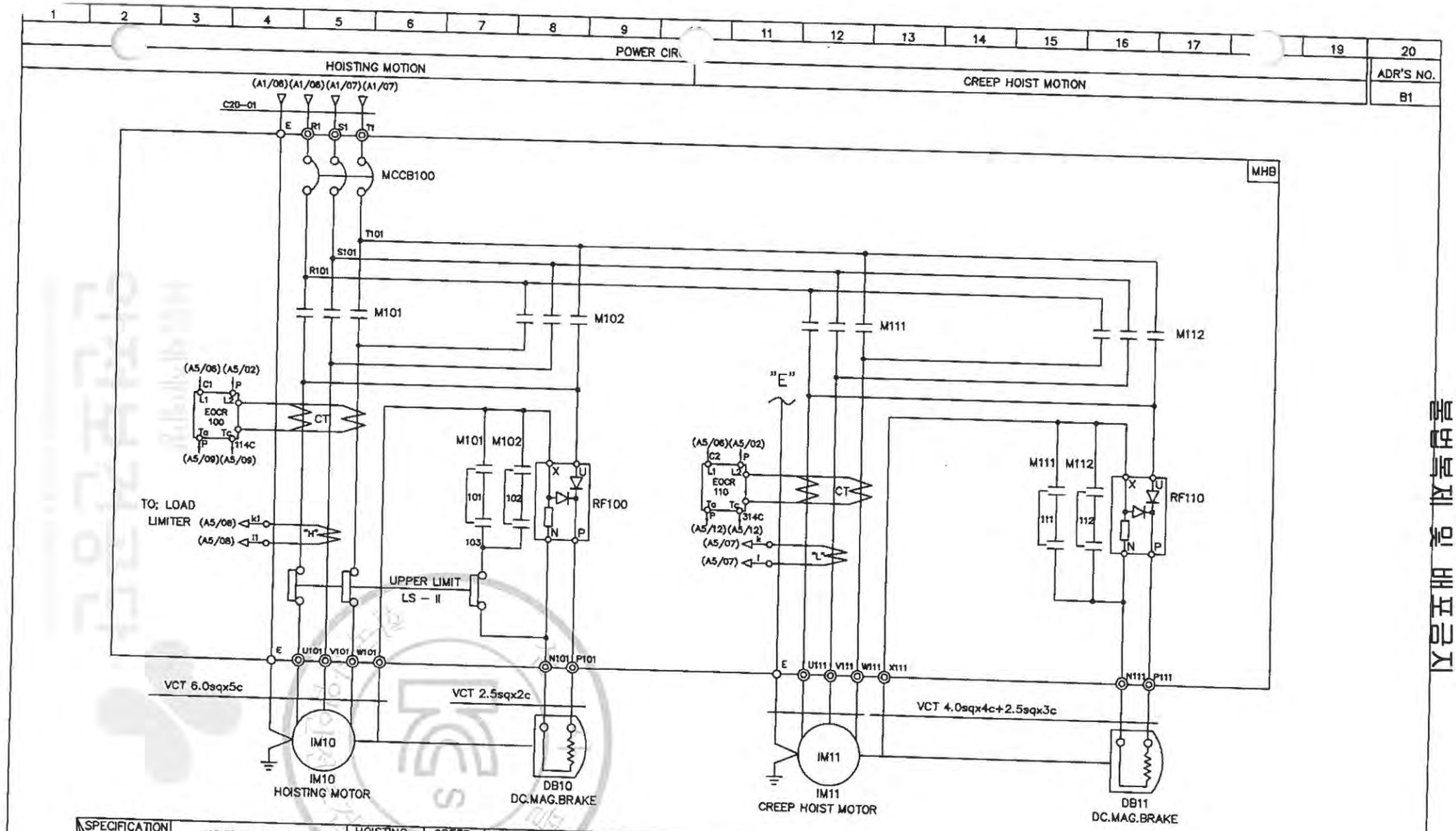
DRAWING TITLE: CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 국동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO: KDC5E61

仪器仪表 各 收集品



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
SELECTION	5TON AC 3PH 480V 60Hz	5.5KW x 6P	1.0KWx6P	DC 100V	ABE-33AF/30A	480/110V,120V,100VA	1A	3A	DMC48C	DMC22C	AC 600V 75A	SS-30	SS-05	SR-60	SR-30	JDL-100	VFCT 6.0sqx4c
MAKER	KUKDONG				LS	SHINHAN	-		DONG-A		KUKDONG	ASECO				JEUNGHO	DONGIL

MK	DATE	REVISIONS	CHK.	APP.
4				
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CUSTOMER

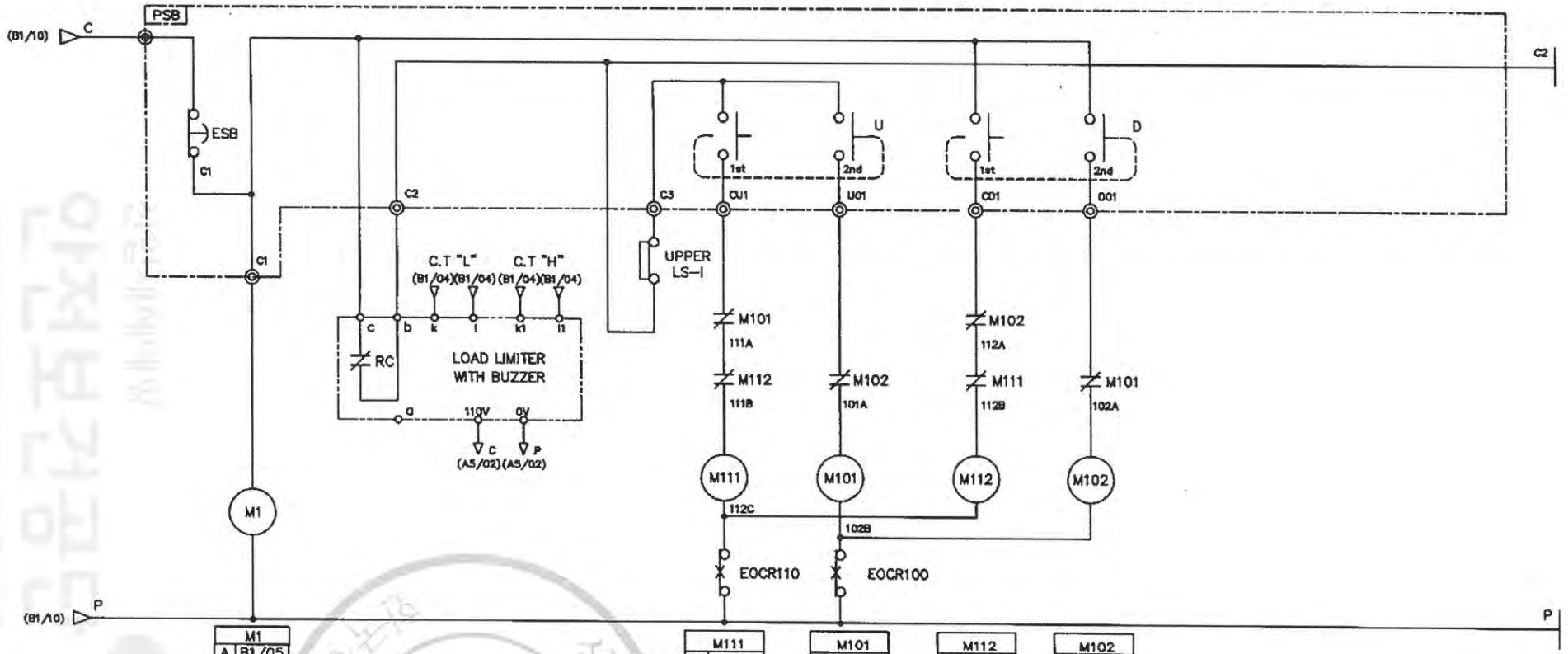
DRAWING TITLE: CREEP HOISTING POWER CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

극동호이스트 주식회사
KUK DONG HOIST CO., LTD.

DWG. NO: KDC5E62

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.
EM. STOP			LOAD LIMIT		UPPER LIMIT	CREEP UP		UP		CREEP DOWN		DOWN							A5



M1	
A	B1/05
A	B1/05
A	B1/05
a	
a	
b	
b	

M111	
A	B1/12
A	B1/12
A	B1/12
a	B1/15
a	B1/15
b	A5/13
b	

M101	
A	B1/05
A	B1/05
A	B1/05
a	B1/07
a	B1/07
b	A5/10
b	A5/14

M112	
A	B1/16
A	B1/16
A	B1/16
a	B1/16
a	B1/16
b	A5/10
b	

M102	
A	B1/08
A	B1/08
A	B1/08
a	B1/08
a	B1/08
b	A5/11
b	A5/13

SPECIFICATION / SYMBOLS / DESCRIPTION	UPPER LIMIT	PENDANT P.B S/W	LOAD LIMITER
	LS-1	E.S.B	LOAD LIMITER
	AC 600V 75A	250V 3A	JDL-100
	AC 600V 3A	250V 3A	JDL-100
MAKER	KUKDONG	KGAUTO	JUNGHO

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

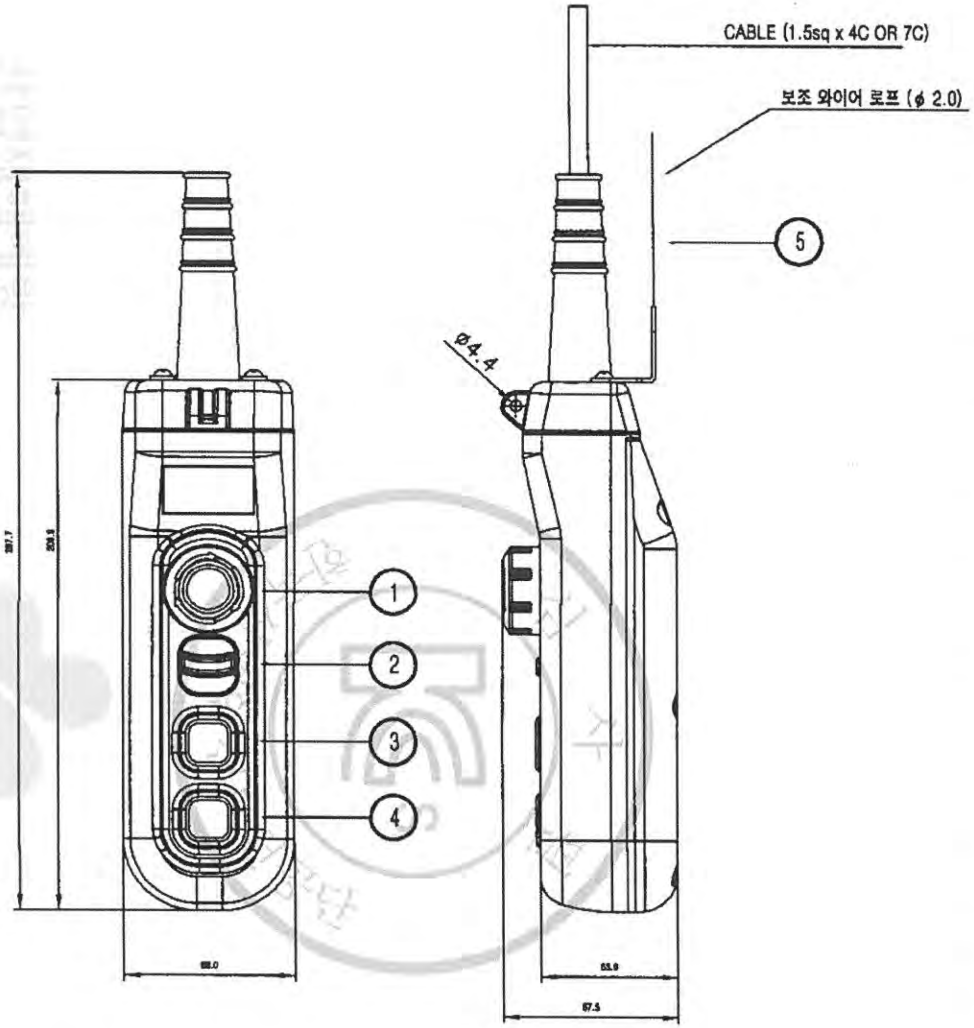
CUSTOMER	
DRAWING TITLE	MAIN POWER 2 & CONTROL CIRCUIT DIAGRAM

DRAWING	DESIGN	CHECKED	APPROVED	SCALE	DATE	ORDER NO.
				NONE		

KD 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.

DWG. NO KDC3E001

■ PUSH BUTTON SWITCH (KG-H02EA)



NO	SYMBOL	TYPE	SPEC.	COLOR
1	E.B.S	PUSH LOCK TURN RESET TYPE	250VAC x 6A	RED
2	SPARE			BLACK
3	UP	PUSH BUTTON 2STEP		
4	DOWN	PUSH BUTTON 2STEP		
5	보조 WIRE	ϕ 2.0		

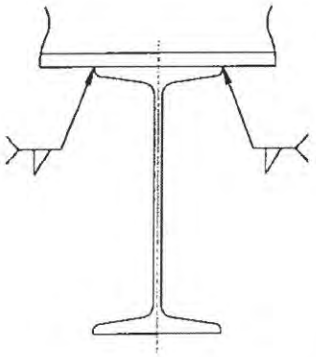
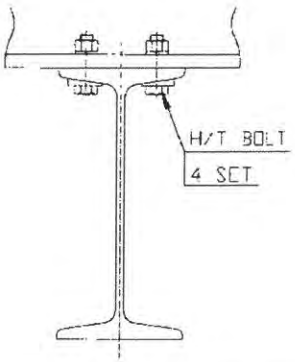
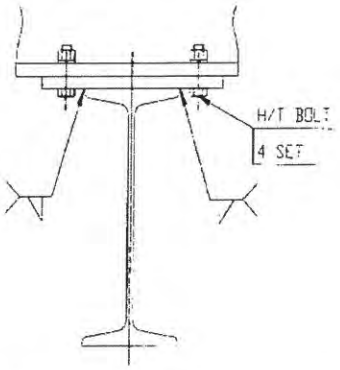
* MATERIAL : POLYCARBOBATE(PLASTIC)
* BODY COLOR : YELLOW, BLACK
* IP : 55 이상

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

NO	DESCRIPTION		MATERIAL	QTY	SIZE	WEIGHT(Kg) UNIT / TOTAL	REMARK
Scale	NS	DWG.	CHK.	APP.	Title	PUSH BUTTON SWITCH	
Pro-jection	3ANGLES	K.M.Seo		M.H.Kim		& EMERGENCY BUTTON SWITCH	
Mass	Kg					KG-H02EA	
KD KUK DONG HOIST CO., LTD.					DWG No.		

Ⅰ-4. Ⅰ-BEAM의 고정방법 및 사양

1. Ⅰ-BEAM의 고정방법

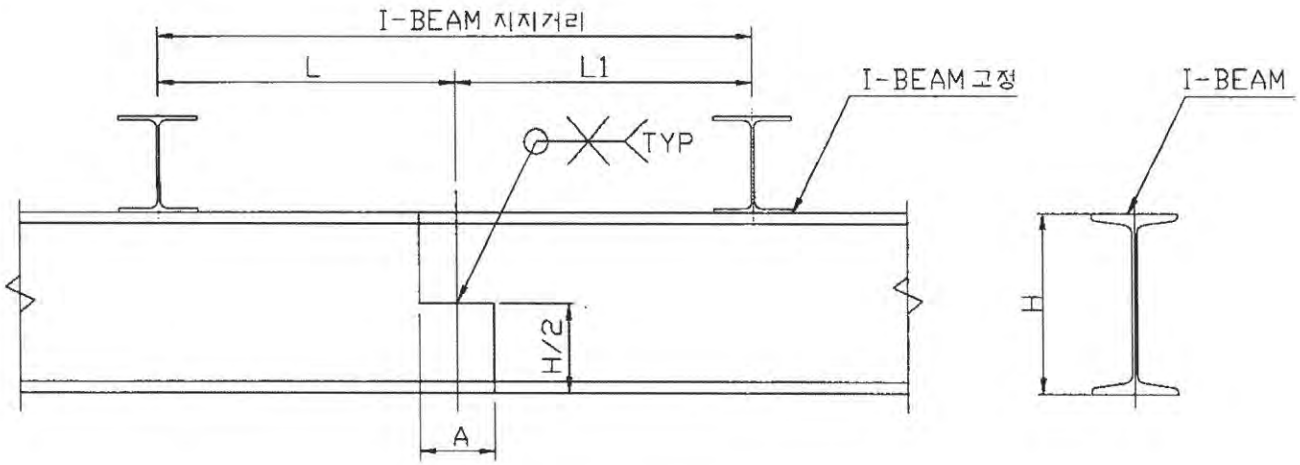
용 접 구 조	BOLT 체 결 구 조	복 합 구 조
		

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
1.0	6	100 × 2개소	M12 × 4 SET
2.0	6	125 × 2개소	M12 × 4 SET
2.8	6	125 × 2개소	M12 × 4 SET
3.0	6	125 × 2개소	M12 × 4 SET
⇨ 5.0	8	150 × 2개소	M16 × 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
200×100×t7/10	200	200	100	4000				
250×125×t7.5/12.5	200	250	125	6000	4400	3700	3600	
300×150×t10/18.5	300	300	150	9000	6800	5800	5800	4500
350×150×t9/15	300	350	175	9800	7500	6300	6000	5900
400×150×t10/18	300	400	200	12600	9400	8000	7700	5700
450×175×t11/20	300	450	225		11000	10000	9900	7700

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

* I-BEAM 고정 방법 중 용접 구조의 용접 강도

$$\text{용접부 강도 } \sigma = 1.14 \times \frac{\text{I-BEAM자중} + 1.25 \times (\text{정격하중} + \text{Hoist자중})}{0.707 \times \text{용접두께} \times \text{용접길이}} \leqq 560 \text{ kg/cm}^2$$

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 (kcal/cm²)	HOIST 자중(KG)	용접강도 (kcal/cm²)	HOIST 자중(KG)	용접강도 (kcal/cm²)	HOIST 자중(KG)	용접강도 (kcal/cm²)	HOIST 자중(KG)	용접강도 (kcal/cm²)
200×100×t7/10	26.0	0.6	10×2	320	225.2								
250×125×t7.5/12.5	38.3	0.6	12.5×2	320	181.5	520	342.7	620	463.7	620	490.5		
300×150×t10/18.5	65.6	0.6	15.0×2	320	153.7	520	288.1	620	388.8	620	411.2	642	478.2
350×150×t9/15	58.5	0.6	15.0×2	320	153.0	520	287.4	620	388.2	620	410.6	642	477.8
400×150×t10/18	72.0	0.8	15.0×2	320	115.7	520	288.6	620	389.4	620	411.8	642	478.7
450×175×t11/20	91.7	0.8	17.5×2			520	290.4	620	391.2	620	354.5	642	480.0

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

* I-BEAM 고정 방법 중 BOLT 고정 강도

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

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 (kcal/cm²)	HOIST 자중(KG)	BOLT강도 (kcal/cm²)	HOIST 자중(KG)	BOLT강도 (kcal/cm²)	HOIST 자중(KG)	BOLT강도 (kcal/cm²)	HOIST 자중(KG)	BOLT강도 (kcal/cm²)
200×100×t7/10	26.0	M12	4	1.13	320	422.7								
250×125×t7.5/12.5	38.3	M12	4	1.13	320	425.8	520	804.1	620	1087.9	620	1150.9		
300×150×t10/18.5	65.6	M12	4	1.13	320	432.7	520	811.0	620	1094.8	620	1157.8	642	1009.3
350×150×t9/15	58.5	M12	4	1.13	320	430.9	520	809.2	620	1093.0	620	1156.0	642	1008.3
400×150×t10/18	72.0	M16	4	2.01	320	244.2	520	456.9	620	616.4	620	651.8	642	1010.2
450×175×t11/20	91.7	M16	4	2.01			520	459.6	620	619.2	620	654.6	642	1013.0

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

$Ms = \dfrac{1.05 * 65.5 * 450\text{^}2}{8} = 17409$ kg-cm

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

$M_d = 1.254 \times \dfrac{(5000 + 642) * 450}{4} = 795945$ kg-cm

* 호이스트 자중 = 642 KG 용 량 : 5000 KG

* DYNAMIC COEFFICIENT : F = 1.254

* STATIC COEFFICIENT : M = 1.05

굽힘 MOMENT 합계 : $\sum M_v = M_s + M_d$ = 17409 + 795945 = 813354 kg-cm

2. 풍하중에 의한 굽힘 MOMENT

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

$M_w = \dfrac{49.69 * 450}{2} = 11179.4$ kg-cm

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

= 23.66 x 1.2 x 1.75 = 49.69 (kg)

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

속도계수 : C = 1.2 (크레인 제작기준 참조)

풍압을 받는 면적 A = I-BEAM의 면적 + HOIST의 면적 (㎡)

= 1.38 + 0.37 = 1.75 (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)	∑Mv (kg-cm)	W (kg)	Mw (kg-cm)	A (m^2)
300×150×t10/18.5	65.5	450	17409	795945	813354	49.69	11179.4	1.75
350×150×t12/24	87.2	590	39840	1043573	1083413	69.28	20436.6	2.44
400×150×t10/18	72.0	570	30703	1008197	1038900	78.65	22414	2.77
450×175×t11/20	91.7	770	71359	1361951	1433310	109.88	42303	3.87

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

5-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

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

$$= \frac{813354}{849} = 958.0 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

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

$$= \frac{11179.4}{118} = 94.7 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

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

I-BEAM 규격	단면2차 MOMENT Ix	단 면 계 수 Zx	단 면 계 수 Zy	∑Mv (kg-cm)	Mw (kg-cm)	σv (kg/cm²)	σw (kg/cm²)	∑σ (kg/cm²)
300×150×t10/18.5	12700	849	118	813354	11179.4	958.0	94.7	1053
350×150×t12/24	22400	1280	158	1083413	20436.6	846.4	129.3	975.8
400×150×t10/18	24100	1200	115	1038900	22414.1	865.8	194.9	1060.7
450×175×t11/20	39200	1740	173	1433310	42302.7	823.7	244.5	1068.3

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

5-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

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

$$= \frac{5 * 65.5 * 450\text{^}3}{384 * 2100000 * 12700} = 0.02914 \quad (cm)$$

2. 이동하중에 의한 처짐 (DEFLECTION)

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

$$= \frac{(5000 + 642) \times 450\text{^}3}{48 * 2100000 * 12700} = 0.402 \quad (cm)$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

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

$$= \frac{0.402}{450} = \frac{1}{1120} < \frac{1}{1000}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

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

$$= \frac{0.0291+0.402}{450} = \frac{1}{1045} < \frac{1}{800}$$

I-BEAM 규격	단면2차 MOMENT Ix	BEAM 자중 (kg/m)	δ_s (cm)	δ_d (cm)	이동하중에 의한 처짐 판정	처짐량 합계에의한 처짐판정
300×150×t10/18.5	12700	65.5	0.0291	0.402	1 / 1119	1 / 1045
350×150×t12/24	22400	87.2	0.0496	0.513	1 / 1150	1 / 1048
400×150×t10/18	24100	72.0	0.0343	0.430	1 / 1325	1 / 1227
450×175×t11/20	39200	91.7	0.0662	0.652	1 / 1181	1 / 1072

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

Ⅰ-6. Ⅰ-BEAM의 최대 지지거리

6-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

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

$$Ms = \frac{1.05 * 87.2 * 590\text{^}2}{8} = 39840 \quad \text{kg-cm}$$

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

$$M_d = 1.254 \times \frac{(5000 + 642) * 590}{4} = 1043573 \quad \text{kg-cm}$$

* 호이스트 자중 = 642 KG 용 량 : 5000 KG

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

굽힘 MOMENT 합계 : $\sum M_v = M_s + M_d$ = 39840 + 1043573 = 1083413 kg-cm

2. 풍하중에 의한 굽힘 MOMENT

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

$$M_w = \frac{69.28 * 590}{2} = 20436.6 \quad \text{kg-cm}$$

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

= 23.66 x 1.2 x 2.44 = 69.28 (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 (㎡)

= 2.07 + 0.37 = 2.44 (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)	∑Mv (kg-cm)	W (kg)	Mw (kg-cm)	A (m^2)
300×150×t10/18.5	65.5	450	17409	795945	813354	49.69	11179.4	1.75
⇨ 350×150×t12/24	87.2	590	39840	1043573	1083413	69.28	20436.6	2.44
400×150×t10/18	72.0	570	30703	1008197	1038900	78.65	22414	2.77
450×175×t11/20	91.7	770	71359	1361951	1433310	109.88	42303	3.87

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

6-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

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

$$= \frac{1083413}{1280} = 846.4 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

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

$$= \frac{20436.6}{158} = 129.3 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

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

I-BEAM 규격	단면2차 MOMENT Ix	단 면 계 수 Zx	단 면 계 수 Zy	ΣMv (kg-cm)	Mw (kg-cm)	σv (kg/cm²)	σw (kg/cm²)	Σσ (kg/cm²)
300×150×t10/18.5	12700	849	118	813354.0	11179.4	958.0	94.7	1053
⇨ 350×150×t12/24	22400	1280	158	1083413	20436.6	846.4	129.3	975.8
400×150×t10/18	24100	1200	115	1038900	22414.1	865.8	194.9	1060.7
450×175×t11/20	39200	1740	173	1433310	42302.7	823.7	244.5	1068.3

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

6-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

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

$$= \frac{5 * 87.2 * 590\text{^}3}{384 * 2100000 * 22400} = 0.0496 \quad (cm)$$

2. 이동하중에 의한 처짐 (DEFLECTION)

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

$$= \frac{(5000 + 642) \times 590\text{^}3}{48 * 2100000 * 22400} = 0.513 \quad (cm)$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

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

$$= \frac{0.513}{590} = \frac{1}{1150} < \frac{1}{1000}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

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

$$= \frac{0.0496+0.513}{590} = \frac{1}{1048} < \frac{1}{800}$$

I-BEAM 규격	단면2차 MOMENT Ix	BEAM 자중 (kg/m)	δ_s (cm)	δ_d (cm)	이동하중에 의한 처짐 판정	처짐량 합계에의한 처짐판정
300×150×t10/18.5	12700	65.5	0.0291	0.402	1 / 1119	1 / 1045
⇨ 350×150×t12/24	22400	87.2	0.0496	0.513	1 / 1150	1 / 1048
400×150×t10/18	24100	72.0	0.0343	0.430	1 / 1325	1 / 1227
450×175×t11/20	39200	91.7	0.0662	0.652	1 / 1181	1 / 1072

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

Ⅰ-7. Ⅰ-BEAM의 최대 지지거리

7-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

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

$$Ms = \frac{1.05 * 72 * 570\text{^}2}{8} = 30703 \text{ kg-cm}$$

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

$$M_d = 1.254 \times \frac{(5000 + 642) * 570}{4} = 1008197 \text{ kg-cm}$$

* 호이스트 자중 = 642 KG 용 량 : 5000 KG

* DYNAMIC COEFFICIENT : F = 1.254

* STATIC COEFFICIENT : M = 1.05

굽힘 MOMENT 합계 : $\sum M_v = M_s + M_d$ = 30703 + 1008197 = 1038900 kg-cm

2. 풍하중에 의한 굽힘 MOMENT

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

$$M_w = \frac{78.65 * 570}{2} = 22414.1 \text{ kg-cm}$$

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

= 23.66 x 1.2 x 2.77 = 78.65 (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)

= 2.4 + 0.37 = 2.77 (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)
300×150×t10/18.5	65.5	450	17409	795945	813354	49.69	11179.4	1.75
350×150×t12/24	87.2	590	39840	1043573	1083413	69.28	20436.6	2.44
⇨ 400×150×t10/18	72.0	570	30703	1008197	1038900	78.65	22414.1	2.77
450×175×t11/20	91.7	770	71359	1361951	1433310	109.88	42303	3.87

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

7-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

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

$$= \frac{1038900}{1200} = 865.8 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

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

$$= \frac{22414.1}{115} = 194.9 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

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

I-BEAM 규격	단면2차 MOMENT Ix	단 면 계 수 Zx	단 면 계 수 Zy	ΣMv (kg-cm)	Mw (kg-cm)	σv (kg/cm²)	σw (kg/cm²)	Σσ (kg/cm²)
300×150×t10/18.5	12700	849	118	813354	11179.4	958.0	94.7	1053
350×150×t12/24	22400	1280	158	1083413	20436.6	846.4	129.3	975.8
⇨ 400×150×t10/18	24100	1200	115	1038900	22414.1	865.8	194.9	1060.7
450×175×t11/20	39200	1740	173	1433310	42302.7	823.7	244.5	1068.3

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

7-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

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

$$= \frac{5 * 72 * 570\text{^}3}{384 * 2100000 * 24100} = 0.03431 \quad (cm)$$

2. 이동하중에 의한 처짐 (DEFLECTION)

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

$$= \frac{(5000 + 642) \times 570\text{^}3}{48 * 2100000 * 24100} = 0.430 \quad (cm)$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

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

$$= \frac{0.430}{570} = \frac{1}{1325} < \frac{1}{1000}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

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

$$= \frac{0.0343+0.43}{570} = \frac{1}{1227} < \frac{1}{800}$$

I-BEAM 규격	단면2차 MOMENT Ix	BEAM 자중 (kg/m)	δ_s (cm)	δ_d (cm)	이동하중에 의한 처짐 판정	처짐량 합계에의한 처짐판정
300×150×t10/18.5	12700	65.5	0.0291	0.402	1 / 1119	1 / 1045
350×150×t12/24	22400	87.2	0.0496	0.513	1 / 1150	1 / 1048
⇨ 400×150×t10/18	24100	72.0	0.0343	0.430	1 / 1325	1 / 1227
450×175×t11/20	39200	91.7	0.0662	0.652	1 / 1181	1 / 1072

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

$Ms = \frac{1.05 * 91.7 * 770^2}{8} = 71359$ kg-cm

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

$M_d = 1.254 \times \frac{(5000 + 642) * 770}{4} = 1361951$ kg-cm

* 호이스트 자중 = 642 KG 용 량 : 5000 KG

* DYNAMIC COEFFICIENT : F = 1.254

* STATIC COEFFICIENT : M = 1.05

굽힘 MOMENT 합계 : $\sum M_v = M_s + M_d$ = 71359 + 1361951 = 1433310 kg-cm

2. 풍하중에 의한 굽힘 MOMENT

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

$M_w = \frac{109.88 * 770}{2} = 42302.7$ kg-cm

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

= 23.66 x 1.2 x 3.87 = 109.88 (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 (㎡)

= 3.5 + 0.37 = 3.87 (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)	∑Mv (kg-cm)	W (kg)	Mw (kg-cm)	A (m^2)
300×150×t10/18.5	65.5	450	17409	795945	813354	49.69	11179.4	1.75
350×150×t12/24	87.2	590	39840	1043573	1083413	69.28	20436.6	2.44
400×150×t10/18	72.0	570	30703	1008197	1038900	78.65	22414	2.77
⇨ 450×175×t11/20	91.7	770	71359	1361951	1433310	109.88	42303	3.87

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

8-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

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

$$= \frac{1433310}{1740} = 823.7 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

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

$$= \frac{42302.6604}{173} = 244.5 \quad (kg/cm^2)$$

2. 풍하중에 의한 굽힘 응력

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

I-BEAM 규격	단면2차 MOMENT Ix	단 면 계 수 Zx	단 면 계 수 Zy	ΣMv (kg-cm)	Mw (kg-cm)	σv (kg/cm²)	σw (kg/cm²)	Σσ (kg/cm²)
300×150×t10/18.5	12700	849	118	813354	11179.4	958.0	94.7	1053
350×150×t12/24	22400	1280	158	1083413	20436.6	846.4	129.3	975.8
400×150×t10/18	24100	1200	115	1038900	22414.1	865.8	194.9	1060.7
⇨ 450×175×t11/20	39200	1740	173	1433310	42302.7	823.7	244.5	1068.3

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

8-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

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

$$= \frac{5 * 91.7 * 770\text{^}3}{384 * 2100000 * 39200} = 0.06622 \quad (cm)$$

2. 이동하중에 의한 처짐 (DEFLECTION)

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

$$= \frac{(5000 + 642) \times 770\text{^}3}{48 * 2100000 * 39200} = 0.652 \quad (cm)$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

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

$$= \frac{0.652}{770} = \frac{1}{1181} < \frac{1}{1000}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

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

$$= \frac{0.0662+0.652}{770} = \frac{1}{1072} < \frac{1}{800}$$

I-BEAM 규격	단면2차 MOMENT Ix	BEAM 자중 (kg/m)	δ_s (cm)	δ_d (cm)	이동하중에 의한 처짐 판정	처짐량 합계에의한 처짐판정
300×150×t10/18.5	12700	65.5	0.0291	0.402	1 / 1119	1 / 1045
350×150×t12/24	22400	87.2	0.0496	0.513	1 / 1150	1 / 1048
400×150×t10/18	24100	72.0	0.0343	0.430	1 / 1325	1 / 1227
450×175×t11/20	39200	91.7	0.0662	0.652	1 / 1181	1 / 1072

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.

4. 참 고 도 서

1 LOAD LIMITER 권고 SETTING 치
2 E.O.C.R 권고 SETTING치
3 MOTOR DATA SHEET
4 사용방법 설명서 (HOIST, OLP)
5 PUSH BUTTON 카다록 및 IP 성적서
6 WIRE ROPE 성적서
7 SUB VENDOR LIST
8 INVERTER 취급설명서

THREE PHASE INDUCTION MOTOR DATE SHEET

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	132 M
4. RATED POWER	8.5 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	1740 RPM
11. FULL LOAD CURRENT	34.4 A
12. LOCKED ROTOR CURRENT	198.1 A
13. MINIMUM STARTING VOLTAGE	200 V
14. EFFICIENCY AT 100% RATED LOAD	82 %
15. POWER FACTOR AT 100% RATED LOAD	79 %
16. FULL LOAD TORQUE	10.82 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6307zz
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 M
4. RATED POWER	8.5 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	1740 RPM
11. FULL LOAD CURRENT	19.9 A
12. LOCKER ROTOR CURRENT	114.7 A
13. MINIMUM STARTING VOLTAGE	345 V
14. EFFICIENCY AT 100% RATED LOAD	82 %
15. POWER FACTOR AT 100% RATED LOAD	79 %
16. FULL LOAD TORQUE	10.82 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6307zz
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 M
4. RATED POWER	8.5 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	1740 RPM
11. FULL LOAD CURRENT	18.1 A
12. LOCKED ROTOR CURRENT	94.8 A
13. MINIMUM STARTING VOLTAGE	400 V
14. EFFICIENCY AT 100% RATED LOAD	82 %
15. POWER FACTOR AT 100% RATED LOAD	79 %
16. FULL LOAD TORQUE	10.82 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6307zz
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 M
4. RATED POWER	8.5 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	1740 RPM
11. FULL LOAD CURRENT	16.5 A
12. LOCKED ROTOR CURRENT	94.8 A
13. MINIMUM STARTING VOLTAGE	418 V
14. EFFICIENCY AT 100% RATED LOAD	82 %
15. POWER FACTOR AT 100% RATED LOAD	79 %
16. FULL LOAD TORQUE	10.82 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6307zz
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 M
4. RATED POWER	8.5 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	1740 RPM
11. FULL LOAD CURRENT	15.8 A
12. LOCKED ROTOR CURRENT	90.9 A
13. MINIMUM STARTING VOLTAGE	436 V
14. EFFICIENCY AT 100% RATED LOAD	82 %
15. POWER FACTOR AT 100% RATED LOAD	79 %
16. FULL LOAD TORQUE	10.82 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6307zz
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 M
4. RATED POWER	5.5 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	28.2 A
12. LOCKED ROTOR CURRENT	155.1 A
13. MINIMUM STARTING VOLTAGE	200 V
14. EFFICIENCY AT 100% RATED LOAD	77 %
15. POWER FACTOR AT 100% RATED LOAD	66.4 %
16. FULL LOAD TORQUE	11.59 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6207zz
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 M
4. RATED POWER	5.5 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	16.3 A
12. LOCKER ROTOR CURRENT	89.8 A
13. MINIMUM STARTING VOLTAGE	342 V
14. EFFICIENCY AT 100% RATED LOAD	77 %
15. POWER FACTOR AT 100% RATED LOAD	66.4 %
16. FULL LOAD TORQUE	11.59 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6207zz
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 M
4. RATED POWER	5.5 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	14.1 A
12. LOCKED ROTOR CURRENT	77.6 A
13. MINIMUM STARTING VOLTAGE	400 V
14. EFFICIENCY AT 100% RATED LOAD	77 %
15. POWER FACTOR AT 100% RATED LOAD	66.4 %
16. FULL LOAD TORQUE	11.59 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6207zz
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 L
4. RATED POWER	5.5 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	13.5 A
12. LOCKED ROTOR CURRENT	74.3 A
13. MINIMUM STARTING VOLTAGE	418 V
14. EFFICIENCY AT 100% RATED LOAD	77 %
15. POWER FACTOR AT 100% RATED LOAD	66.4 %
16. FULL LOAD TORQUE	11.59 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6207zz
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 M
4. RATED POWER	5.5 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	12.9 A
12. LOCKED ROTOR CURRENT	71.2 A
13. MINIMUM STARTING VOLTAGE	436 V
14. EFFICIENCY AT 100% RATED LOAD	77 %
15. POWER FACTOR AT 100% RATED LOAD	66.4 %
16. FULL LOAD TORQUE	11.59 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6207zz
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 M
4. RATED POWER	4.2 KW x 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	860 RPM
11. FULL LOAD CURRENT	23.0 A
12. LOCKED ROTOR CURRENT	136.2 A
13. MINIMUM STARTING VOLTAGE	200 V
14. EFFICIENCY AT 100% RATED LOAD	77.5 %
15. POWER FACTOR AT 100% RATED LOAD	60 %
16. FULL LOAD TORQUE	14.93 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6207zz
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 M
4. RATED POWER	4.2 KW x 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	860 RPM
11. FULL LOAD CURRENT	13.3 A
12. LOCKED ROTOR CURRENT	78.8 A
13. MINIMUM STARTING VOLTAGE	342 V
14. EFFICIENCY AT 100% RATED LOAD	77.5 %
15. POWER FACTOR AT 100% RATED LOAD	60 %
16. FULL ROTOR TORQUE	14.93 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6207zz
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 M
4. RATED POWER	4.2 KW x 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	860 RPM
11. FULL LOAD CURRENT	11.5 A
12. LOCKED ROTOR CURRENT	68.1 A
13. MINIMUM STARTING VOLTAGE	400 V
14. EFFICIENCY AT 100% RATED LOAD	77.5 %
15. POWER FACTOR AT 100% RATED LOAD	60 %
16. FULL LOAD TORQUE	14.93 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6207zz
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 M
4. RATED POWER	4.2 KW x 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	860 RPM
11. FULL LOAD CURRENT	11.0 A
12. LOCKED ROTOR CURRENT	65.1 A
13. MINIMUM STARTING VOLTAGE	418 V
14. EFFICIENCY AT 100% RATED LOAD	77.5 %
15. POWER FACTOR AT 100% RATED LOAD	60 %
16. FULL LOAD TORQUE	14.93 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6207zz
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 M
4. RATED POWER	4.2 KW x 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	860 RPM
11. FULL LOAD CURRENT	10.5 A
12. LOCKED ROTOR CURRENT	62.4 A
13. MINIMUM STARTING VOLTAGE	436 V
14. EFFICIENCY AT 100% RATED LOAD	77.5 %
15. POWER FACTOR AT 100% RATED LOAD	60 %
16. FULL LOAD TORQUE	14.93 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E N V
19. TYPE OF BEARING	PL : 6307zz OPL : 6207zz
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	CREEP HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	1.0 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	1152 RPM
11. FULL LOAD CURRENT	6.7 A
12. LOCKED ROTOR CURRENT	23.8 A
13. MINIMUM STARTING VOLTAGE	200 V
14. EFFICIENCY AT 100% RATED LOAD	63.5 %
15. POWER FACTOR AT 100% RATED LOAD	62 %
16. FULL LOAD TORQUE	1.6 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	CREEP HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	1.0 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	1152 RPM
11. FULL LOAD CURRENT	3.9 A
12. LOCKED ROTOR CURRENT	13.8 A
13. MINIMUM STARTING VOLTAGE	345 V
14. EFFICIENCY AT 100% RATED LOAD	63.5 %
15. POWER FACTOR AT 100% RATED LOAD	62 %
16. FULL LOAD TORQUE	1.6 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	CREEP HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	1.0 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	1152 RPM
11. FULL LOAD CURRENT	3.3 A
12. LOCKED ROTOR CURRENT	11.9 A
13. MINIMUM STARTING VOLTAGE	400 V
14. EFFICIENCY AT 100% RATED LOAD	63.5 %
15. POWER FACTOR AT 100% RATED LOAD	62 %
16. FULL LOAD TORQUE	1.6 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E F C
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	CREEP HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	1.0 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	1152 RPM
11. FULL LOAD CURRENT	3.2 A
12. LOCKED ROTOR CURRENT	11.4 A
13. MINIMUM STARTING VOLTAGE	418 V
14. EFFICIENCY AT 100% RATED LOAD	63.5 %
15. POWER FACTOR AT 100% RATED LOAD	62 %
16. FULL LOAD TORQUE	1.6 KG.M
17. SITE ALTTITUDE(UNDER)	1000 M
18. ENCLOSURE & COOLING METHOD	T E F C
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	CREEP HOISTING
2. MANUFACTURE	극동호이스트 (주)
3. FRAME NUMBER	90 L
4. RATED POWER	1.0 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	1152 RPM
11. FULL LOAD CURRENT	3.1 A
12. LOCKED ROTOR CURRENT	10.9 A
13. MINIMUM STARTING VOLTAGE	436 V
14. EFFICIENCY AT 100% RATED LOAD	63.5 %
15. POWER FACTOR AT 100% RATED LOAD	62 %
16. FULL LOAD TORQUE	1.6 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	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 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	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 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	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
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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 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
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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 ℃
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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

ISSUE NO. PW1416 DATE 2014-01-29

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 - 2002** **(B Grade)**

TO MESSRS KISWIRE LTD.

MATERIAL DESCRIPTION UNGALVANIZED STEEL WIRE ROPE

06X37 + FC 2000M X 3 REEL

EX NO. PW1416 T/T NO.

ORDER NO. REEL NO. 2 ~ 4 SAMPLING NO. 2

DIAMETER OF ROPE 16.0 mm TYPE OF CORE Fiber Core

SPECIFIED BREAKING LOAD 145.0 kN SAMPLE BROKE AT 157.575 kN

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

ROPE LAY RHRL (OZ) LAY LENGTH 106.4 mm

LUBRICATION A-2

CHEMICAL ANALYSIS OF WIRE ROD

CHARGE NO.	C X 100	Si X 100	Mn X 100	P X 1000	S X 1000
SD51275791	**61**	**20**	**55**	**7**	**13**

KS JIS

DATE OF SAMPLE TEST 2014-01-29

KISWIRE