



제 CE-2018-51324 호

안 전 인 증 서

(사업장명) 극동호이스트(주)

(소 재 지) 경기도 안산시 단원구 해봉로 119 (성곡동 630-2)

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

_____ 품 목 :	호이스트	_____
_____ 형식(용량) :	KD1-M(1 ton)	_____
_____ 인증번호 :	18-CE2AC-51324	_____
_____ 인증기준 :	위험기계·기구 안전인증기준 (고용노동부고시 제2016-29호)	_____
_____ 인증조건 :	산업안전보건법 “제34조 준수”	_____

2018년 10월 23일

한국승강기안전공단 이사장





심사결과 통지서

신청인	사업장명	극동호이스트(주)	사업장관리번호	13481013350
	사업자등록번호	134-81-01335	대표자 성명	최성찬
	소재지	경기도 안산시 단원구 해봉로 119 (성곡동)		
안전인증대상기계 · 기구명 호이스트				
형식(규격)	KD1-M		용량(등급)	1 ton

『산업안전보건법』 제34조 및 같은 법 시행규칙 제58조의4제4항에 따라 실시한

☐ 예비심사

☒ 서면심사

☐ 기술능력 및 생산체계심사

☐ 개별 제품심사

☐ 형식별 제품심사

결과가 ☒ 적 합 함을 통지합니다.
☐ 부적합

2017년 05월 08일

인증심사원

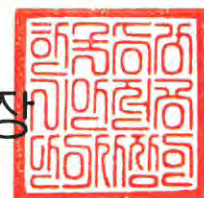
박영민

(박영민인)

이동윤

(이동윤인)

한국승강기안전공단 이사장



서 면 심 사 도 서

품 명: Monorail Type Hoist
형식번호: KD1 - M
정격용량: 1 톤



CE1701687

극 동 호 이 스톱 (주)

주소: 경기도 안산시 단원구 해봉로 119 (성곡동)

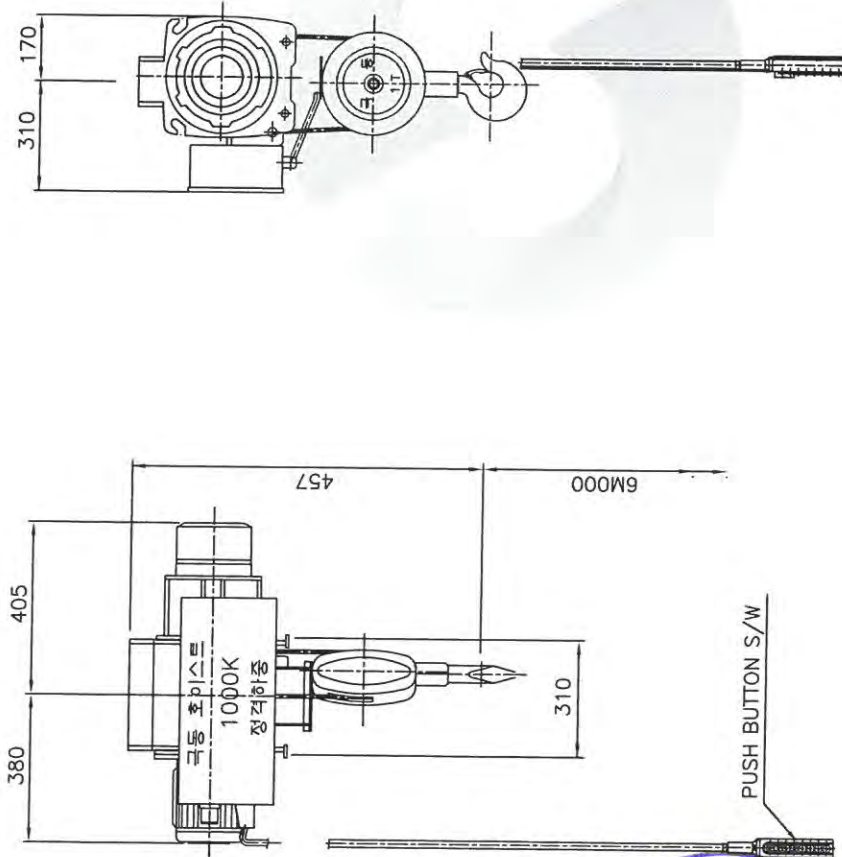
TEL : 031) 491 - 5311

FAX : 031) 363 - 3952



동 일 형 식 일 램 표

사업장명	극동호이스트(주)		개정일자 및 번호	2017. 04. 28	인증번호	비 고
형식 및 모델			동일 형식 인정범위 및 내역		회행방식	
형식	모델	양정(m)	권상속도(m/min)	회행속도(m/min)		
KD1-M	KD1-L6-S	6	고속: 12M/MIN 저속: 6M/MIN	고속:24M/MIN 저속:16M/MIN	정치식	
	KD1-L9-S	9				
	KD1-L12-S	12				
	KD1-L18-S	18				
	KD1-L24-S	24			수동 구동식	
	KD1-L30-S	30				
	KD1-L6-P	6				
	KD1-L9-P	9				
	KD1-L12-P	12			모터 구동식 (인버터 콘트롤 포함)	
	KD1-L6-M	6				
	KD1-L9-M	9				
	KD1-L12-M	12				
	KD1-L18-M	18				
	KD1-L24-M	24				
	KD1-L30-M	30				
KD1-L18-M-H	18	인버터 콘트롤 타입				
KD1-L24-M-H	24					
KD1-L30-M-H	30					



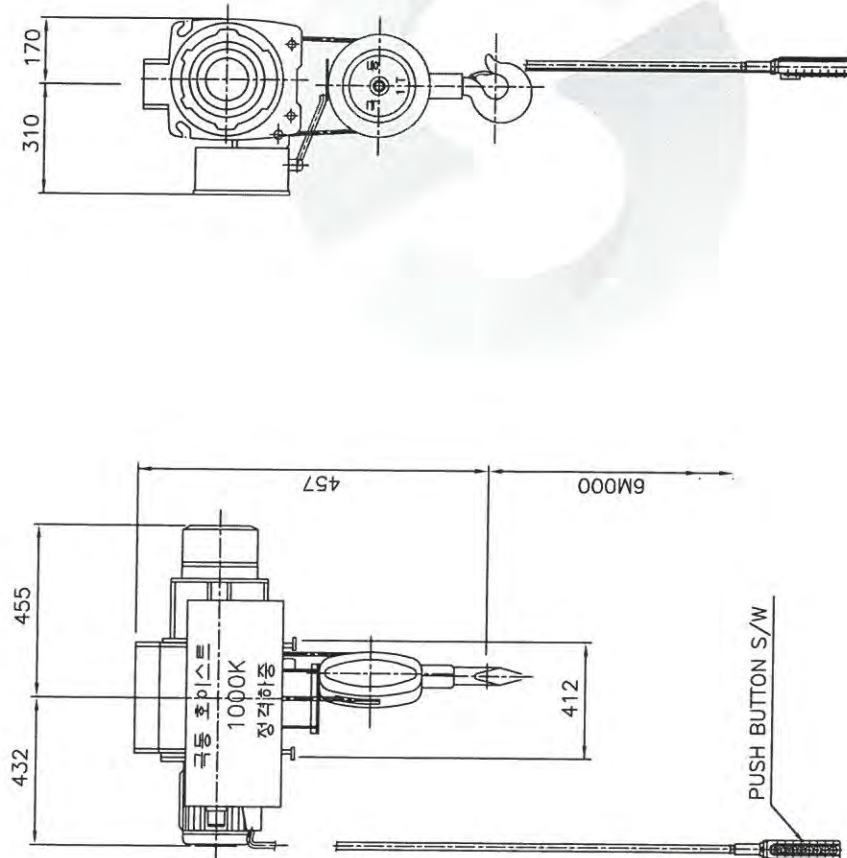
PUSH BUTTON S/W

090110 : KD1-M

SPECIFICATION			
HOISTING LOAD		1000	KG
TESTING LOAD		1250	KG
LIFT		6	M
RATING		30	MIN
HOISTING	HIGH	SPEED	12 M/MIN
		MOTOR	2.4 KW x 4 P
	LOW	SPEED	6 M/MIN
		MOTOR	1.2 KW x 8 P
TRAVERSING	HIGH	SPEED	—
		MOTOR	—
	LOW	SPEED	—
		MOTOR	—
WIRE ROPE	(6X36) ø8 x 2 FALLS		
POWER SOURCE	Stainless (7X19) ø8 x 2 FALLS		
	AC3ø 220V(380,440,460,480)60HZ		
COLOR	10 B 3/5		
WEIGHT	146 KG		

5										
4	UPPER LIMIT S/W	SS400		1						
3	SAFETY LATCH	SPC		1						
2	EMERGENCY S/W	—		1						
1	LOAD LIMITER	—		1						
NO.	DESCRIPTIONS	MT'L	SET QTY	SET	UNIT	TOTAL WEIGHT KG.	REMARKS			
PROJECT		DATE								
TITLE		20 . . .								
DRAWN		SCALE								
		A3/20 /								
		REF DRAWING								
 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.		SHEET NO.			DRAWING NO.					
		K01S6000								

307266



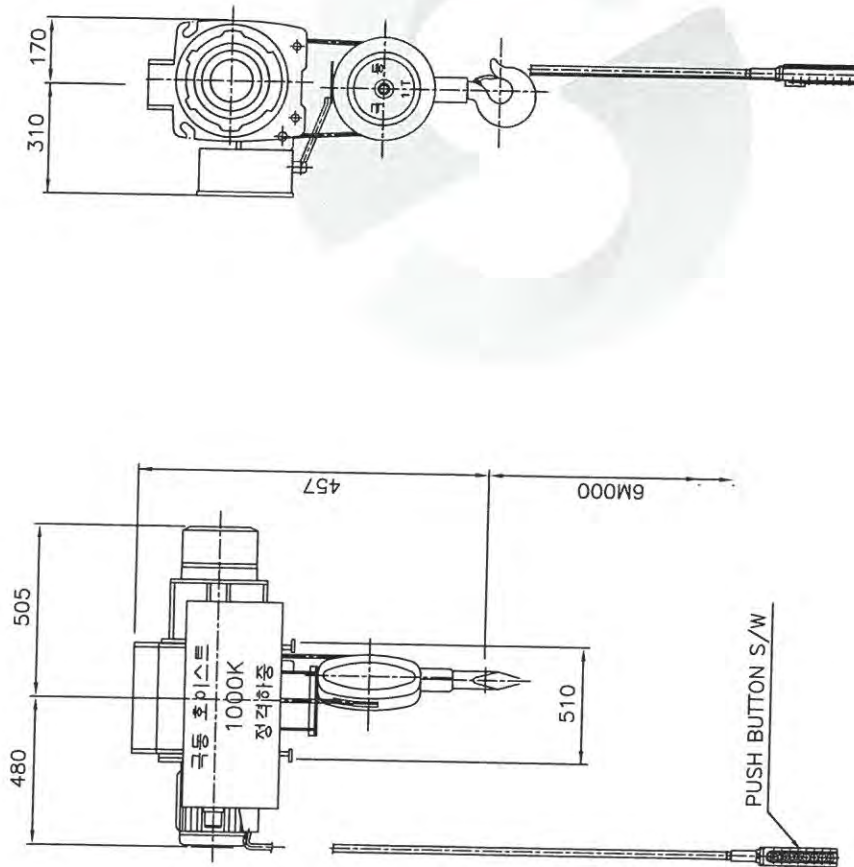
PUSH BUTTON S/W

0907-01 : KD1-M

SPECIFICATION			
HOISTING LOAD		1000	KG
TESTING LOAD		1250	KG
LIFT		9	M
RATING		30	MIN
HOISTING	HIGH	SPEED	12 M/MIN
		MOTOR	2.4 KW x 4 P
	LOW	SPEED	6 M/MIN
		MOTOR	1.2 KW x 8 P
TRAVERSING	HIGH	SPEED	—
		MOTOR	—
	LOW	SPEED	—
		MOTOR	—
WIRE ROPE	(6X36) Ø8 x 2 FALLS		
POWER SOURCE	Stainless (7X19) Ø8 x 2 FALLS AC3Ø 220V(380,440,460,480)60HZ		
COLOR	10 B 3/5		
WEIGHT	170 KG		

5									
4	UPPER LIMIT S/W	SS400	1						
3	SAFETY LATCH	SPC	1						
2	EMERGENCY S/W	—	1						
1	LOAD LIMITER	—	1						
NO.	DESCRIPTIONS	MT'L	SET	SET	UNIT	TOTAL	REMARKS		
			QTY			WEIGHT KG.			
PROJECT		DATE							
		20 . . .							
TITLE		SCALE							
		A3/20 /							
DRAWN		DESIGNED	CHECKED	APPROVED	REF DRAWING				
							DRAWING NO.		
							KD1S900		
 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.		SHEET NO. 							





001000 : KD1-M

SPECIFICATION			
HOISTING LOAD		1000	KG
TESTING LOAD		1250	KG
LIFT		12	M
RATING		30	MIN
HOISTING	HIGH	SPEED	12 M/MIN
		MOTOR	2.4 KW x 4 P
	LOW	SPEED	6 M/MIN
		MOTOR	1.2 KW x 8 P
TRAVERSING	HIGH	SPEED	—
		MOTOR	—
	LOW	SPEED	—
		MOTOR	—
WIRE ROPE	(6X36) ø8 x 2 FALLS		
POWER SOURCE	Stainless (7X19) ø8 x 2 FALLS		
COLOR	AC3ø 220V(380,440,460,480)60HZ		
WEIGHT	10 B 3/5		
	180 KG		

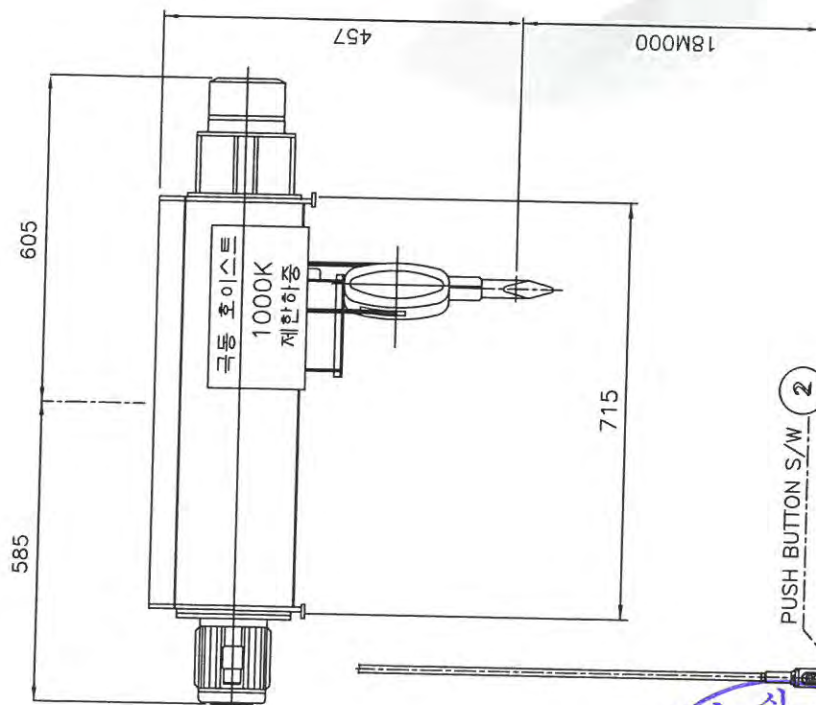
5									
4	UPPER LIMIT S/W	SS400	1						
3	SAFETY LATCH	SPC	1						
2	EMERGENCY S/W	—	1						
1	LOAD LIMITER	—	1						
NO.	DESCRIPTIONS	MT'L	SET QTY	SET QTY	UNIT	TOTAL WEIGHT KG.	REMARKS		
PROJECT						DATE			
TITLE		KD1 - L12 - S				20 . . .			
DRAWN		ARRANGEMENT DRAWING FOR HOIST				SCALE			
		DESIGNED	CHECKED	APPROVED	A3/20 /				
					REF DRAWING				
 극동호이스트 주식회사 KUK DONG HOIST CO., LTD.		SHEET NO.		DRAWING NO.					
				KD1S1200					



KD

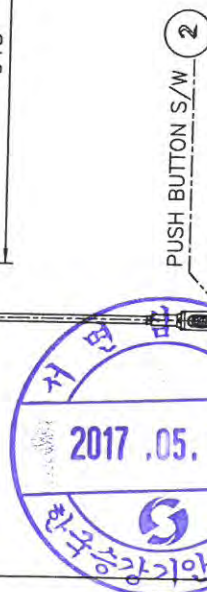
SHEET No.	DWG No.
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KD1S - 1800



~~불법복제 및 배포금지~~

5											
4	UPPER LIMIT S/W	SS400		1							
3	SAFETY LATCH	SPC		1							
2	PENDANT S/W	-		1							
1	LOAD LIMITER	-		1							
NO.	DESCRIPTION	MT'L	SUB QTY	TOTAL	SUB	TOTAL	WEIGHT(kg)	REMARKS.			
PROJECT											
TITLE	KD1 - L18- S ARRANGEMENT DRAWING FOR HOIST										
DRAWN	DESIGNED	CHECKED	APPROVED	SCALE				PROJECTION			
				A3/20				3rd			
				REP. DRAWING							
			극동호이스트 주식회사				SHEET No.		DWG No.		
			KUK DONG HOIST CO., LTD						KD1S - 1800		



~~불법복제 및 배포금지~~

[illegible]



KD

SHEET No.	DWG No.
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KD1S - 3000

[illegible]

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
																			ADR'S NO.

본 명세서 및 배포금지

NO	DESCRIPTION	SPECIFICATION	Q'TY	REMARK
1	CHASSIS PLATE		1	아 연 도 글
2	CABLE DUCT	-	1	
3	N.F.B	33AF/20AT(저속 15AT)	1	HOISTING
4	MAGNET CONTACTOR	DMC22C	1	MAIN MAG.
5	MAGNET CONTACTOR	DMC22C	2	HOISTING
6	SILICON RECTIFIER	SR-30	1	HOISTING
7	E.O.C.R	SS-30	1	HOISTING
8	FUSE	1 A	2	
9	FUSE	2 A	1	
10	TRANSFORMER	220V/110,120V/60VA	1	
11	UPPER LIMIT	AC 600V/75A	1	
12	TERMINAL BLOCK	60A,15A		
13	EARTH TERMINAL	3tx20x50	1	

NOTE

1. 전선의 색상은 다음과 같다.

1) 흑색 : 교류 및 직류 전원선으로 5) 청색 : 직류 제어선으로

2) 적색 : 교류제어회로

3) 주황색 : 외부 전원에서 공급되는 연동장치 제어회로

4) 녹색 또는 녹색과 황색 혼용 : 접지선

2. CABLE MATERIAL : KIV OR EQUIVALENT

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.

NOTE

1. UPPER LIMIT LS-1,LS-2의 직접 허용 전류 용량 : AC 600V, 75A

2. POWER SOURCE : AC. 3ø 220V 60HZ

3. EARTH TERMINAL RESISTANCE : 0.018 Ω

*TRAVELLING 적용 시 NFB는 CRANE SCOPE

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13.



| | | | | | | | |
|------|-----------|------|------|--------------------------|------------------------|---------------------|-----------|
| DR | DR | DR | DR | CUSTOMER | HOIST CONTROL BOX (고속) | ARRANGEMENT DRAWING | ORDER NO. |
| DATE | REVISIONS | CHK. | APP. | DRAWING TITLE | | | |
| | | | | KUK DONG HOIST CO., LTD. | | | KD01BA23 |

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

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NOTE

1. 전선의 색상은 다음과 같다.

- 1) 흑색 : 교류 및 직류 전원선로

2) 적색 : 교류제어회로

3) 주황색 : 외부 전원에서 공급되는 연동장치 제어회로

4) 녹색 또는 녹색과 황색 혼용 : 접지선

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 증전부분이 차단되도록 할것.

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

5) 정색 : 직류 제어선로

NOTE

1. UPPER LIMIT LS-1,LS-2의 접점 허용 전류, 용량 : AC 600V, 75A

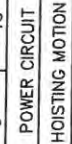
2. POWER SOURCE : AC. 3ø 460V 60HZ

3. EARTH TERMINAL RESISTANCE : 0.018 Ω

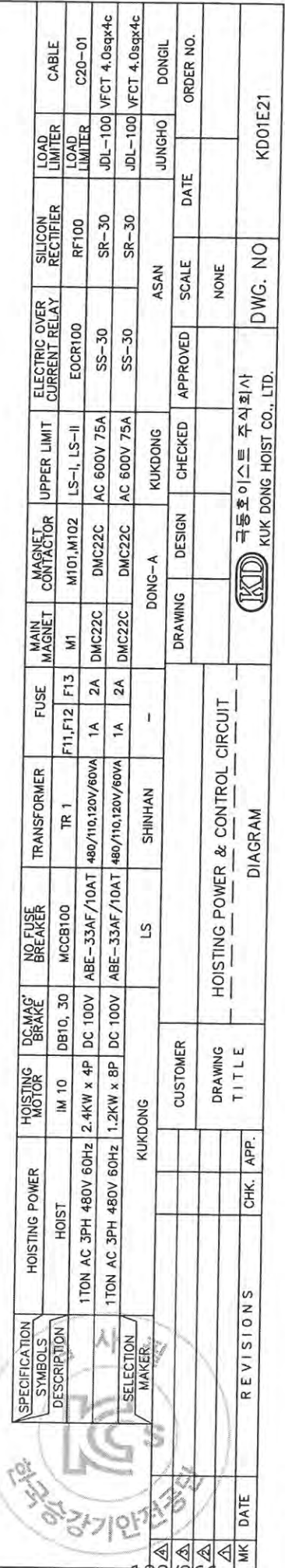
*TRAVELLING 적용 시 NFB는 CRANE SCOPE



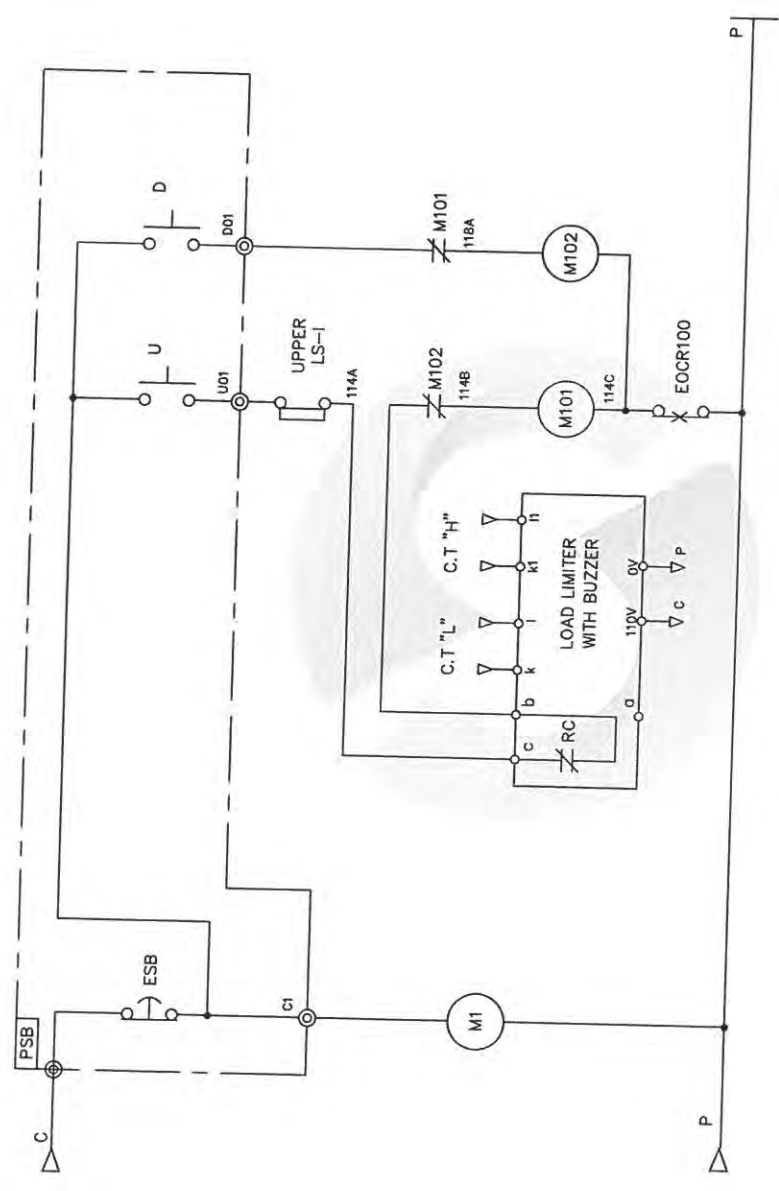
| | | | | | | |
|--|--------|---------|----------|-------|---------|-----------|
| DRAWING | DESIGN | CHECKED | APPROVED | SCALE | DATE | ORDER NO. |
| <div> <div>KID</div> <div>극동호이스트 주식회사</div> <div>KUK DONG HOIST CO., LTD.</div> </div> | | | | NONE | | |
| <div> <div>HOIST CONTROL BOX (고속)</div> <div>ARRANGEMENT DRAWING</div> </div> | | | | | DWG. NO | KD01BA53 |
| CUSTOMER | | | | | | |
| DRAWING TITLE | | | | | | |
| REVISIONS | CHK. | APP. | | | | |
| MK | DATE | | | | | |

KD01E21

불법복제 및 배포금지



| | | | | | | | | | | | | | | | | | | | |
|-----------------|---|---|---|---|---|---|---|---|----|------------------|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20. |
| EM, STOP | | | | | | | | | | OVER LOAD BUZZER | | | | | | | | | |
| CONTROL CIRCUIT | | | | | | | | | | UP DOWN | | | | | | | | | |
| ADR'S NO. | | | | | | | | | | A5 | | | | | | | | | |



불법복제 및 배포금지



129/206

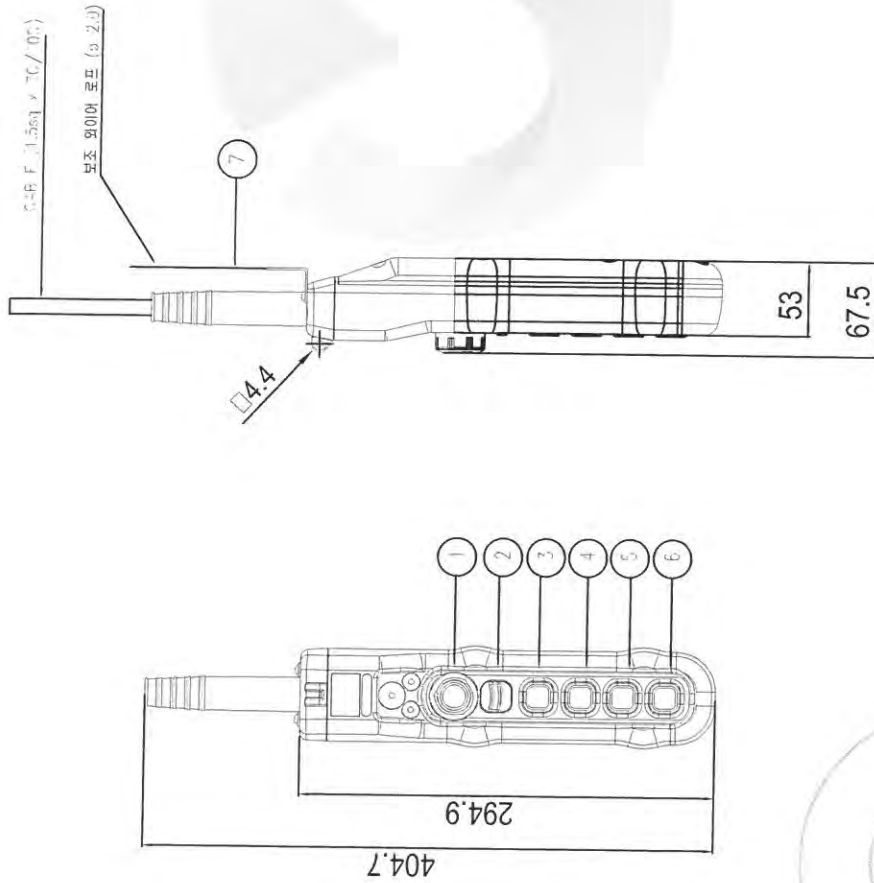
| SPECIFICATION SYMBOLS | UPPER LIMIT | PENDANT P.B. S/W | LOAD LIMITER |
|--------------------------------|-------------|------------------|--------------|
| | | | |
| DESCRIPTION | LS-1 | E.S.B | LOAD LIMITER |
| MAKER | AC 600V 3A | 250V 3A | JDL-100 |
| APPROVED | KUKDONG | KUNHUNG | JEUNGHO |
| CHECKED | SCALE | DATE | ORDER NO. |
| DESIGN | NONE | | |
| DRAWING | | | |
| MAIN POWER 2 & CONTROL CIRCUIT | | | |
| DIAGRAM | | | |
| CUSTOMER | | | |
| DRAWING TITLE | | | |
| CHK. | APP. | | |
| DATE | REVISIONS | | |
| MK | | | |
| KUK DONG HOIST CO., LTD. | | | |
| DWG. NO | | | |
| KD2E001 | | | |



* IP : 55.01.상

| NO | SYMBOL | TYPE | SPEC. | COLOR |
|----|--------|---------------------------|----------------|-------|
| 1 | E.B.S | PUSH LOCK TURN RESET TYPE | 250VAC
x 6A | RED |
| 2 | SPARE | | | |
| 3 | 상 | 1PUSH BUTTON 1STEP | | BLACK |
| 4 | 하 | 1PUSH BUTTON 1STEP | | |
| 7 | 보조아이어 | ø 2.0 | | |

| | | | | | | | | | | | | | | | |
|----|------|-----------|------|------|----------|--|---------------|--|--|--------|---------|----------|-------|---------|--|
| A | | | | | | | | | | | | | | | |
| A | | | | | | | | | | | | | | | |
| A | | | | | | | | | | | | | | | |
| MK | DATE | REVISIONS | CHK. | APP. | CUSTOMER | | DRAWING | | DRAWING | DESIGN | CHECKED | APPROVED | SCALE | DATE | |
| | | | | | | | DRAWING TITLE | | PENDANT PUSH BUTTON SWITCH | | | | | | |
| | | | | | | | | | LAY OUT | | | | | | |
| | | | | | | | | |  KUK DONG HOIST CO., LTD. | | | | | DWG. NO | |



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

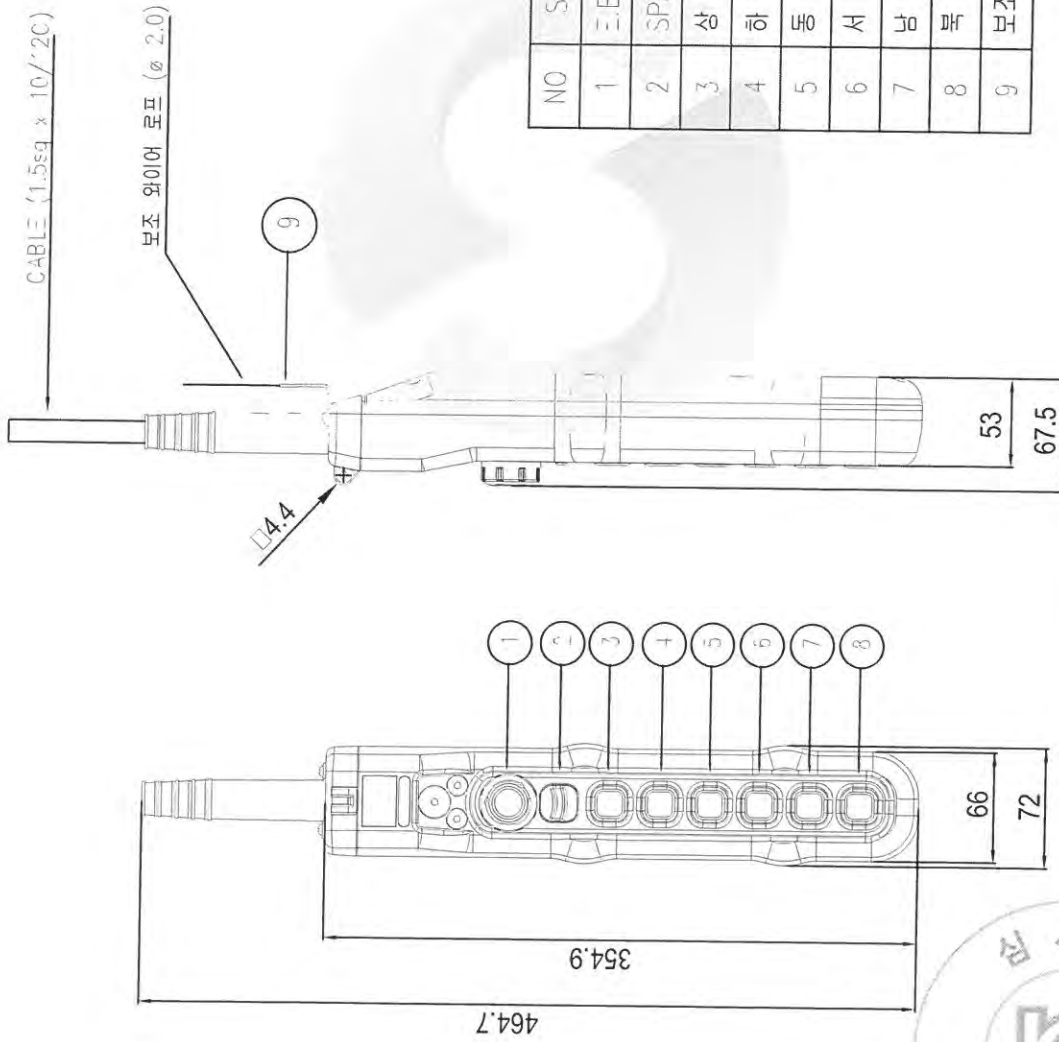
* MATERIAL : POLYCARBONATE(PLASTIC)

* 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 | | | |
| 3 | 상 | 1PUSH BUTTON 1STEP | | BLACK |
| 4 | 하 | 1PUSH BUTTON 1STEP | | |
| 5 | 동(전) | 1PUSH BUTTON 1STEP | | |
| 6 | 서(후) | 1PUSH BUTTON 1STEP | | |
| 7 | 보조 와이어 | φ 2.0 | | |

| | | | | | | | |
|--------------------------|------|----------------------------|---------|---------|----------|-------|------|
| CUSTOMER | | DRAWING | DESIGN | CHECKED | APPROVED | SCALE | DATE |
| DRAWING TITLE | | PENDANT PUSH BUTTON SWITCH | | | | | |
| REVISES | | LAY OUT | | | | | |
| DATE | CHK. | APP. | DWG. NO | | | | |
| KUK DONG HOIST CO., LTD. | | | KDK | | | | |



| | | |
|------------|---------|-----|
| 사상
과거 | 조각버튼 | 표시등 |
| 적색 | 비상 | 비상 |
| 황색 | 비정상 | 비정상 |
| 녹색 | 정상 | 정상 |
| 청색 | 의무 | 의무 |
| 흰색, 회색, 흑색 | 지정된의미없음 | 기타 |

* MATERIAL : POLYCARBONATE(PLASTIC)

* BODY COLOR : YELLOW, BLACK

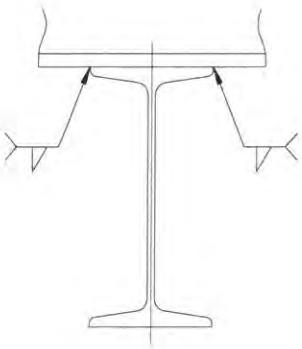
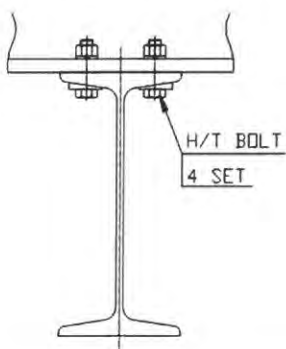
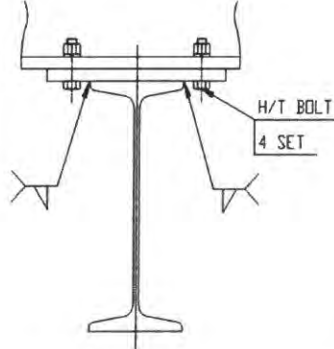
* |P : 55 0|상

| NO | SYMBOL | TYPE | SPEC. | COLOR |
|----|---------|---------------------------|----------------|-------|
| 1 | 리버스 | PUSH LOCK TURN RESET TYPE | 250VAC
x 6A | RED |
| 2 | SPARE | | | BLACK |
| 3 | 상 | 1PUSH BUTTON 1STEP | | |
| 4 | 하 | 1PUSH BUTTON 1STEP | | |
| 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 | 보조 WIRE | ø 2.0 | | |

| | | | | | | | | | | | | |
|---------------------------------|------|-----------|------|----------|---------|----------------------------|---------|--------|---------|----------|-------|------|
| ☐ | | | | CUSTOMER | DRAWING | PENDANT PUSH BUTTON SWITCH | DRAWING | DESIGN | CHECKED | APPROVED | SCALE | DATE |
| ☐ | | | | | TITLE | LAY OUT | | | | | | |
| ☐ | | | | | | | | | | | | |
| MK | DATE | REVISIONS | CHK. | APP. | | | | | | | | |
| KUK DONG HOIST CO., LTD. | | | | | | | | | | | | |
| | | | | | | | | | | DWG. NO. | | |

I-4. I-BEAM의 고정방법 및 사양

1. I-BEAM의 고정방법

| 용 접 구 조 | BOLT 체결구조 | 복 합 구 조 |
|---|---|---|
|  |  |  |

2. 기본조건 및 사양

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

| 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 |

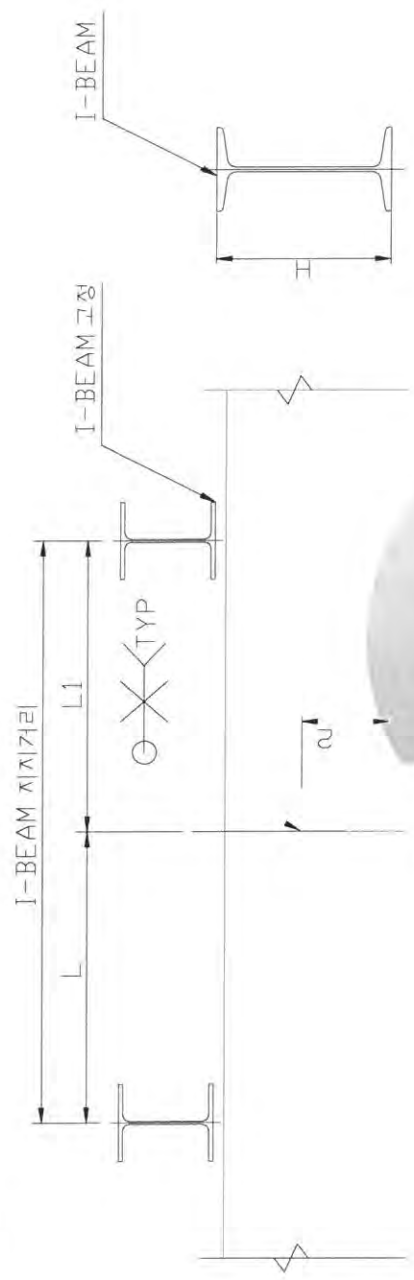
* I-BEAM 200×100×t7/10 기준.

(기타 규격은 용접강도, BOLT강도 테이블 참조)



164/266

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.

| 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 | 6200 | 4500 | 3600 | 3600 | |
| 300×150×t10/18.5 | 300 | 300 | 150 | 9600 | 7100 | 5800 | 5800 | 4500 |
| 350×150×t9/15 | 300 | 350 | 175 | 9900 | 7800 | 6300 | 6000 | 5900 |
| 400×150×t10/18 | 300 | 400 | 200 | 11000 | 9800 | 8000 | 7700 | 5700 |
| 450×175×t11/20 | 300 | 450 | 225 | | 12400 | 10000 | 9900 | 7700 |

사용 I-BEAM은 MODEL 별 기술 사양서의 BEAM 폭을 참조 할 것

* I-BEAM 고정 방법 중 용접 구조의 용접 강도

$$\text{용접부 강도 } \sigma = 1.14 \times \frac{\text{I-BEAM 자중} + 1.25 \times (\text{정격 하중} + \text{Hoist 자중})}{0.707 \times \text{용접 두께} \times \text{용접 길이}} \leq 560 \text{ kg/cm}^2$$



| I-BEAM 규격 | BEAM 자중 (kg/m) | 용접 두께 (cm) | 최소 용접 길이 (cm) | 1 T | | 2 T | | 2.8 T | | 3 T | | 5 T | |
|------------------|----------------|------------|---------------|---------------|-------------------------------|---------------|-------------------------------|---------------|-------------------------------|---------------|-------------------------------|---------------|-------------------------------|
| | | | | HOIST 자중 (KG) | 용접 강도 (kcal/cm ²) | HOIST 자중 (KG) | 용접 강도 (kcal/cm ²) | HOIST 자중 (KG) | 용접 강도 (kcal/cm ²) | HOIST 자중 (KG) | 용접 강도 (kcal/cm ²) | HOIST 자중 (KG) | 용접 강도 (kcal/cm ²) |
| 200×100×7/10 | 26.0 | 0.6 | 10×2 | 320 | 225.2 | | | | | | | | |
| 250×125×7.5/12.5 | 38.3 | 0.6 | 12.5×2 | 320 | 181.5 | 470 | 336.0 | 690 | 473.1 | 620 | 490.5 | | |
| 300×150×10/18.5 | 65.6 | 0.6 | 15.0×2 | 320 | 153.7 | 470 | 282.5 | 690 | 396.7 | 620 | 411.2 | | |
| 350×150×9/15 | 58.5 | 0.6 | 15.0×2 | 320 | 153.0 | 470 | 281.8 | 690 | 396.0 | 620 | 410.6 | 642 | 478.2 |
| 400×150×10/18 | 72.0 | 0.8 | 15.0×2 | 320 | 115.7 | 470 | 283.0 | 690 | 397.2 | 620 | 411.8 | 642 | 477.8 |
| 450×175×11/20 | 91.7 | 0.8 | 17.5×2 | | | 470 | 284.8 | 690 | 399.0 | 620 | 354.5 | 642 | 480.0 |

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



* I-BEAM 고정 방법 중 BOLT 고정 강도

$$\text{BOLT 강도 } \sigma = 1.14 \frac{\text{I-BEAM 자중} + 1.25 \times (\text{정격 하중} + \text{Hoist 자중})}{\text{BOLT 단면적} \times \text{BOLT 수}} \leq 2500 \text{ kg/cm}^2$$



| I-BEAM 규격 | BEAM 자중 (kg/m) | BOLT 규격 | BOLT 수 | BOLT 단면적 (cm ²) | 1 T | | 1.2 T | | 2.8 T | | 3 T | | 5 T | |
|-------------------|----------------|---------|--------|-----------------------------|---------------|---------------------------------|---------------|---------------------------------|---------------|---------------------------------|---------------|---------------------------------|---------------|---------------------------------|
| | | | | | HOIST 자중 (KG) | BOLT 강도 (kgal/cm ²) | HOIST 자중 (KG) | BOLT 강도 (kgal/cm ²) | HOIST 자중 (KG) | BOLT 강도 (kgal/cm ²) | HOIST 자중 (KG) | BOLT 강도 (kgal/cm ²) | HOIST 자중 (KG) | BOLT 강도 (kgal/cm ²) |
| 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 | 470 | 788.4 | 690 | 1109.9 | 620 | 1150.9 | | |
| 300×150×t10/18.5 | 65.6 | M12 | 4 | 1.13 | 320 | 432.7 | 470 | 795.3 | 690 | 1116.8 | 620 | 1157.8 | | |
| 350×150×t9/15 | 58.5 | M12 | 4 | 1.13 | 320 | 430.9 | 470 | 793.5 | 690 | 1115.0 | 620 | 1156.0 | 642 | 1009.3 |
| 400×150×t10/18 | 72.0 | M16 | 4 | 2.01 | 320 | 244.2 | 470 | 448.0 | 690 | 628.8 | 620 | 651.8 | 642 | 1010.2 |
| 450×175×t11/20 | 91.7 | M16 | 4 | 2.01 | | | 470 | 450.8 | 690 | 631.6 | 620 | 654.6 | 642 | 1013.0 |



I-5. I-BEAM의 최대 지지거리

5-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

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

$$M_s = \frac{1.05 \times 26 \times 400^2}{8} = 5460 \quad \text{kg-cm}$$

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

$$M_d = 1.254 \times \frac{(1000 + 320) \times 400}{4} = 165528 \quad \text{kg-cm}$$

$$\text{* 호이스트 자중} = 320 \quad \text{KG} \quad \text{용량 : } 1000 \quad \text{KG}$$

$$\text{* DYNAMIC COEFFICIENT : } F = 1.254$$

$$\text{* STATIC COEFFICIENT : } M = 1.05$$

$$\text{굽힘 MOMENT 합계 : } \Sigma M_v = M_s + M_d = 5460 + 165528 = 170988 \quad \text{kg-cm}$$

2. 풍하중에 의한 굽힘 MOMENT

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

$$M_w = \frac{31.52 \times 400}{2} = 6303.0 \quad \text{kg-cm}$$

$$\begin{aligned} \text{풍하중 : } W &= \text{속도압}(q) \times \text{속도계수}(C) \times \text{압력을 받는 면적}(A) \quad (\text{kg}) \\ &= 23.66 \times 1.2 \times 1.11 = 31.52 \quad (\text{kg}) \end{aligned}$$

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

$$\text{속도계수 : } C = 1.2 \quad (\text{크레인 제작기준 참조})$$

$$\begin{aligned} \text{풍압을 받는 면적 } A &= \text{I-BEAM의 면적} + \text{HOIST의 면적} \quad (\text{m}^2) \\ &= 0.8 + 0.31 = 1.11 \quad (\text{m}^2) \end{aligned}$$

$$\text{* 호이스트의 풍압을 받는 면적} \approx 0.31 \text{ m}^2$$

| I-BEAM 규격 | BEAM 자중 (kg/m) | 최대 지지거리 (cm) | M _s (kg-cm) | M _d (kg-cm) | ΣM _v (kg-cm) | W (kg) | M _w (kg-cm) | A (m ²) |
|-------------------|----------------|--------------|------------------------|------------------------|-------------------------|--------|------------------------|---------------------|
| 200×100×t7/10 | 26 | 400 | 5460 | 165528 | 170988 | 31.52 | 6303.0 | 1.11 |
| 250×125×t7.5/12.5 | 38.3 | 620 | 19323 | 256568 | 275892 | 51.39 | 15980.8 | 1.81 |
| 300×150×t10/18.5 | 65.5 | 960 | 79229 | 397267 | 476496 | 88.30 | 42383.6 | 3.11 |
| 350×150×t9/15 | 58.5 | 990 | 75253 | 409682 | 484935 | 105.33 | 52140.5 | 3.71 |
| 400×150×t10/18 | 72 | 1100 | 114345 | 455202 | 569547 | 139.40 | 76672.6 | 4.91 |

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

5-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

$$\begin{aligned} * \sigma_v &= \frac{\text{수직 굽힘 MOMENT 합계 : } \sum M_v}{\text{단면 계수 : } Z_x} \quad (\text{kg/cm}^2) \\ &= \frac{170988}{218} = 784.3 \quad (\text{kg/cm}^2) \end{aligned}$$

2. 풍하중에 의한 굽힘 응력

$$\begin{aligned} * \sigma_w &= \frac{\text{풍하중에 의한 굽힘 MOMENT : } M_w}{\text{단면 계수 : } Z_y} \quad (\text{kg/cm}^2) \\ &= \frac{6303.0}{27.7} = 227.5 \quad (\text{kg/cm}^2) \end{aligned}$$

2. 풍하중에 의한 굽힘 응력

$$* \sum \sigma = \sigma_v + \sigma_w \leq 0.8 \times 1449 = 1159 \text{ kg/cm}^2$$

| I-BEAM 규격 | 단 면
계 수
Zx | 단 면
계 수
Zy | $\sum M_v$
(kg-cm) | Mw
(kg-cm) | σ_v
(kg/cm ²) | σ_w
(kg/cm ²) | $\sum \sigma$
(kg/cm ²) |
|-------------------|------------------|------------------|-----------------------|---------------|-------------------------------------|-------------------------------------|--|
| 200×100×t7/10 | 218 | 27.7 | 170988 | 6303.0 | 784.3 | 227.5 | 1011.9 |
| 250×125×t7.5/12.5 | 414 | 53.9 | 275892 | 15930.8 | 666.4 | 295.6 | 962.0 |
| 300×150×t10/18.5 | 849 | 118 | 476496 | 42383.6 | 561.2 | 359.2 | 920.4 |
| 350×150×t9/15 | 870 | 93.5 | 484935 | 52140.5 | 557.4 | 557.7 | 1115.0 |
| 400×150×t10/18 | 1200 | 115 | 569547 | 76672.6 | 474.6 | 666.7 | 1141.3 |

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.



169/266

5-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

$$\begin{aligned} * \delta_s &= \frac{5 \times \text{I-BEAM 자중} \times \text{지지거리}^3}{384 \times 2100000 \times I_x} \quad (\text{cm}) \\ &= \frac{5 \times 26 \times 400^3}{384 \times 2100000 \times 2170} = 0.048 \quad (\text{cm}) \end{aligned}$$

2. 이동하중에 의한 처짐 (DEFLECTION)

$$\begin{aligned} * \delta_d &= \frac{(\text{정격하중} + \text{호이스트자중}) \times \text{지지거리}^3}{48 \times 2100000 \times I_x} \quad (\text{cm}) \\ &= \frac{(1000 + 320) \times 400^3}{48 \times 2100000 \times 2170} = 0.386 \quad (\text{cm}) \end{aligned}$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

$$\begin{aligned} &\frac{\text{이동하중에 의한 처짐 : } \delta_d}{\text{지지거리}} < \frac{1}{1000} \\ &= \frac{0.386}{400} = \frac{1}{1036} < \frac{1}{1000} \end{aligned}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

$$\begin{aligned} &\frac{\text{I-BEAM 자중에 의한 처짐 : } \delta_s + \text{이동하중에 의한 처짐 : } \delta_d}{\text{지지거리}} < \frac{1}{800} \\ &= \frac{0.048 + 0.386}{400} = \frac{1}{922} < \frac{1}{800} \end{aligned}$$

| I-BEAM 규격 | 단면2차
MOMENT
I _x | BEAM
자중
(kg/m) | δ _s
(cm) | δ _d
(cm) | 이동하중에 의한
처짐 판정 | 처짐량 합계에 의한
처짐판정 |
|-------------------|----------------------------------|----------------------|------------------------|------------------------|-------------------|--------------------|
| 200×100×t7/10 | 2170 | 26 | 0.048 | 0.386 | 1 / 1036 | 1 / 922 |
| 250×125×t7.5/12.5 | 5180 | 38.3 | 0.109 | 0.603 | 1 / 1029 | 1 / 871 |
| 300×150×t10/18.5 | 12700 | 65.5 | 0.283 | 0.912 | 1 / 1052 | 1 / 803 |
| 350×150×t9/15 | 15200 | 58.5 | 0.232 | 0.836 | 1 / 1184 | 1 / 927 |
| 400×150×t10/18 | 24100 | 72 | 0.247 | 0.723 | 1 / 1521 | 1 / 1134 |

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.



110/266

I-6. I-BEAM의 최대 지지거리

6-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

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

$$M_s = \frac{1.05 \times 38.3 \times 620^2}{8} = 19323 \quad \text{kg-cm}$$

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

$$M_d = 1.254 \times \frac{(1000 + 320) \times 620}{4} = 256568 \quad \text{kg-cm}$$

$$\text{* 호이스트 자중} = 320 \text{ KG} \quad \text{용량 : 1000 KG}$$

$$\text{* DYNAMIC COEFFICIENT : } F = 1.254$$

$$\text{* STATIC COEFFICIENT : } M = 1.05$$

$$\text{굽힘 MOMENT 합계 : } \Sigma M_v = M_s + M_d = 19323 + 256568 = 275892 \quad \text{kg-cm}$$

2. 풍하중에 의한 굽힘 MOMENT

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

$$M_w = \frac{51.39 \times 620}{2} = 15930.8 \quad \text{kg-cm}$$

$$\begin{aligned} \text{풍하중 : } W &= \text{속도압}(q) \times \text{속도계수}(C) \times \text{압력을 받는 면적}(A) \text{ (kg)} \\ &= 23.66 \times 1.2 \times 1.81 = 51.39 \text{ (kg)} \end{aligned}$$

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

$$\text{속도계수 : } C = 1.2 \text{ (크레인 제작기준 참조)}$$

$$\begin{aligned} \text{풍압을 받는 면적 } A &= \text{I-BEAM의 면적} + \text{HOIST의 면적 (m}^2\text{)} \\ &= 1.5 + 0.31 = 1.81 \text{ (m}^2\text{)} \end{aligned}$$

$$\text{* 호이스트의 풍압을 받는 면적 } \approx 0.31 \text{ m}^2$$

| I-BEAM 규격 | BEAM 자중 (kg/m) | 최대 지지거리 (cm) | M _s (kg-cm) | M _d (kg-cm) | ΣM _v (kg-cm) | W (kg) | M _w (kg-cm) | A (m ²) |
|-------------------|----------------|--------------|------------------------|------------------------|-------------------------|--------|------------------------|---------------------|
| 200×100×t7/10 | 26 | 400 | 5460 | 165528 | 170988 | 31.52 | 6303.0 | 1.11 |
| 250×125×t7.5/12.5 | 38.3 | 620 | 19323 | 256568 | 275892 | 51.39 | 15930.8 | 1.81 |
| 300×150×t10/18.5 | 65.5 | 960 | 79229 | 397267 | 476496 | 88.30 | 42883.6 | 3.11 |
| 350×150×t9/15 | 58.5 | 990 | 75253 | 409682 | 484935 | 105.33 | 52140.5 | 3.71 |
| 400×150×t10/18 | 72 | 1100 | 114345 | 455202 | 569547 | 151.07 | 76672.6 | 5.32 |

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



11/266

6-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

$$\begin{aligned} * \sigma_v &= \frac{\text{수직 굽힘 MOMENT 합계 : } \sum M_v}{\text{단면 계수 : } Z_x} \quad (\text{kg/cm}^2) \\ &= \frac{275892}{414} = 666.4 \quad (\text{kg/cm}^2) \end{aligned}$$

2. 풍하중에 의한 굽힘 응력

$$\begin{aligned} * \sigma_w &= \frac{\text{풍하중에 의한 굽힘 MOMENT : } M_w}{\text{단면 계수 : } Z_y} \quad (\text{kg/cm}^2) \\ &= \frac{15930.8}{53.9} = 295.6 \quad (\text{kg/cm}^2) \end{aligned}$$

2. 풍하중에 의한 굽힘 응력

$$* \sum \sigma = \sigma_v + \sigma_w \leq 0.8 \times 1449 = 1159 \text{ kg/cm}^2$$

| I-BEAM 규격 | 단 면
계 수
Zx | 단 면
계 수
Zy | $\sum M_v$
(kg-cm) | Mw
(kg-cm) | σ_v
(kg/cm ²) | σ_w
(kg/cm ²) | $\sum \sigma$
(kg/cm ²) |
|-------------------|------------------|------------------|-----------------------|---------------|-------------------------------------|-------------------------------------|--|
| 200×100×t7/10 | 218 | 27.7 | 170988 | 6303.0 | 784.3 | 227.5 | 1011.9 |
| 250×125×t7.5/12.5 | 414 | 53.9 | 275892 | 15930.8 | 666.4 | 295.6 | 962.0 |
| 300×150×t10/18.5 | 849 | 118 | 476496 | 42383.6 | 561.2 | 359.2 | 920.4 |
| 350×150×t9/15 | 870 | 93.5 | 484935 | 52140.5 | 557.4 | 557.7 | 1115.0 |
| 400×150×t10/18 | 1200 | 115 | 569547 | 76672.6 | 474.6 | 666.7 | 1141.3 |

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.



172/266

6-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

$$\begin{aligned} * \delta_s &= \frac{5 \times \text{I-BEAM 자중} \times \text{지지거리}^3}{384 \times 2100000 \times I_x} \quad (\text{cm}) \\ &= \frac{5 \times 38.3 \times 620^3}{384 \times 2100000 \times 5180} = 0.1093 \quad (\text{cm}) \end{aligned}$$

2. 이동하중에 의한 처짐 (DEFLECTION)

$$\begin{aligned} * \delta_d &= \frac{(\text{정격하중} + \text{호이스트자중}) \times \text{지지거리}^3}{48 \times 2100000 \times I_x} \quad (\text{cm}) \\ &= \frac{(1000 + 320) \times 620^3}{48 \times 2100000 \times 5180} = 0.603 \quad (\text{cm}) \end{aligned}$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

$$\begin{aligned} \frac{\text{이동하중에 의한 처짐 : } \delta_d}{\text{지지거리}} &< \frac{1}{1000} \\ &= \frac{0.603}{620} = \frac{1}{1029} < \frac{1}{1000} \end{aligned}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

$$\begin{aligned} \frac{\text{I-BEAM 자중에 의한 처짐 : } \delta_s + \text{이동하중에 의한 처짐 : } \delta_d}{\text{지지거리}} &< \frac{1}{800} \\ &= \frac{0.1093+0.603}{620} = \frac{1}{871} < \frac{1}{800} \end{aligned}$$

| I-BEAM 규격 | 단면2차
MOMENT
I_x | BEAM
자중
(kg/m) | δ_s
(cm) | δ_d
(cm) | 이동하중에 의한
처짐 판정 | 처짐량 합계에 의한
처짐판정 |
|-------------------|-------------------------|----------------------|--------------------|--------------------|-------------------|--------------------|
| 200×100×t7/10 | 2170 | 26 | 0.048 | 0.386 | 1 / 1036 | 1 / 922 |
| 250×125×t7.5/12.5 | 5180 | 38.3 | 0.109 | 0.603 | 1 / 1029 | 1 / 871 |
| 300×150×t10/18.5 | 12700 | 65.5 | 0.283 | 0.912 | 1 / 1052 | 1 / 803 |
| 350×150×t9/15 | 15200 | 58.5 | 0.232 | 0.836 | 1 / 1184 | 1 / 927 |
| 400×150×t10/18 | 24100 | 72 | 0.247 | 0.723 | 1 / 1521 | 1 / 1134 |

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.



173/266

I-7. I-BEAM의 최대 지지거리

7-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

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

$$M_s = \frac{1.05 \times 65.5 \times 960^2}{8} = 79229 \quad \text{kg-cm}$$

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

$$M_d = 1.254 \times \frac{(1000 + 320) \times 960}{4} = 397267 \quad \text{kg-cm}$$

$$\text{* 호이스트 자중} = 320 \text{ KG} \quad \text{용량 : 1000 KG}$$

$$\text{* DYNAMIC COEFFICIENT : } F = 1.254$$

$$\text{* STATIC COEFFICIENT : } M = 1.05$$

$$\text{굽힘 MOMENT 합계 : } \Sigma M_v = M_s + M_d = 79229 + 397267 = 476496 \quad \text{kg-cm}$$

2. 풍하중에 의한 굽힘 MOMENT

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

$$M_w = \frac{88.3 \times 960}{2} = 42383.6 \quad \text{kg-cm}$$

$$\begin{aligned} \text{풍하중 : } W &= \text{속도압}(q) \times \text{속도계수}(C) \times \text{압력을 받는 면적}(A) \text{ (kg)} \\ &= 23.66 \times 1.2 \times 3.11 = 88.30 \text{ (kg)} \end{aligned}$$

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

$$\text{속도계수 : } C = 1.2 \text{ (크레인 제작기준 참조)}$$

$$\begin{aligned} \text{풍압을 받는 면적 } A &= \text{I-BEAM의 면적} + \text{HOIST의 면적 (m}^2\text{)} \\ &= 2.8 + 0.31 = 3.11 \text{ (m}^2\text{)} \end{aligned}$$

$$\text{* 호이스트의 풍압을 받는 면적 } \approx 0.31 \text{ m}^2$$

| I-BEAM 규격 | BEAM 자중 (kg/m) | 최대 지지거리 (cm) | M _s (kg-cm) | M _d (kg-cm) | ΣM _v (kg-cm) | W (kg) | M _w (kg-cm) | A (m ²) |
|-------------------|----------------|--------------|------------------------|------------------------|-------------------------|--------|------------------------|---------------------|
| 200×100×t7/10 | 26 | 400 | 5460 | 165528 | 170988 | 31.52 | 6303.0 | 1.36 |
| 250×125×t7.5/12.5 | 38.3 | 620 | 19323 | 256568 | 275892 | 63.34 | 19636.2 | 2.23 |
| 300×150×t10/18.5 | 65.5 | 960 | 79229 | 397267 | 476496 | 88.30 | 42383.6 | 3.11 |
| 350×150×t9/15 | 58.5 | 990 | 75253 | 409682 | 484935 | 105.33 | 52140.5 | 3.71 |
| 400×150×t10/18 | 72 | 1100 | 114345 | 455202 | 569547 | 151.07 | 76672.6 | 5.32 |

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



114/266

7-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

$$\begin{aligned} * \sigma_v &= \frac{\text{수직 굽힘 MOMENT 합계 : } \sum M_v}{\text{단면 계수 : } Z_x} \quad (\text{kg/cm}^2) \\ &= \frac{476496}{849} = 561.2 \quad (\text{kg/cm}^2) \end{aligned}$$

2. 풍하중에 의한 굽힘 응력

$$\begin{aligned} * \sigma_w &= \frac{\text{풍하중에 의한 굽힘 MOMENT : } M_w}{\text{단면 계수 : } Z_y} \quad (\text{kg/cm}^2) \\ &= \frac{42383.6}{118} = 359.2 \quad (\text{kg/cm}^2) \end{aligned}$$

2. 풍하중에 의한 굽힘 응력

$$* \sum \sigma = \sigma_v + \sigma_w \leq 0.8 \times 1449 = 1159 \text{ kg/cm}^2$$

| I-BEAM 규격 | 단 면
계 수
Zx | 단 면
계 수
Zy | $\sum M_v$
(kg-cm) | Mw
(kg-cm) | σ_v
(kg/cm ²) | σ_w
(kg/cm ²) | $\sum \sigma$
(kg/cm ²) |
|--------------------|------------------|------------------|-----------------------|---------------|-------------------------------------|-------------------------------------|--|
| 200×100×t7/10 | 218 | 27.7 | 170988 | 6303.0 | 784.3 | 227.5 | 1011.9 |
| 250×125×t7.5/12.5 | 414 | 53.9 | 275892 | 19636.2 | 666.4 | 364.3 | 1030.7 |
| ⇒ 300×150×t10/18.5 | 849 | 118 | 476496 | 42383.6 | 561.2 | 359.2 | 920.4 |
| 350×150×t9/15 | 870 | 93.5 | 484935 | 52140.5 | 557.4 | 557.7 | 1115.0 |
| 400×150×t10/18 | 1200 | 115 | 569547 | 76672.6 | 474.6 | 666.7 | 1141.3 |

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.



175/266

7-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

$$\begin{aligned} * \delta_s &= \frac{5 \times \text{I-BEAM 자중} \times \text{지지거리}^3}{384 \times 2100000 \times I_x} \quad (\text{cm}) \\ &= \frac{5 \times 65.5 \times 960^3}{384 \times 2100000 \times 12700} = 0.283 \quad (\text{cm}) \end{aligned}$$

2. 이동하중에 의한 처짐 (DEFLECTION)

$$\begin{aligned} * \delta_d &= \frac{(\text{정격하중} + \text{호이스트자중}) \times \text{지지거리}^3}{48 \times 2100000 \times I_x} \quad (\text{cm}) \\ &= \frac{(1000 + 320) \times 960^3}{48 \times 2100000 \times 12700} = 0.912 \quad (\text{cm}) \end{aligned}$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

$$\begin{aligned} &\frac{\text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{1000} \\ &= \frac{0.912}{960} = \frac{1}{1052} < \frac{1}{1000} \end{aligned}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

$$\begin{aligned} &\frac{\text{I-BEAM 자중에 의한 처짐} : \delta_s + \text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{800} \\ &= \frac{0.283+0.912}{960} = \frac{1}{803} < \frac{1}{800} \end{aligned}$$

| I-BEAM 규격 | 단면2차
MOMENT
I _x | BEAM
자중
(kg/m) | δ _s
(cm) | δ _d
(cm) | 이동하중에 의한
처짐 판정 | 처짐량 합계에 의한
처짐판정 |
|-------------------|----------------------------------|----------------------|------------------------|------------------------|-------------------|--------------------|
| 200×100×t7/10 | 2170 | 26 | 0.048 | 0.386 | 1 / 1036 | 1 / 922 |
| 250×125×t7.5/12.5 | 5180 | 38.3 | 0.1093 | 0.603 | 1 / 1029 | 1 / 871 |
| 300×150×t10/18.5 | 12700 | 65.5 | 0.2829 | 0.912 | 1 / 1052 | 1 / 803 |
| 350×150×t9/15 | 15200 | 58.5 | 0.2315 | 0.836 | 1 / 1184 | 1 / 927 |
| 400×150×t10/18 | 24100 | 72 | 0.2466 | 0.723 | 1 / 1521 | 1 / 1134 |

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.



176/266

I-8. I-BEAM의 최대 지지거리

8-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

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

$$M_s = \frac{1.05 \times 58.5 \times 990^2}{8} = 75253 \quad \text{kg-cm}$$

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

$$M_d = 1.254 \times \frac{(1000 + 320) \times 990}{4} = 409682 \quad \text{kg-cm}$$

$$* \text{ 호이스트 자중 } = 320 \text{ KG} \quad \text{용 량 : } 1000 \text{ KG}$$

$$* \text{ DYNAMIC COEFFICIENT : } F = 1.254$$

$$* \text{ STATIC COEFFICIENT : } M = 1.05$$

$$\text{굽힘 MOMENT 합계 : } \Sigma M_v = M_s + M_d = 75253 + 409682 = 484935 \quad \text{kg-cm}$$

2. 풍하중에 의한 굽힘 MOMENT

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

$$M_w = \frac{105.33 \times 990}{2} = 52140.5 \quad \text{kg-cm}$$

$$\begin{aligned} \text{풍하중 : } W &= \text{속도압}(q) \times \text{속도계수}(C) \times \text{압력을 받는 면적}(A) \text{ (kg)} \\ &= 23.66 \times 1.2 \times 3.71 = 105.33 \text{ (kg)} \end{aligned}$$

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

$$\text{속도계수 : } C = 1.2 \text{ (크레인 제작기준 참조)}$$

$$\begin{aligned} \text{풍압을 받는 면적 } A &= \text{I-BEAM의 면적} + \text{HOIST의 면적 (m}^2\text{)} \\ &= 3.4 + 0.310 = 3.71 \text{ (m}^2\text{)} \end{aligned}$$

$$* \text{ 호이스트의 풍압을 받는 면적 } \approx 0.31 \text{ m}^2$$

| I-BEAM 규격 | BEAM 자중 (kg/m) | 최 대 지지거리 (cm) | M _s (kg-cm) | M _d (kg-cm) | ΣM _v (kg-cm) | W (kg) | M _w (kg-cm) | A (m ²) |
|-------------------|----------------|---------------|------------------------|------------------------|-------------------------|--------|------------------------|---------------------|
| 200×100×t7/10 | 26 | 400 | 5460 | 165528 | 170988 | 31.52 | 6303.0 | 1.110 |
| 250×125×t7.5/12.5 | 38.3 | 620 | 19323.3 | 256568 | 275892 | 63.34 | 19636.2 | 2.231 |
| 300×150×t10/18.5 | 65.5 | 960 | 79229 | 397267 | 476496 | 88.30 | 42383.6 | 3.11 |
| 350×150×t9/15 | 58.5 | 990 | 75253 | 409682 | 484935 | 105.33 | 52140.5 | 3.71 |
| 400×150×t10/18 | 72 | 1100 | 10395.0 | 455202 | 569547 | 139.40 | 76672.6 | 4.91 |

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



8-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

$$\begin{aligned} * \sigma_v &= \frac{\text{수직 굽힘 MOMENT 합계 : } \sum M_v}{\text{단면 계수 : } Z_x} \quad (\text{kg/cm}^2) \\ &= \frac{484935}{870} = 557.4 \quad (\text{kg/cm}^2) \end{aligned}$$

2. 풍하중에 의한 굽힘 응력

$$\begin{aligned} * \sigma_w &= \frac{\text{풍하중에 의한 굽힘 MOMENT : } M_w}{\text{단면 계수 : } Z_y} \quad (\text{kg/cm}^2) \\ &= \frac{52140.5}{93.5} = 557.7 \quad (\text{kg/cm}^2) \end{aligned}$$

2. 풍하중에 의한 굽힘 응력

$$* \sum \sigma = \sigma_v + \sigma_w \leq 0.8 \times 1449 = 1159 \text{ kg/cm}^2$$

| I-BEAM 규격 | 단면
계수
Z _x | 단면
계수
Z _y | ΣM _v
(kg-cm) | M _w
(kg-cm) | σ _v
(kg/cm ²) | σ _w
(kg/cm ²) | Σσ
(kg/cm ²) |
|-------------------|----------------------------|----------------------------|----------------------------|---------------------------|---|---|-----------------------------|
| 200×100×t7/10 | 218 | 27.7 | 170988 | 6303.0 | 784.3 | 227.5 | 1011.9 |
| 250×125×t7.5/12.5 | 414 | 53.9 | 275892 | 19636.2 | 666.4 | 364.3 | 1030.7 |
| 300×150×t10/18.5 | 849 | 118 | 476496 | 42383.6 | 561.2 | 359.2 | 920.4 |
| ⇒ 350×150×t9/15 | 870 | 93.5 | 484935 | 52140.5 | 557.4 | 557.7 | 1115.0 |
| 400×150×t10/18 | 1200 | 115 | 569547 | 76672.6 | 474.6 | 666.7 | 1141.3 |

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.



178/266

8-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

$$\begin{aligned} * \delta_s &= \frac{5 \times \text{I-BEAM 자중} \times \text{지지거리}^3}{384 \times 2100000 \times I_x} \quad (\text{cm}) \\ &= \frac{5 \times 58.5 \times 990^3}{384 \times 2100000 \times 15200} = 0.232 \quad (\text{cm}) \end{aligned}$$

2. 이동하중에 의한 처짐 (DEFLECTION)

$$\begin{aligned} * \delta_d &= \frac{(\text{정격하중} + \text{호이스트자중}) \times \text{지지거리}^3}{48 \times 2100000 \times I_x} \quad (\text{cm}) \\ &= \frac{(1000 + 320) \times 990^3}{48 \times 2100000 \times 15200} = 0.836 \quad (\text{cm}) \end{aligned}$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

$$\begin{aligned} &\frac{\text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{1000} \\ &= \frac{0.836}{990} = \frac{1}{1184} < \frac{1}{1000} \end{aligned}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

$$\begin{aligned} &\frac{\text{I-BEAM 자중에 의한 처짐} : \delta_s + \text{이동하중에 의한 처짐} : \delta_d}{\text{지지거리}} < \frac{1}{800} \\ &= \frac{0.232+0.836}{990} = \frac{1}{927} < \frac{1}{800} \end{aligned}$$

| I-BEAM 규격 | 단면2차
MOMENT
I _x | BEAM
자중
(kg/m) | δ _s
(cm) | δ _d
(cm) | 이동하중에 의한
처짐 판정 | 처짐량 합계에 의한
처짐판정 |
|-------------------|----------------------------------|----------------------|------------------------|------------------------|-------------------|--------------------|
| 200×100×t7/10 | 2170 | 26 | 0.048 | 0.386 | 1 / 1036 | 1 / 922 |
| 250×125×t7.5/12.5 | 5180 | 38.3 | 0.1093 | 0.603 | 1 / 1029 | 1 / 871 |
| 300×150×t10/18.5 | 12700 | 65.5 | 0.2829 | 0.912 | 1 / 1052 | 1 / 803 |
| ⇒ 350×150×t9/15 | 15200 | 58.5 | 0.2315 | 0.836 | 1 / 1184 | 1 / 927 |
| 400×150×t10/18 | 24100 | 72 | 0.2466 | 0.723 | 1 / 1521 | 1 / 1134 |

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.



119/266

I-9. I-BEAM의 최대 지지거리

9-1. 굽힘 MOMENT 계산

1. 수직하중에 의한 굽힘 MOMENT

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

$$M_s = \frac{1.05 \times 72 \times 1100^2}{8} = 114345 \quad \text{kg-cm}$$

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

$$M_d = 1.254 \times \frac{(1000 + 320) \times 1100}{4} = 455202 \quad \text{kg-cm}$$

$$\text{* 호이스트 자중} = 320 \text{ KG} \quad \text{용 량 : 1000 KG}$$

$$\text{* DYNAMIC COEFFICIENT : } F = 1.254$$

$$\text{* STATIC COEFFICIENT : } M = 1.05$$

$$\text{굽힘 MOMENT 합계 : } \Sigma M_v = M_s + M_d = 114345 + 455202 = 569547 \quad \text{kg-cm}$$

2. 풍하중에 의한 굽힘 MOMENT

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

$$M_w = \frac{139.4 \times 990}{2} = 76672.6 \quad \text{kg-cm}$$

$$\begin{aligned} \text{풍하중 : } W &= \text{속도압}(q) \times \text{속도계수}(C) \times \text{압력을 받는 면적}(A) \text{ (kg)} \\ &= 23.66 \times 1.2 \times 4.91 = 139.40 \text{ (kg)} \end{aligned}$$

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

$$\text{속도계수 : } C = 1.2 \text{ (크레인 제작기준 참조)}$$

$$\begin{aligned} \text{풍압을 받는 면적 } A &= \text{I-BEAM의 면적} + \text{HOIST의 면적 (m}^2\text{)} \\ &= 4.6 + 0.310 = 4.91 \text{ (m}^2\text{)} \end{aligned}$$

$$\text{* 호이스트의 풍압을 받는 면적} \approx 0.31 \text{ m}^2$$

| I-BEAM 규격 | BEAM 자중 (kg/m) | 최 대 지지거리 (cm) | M _s (kg-cm) | M _d (kg-cm) | ΣM _v (kg-cm) | W (kg) | M _w (kg-cm) | A (m ²) |
|-------------------|----------------|---------------|------------------------|------------------------|-------------------------|--------|------------------------|---------------------|
| 200×100×t7/10 | 26 | 400 | 5460 | 165528 | 170988 | 31.52 | 6303.0 | 1.110 |
| 250×125×t7.5/12.5 | 38.3 | 620 | 19323.3 | 256568 | 275892 | 51.39 | 15930.8 | 1.81 |
| 300×150×t10/18.5 | 65.5 | 960 | 79229 | 397267 | 476496 | 88.30 | 42383.6 | 3.11 |
| 350×150×t9/15 | 58.5 | 990 | 75253 | 409682 | 484935 | 105.33 | 52140.5 | 3.71 |
| 400×150×t10/18 | 72 | 1100 | 114345 | 455202 | 569547 | 139.40 | 76672.6 | 4.91 |

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



180/266

9-2. 굽힘 응력 계산

1. 수직하중에 의한 굽힘 응력

$$\begin{aligned} * \sigma_v &= \frac{\text{수직 굽힘 MOMENT 합계 : } \sum M_v}{\text{단면 계수 : } Z_x} \quad (\text{kg/cm}^2) \\ &= \frac{569547}{1200} = 474.6 \quad (\text{kg/cm}^2) \end{aligned}$$

2. 풍하중에 의한 굽힘 응력

$$\begin{aligned} * \sigma_w &= \frac{\text{풍하중에 의한 굽힘 MOMENT : } M_w}{\text{단면 계수 : } Z_y} \quad (\text{kg/cm}^2) \\ &= \frac{76672.6}{115} = 666.7 \quad (\text{kg/cm}^2) \end{aligned}$$

2. 풍하중에 의한 굽힘 응력

$$* \sum \sigma = \sigma_v + \sigma_w \leq 0.8 \times 1449 = 1159 \text{ kg/cm}^2$$

| I-BEAM 규격 | 단 면
계 수
Zx | 단 면
계 수
Zy | $\sum M_v$
(kg-cm) | Mw
(kg-cm) | σ_v
(kg/cm ²) | σ_w
(kg/cm ²) | $\sum \sigma$
(kg/cm ²) |
|-------------------|------------------|------------------|-----------------------|---------------|-------------------------------------|-------------------------------------|--|
| 200×100×t7/10 | 218 | 27.7 | 170988 | 6303.0 | 784.3 | 227.5 | 1011.9 |
| 250×125×t7.5/12.5 | 414 | 53.9 | 275892 | 15930.8 | 666.4 | 295.6 | 962.0 |
| 300×150×t10/18.5 | 849 | 118 | 476496 | 42383.6 | 561.2 | 359.2 | 920.4 |
| 350×150×t9/15 | 870 | 93.5 | 484935 | 52140.5 | 557.4 | 557.7 | 1115.0 |
| ⇒ 400×150×t10/18 | 1200 | 115 | 569547 | 76672.6 | 474.6 | 666.7 | 1141.3 |

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.



18/266

9-3. I-BEAM 처짐(DEFLECTION)

1. I-BEAM 자중에 의한 처짐

$$\begin{aligned} * \delta_s &= \frac{5 \times \text{I-BEAM 자중} \times \text{지지거리}^3}{384 \times 2100000 \times I_x} \quad (\text{cm}) \\ &= \frac{5 \times 72 \times 1100^3}{384 \times 2100000 \times 24100} = 0.247 \quad (\text{cm}) \end{aligned}$$

2. 이동하중에 의한 처짐 (DEFLECTION)

$$\begin{aligned} * \delta_d &= \frac{(\text{정격하중} + \text{호이스트자중}) \times \text{지지거리}^3}{48 \times 2100000 \times I_x} \quad (\text{cm}) \\ &= \frac{(1000 + 320) \times 1100^3}{48 \times 2100000 \times 24100} = 0.723 \quad (\text{cm}) \end{aligned}$$

3. 판 정

1) 이동하중에 의한 처짐판정(하단표기)

$$\begin{aligned} &\frac{\text{이동하중에 의한 처짐 : } \delta_d}{\text{지지거리}} < \frac{1}{1000} \\ &= \frac{0.723}{1100} = \frac{1}{1521} < \frac{1}{1000} \end{aligned}$$

2) 처짐량 합계에 의한 처짐판정 (하단표기)

$$\begin{aligned} &\frac{\text{I-BEAM 자중에 의한 처짐 : } \delta_s + \text{이동하중에 의한 처짐 : } \delta_d}{\text{지지거리}} < \frac{1}{800} \\ &= \frac{0.282+0.826}{1100} = \frac{1}{1134} < \frac{1}{800} \end{aligned}$$

| I-BEAM 규격 | 단면2차
MOMENT
I _x | BEAM
자중
(kg/m) | δ _s
(cm) | δ _d
(cm) | 이동하중에 의한
처짐 판정 | 처짐량 합계에 의한
처짐판정 |
|-------------------|----------------------------------|----------------------|------------------------|------------------------|-------------------|--------------------|
| 200×100×t7/10 | 2170 | 26 | 0.048 | 0.386 | 1 / 1036 | 1 / 922 |
| 250×125×t7.5/12.5 | 5180 | 38.3 | 0.1093 | 0.603 | 1 / 1029 | 1 / 871 |
| 300×150×t10/18.5 | 12700 | 65.5 | 0.2829 | 0.912 | 1 / 1052 | 1 / 803 |
| 350×150×t9/15 | 15200 | 58.5 | 0.2315 | 0.836 | 1 / 1184 | 1 / 927 |
| ⇒ 400×150×t10/18 | 24100 | 72 | 0.2466 | 0.723 | 1 / 1521 | 1 / 1134 |

단, I-BEAM의 사용은 MODEL 별 기술사양서에 따른다.



182/266

IV. 참 고 도 서



LOAD LIMITER 권고 SETTING치

* POWER SOURCE : AC 3 ̸ 220V 60Hz

극동하이스트(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% | | | | |
| 0.5 TON | 1.2KW x 8P | 110% | 1 SEC | 1 SEC | 8.0 A | 9.0 A | CT-1 | K, L | 5 V.A | |
| | 1.5KW x 6P | 110% | 1 SEC | 1 SEC | 7.6 A | 8.4 A | CT-1 | K, L | 5 V.A | |
| | 2.4KW x 4P | 110% | 1 SEC | 1 SEC | 10 A | 11.2 A | CT-1 | K, L | 5 V.A | |
| 1 TON | 1.2KW x 8P | 110% | 1 SEC | 1 SEC | 8.0 A | 9.0 A | CT-1 | K, L | 5 V.A | |
| | 2.4KW x 4P | 110% | 1 SEC | 1 SEC | 10 A | 11.2 A | CT-1 | K, L | 5 V.A | |
| 2 TON | 1.8KW x 8P | 110% | 1 SEC | 1 SEC | 11.0 A | 12.2 A | CT-1 | K, L | 5 V.A | |
| | 2.5KW x 6P | 110% | 1 SEC | 1 SEC | 12.0 A | 13.2 A | CT-1 | K, L | 5 V.A | |
| | 3.7KW x 4P | 110% | 1 SEC | 1 SEC | 16.0 A | 17.6 A | CT-1 | K, L | 5 V.A | |
| 2.8 TON | 2.5KW x 8P | 110% | 1 SEC | 1 SEC | 17.7 A | 19.5 A | CT-1 | K, L | 5 V.A | |
| | 5.0KW x 4P | 110% | 1 SEC | 1 SEC | 22.8 A | 25.0 A | CT-1 | K, L | 5 V.A | |
| 3 TON | 2.8KW x 8P | 110% | 1 SEC | 1 SEC | 17.7 A | 19.5 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 4P | 110% | 1 SEC | 1 SEC | 22.8 A | 25.0 A | CT-1 | K, L | 5 V.A | |
| 5 TON | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 23.0 A | 25.3 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 28.2 A | 31.0 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 34.4 A | 38.4 A | CT-1 | K, L | 5 V.A | |
| 7.5 TON | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 23.0 A | 25.3 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 28.2 A | 31.0 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 34.4 A | 38.4 A | CT-1 | K, L | 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% | | | | |
| 0.5 TON | 1.2KW x 8P | 110% | 1 SEC | 1 SEC | 4.6 A | 5.2 A | CT-1 | K, L | 5 V.A | |
| | 1.5KW x 6P | 110% | 1 SEC | 1 SEC | 5.4 A | 4.9 A | CT-1 | K, L | 5 V.A | |
| | 2.4KW x 4P | 110% | 1 SEC | 1 SEC | 5.6 A | 6.4 A | CT-1 | K, L | 5 V.A | |
| 1 TON | 1.2KW x 8P | 110% | 1 SEC | 1 SEC | 4.6 A | 5.2 A | CT-1 | K, L | 5 V.A | |
| | 2.4KW x 4P | 110% | 1 SEC | 1 SEC | 5.6 A | 6.4 A | CT-1 | K, L | 5 V.A | |
| 2 TON | 1.8KW x 8P | 110% | 1 SEC | 1 SEC | 6.4 A | 7.1 A | CT-1 | K, L | 5 V.A | |
| | 2.5KW x 6P | 110% | 1 SEC | 1 SEC | 7.0 A | 7.7 A | CT-1 | K, L | 5 V.A | |
| 2.8 TON | 3.7KW x 4P | 110% | 1 SEC | 1 SEC | 9.3 A | 10.3 A | CT-1 | K, L | 5 V.A | |
| | 2.5KW x 8P | 110% | 1 SEC | 1 SEC | 10.3 A | 11.4 A | CT-1 | K, L | 5 V.A | |
| 3 TON | 5.0KW x 4P | 110% | 1 SEC | 1 SEC | 12.2 A | 13.5 A | CT-1 | K, L | 5 V.A | |
| | 2.8KW x 8P | 110% | 1 SEC | 1 SEC | 10.3 A | 11.4 A | CT-1 | K, L | 5 V.A | |
| 5 TON | 5.5KW x 4P | 110% | 1 SEC | 1 SEC | 12.2 A | 13.5 A | CT-1 | K, L | 5 V.A | |
| | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 13.3 A | 14.6 A | CT-1 | K, L | 5 V.A | |
| 7.5 TON | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 19.9 A | 23.1 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 16.3 A | 18.0 A | CT-1 | K, L | 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 440V 60Hz

극동하이스트(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% | | | | |
| 0.5 TON | 1.2KW x 8P | 110% | 1 SEC | 1 SEC | 4.0 A | 4.6 A | CT-1 | K, L | 5 V.A | |
| | 1.5KW x 6P | 110% | 1 SEC | 1 SEC | 3.8 A | 4.5 A | CT-1 | K, L | 5 V.A | |
| | 2.4KW x 4P | 110% | 1 SEC | 1 SEC | 5.0 A | 5.9 A | CT-1 | K, L | 5 V.A | |
| 1 TON | 1.2KW x 8P | 110% | 1 SEC | 1 SEC | 4.0 A | 4.6 A | CT-1 | K, L | 5 V.A | |
| | 2.4KW x 4P | 110% | 1 SEC | 1 SEC | 5.0 A | 5.9 A | CT-1 | K, L | 5 V.A | |
| | 1.8KW x 8P | 110% | 1 SEC | 1 SEC | 5.5 A | 6.1 A | CT-1 | K, L | 5 V.A | |
| 2 TON | 2.5KW x 6P | 110% | 1 SEC | 1 SEC | 5.8 A | 6.4 A | CT-1 | K, L | 5 V.A | |
| | 3.7KW x 4P | 110% | 1 SEC | 1 SEC | 8.0 A | 10.8 A | CT-1 | K, L | 5 V.A | |
| | 2.5KW x 8P | 110% | 1 SEC | 1 SEC | 8.9 A | 9.8 A | CT-1 | K, L | 5 V.A | |
| 2.8 TON | 5.0KW x 4P | 110% | 1 SEC | 1 SEC | 10.5 A | 11.6 A | CT-1 | K, L | 5 V.A | |
| | 2.8KW x 8P | 110% | 1 SEC | 1 SEC | 8.9 A | 9.8 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 4P | 110% | 1 SEC | 1 SEC | 10.5 A | 11.6 A | CT-1 | K, L | 5 V.A | |
| 3 TON | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 11.5 A | 12.7 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 14.1 A | 15.5 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 16.5 A | 20.5 A | CT-1 | K, L | 5 V.A | |
| 5 TON | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 11.5 A | 12.7 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 14.1 A | 15.5 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 16.5 A | 20.5 A | CT-1 | K, L | 5 V.A | |
| 7.5 TON | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 11.5 A | 12.7 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 14.1 A | 15.5 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 16.5 A | 20.5 A | CT-1 | K, L | 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 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% | | | | |
| 0.5 TON | 1.2KW x 8P | 110% | 1 SEC | 1 SEC | 3.8 A | 4.4 A | CT-1 | K, L | 5 V.A | |
| | 1.5KW x 6P | 110% | 1 SEC | 1 SEC | 3.6 A | 4.1 A | CT-1 | K, L | 5 V.A | |
| | 2.4KW x 4P | 110% | 1 SEC | 1 SEC | 4.8 A | 5.2 A | CT-1 | K, L | 5 V.A | |
| 1 TON | 1.2KW x 8P | 110% | 1 SEC | 1 SEC | 3.8 A | 4.4 A | CT-1 | K, L | 5 V.A | |
| | 2.4KW x 4P | 110% | 1 SEC | 1 SEC | 4.8 A | 5.2 A | CT-1 | K, L | 5 V.A | |
| 2 TON | 1.8KW x 8P | 110% | 1 SEC | 1 SEC | 5.3 A | 5.9 A | CT-1 | K, L | 5 V.A | |
| | 2.5KW x 6P | 110% | 1 SEC | 1 SEC | 5.5 A | 6.1 A | CT-1 | K, L | 5 V.A | |
| | 3.7KW x 4P | 110% | 1 SEC | 1 SEC | 7.7 A | 8.5 A | CT-1 | K, L | 5 V.A | |
| 2.8T | 2.5KW x 8P | 110% | 1 SEC | 1 SEC | 7.7 A | 8.5 A | CT-1 | K, L | 5 V.A | |
| | 5.0KW x 4P | 110% | 1 SEC | 1 SEC | 10.0 A | 11.5 A | CT-1 | K, L | 5 V.A | |
| 3TON | 2.8KW x 8P | 110% | 1 SEC | 1 SEC | 7.7 A | 8.5 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 4P | 110% | 1 SEC | 1 SEC | 10.0 A | 11.5 A | CT-1 | K, L | 5 V.A | |
| 5 TON | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 11.0 A | 12.2 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 13.5 A | 14.7 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 16.5 A | 20.5 A | CT-1 | K, L | 5 V.A | |
| 7.5 TON | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 11.0 A | 12.2 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 13.5 A | 14.7 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 16.5 A | 20.5 A | CT-1 | K, L | 5 V.A | |

NOTE

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

LOAD LIMITER 권고 SETTING치

* POWER SOURCE : AC 3Φ 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% | | | | |
| 0.5 TON | 1.2KW x 8P | 110% | 1 SEC | 1 SEC | 3.6 A | 4.2 A | CT-1 | K, L | 5 V.A | |
| | 1.5KW x 6P | 110% | 1 SEC | 1 SEC | 3.5 A | 3.9 A | CT-1 | K, L | 5 V.A | |
| | 2.4KW x 4P | 110% | 1 SEC | 1 SEC | 4.6 A | 5.1 A | CT-1 | K, L | 5 V.A | |
| 1 TON | 1.2KW x 8P | 110% | 1 SEC | 1 SEC | 3.6 A | 4.2 A | CT-1 | K, L | 5 V.A | |
| | 2.4KW x 4P | 110% | 1 SEC | 1 SEC | 4.6 A | 5.1 A | CT-1 | K, L | 5 V.A | |
| | 1.8KW x 8P | 110% | 1 SEC | 1 SEC | 5.1 A | 5.8 A | CT-1 | K, L | 5 V.A | |
| 2 TON | 2.5KW x 6P | 110% | 1 SEC | 1 SEC | 5.3 A | 6.0 A | CT-1 | K, L | 5 V.A | |
| | 3.7KW x 4P | 110% | 1 SEC | 1 SEC | 7.3 A | 8.2 A | CT-1 | K, L | 5 V.A | |
| | 2.5KW x 8P | 110% | 1 SEC | 1 SEC | 7.3 A | 8.2 A | CT-1 | K, L | 5 V.A | |
| 2.8 TON | 5.0KW x 4P | 110% | 1 SEC | 1 SEC | 9.6 A | 11.2 A | CT-1 | K, L | 5 V.A | |
| | 2.8KW x 8P | 110% | 1 SEC | 1 SEC | 7.3 A | 8.2 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 4P | 110% | 1 SEC | 1 SEC | 9.6 A | 11.2 A | CT-1 | K, L | 5 V.A | |
| 3 TON | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 10.5 A | 12.0 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 12.9 A | 14.2 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 15.8 A | 19.9 A | CT-1 | K, L | 5 V.A | |
| 5 TON | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 10.5 A | 12.0 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 12.9 A | 14.2 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 15.8 A | 19.9 A | CT-1 | K, L | 5 V.A | |
| 7.5 TON | 4.2KW x 8P | 110% | 1 SEC | 1 SEC | 10.5 A | 12.0 A | CT-1 | K, L | 5 V.A | |
| | 5.5KW x 6P | 110% | 1 SEC | 1 SEC | 12.9 A | 14.2 A | CT-1 | K, L | 5 V.A | |
| | 8.5KW x 4P | 110% | 1 SEC | 1 SEC | 15.8 A | 19.9 A | CT-1 | K, L | 5 V.A | |

NOTE

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

E.O.C.R 권고 SETTING치

* POWER SOURCE : AC 3Φ 220V 60Hz

| HOIST | MOTOR 용량 | MOTOR 정격 전류 | DRIVE TYPE | E.O.C.R TYPE | 권고 SETTING 치 | | | REMARK |
|---------|------------|-------------|------------|--------------|--------------|----------------|---------|--------|
| | | | | | DELAY TIME | OPERATION TIME | CURRENT | |
| 0.5 TON | 1.2KW x 8P | 8.0 A | 1 DRIVE | SS-30 | 3 SEC | 1 SEC | 8.0 A | |
| | 1.5KW x 6P | 7.6 A | 1 DRIVE | SS-30 | 3 SEC | 1 SEC | 7.6 A | |
| | 2.4KW x 4P | 10.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 10.0 A | |
| 1 TON | 1.2KW x 8P | 8.0 A | 1 DRIVE | SS-30 | 3 SEC | 1 SEC | 8.0 A | |
| | 2.4KW x 4P | 10.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 10.0 A | |
| 2 TON | 1.8KW x 8P | 11.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 11.0 A | |
| | 2.5KW x 6P | 12.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 12.0 A | |
| | 3.7KW x 4P | 16.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 16.0 A | |
| 2.8 TON | 2.5KW x 8P | 17.7 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 17.7 A | |
| | 5.0KW x 4P | 22.8 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 22.8 A | |
| 3 TON | 2.8KW x 8P | 17.7 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 17.7 A | |
| | 5.5KW x 4P | 22.8 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 22.8 A | |
| 5 TON | 4.2KW x 8P | 23.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 23.0 A | |
| | 5.5KW x 6P | 28.2 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 28.2 A | |
| | 8.5KW x 4P | 34.4 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 34.4 A | |
| 7.5 TON | 4.2KW x 8P | 23.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 23.0 A | |
| | 5.5KW x 6P | 28.2 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 28.2 A | |
| | 8.5KW x 4P | 34.4 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 34.4 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 380V 60Hz

| HOIST | MOTOR 용량 | 1
정격 전류 | DRIVE
TYPE | E.O.C.R
TYPE | 권고 SETTING 치 | | | REMARK |
|---------|------------|------------|---------------|-----------------|--------------|----------------|---------|--------|
| | | | | | DELAY TIME | OPERATION TIME | CURRENT | |
| 0.5 TON | 1.2KW x 8P | 4.6 A | 1 DRIVE | SS-30 | 3 SEC | 1 SEC | 4.6 A | |
| | 1.5KW x 6P | 5.4 A | 1 DRIVE | SS-30 | 3 SEC | 1 SEC | 5.4 A | |
| | 2.4KW x 4P | 5.6 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.6 A | |
| 1 TON | 1.2KW x 8P | 4.6 A | 1 DRIVE | SS-30 | 3 SEC | 1 SEC | 4.6 A | |
| | 2.4KW x 4P | 5.6 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.6 A | |
| 2 TON | 1.8KW x 8P | 6.4 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 6.4 A | |
| | 2.5KW x 6P | 7.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 7.0 A | |
| | 3.7KW x 4P | 9.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 9.3 A | |
| 2.8 TON | 2.5KW x 8P | 10.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 10.3 A | |
| | 5.0KW x 4P | 12.2 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 12.2 A | |
| 3 TON | 2.8KW x 8P | 10.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 10.3 A | |
| | 5.5KW x 4P | 12.2 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 12.2 A | |
| 5 TON | 4.2KW x 8P | 13.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 13.3 A | |
| | 5.5KW x 6P | 16.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 16.3 A | |
| | 8.5KW x 4P | 19.9 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 19.9 A | |
| 7.5 TON | 4.2KW x 8P | 13.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 13.3 A | |
| | 5.5KW x 6P | 16.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 16.3 A | |
| | 8.5KW x 4P | 19.9 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 19.9 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

| HOIST | MOTOR 용량 | MOTOR 정격 전류 | DRIVE TYPE | E.O.C.R TYPE | 권고 SETTING 치 | | | REMARK |
|---------|------------|-------------|------------|--------------|--------------|----------------|---------|--------|
| | | | | | DELAY TIME | OPERATION TIME | CURRENT | |
| 0.5 TON | 1.2KW x 8P | 4.0 A | 1 DRIVE | SS-06 | 3 SEC | 1 SEC | 4.0 A | |
| | 1.5KW x 6P | 3.8 A | 1 DRIVE | SS-06 | 3 SEC | 1 SEC | 3.8 A | |
| | 2.4KW x 4P | 5.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.0 A | |
| 1 TON | 1.2KW x 8P | 4.0 A | 1 DRIVE | SS-30 | 3 SEC | 1 SEC | 4.0 A | |
| | 2.4KW x 4P | 5.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.0 A | |
| | 1.8KW x 8P | 5.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.5 A | |
| 2 TON | 2.5KW x 6P | 5.8 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.8 A | |
| | 3.7KW x 4P | 8.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 8.0 A | |
| | 2.5KW x 8P | 8.9 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 8.9 A | |
| 2.8 TON | 5.0KW x 4P | 10.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 10.5 A | |
| | 2.8KW x 8P | 8.9 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 8.9 A | |
| | 5.5KW x 4P | 10.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 10.5 A | |
| 3 TON | 4.2KW x 8P | 11.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 11.5 A | |
| | 5.5KW x 6P | 14.1 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 14.1 A | |
| | 8.5KW x 4P | 16.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 16.5 A | |
| 5 TON | 4.2KW x 8P | 11.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 11.5 A | |
| | 5.5KW x 6P | 14.1 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 14.1 A | |
| | 8.5KW x 4P | 16.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 16.5 A | |
| 7.5 TON | 4.2KW x 8P | 11.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 11.5 A | |
| | 5.5KW x 6P | 14.1 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 14.1 A | |
| | 8.5KW x 4P | 16.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 16.5 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 460V 60Hz

| HOIST | MOTOR 용량 | MOTOR 정격 전류 | DRIVE TYPE | E.O.C.R TYPE | 권고 SETTING 치 | | | REMARK |
|---------|------------|-------------|------------|--------------|--------------|----------------|---------|--------|
| | | | | | DELAY TIME | OPERATION TIME | CURRENT | |
| 0.5 TON | 1.2KW x 8P | 3.8 A | 1 DRIVE | SS-06 | 3 SEC | 1 SEC | 3.8 A | |
| | 1.5KW x 6P | 3.6 A | 1 DRIVE | SS-06 | 3 SEC | 1 SEC | 3.6 A | |
| | 2.4KW x 4P | 4.8 A | 1 DRAVE | SS-06 | 3 SEC | 1 SEC | 4.8 A | |
| 1 TON | 1.2KW x 8P | 3.8 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.3 A | |
| | 2.4KW x 4P | 5% | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 7.7 A | |
| 2 TON | 1.8KW x 8P | 5.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.3 A | |
| | 2.5KW x 6P | 5.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.8 A | |
| | 3.7KW x 4P | 7.7 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 7.7 A | |
| 2.8 TON | 2.5KW x 8P | 7.7 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 7.7 A | |
| | 5.0KW x 4P | 10.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 10.0 A | |
| 3 TON | 2.8KW x 8P | 7.7 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 7.7 A | |
| | 5.5KW x 4P | 10.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 10.0 A | |
| 5 TON | 4.2KW x 8P | 11.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 11.0 A | |
| | 5.5KW x 6P | 13.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 13.5 A | |
| | 8.5KW x 4P | 16.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 16.5 A | |
| 7.5 TON | 4.2KW x 8P | 11.0 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 11.0 A | |
| | 5.5KW x 6P | 13.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 13.5 A | |
| | 8.5KW x 4P | 16.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 16.5 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 480V 60Hz

| HOIST | MOTOR 용량 | MOTOR 정격 전류 | DRIVE TYPE | E.O.C.R TYPE | 권고 SETTING 치 | | | REMARK |
|---------|------------|-------------|------------|--------------|--------------|----------------|---------|--------|
| | | | | | DELAY TIME | OPERATION TIME | CURRENT | |
| 0.5 TON | 1.2KW x 8P | 3.6 A | 1 DRIVE | SS-06 | 3 SEC | 1 SEC | 3.6 A | |
| | 1.5KW x 6P | 3.5 A | 1 DRIVE | SS-06 | 3 SEC | 1 SEC | 3.5 A | |
| | 2.4KW x 4P | 4.6 A | 1 DRAVE | SS-06 | 3 SEC | 1 SEC | 4.6 A | |
| 1 TON | 1.2KW x 8P | 3.6 A | 1 DRIVE | SS-30 | 3 SEC | 1 SEC | 3.6 A | |
| | 2.4KW x 4P | 4.6 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 4.6 A | |
| 2 TON | 1.8KW x 8P | 5.1 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.1 A | |
| | 2.5KW x 6P | 5.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 5.3 A | |
| | 3.7KW x 4P | 7.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 7.3 A | |
| 2.8 TON | 2.5KW x 8P | 7.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 7.3 A | |
| | 5.0KW x 4P | 9.6 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 9.6 A | |
| 3 TON | 2.8KW x 8P | 7.3 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 7.3 A | |
| | 5.5KW x 4P | 9.6 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 9.6 A | |
| | 4.2KW x 8P | 10.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 10.5 A | |
| 5 TON | 5.5KW x 6P | 12.9 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 12.9 A | |
| | 8.5KW x 4P | 15.8 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 15.8 A | |
| | 4.2KW x 8P | 10.5 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 10.5 A | |
| 7.5 TON | 5.5KW x 6P | 12.9 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 12.9 A | |
| | 8.5KW x 4P | 15.8 A | 1 DRAVE | SS-30 | 3 SEC | 1 SEC | 15.8 A | |

NOTE

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



E.O.C.R 권고 SETTING 치

* POWER SOURCE : AC3Φ 220V 60Hz

| MOTOR 용량 | MOTOR 정격 전류 | DRIVE TYPE | E.O.C.R TYPE | 권고 SETTING 치 | | | REMARK |
|------------------|-------------|------------|--------------|--------------|----------------|---------|--------|
| | | | | DELAY TIME | OPERATION TIME | CURRENT | |
| 0.2KW x 6P | 2.0 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.0 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.0 A | |
| 0.4KW x 4P | 2.7 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.7 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 5.4 A | |
| 0.5KW x 6P | 3.4 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.4 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 6.8 A | |
| 0.75KW x 4P | 4.1 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.1 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 8.2 A | |
| 1.0KW x 6P | 6.7 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 6.7 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 13.4 A | |
| 1.5KW x 4P | 7.3 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.3 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 14.6 A | |
| 1.5KW x 6P | 7.6 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.6 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 15.2 A | |
| 2.2KW x 4P | 10 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 10 A | |
| | | 2 DRIVE | SS - 30 | 3 SEC | 1 SEC | 20 A | |
| 0.8/0.4KW x 4/8P | 4.8/4.25 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.8 A | |
| | | 2 DRIVE | SS - 30 | 3 SEC | 1 SEC | 4.25 A | |
| 2.2KW x 6P | 12 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 8.5 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 12 A | |
| 3.7KW x 4P | 16 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 24 A | |
| | | 2DRIVE | SS - 60 | 3 SEC | 1 SEC | 16 A | |

NOTE

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



E.O.C.R 권고 SETTING 치

* POWER SOURCE : AC3Φ 380V 60Hz

| MOTOR 용량 | MOTOR 정격 전류 | DRIVE TYPE | E.O.C.R TYPE | 권고 SETTING 치 | | | REMARK |
|------------------|-------------|------------|--------------|--------------|----------------|---------|--------|
| | | | | DELAY TIME | OPERATION TIME | CURRENT | |
| 0.2KW x 6P | 1.2 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.2 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.4 A | |
| 0.4KW x 4P | 1.6 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.6 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.2 A | |
| 0.5KW x 6P | 2.0 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.0 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.0 A | |
| 0.75KW x 4P | 2.4 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.4 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.8 A | |
| 1.0KW x 6P | 3.9 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.9 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.8 A | |
| 1.5KW x 4P | 4.2 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.2 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 8.4 A | |
| 1.5KW x 6P | 4.4 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.4 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 8.8 A | |
| 2.2KW x 4P | 5.8 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 5.8 A | |
| | | 2 DRIVE | SS - 30 | 3 SEC | 1 SEC | 11.6 A | |
| 0.8/0.4KW x 4/8P | 2.78/2.63 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.78 A | |
| | | 2 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.63A | |
| 2.2KW x 6P | 7.0 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 5.26 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.0 A | |
| 3.7KW x 4P | 9.3 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 14 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 9.3 A | |
| | | | | 3 SEC | 1 SEC | 18.6 A | |

극동호이스트 (주)

NOTE

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

E.O.C.R 권고 SETTING 치

* POWER SOURCE : AC3Ø 440V 60Hz

| MOTOR 용량 | MOTOR 정격 전류 | DRIVE TYPE | E.O.C.R TYPE | 권고 SETTING 치 | | | REMARK |
|------------------|-------------|------------|--------------|--------------|----------------|---------|--------|
| | | | | DELAY TIME | OPERATION TIME | CURRENT | |
| 0.2KW x 6P | 1.0 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.0 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.0 A | |
| 0.4KW x 4P | 1.4 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.4 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.8 A | |
| 0.5KW x 6P | 1.7 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.7 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.4 A | |
| 0.75KW x 4P | 2.0 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.0 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.0 A | |
| 1.0KW x 6P | 3.3 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.3 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 6.6 A | |
| 1.5KW x 4P | 3.7 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.7 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.4 A | |
| 1.5KW x 6P | 3.8 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.8 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.6 A | |
| 2.2KW x 4P | 5.0 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 5.0 A | |
| | | 2 DRIVE | SS - 30 | 3 SEC | 1 SEC | 10 A | |
| 0.8/0.4KW x 4/8P | 2.4/2.27 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.4 A | |
| | | 2 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.27 A | |
| 2.2KW x 6P | 6.0 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.8 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 4.54 A | |
| 3.7KW x 4P | 8.0 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 12.0 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 8.0 A | |
| | | | | 3 SEC | 1 SEC | 16 A | |

NOTE

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

E.O.C.R 권고 SETTING 치

* POWER SOURCE : AC3Φ 460V 60Hz

| MOTOR 용량 | MOTOR 정격 전류 | DRIVE TYPE | E.O.C.R TYPE | 권고 SETTING 치 | | | REMARK |
|------------------|-------------|------------|--------------|--------------|----------------|---------|--------|
| | | | | DELAY TIME | OPERATION TIME | CURRENT | |
| 0.2KW x 6P | 1.0 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.0 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.0 A | |
| 0.4KW x 4P | 1.3 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.3 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.6 A | |
| 0.5KW x 6P | 1.7 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.7 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.4 A | |
| 0.75KW x 4P | 2.0 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.0 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.0 A | |
| 1.0KW x 6P | 3.2 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.2 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 6.4 A | |
| 1.5KW x 4P | 3.5 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.5 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.0 A | |
| 1.5KW x 6P | 3.6 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.6 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.2 A | |
| 2.2KW x 4P | 4.8 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.8 A | |
| | | 2 DRIVE | SS - 30 | 3 SEC | 1 SEC | 9.6 A | |
| 0.8/0.4KW x 4/8P | 2.3/2.15 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.3 A | |
| | | 2 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.15 A | |
| 2.2KW x 6P | 4.8 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.8 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 9.6 A | |
| 3.7KW x 4P | 7.7 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.7 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 15.4 A | |

NOTE

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



E.O.C.R 권고 SETTING 치

* POWER SOURCE : AC3Φ 480V 60Hz

| MOTOR 용량 | MOTOR 정격 전류 | DRIVE TYPE | E.O.C.R TYPE | 권고 SETTING 치 | | | REMARK |
|------------------|-------------|------------|--------------|--------------|----------------|---------|--------|
| | | | | DELAY TIME | OPERATION TIME | CURRENT | |
| 0.2KW x 6P | 0.9 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 0.9 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.8 A | |
| 0.4KW x 4P | 1.2 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.2 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.4 A | |
| 0.5KW x 6P | 1.6 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.6 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.2 A | |
| 0.75KW x 4P | 1.9 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 1.9 A | |
| | | 2DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.8 A | |
| 1.0KW x 6P | 3.1 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.1 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 4.2 A | |
| 1.5KW x 4P | 3.4 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.4 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 6.8 A | |
| 1.5KW x 6P | 3.5 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 3.5 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.0 A | |
| 2.2KW x 4P | 4.6 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.6 A | |
| | | 2 DRIVE | SS - 30 | 3 SEC | 1 SEC | 9.2 A | |
| 0.8/0.4KW x 4/8P | 2.22/2.05 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.22 A | |
| | | 2 DRIVE | SS - 06 | 3 SEC | 1 SEC | 2.05 A | |
| 2.2KW x 6P | 4.6 A | 1 DRIVE | SS - 06 | 3 SEC | 1 SEC | 4.1 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 9.2 A | |
| 3.7KW x 4P | 7.3 A | 1 DRIVE | SS - 30 | 3 SEC | 1 SEC | 7.3 A | |
| | | 2DRIVE | SS - 30 | 3 SEC | 1 SEC | 14.6 A | |

NOTE

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



THREE PHASE INDUCTION MOTOR DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | HOISTING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 112 S |
| 4. RATED POWER | 2.4 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1710 RPM |
| 11. FULL LOAD CURRENT | 10.0 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 56.0 A |
| 13. MINIMUM STARTING VOLTAGE | 200 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 75.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 77.0 % |
| 16. STARTING TORQUE | 2.56 KG.M |
| 17. SITE ALTITUDE(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 TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | HOISTING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 112 S |
| 4. RATED POWER | 2.4 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1710 RPM |
| 11. FULL LOAD CURRENT | 5.8 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 43.2 A |
| 13. MINIMUM STARTING VOLTAGE | 342 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 76.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 77.0 % |
| 16. STARTING TORQUE | 2.56 KG.M |
| 17. SITE ALTITUDE(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 TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | HOISTING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 112 S |
| 4. RATED POWER | 2.4 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1710 RPM |
| 11. FULL LOAD CURRENT | 5.0 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 29.7 A |
| 13. MINIMUM STARTING VOLTAGE | 400 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 75.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 77.0 % |
| 16. STARTING TORQUE | 2.56 KG.M |
| 17. SITE ALTITUDE(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 TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | HOISTING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 112 S |
| 4. RATED POWER | 2.4 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1710 RPM |
| 11. FULL LOAD CURRENT | 4.9 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 25.49 A |
| 13. MINIMUM STARTING VOLTAGE | 418 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 75.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 77.0 % |
| 16. STARTING TORQUE | 2.56 KG.M |
| 17. SITE ALTITUDE(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 TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | HOISTING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 112 S |
| 4. RATED POWER | 2.4 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1710 RPM |
| 11. FULL LOAD CURRENT | 4.8 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 24.97 A |
| 13. MINIMUM STARTING VOLTAGE | 436 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 75.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 77.0 % |
| 16. STARTING TORQUE | 2.56 KG.M |
| 17. SITE ALTITUDE(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 TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | HOISTING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 112 S |
| 4. RATED POWER | 1.2 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 860 RPM |
| 11. FULL LOAD CURRENT | 8.0 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 41.3 A |
| 13. MINIMUM STARTING VOLTAGE | 220 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 71.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 51.5 % |
| 16. STARTING TORQUE | 3.62 KG.M |
| 17. SITE ALTITUDE(UNDER) | 1000 M |
| 18. ENCLOSURE & COOLING METHOD | T E N V |
| 19. TYPE OF BEARING | PL : 6208zz OPL : 6206zz |
| 20. MOUNTING | H O R I Z O N T A L |
| 21. MAXIMUM AMBIENT TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | HOISTING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 112 S |
| 4. RATED POWER | 1.2 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 860 RPM |
| 11. FULL LOAD CURRENT | 4.6 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 23.8 A |
| 13. MINIMUM STARTING VOLTAGE | 345 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 71.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 51.5 % |
| 16. STARTING TORQUE | 3.62 KG.M |
| 17. SITE ALTITUDE(UNDER) | 1000 M |
| 18. ENCLOSURE & COOLING METHOD | T E N V |
| 19. TYPE OF BEARING | PL : 6208zz OPL : 6206zz |
| 20. MOUNTING | H O R I Z O N T A L |
| 21. MAXIMUM AMBIENT TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | HOISTING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 112 S |
| 4. RATED POWER | 1.2 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 860 RPM |
| 11. FULL LOAD CURRENT | 4.0 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 20.5 A |
| 13. MINIMUM STARTING VOLTAGE | 400 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 71.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 51.5 % |
| 16. STARTING TORQUE | 3.62 KG.M |
| 17. SITE ALTITUDE(UNDER) | 1000 M |
| 18. ENCLOSURE & COOLING METHOD | T E N V |
| 19. TYPE OF BEARING | PL : 6208zz OPL : 6206zz |
| 20. MOUNTING | H O R I Z O N T A L |
| 21. MAXIMUM AMBIENT TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | HOISTING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 112 S |
| 4. RATED POWER | 1.2 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 860 RPM |
| 11. FULL LOAD CURRENT | 3.8 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 19.8 A |
| 13. MINIMUM STARTING VOLTAGE | 418 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 71.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 51.5 % |
| 16. STARTING TORQUE | 3.62 KG.M |
| 17. SITE ALTITUDE(UNDER) | 1000 M |
| 18. ENCLOSURE & COOLING METHOD | T E N V |
| 19. TYPE OF BEARING | PL : 6208zz OPL : 6206zz |
| 20. MOUNTING | H O R I Z O N T A L |
| 21. MAXIMUM AMBIENT TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | HOISTING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 112 S |
| 4. RATED POWER | 1.2 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 860 RPM |
| 11. FULL LOAD CURRENT | 3.6 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 18.9 A |
| 13. MINIMUM STARTING VOLTAGE | 436 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 71.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 51.5 % |
| 16. STARTING TORQUE | 3.62 KG.M |
| 17. SITE ALTITUDE(UNDER) | 1000 M |
| 18. ENCLOSURE & COOLING METHOD | T E N V |
| 19. TYPE OF BEARING | PL : 6208zz OPL : 6206zz |
| 20. MOUNTING | H O R I Z O N T A L |
| 21. MAXIMUM AMBIENT TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | TRAVERSING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 80 |
| 4. RATED POWER | 0.4 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1660 RPM |
| 11. FULL LOAD CURRENT | 2.7 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 11.2 A |
| 13. MINIMUM STARTING VOLTAGE | 200 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 63.5 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 61.5 % |
| 16. STARTING TORQUE | 0.515 KG.M |
| 17. SITE ALTITUDE(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 TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | TRAVERSING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 80 |
| 4. RATED POWER | 0.4 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1660 RPM |
| 11. FULL LOAD CURRENT | 1.6 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 7.8 A |
| 13. MINIMUM STARTING VOLTAGE | 345 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 63.5 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 61.5 % |
| 16. STARTING TORQUE | 0.515 KG.M |
| 17. SITE ALTITUDE(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 TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | TRAVERSING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 80 |
| 4. RATED POWER | 0.4 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1660 RPM |
| 11. FULL LOAD CURRENT | 1.4 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 6.71 A |
| 13. MINIMUM STARTING VOLTAGE | 400 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 63.5 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 61.5 % |
| 16. STARTING TORQUE | 0.515 KG.M |
| 17. SITE ALTITUDE(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 TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | TRAVERSING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 80 |
| 4. RATED POWER | 0.4 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1660 RPM |
| 11. FULL LOAD CURRENT | 1.3 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 6.61A |
| 13. MINIMUM STARTING VOLTAGE | 418 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 63.5 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 61.5 % |
| 16. STARTING TORQUE | 0.515 KG.M |
| 17. SITE ALTITUDE(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 TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | TRAVERSING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 80 |
| 4. RATED POWER | 0.4 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1660 RPM |
| 11. FULL LOAD CURRENT | 1.2 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 6.42 A |
| 13. MINIMUM STARTING VOLTAGE | 436 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 63.5 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 61.5 % |
| 16. STARTING TORQUE | 0.515 KG.M |
| 17. SITE ALTITUDE(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 TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | TRAVERSING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 80 |
| 4. RATED POWER | 0.2 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1050 RPM |
| 11. FULL LOAD CURRENT | 2.0 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 9.4 A |
| 13. MINIMUM STARTING VOLTAGE | 200 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 56.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 46.5 % |
| 16. STARTING TORQUE | 0.25 KG.M |
| 17. SITE ALTITUDE(UNDER) | 1000 M |
| 18. ENCLOSURE & COOLING METHOD | T E N V |
| 19. TYPE OF BEARING | PL : 6202zz OPL : 6202zz |
| 20. MOUNTING | H O R I Z O N T A L |
| 21. MAXIMUM AMBIENT TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | TRAVERSING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 80 |
| 4. RATED POWER | 0.2 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1050 RPM |
| 11. FULL LOAD CURRENT | 1.2 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 6.6 A |
| 13. MINIMUM STARTING VOLTAGE | 345 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 56.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 46.5 % |
| 16. STARTING TORQUE | 0.25 KG.M |
| 17. SITE ALTITUDE(UNDER) | 1000 M |
| 18. ENCLOSURE & COOLING METHOD | T E N V |
| 19. TYPE OF BEARING | PL : 6202zz OPL : 6202zz |
| 20. MOUNTING | H O R I Z O N T A L |
| 21. MAXIMUM AMBIENT TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | TRAVERSING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 80 |
| 4. RATED POWER | 0.2 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1050 RPM |
| 11. FULL LOAD CURRENT | 1.0 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 5.1 A |
| 13. MINIMUM STARTING VOLTAGE | 400 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 56.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 46.5 % |
| 16. STARTING TORQUE | 0.25 KG.M |
| 17. SITE ALTITUDE(UNDER) | 1000 M |
| 18. ENCLOSURE & COOLING METHOD | T E N V |
| 19. TYPE OF BEARING | PL : 6202zz OPL : 6202zz |
| 20. MOUNTING | H O R I Z O N T A L |
| 21. MAXIMUM AMBIENT TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | TRAVERSING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 80 |
| 4. RATED POWER | 0.2 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1050 RPM |
| 11. FULL LOAD CURRENT | 0.97 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 4.07 A |
| 13. MINIMUM STARTING VOLTAGE | 418 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 56.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 46.5 % |
| 16. STARTING TORQUE | 0.25 KG.M |
| 17. SITE ALTITUDE(UNDER) | 1000 M |
| 18. ENCLOSURE & COOLING METHOD | T E N V |
| 19. TYPE OF BEARING | PL : 6202zz OPL : 6202zz |
| 20. MOUNTING | H O R I Z O N T A L |
| 21. MAXIMUM AMBIENT TEMPERATURE | 40 °C |
| 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 DATA SHEET

SCHEDULE OF TECHNICAL DATA

| | |
|---|--------------------------|
| 1. SERVICE | TRAVERSING |
| 2. MANUFACTURE | 극동 호이스트 (주) |
| 3. FRAME NUMBER | 80 |
| 4. RATED POWER | 0.2 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 TEMPERATURE RISE(BY RESISTANCE) | 80 °C |
| 10. FULL LOAD SPEED | 1050 RPM |
| 11. FULL LOAD CURRENT | 0.93 A |
| 12. STARTING CURRENT AT RATED VOLTAGE | 4.03 A |
| 13. MINIMUM STARTING VOLTAGE | 436 V |
| 14. EFFICIENCY AT 100% RATED LOAD | 56.0 % |
| 15. POWER FACTOR AT 100% RATED LOAD | 46.5 % |
| 16. STARTING TORQUE | 0.25 KG.M |
| 17. SITE ALTITUDE(UNDER) | 1000 M |
| 18. ENCLOSURE & COOLING METHOD | T E N V |
| 19. TYPE OF BEARING | PL : 6202zz OPL : 6202zz |
| 20. MOUNTING | H O R I Z O N T A L |
| 21. MAXIMUM AMBIENT TEMPERATURE | 40 °C |
| 22. BEARING LUBRICATION | G R E A S E |
| 23. STARTING METHOD | F U L L V O L T A G E |



INVOICE NO. 2010 - 10 - 256 / PW10061

DATE 26. Oct, 2010

MILL TEST CERTIFICATE

THIS IS TO CERTIFY THAT THE MATERIAL DESCRIBED BELOW WAS MANUFACTURED
IN ACCORDANCE WITH KISWIRE SPECIFICATION AND APPLICABLE SECTIONS

OF KSD 3514 - 2002 (B Grade)

TO MESSRS KISWIRE LTD

MATERIAL DESCRIPTION UNGALVANIZED STEEL WIRE ROPE
06 x 36(WS) + PP 1,000.00 M x 10 REEL

TYPE KSD 3514-1997

EX NO. PW10105-8

ORDER NO. SMW1010-6/SAMJIN REEL NO. 41 - 50 SAMPLING NO. 41

DIAMETER OF ROPE 08.00 mm TYPE OF CORE POLYPROPYLENE

SPECIFIED NOMINAL

BREAKING STRENGTH 37.90 kN SAMPLE BROKE AT 42.96 kN

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

ROPE LAY RHRL LAY LENGTH 85.15 mm

LUBRICATION A-3

CHEMICAL ANALYSIS OF WIRE ROD

| CHARGE NO. | C X 100 | Si X 100 | Mn X 100 | P X 1000 | S X 1000 |
|------------|---------|----------|----------|----------|----------|
| SA21063591 | 72 | 21 | 57 | 8 | 12 |



DATE OF SAMPLE TEST 21. Oct, 2010

Q.A. MANAGER
KISWIRE



D/S/R DSR CORP

ORIGINAL

SALES OFFICE : Woosin Bldg. 7F, 646-15, Yeoksam-dong, Gangnam-gu, Seoul, 135-911, Korea
TEL : 82-2-3420-3500, FAX : 82-2-3420-3600, E-mail : sales@dsrcorp.com, http : //www.dsrcorp.com

FACTORY : TEL : 82-61-762-8351, FAX : 82-61-762-8354

MILL TEST CERTIFICATE / CERTIFICATE OF INSPECTION

Cert. No. : 20130527 - 002
Invoice No. : DO
P.O. No. : -
L/C No. : -

Date : May. 27, 2013
Reel No : 1
Sampling No : 1
Purchaser : .

1. TYPE / GRADE

Construction : 7 X 19
Grade : AISI 304
Lay : RHRL

Diameter : 8.00 MM
Length : 1,525 Mtrs X 1 R/L
Specification : DSR C 206

2. ROPE TEST RESULTS

| Items | Norminal or Specified | Actual |
|-------------------|-----------------------|-----------------|
| Diameter | 8.00 ~ 8.40 MM | 8.090 MM |
| Breaking Strength | 40.18 KN | 47.70 KN |
| Lay Length | 6.0 ~ 8.0 x Cable Dia | 6.7 x Cable Dia |
| Preforming | Good | Good |

3. WIRE TEST RESULTS

| Items
No | Diameter | | Tensile Strength | |
|-------------|------------------|----------|------------------|------------|
| | Nominal | Actual | Nominal | Actual |
| 1 | 0.480 - 0.520 MM | 0.519 MM | 1810 N/mm2 | 2123 N/mm2 |
| | | | | |
| | | | | |

Chemical Composition (%)

| Heat No | C | Si | Mn | P | S | Ni | Cr | | | | |
|---------|-------|-------|-------|--------|--------|-------|--------|--|--|--|--|
| S10086 | 0.065 | 0.472 | 1.127 | 0.0304 | 0.0022 | 8.331 | 18.178 | | | | |
| Remark | | | | | | | | | | | |



BY

J.B. JOO

Chief Inspector

Comment : Manufactured in accordance with Quality Management System approved to ISO 9001: 2008