■ 산업안전보건법 시행규칙 [별지 제10호의 5서식]

심사결과 통지서

신청인	사업장명	(주)KITO	사업장관리번호	2010E110010
	사업자등록번호	010-E1-10010	대표자 성명	KITO YOSHIO
	소재지	2000,Tsuijiarai,Showa-Cho,Nakakoma-Gun,Yamanashi,Japan		

안전인증대상기계·기구명	호이스트		
형식(규격)	KDS-ER2-020	용량(등급)	2 ton

「산업안전보건법」 제34조 및 같은 법 시행규칙 제58조의4제4항에 따라 실시한

[ ] 예비심사

[ ] 서면심사

[ ] 기술능력 및 생산체계 심사

[ ] 개별 제품심사

[■] 형식별 제품심사

결과가 [■] 적 합 / [ ] 부적합 함을 통지합니다.

2013년 08월 23일

인증심사원 최 창 일 최창일

한국승강기안전기술원 이사장

■ 산업안전보건법 시행규칙 [별지 제10호의 6서식]

제 CA-2013-0006 호

안 전 인 증 서

(사업장명) (주)KITO

(소 재 지) 2000,Tsuijiarai,Showa-Cho,Nakakoma-Gun,Yamanashi, Japan

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): KDS-ER2-020(2 ton)

인증번호 : 13-CA4AC-0006

인증기준 : 위험기계·기구 의무안전인증기준 (고용노동부고시 제2012-33호)

인증조건 : 산업안전보건법 "제34조 준수"

2013년 08월 23일

한국승강기안전기술원 이사장

제 2012-BJ-0009 호

안 전 인 증 서

정호엔지니어링

경기도 광명시 노온사동 440-5

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

품 목

양중기용 과부하방지장치

형식·모델/용량·등급/인증번호

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

인 증 기 준

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

인 증 조 건

아래 주소에서 생산되는 제품에 한함.

정호엔지니어링, 경기도 광명시 노온사동 440-5

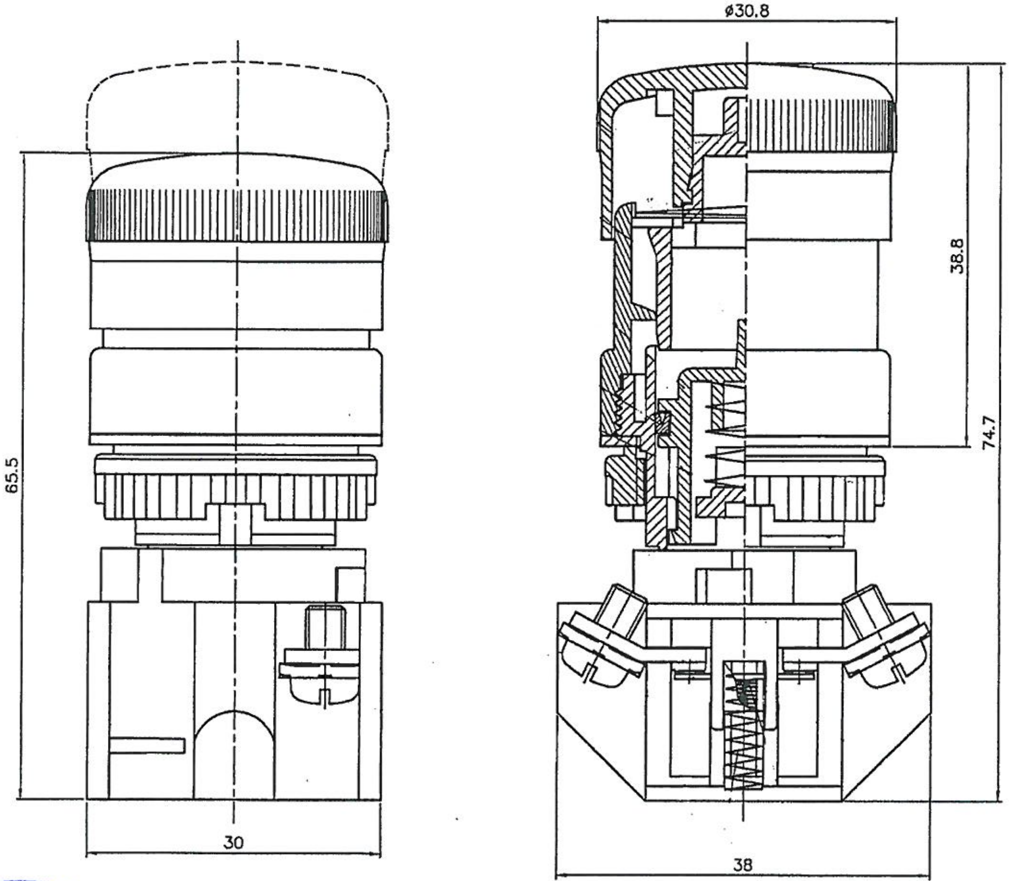
2012년 06월 11일

한국산업안전보건공단 이사장

2013 .08. 21

한국산업안전보건공단 이사장 전용인

한국승강기안전기술원



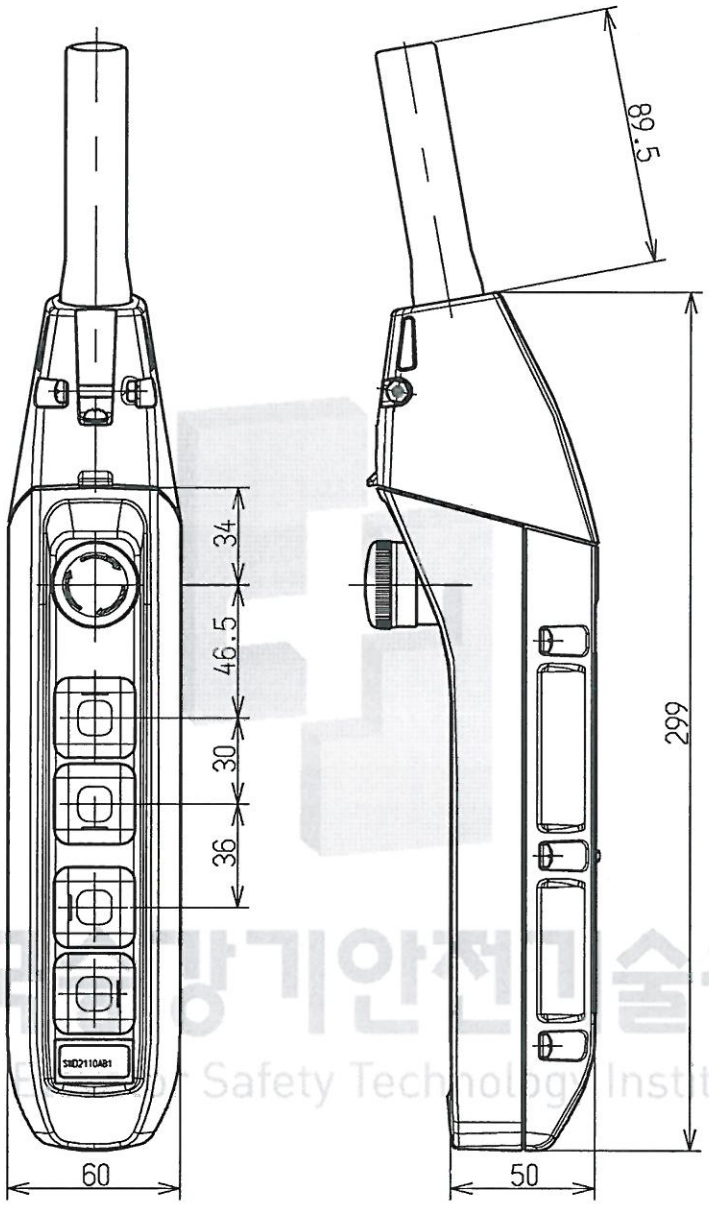
一般公差	0.2~30mm:±0.2	30.1~60mm:±0.3	60.1~300mm:±0.5		模具材質		模具處理		模具孔數		單 位	mm	材 質	圖 號	T2-BKH
天得科技股份有限公司	最新修正		品 保	品保部 95.05.24 林建宏	核 准	研發部 95.05.24 鐘健誌	核 對	研發部 95.05.24 周欽祥	繪 圖	設計課 95.05.24 吳宗達	比 例	2:1	表面處理	品 名	T2 BKH 連鎖開關
TEND TECHNOLOGY CO.,LTD.	前次修正										投影法	⊕◁	顏 色		

/2/T2/BKH/T2-BKH.dwg

順序:A

様式:04KH-N001DA

Revision	Incidence	Description	Date	Charge	Approved
.					
.					
.					
.					
.					



The lifting and lowering push buttons are marked with ⇑⇓ for single speed or ⇈⇊ for dual speed.
The traveling push buttons are marked with E W or N S depending on the installed direction.

NOTE		MATERIAL		CODE	
		NOS./UNIT		NAME	5pos Pendant control station MXX subassembly

APPROVED	CHECKED	DESIGNED	DRAWN	SCALE	DWG.NO.
H.FURIYA 09.04.21	T.HATANO 09.04.21	KOBAYASHI 09.04.21	KOBAYASHI 09.04.21	-	SWD2XX0AA

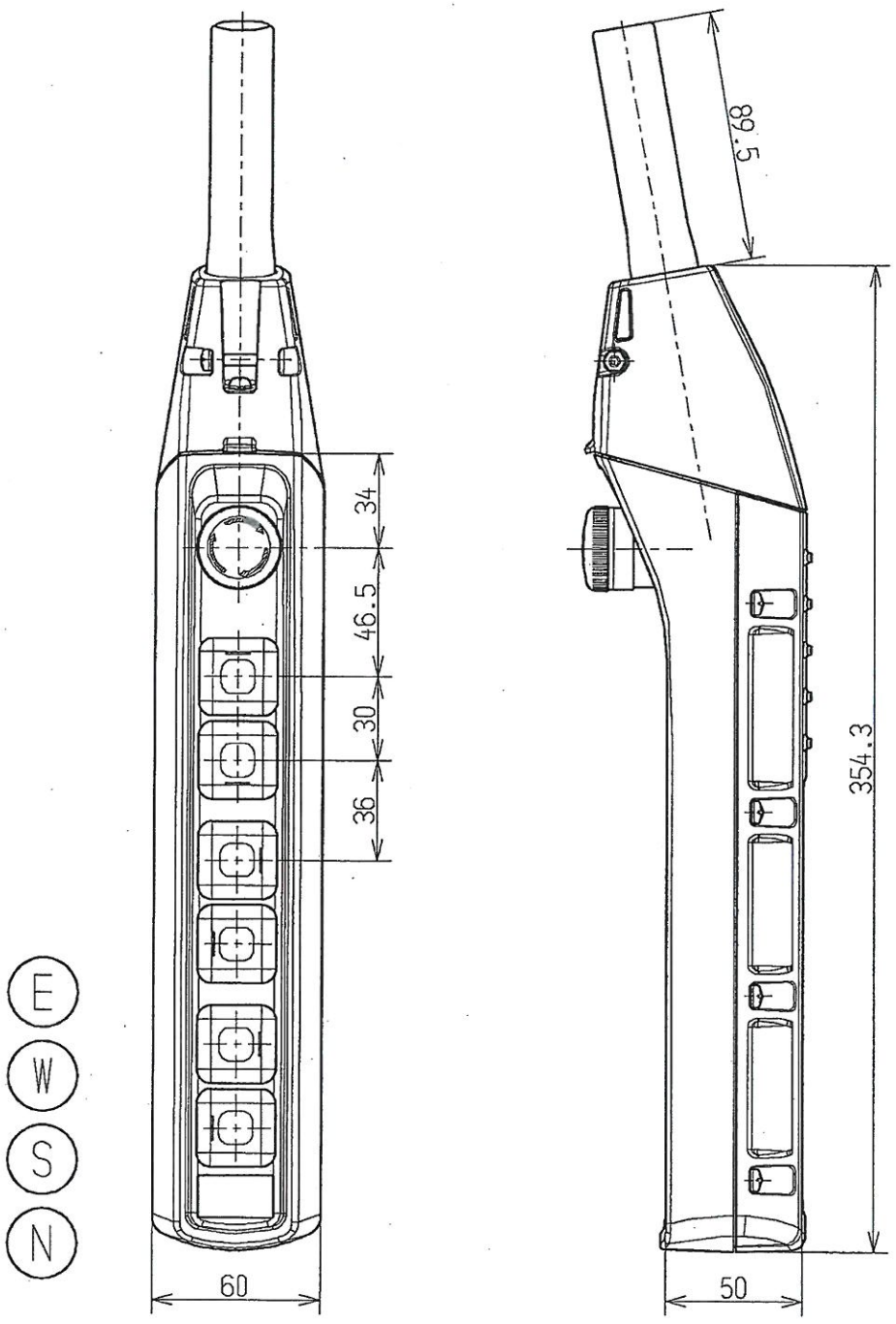
⑥ ⑤ ④ ③ ② ①

Date issued

KITO CORPORATION

様式:04KH-N0D1DA

Revision	Incidence	Description	Date	Charge	Approved



APPROVED	ISHIKAWA 08.02.08	CHECKED	FURIYA 08.02.08	DESIGNED	KOBAYASHI 08.02.08	DRAWN	KOBAYASHI 08.02.08	SCALE	-	DWG.NO.	SWD2XXXAA1

NOTE

MATERIAL

NOS./UNIT

CODE

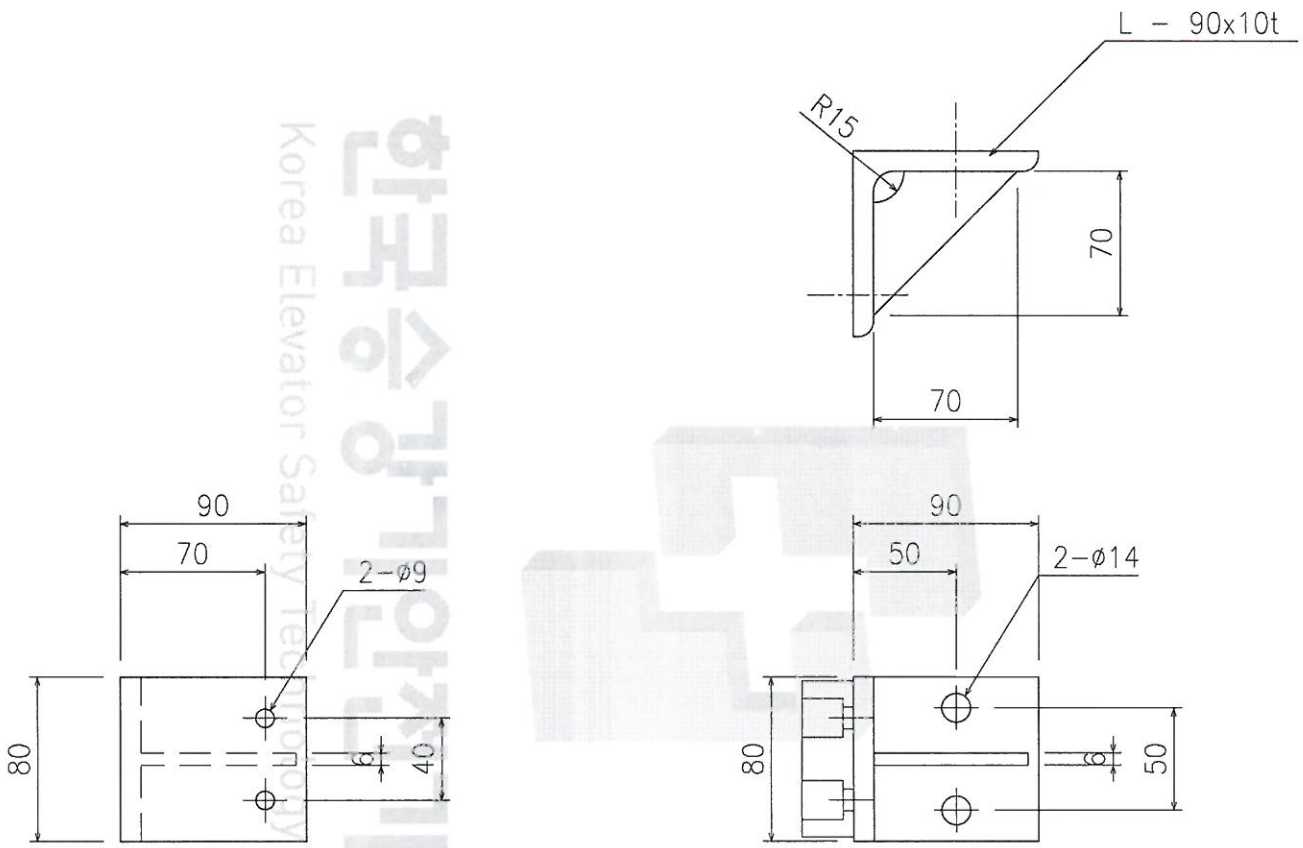
NAME 'point Pendant control station MXXX subassembly

Date issued

2013.08.21

KITO CORPORATION

UNIT: mm



REV.	CONTENTS	DATE	DRAWN	APPRO-VED

APPROVED	CHECKED	DESIGNED	DRAWN
J.S.CHO	J.S.CHO	W.H.EUN	W.H.EUN

(주)KITO KOREA

No	Part Name	Description	Mat'l	Unit	Q'ty	Weight (Kg)	Remark
			SS400		4		대전방지

TITLE: STOPPER - traversing

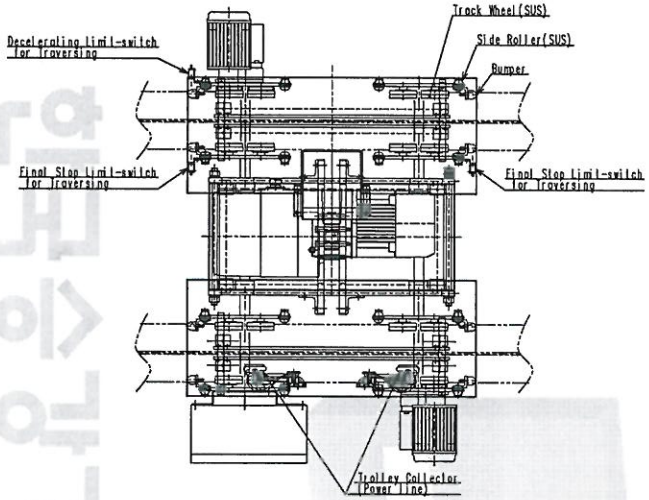
Part No.	STOPPER	SCALE	
DWG No.		REV.	

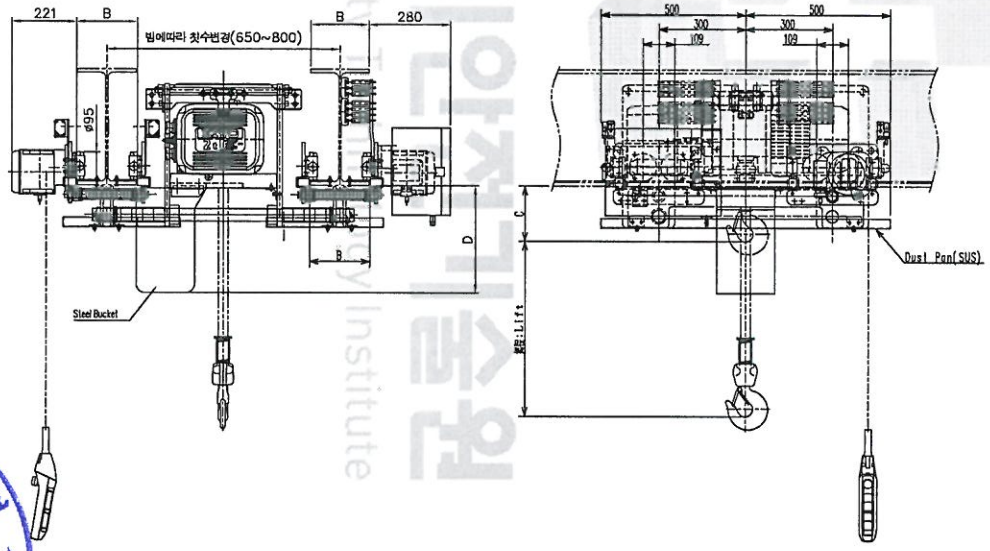
형식번호 : KDS-ER2-020

Model number.

KITO-C-ER2D020S-S
KITO-C-ER2D020S-L
KITO-C-ER2D020S-IS
KITO-C-ER2D020S-IL

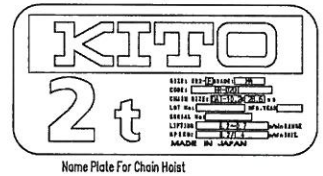
KITO-C-ER2D020IS-S
KITO-C-ER2D020IS-L
KITO-C-ER2D020IS-IS
KITO-C-ER2D020IS-IL



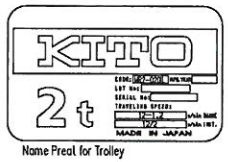


Particulars			
本体 Size			ER2-E
定格荷重 Nominal Capacity			2t
揚程 Lift			6m(Max 30m)
チェーンサイズ Chain			ø10.2x1
レール下面よりフックまでの最小距離 : C Min. Headroom			210mm
相数・電圧 Phase・Voltage			3ø 220(208)V 60Hz 380,440V 60Hz
モータ出力・反復定格・等級 Motor Output Duty Rating Classification	巻上モータ for Lifting	L	3.5kW x 4P
		IL	
	横行モータ for Traversing	L,IL	0.4kW x 4P x 2EA
		S,IS	
巻上速度 Lifting Speed		L	8.4 m/min
		IL	8.2/1.4 m/min
横行速度 Traversing Speed		IL	12/2 m/min
		IS	24/4 m/min
		L	12 m/min
		S	24 m/min
オシボタンコード長さ : L Push Button Cord			6m(Max 30m)
キャブタイヤ給電ケーブル長さ Length of Power Supply Cable			1m
レール下面よりチェーンバケットまでの寸法 : D Chain Container Distance from Bottom of Beam			390mm
Beam Width(175~250)		175	200 250
適用レール巾 : B Flange Width		183mm	208mm 258mm
質量 Mass			Approx 350kg~
塗装色 Painting Color			マンセル 7.5YR7/14 Munsell 7.5YR7/14

NOTE
1. 자바라 옵션
2. DUST PAN 옵션



Name Plate For Chain Hoist



Name Preat for Trolley

改訂 REV.	数 QTY	内容 CONTENTS	年.月.日 DATE	担当 DRAWN	承認 APPROVED

承認 APPROVED	検図 CHECKED	設計 DESIGNED	製図 DRAWN
			W.H.E

株式会社 キトー KITO CORP

名称 TITLE: 2t ER2M SERIES ELECTRIC CHAIN HOIST WITH MOTORIZED TOROLLEY

製造番号 CODE		尺度 SCALE	NOT
図番 DWG.NO.		変更回数 REV.	0

三角法 単位 : mm

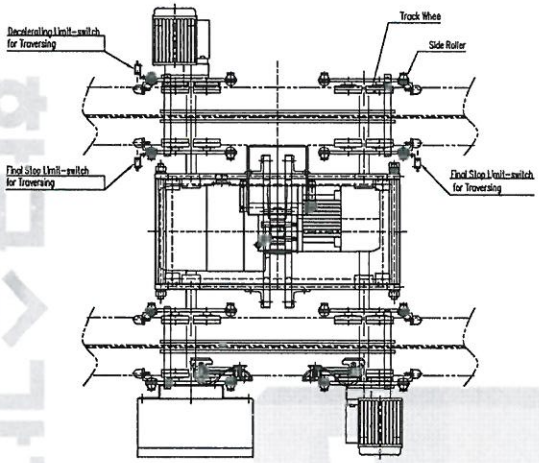
20/148

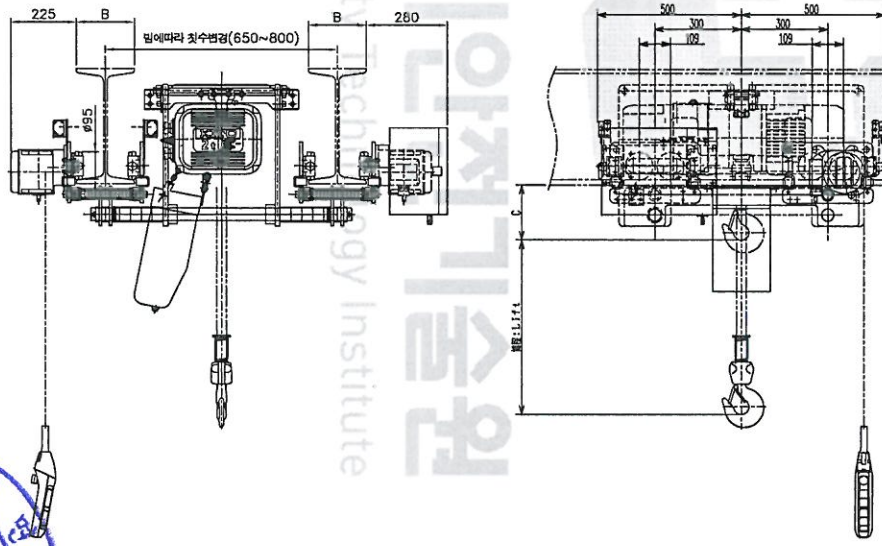
형식번호 : KDS-ER2-020

Model number.

KITO-ER2D020S-S
KITO-ER2D020S-L
KITO-ER2D020S-IS
KITO-ER2D020S-IL

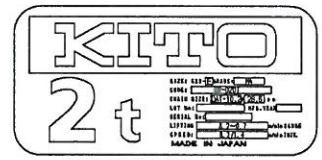
KITO-ER2D020IS-S
KITO-ER2D020IS-L
KITO-ER2D020IS-IS
KITO-ER2D020IS-IL



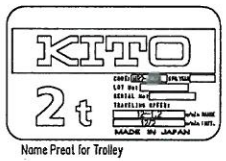


Particulars			
基本本体 Size			ER2-E
定格荷重 Nominal Capacity			2t
揚程 Lift			6m(Max 30m)
チェーンサイズ Chain size			ø10.2 x 1
レール下面より フックまでの最小距離 : C Min. Headroom			210mm
相数・電圧 Phase • Voltage			3ø 220(208)V 60Hz 380,440V 60Hz
モータ出力・反復定格・等級 Motor Output Duty Rating Classification	巻上モータ for Lifting	L	3.5kW x 4P
		IL	
	横行モータ for Traversing	L/L	0.4kW x 4P x 2EA
		S/S	
巻上速度 Lifting Speed		L	8.4 m/min
		IL	8.2/1.4 m/min
横行速度 Traversing Speed		IL	12/2 m/min
		IS	24/4 m/min
		L	12 m/min
		S	24 m/min
オシボタンコード長さ : L Push Button Cord			6m(Max 30m)
キャブタイヤ給電ケーブル長さ Length of Power Supply Cable			1m
レール下面よりチェーンバケットまでの寸法 : D Chain Container Distance from Bottom of Beam			390mm
Beam Width(175~250)			175 ~ 250
質量 Mass 塗装色 Painting Color			Approx 350kg~ マンセル 7.5YR7/14 Munsell 7.5YR7/14

NOTE
1. 자바라 옵션
2. DUST PAN 옵션



Name Plate For Chain Hoist



Name Preat for Trolley

改訂 REV.	数 QTY	内容 CONTENTS	年.月.日 DATE	担当 DRAWN	承認 APPROVED

承認 APPROVED	検図 CHECKED	設計 DESIGNED	製図 DRAWN
			W.H.E

株式会社 キトー KITO CORP

名称 TITLE: 2t ER2M SERIES ELECTRIC CHAIN HOIST WITH MOTORIZED TOROLLEY

製造番号 CODE		尺度 SCALE	NOT
図番 DWG.NO.		変更回数 REV.	0

三角法 単位 : mm

4. 전 기 도 면

1) ELECTRICAL SPECIFICATION

2) SYMBOL LIST

3) 배선배관도 & 접지계통도

4) 전기회로도

5) PANEL 관련도

LOAD SUMMARY 1 – INVERTER사양

*POWER SOURCE : AC 3Φ 220(208)V

OBJECT	HOISTING	TRAVERSING	CONTROL CIRCUIT
MOTOR OUTPUT	3.5KW x 4P	0.4KW x 4P x 2SET	
FULL LOAD CURRENT	18.7 (A)	6 (A)	0.5 (A)

*크레인 하중상태를 HOIST의 정격 LOAD의 100(%)를 사용했을때를 기준으로 작성하였음.

*** NOMAL 전류값 ***

권상과 횡행시 : HOISTING + TRAVERSING + CONTROL CIRCUIT = 25.2 A

*** PEAK 전류값 ***

K= NAMAL 전류치가 50A미만일때 1.25, 50A이상일때 1.1적용

NOMAL 전류값 * K = 25.2 * 1.25 = 31.5 A

*POWER SOURCE : AC 3Φ 380(440)V

OBJECT	HOISTING	TRAVERSING	CONTROL CIRCUIT
MOTOR OUTPUT	3.5KW x 4P	0.4KW x 4P x 2SET	
FULL LOAD CURRENT	9.2 (A)	5 (A)	0.5 (A)

*크레인 하중상태를 HOIST의 정격 LOAD의 100(%)를 사용했을때를 기준으로 작성하였음.

*** NOMAL 전류값 ***

권상과 횡행시 : HOISTING + TRAVERSING + CONTROL CIRCUIT = 14.7 A

*** PEAK 전류값 ***

K= NAMAL 전류치가 50A미만일때 1.25, 50A이상일때 1.1적용

NOMAL 전류값 * K = 14.7 * 1.25 = 18.3 A

LOAD SUMMARY 2 – 1속형사양

*POWER SOURCE : AC 3Φ 220(208)V

OBJECT	HOISTING	TRAVERSING	CONTROL CIRCUIT
MOTOR OUTPUT	3.5KW x 4P	0.4KW x 4P x 2SET	
FULL LOAD CURRENT	16.9 (A)	6 (A)	0.5 (A)

*크레인 하중상태를 HOIST의 정격 LOAD의 100(%)를 사용했을때를 기준으로 작성하였음.

*** NOMAL 전류값 ***

권상과 횡행시 : HOISTING + TRAVERSING + CONTROL CIRCUIT = 23.4 A

*** PEAK 전류값 ***

K= NAMAL 전류치가 50A미만일때 1.25, 50A이상일때 1.1적용

NOMAL 전류값 * K = 23.4 * 1.25 = 29.2 A

*POWER SOURCE : AC 3Φ 380(440)V

OBJECT	HOISTING	TRAVERSING	CONTROL CIRCUIT
MOTOR OUTPUT	3.5KW x 4P	0.4KW x 4P x 2SET	
FULL LOAD CURRENT	8.7 (A)	4.4 (A)	0.5 (A)

*크레인 하중상태를 HOIST의 정격 LOAD의 100(%)를 사용했을때를 기준으로 작성하였음.

*** NOMAL 전류값 ***

권상과 횡행시 : HOISTING + TRAVERSING + CONTROL CIRCUIT = 13.6 A

*** PEAK 전류값 ***

K= NAMAL 전류치가 50A미만일때 1.25, 50A이상일때 1.1적용

NOMAL 전류값 * K = 13.6 * 1.25 = 17 A

ROTATING MACHINE

- SYNCHRONOUS GENERATOR, 3-PHASE
- AC INDUCTION MOTOR, 3-PHASE
  * N : NORMAL DUTY
  S : STAND-BY
- DC MOTOR

LIGHTNING ARRESTERS

- LA : LIGHTNING ARRESTER
  SA : SURGE ARRESTER
  SS : SURGE SUPPRESSOR
- DISCHARGE COUNTER

INSTRUMENT TRANSFORMERS

- CURRENT TRANSFORMER
- ZERO PHASE CURRENT TRANSFORMER
- POTENTIAL TRANSFORMER

CIRCUIT BREAKERS

- POWER CIRCUIT BREAKER, FIXED TYPE
  GCB : SF6 GAS CIRCUIT BREAKER
  VCB : VACUUM CIRCUIT BREAKER
  ACB : AIR CIRCUIT BREAKER
- POWER CIRCUIT BREAKER, DRAWOUT TYPE
- CIRCUIT BREAKER, FIXED TYPE
  MCCB : MOULDED CASE CIRCUIT BREAKER
  MCB : MINIATURE CIRCUIT BREAKER
- CIRCUIT BREAKER, DRAWOUT TYPE
- WITHDRAWABLE INTERCONNECTOR
- CIRCUIT BREAKER, MANUALLY OPERATED FIXED TYPE WITH THERMAL & MAGNETIC TRIP
- CIRCUIT BREAKER, MANUALLY OPERATED FIXED TYPE WITH MAGNETIC TRIP ONLY
- CIRCUIT BREAKER, MANUALLY OPERATED DRAWOUT TYPE WITH THERMAL & MAGNETIC TRIP
- CIRCUIT BREAKER, MANUALLY OPERATED FIXED TYPE WITH THERMAL & MAGNETIC TRIP AND RESIDUAL CURRENT RELEASE

SWITCHES

- DISCONNECTOR SWITCH, SINGLE THROW MANUALLY OPERATED
- LOAD BREAK SWITCH, SINGLE THROW MANUALLY OPERATED,
- EARTHING SWITCH, SINGLE THROW MANUALLY OPERATED
- DISCONNECTOR SWITCH, SINGLE THROW MOTOR OPERATED
- EARTHING SWITCH, SINGLE THROW MOTOR OPERATED
- VACUUM CIRCUIT SWITCH
- FUSED DISCONNECTOR SWITCH
- FUSE-SWITCH
- LIMIT SWITCH (MAKE CONTACT)
- LIMIT SWITCH (BREAK CONTACT)
- PUSH BUTTON, NORMALLY OPEN MOMENTARY CONTACT
- PUSH BUTTON, NORMALLY CLOSED MOMENTARY CONTACT
- PUSH BUTTON, NORMALLY OPEN PUSH TO LOCK, RELEASED BY KEY
- MANUAL SELECTOR SWITCH (LOCKED)

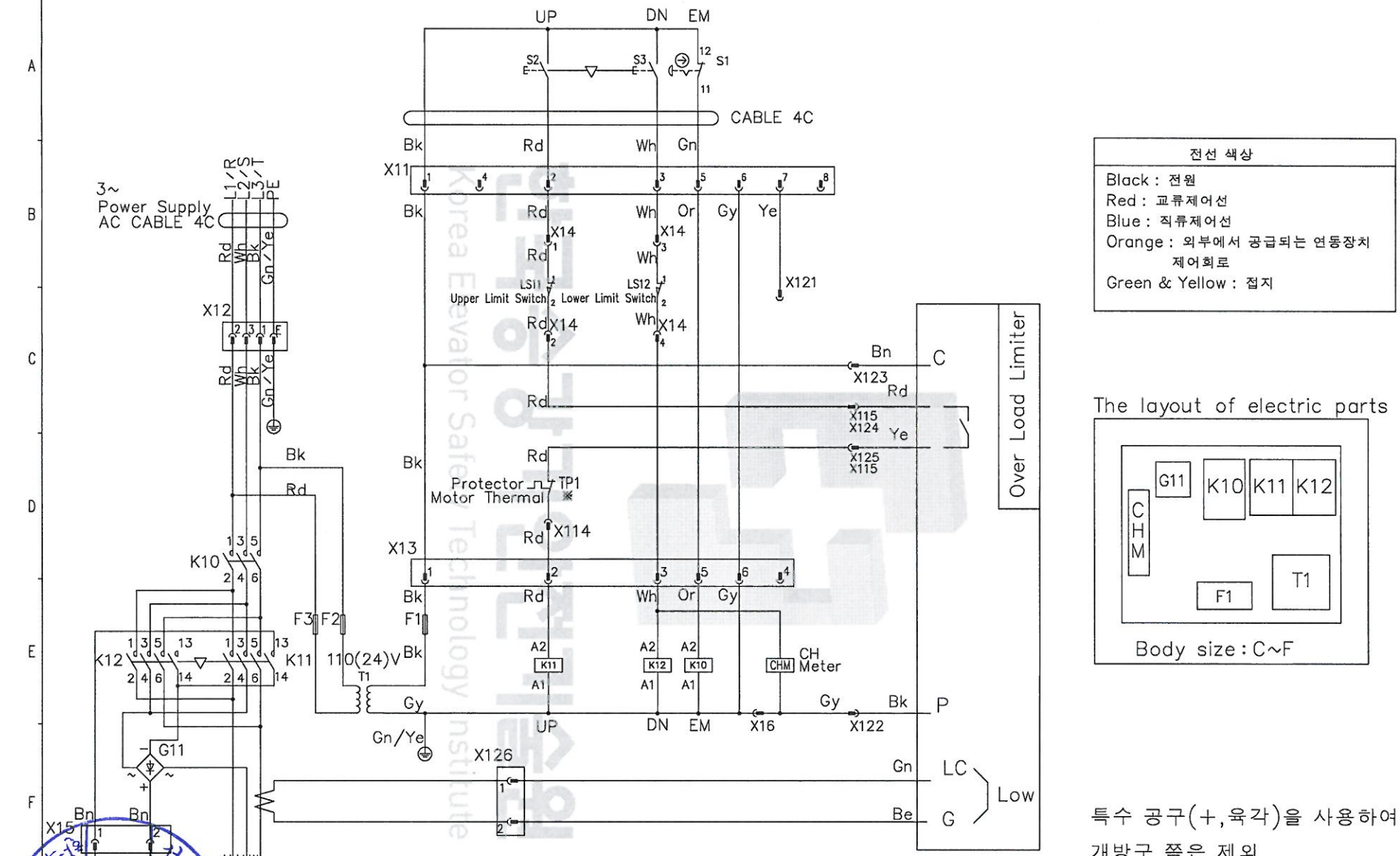
CONTACTORS AND STARTERS

- AUX. CONTACT, NORMALLY OPEN WHEN MAIN SWITCHING DEVICE IS DE-ENERGIZED
- AUX. CONTACT, NORMALLY CLOSED WHEN MAIN SWITCHING DEVICE IS DE-ENERGIZED
- MAGNETIC CONTACTOR, ELECTRICALLY OPERATED
- COMBINATION STARTER, FULL VOLTAGE, NON-REVERSING, DRAWOUT TYPE, WITH ELECTRICALLY OPERATED CONTACTORS, WITH MAGNETIC MOTOR CIRCUIR BREAKER, BUILT IN ELECTRONIC OVER-CURRENT RELAY WITH ADJUSTABLE TRIP RATING (EOCR)
- COMBINATION STARTER, FULL VOLTAGE, NON-REVERSING, FIXED TYPE, WITH ELECTRICALLY OPERATED CONTACTORS, WITH MAGNETIC MOTOR CIRCUIT BREAKER, BUILT IN THERMAL OVER-CURRENT RELAY WITH ADJUSTABLE TRIP RATING

GRAPHIC SYMBOLS

- GENERAL OPERATING COIL
- CAPACITOR
- CAPACITOR VOLTAGE TRANSFORMER(CVT)
- RESISTOR
- DIODE
- CONTROLLED RECTIFIER
- DC-DC CONVERTER
- RECTIFIER, BATTERY CHARGER
- DC-AC INVERTER
- BATTERY BANK
- ELECTRIC HEATER, INDICATE 1* OR 3* AND kW RATING. UNLESS OTHERWISE SPECIFIED, TO BE REGARDED AS 1*.
- EARTHING CONNECTION
- DISCONNECTION LINK
- CROSSING OF CONDUCTORS NOT CONNECTED
- OR JUNCTION OF CONDUCTORS OR WIRES
- BUS DUCT
  SPB : SEGREGATED PHASE BUS DUCT
  IPB : ISOLATED PHASE BUS DUCT
- CABLE HEAD AND CABLE CONNECTION
- AS AMMETER SWITCH
- VS VOLTMETER SWITCH
- SIGNAL LAMP
  * R = RED Y = YELLOW
  G = GREEN B = BLUE
  W = WHITE A = AMBER
  C = CYAN

APPROVED	CHECKED	DESIGNED	SYMBOL LIST		
			CODE	SCALE	—
KITO CORP			DWG.NO. SYMBOL LIST	DATE	



※TP1 is attached only to 380V and 440V.

전선 색상
Black : 전원
Red : 교류제어선
Blue : 직류제어선
Orange : 외부에서 공급되는 연동장치 제어회로
Green & Yellow : 접지

The layout of electric parts

Body size : C~F

특수 공구(+,육각)을 사용하여
개방구 쪽은 제외

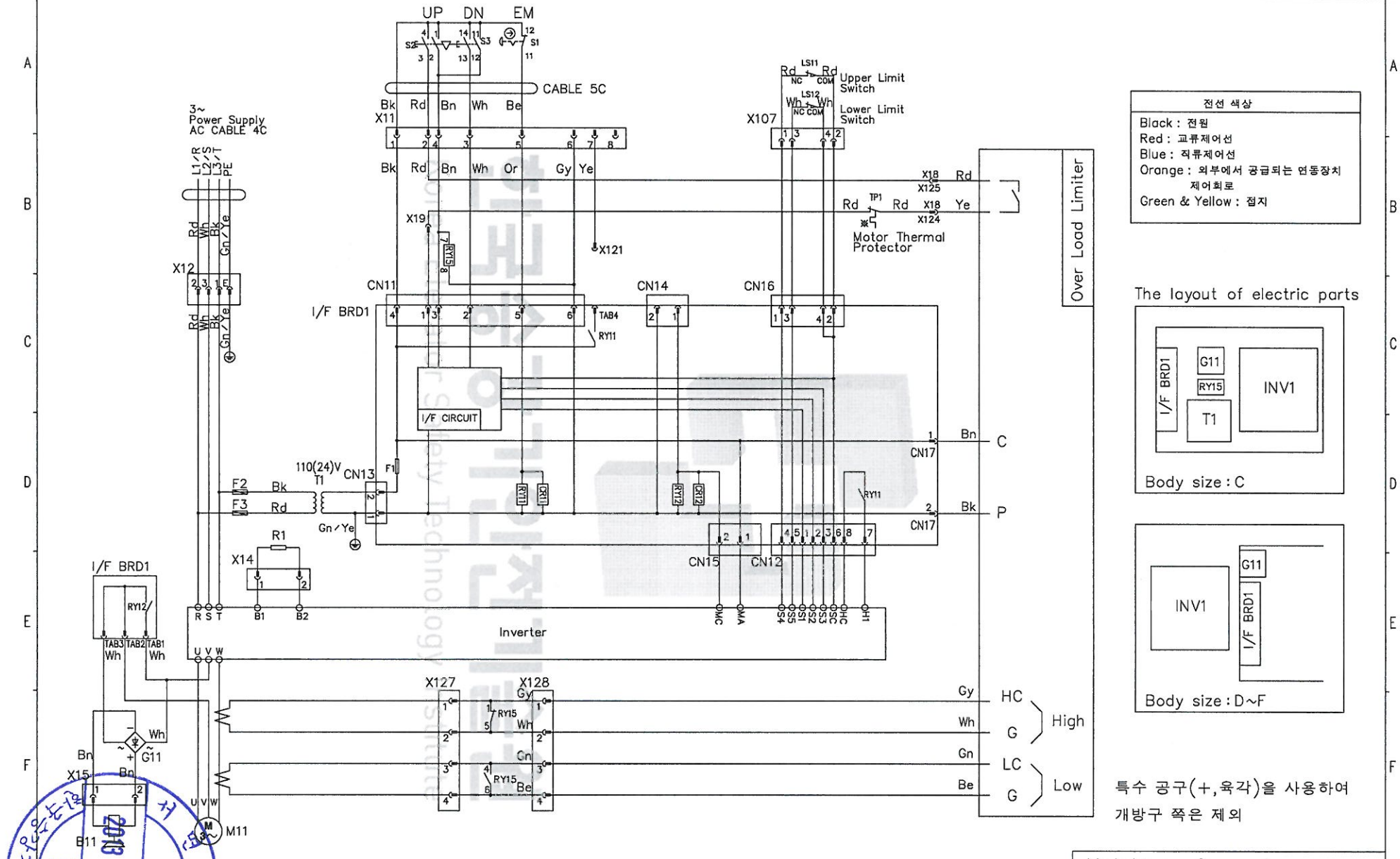
APPROVED	CHECKED	DESIGNED
H.Furiya	T.Hatano	K.Miwa
09 /04 /21	09 /04 /21	09 /04 /21

KITO CORP.

Hoisting : 1 speed
Wiring Diagrm

CODE		SCALE	—
DWG.NO.	SEWG3100L01	DATE	

UNIT : mm



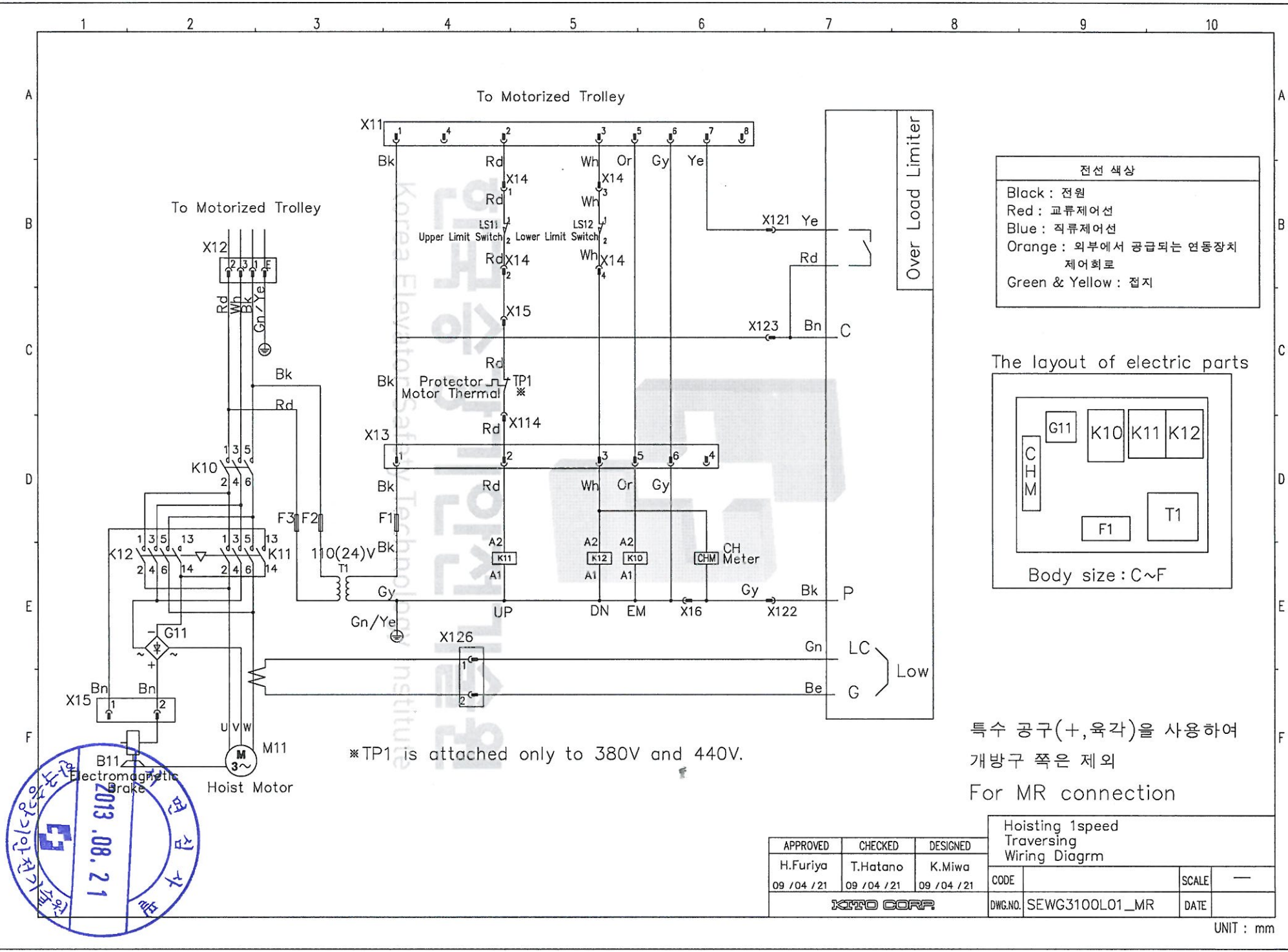
APPROVED	CHECKED	DESIGNED
H.Furiya	H.Hatano	K.Miwa
09 /04 /21	09 /04 /21	09 /04 /21

KITO CORP.

Hoisting 2speed Wiring Diagrm

CODE		SCALE	—
DWG.NO.	SEWG3D00L01	DATE	

UNIT : mm



※TP1 is attached only to 380V and 440V.

전선 색상
Black : 전원
Red : 교류제어선
Blue : 직류제어선
Orange : 외부에서 공급되는 연동장치 제어회로
Green & Yellow : 접지

The layout of electric parts

특수 공구(+,육각)을 사용하여
개방구 쪽은 제외
For MR connection

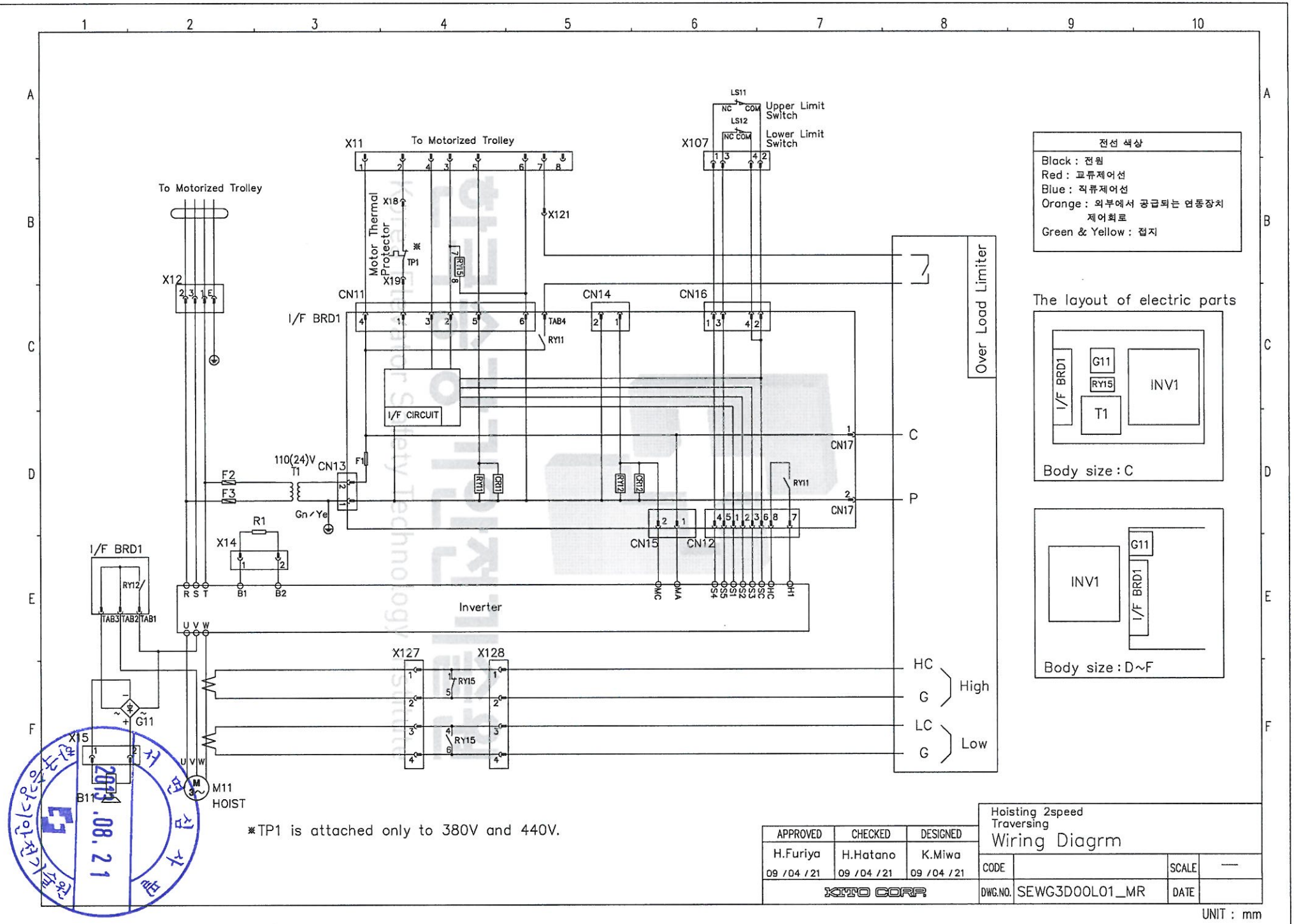
APPROVED	CHECKED	DESIGNED
H.Furiya	T.Hatano	K.Miwa
09 /04 /21	09 /04 /21	09 /04 /21

KITO CORP.

Hoisting 1speed
Traversing
Wiring Diagrm

CODE		SCALE	—
DWG.NO.	SEWG3100L01_MR	DATE	

UNIT : mm



전선 색상
Black : 전원
Red : 교류제어선
Blue : 직류제어선
Orange : 외부에서 공급되는 연동장치 제어회로
Green & Yellow : 접지

The layout of electric parts

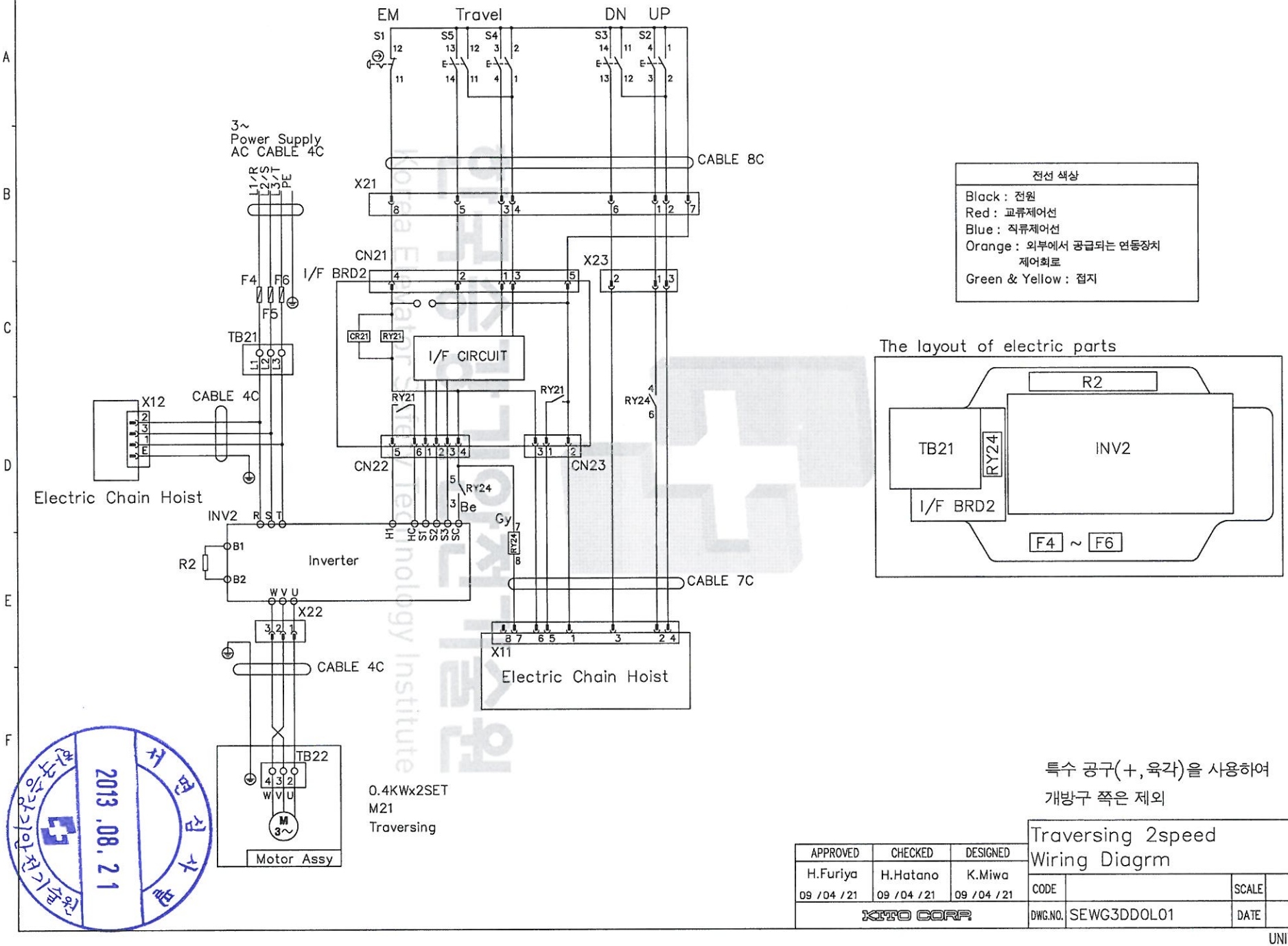
APPROVED	CHECKED	DESIGNED
H.Furiya	H.Hatano	K.Miwa
09 /04 / 21	09 /04 /21	09 /04 /21

KITO CORP.

Hoisting 2speed
Traversing
Wiring Diagrm

CODE		SCALE	—
DWG.NO.	SEWG3D00L01_MR	DATE	

UNIT : mm



전선 색상
Black : 전원
Red : 교류제어선
Blue : 직류제어선
Orange : 외부에서 공급되는 연동장치 제어회로
Green & Yellow : 접지

The layout of electric parts

특수 공구(+, 육각)을 사용하여
개방구 쪽은 제외

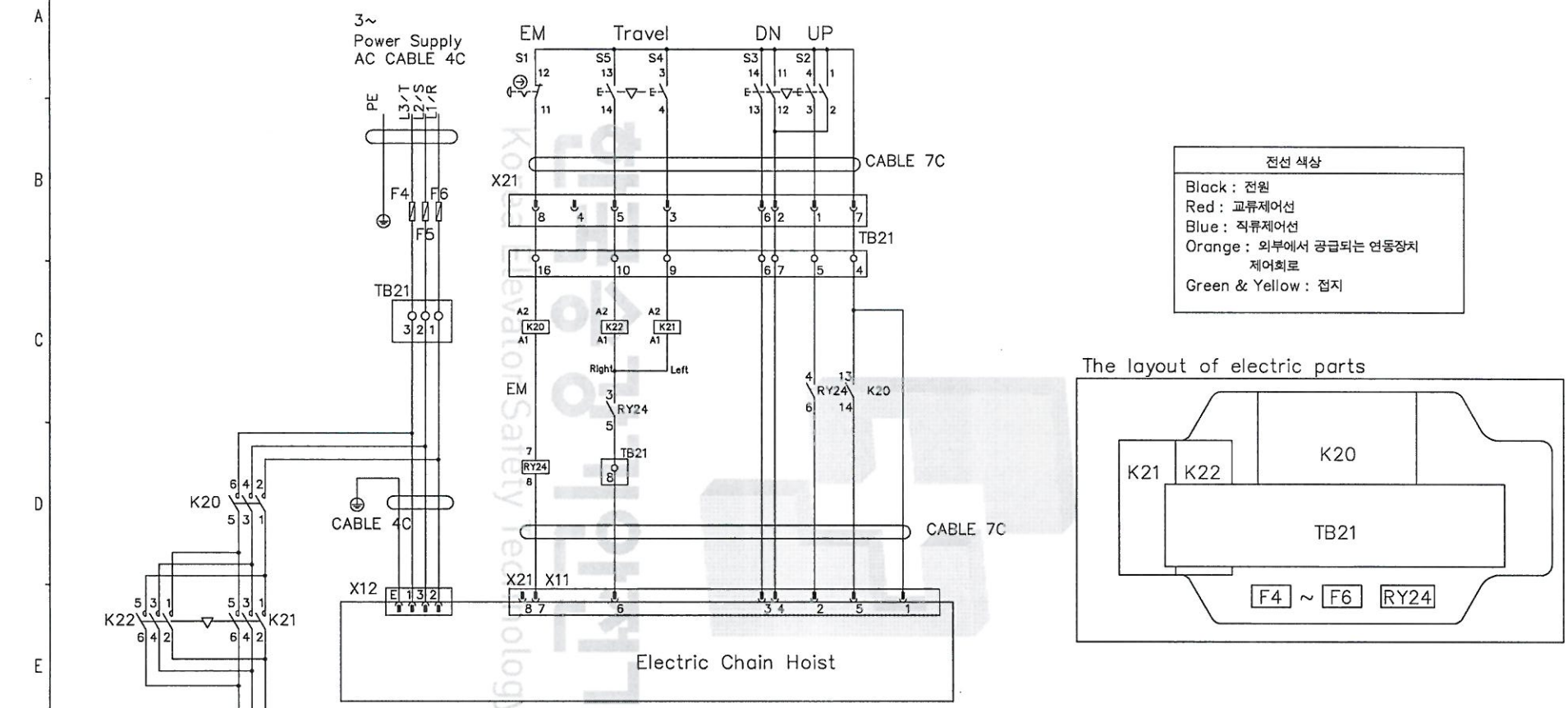
APPROVED	CHECKED	DESIGNED
H.Furiya	H.Hatano	K.Miwa
09 /04 /21	09 /04 /21	09 /04 /21

KITO CORP.

Traversing 2speed
Wiring Diagrm

CODE		SCALE	—
DWG.NO.	SEWG3DD0L01	DATE	

UNIT : mm



전선 색상
Black : 전원
Red : 교류제어선
Blue : 직류제어선
Orange : 외부에서 공급되는 연동장치 제어회로
Green & Yellow : 접지

The layout of electric parts

특수 공구(+, 육각)을 사용하여
개방구 쪽은 제외

APPROVED	CHECKED	DESIGNED
H.Furiya	H.Hatano	K.Miwa
09 /04 /21	09 /04 /21	09 /04 /21

KITO CORP.

Traversing 1speed
Wiring Diagrm

CODE		SCALE	—
DWG.NO.	SEWG3D0L01	DATE	

UNIT : mm

2013 .08. 21

CABLE 구성도 및 사양 – 권상 용량 3.5kw

CABLE SPECIFICATION FOR ER2M

NO	ITEM	TYPE	ER2D20	
			SIZE	
①	Power Line	VCT	220(208)V 주위온도 25°도이내	3.5sq x 4C
			380V,440V	3.5sq x 4C
			220(208)V 주위온도 40°도이내	5.5sq x 4C
②	Push Button Switch	VCT	1.25sq x 8C	
③	Loas Limit	VCT	0.75sq x 8C	
④	Power Line for ER	VCT	2sq x 4C	
⑤	Control Line for ER	VCT	1.25sq x 6C	
⑥	Traversing Motor With Earth	VCT	1.25sq x 4C	

(3Φ 220(208)V / 380V / 440V 60Hz)

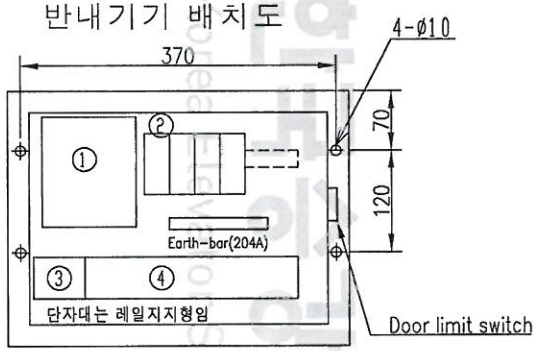
工 番	製作数量	納 期

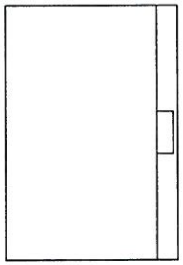
削り加工普通許容差 JIS B0405 中級	
0.5以上	6以下 ±0.1
6をこえ	30 〃 ±0.2
30 〃	120 〃 ±0.3
120 〃	400 〃 ±0.5
400 〃	1000 〃 ±0.8
1000 〃	2000 〃 ±1.2
2000 〃	4000 〃 ±2.0

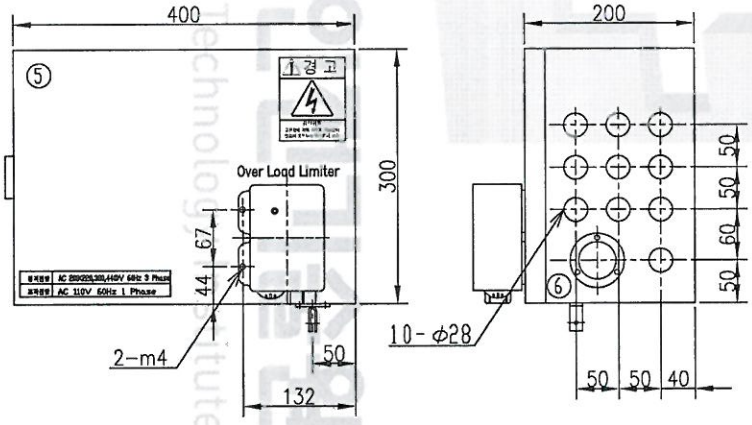
압착단자는 전부 절연피복 부착타입을 사용할것

塗装色 : 먼셀넘버 5Y7/1 (메이커 표준색)
設定機器 : 인버터

반내기기 배치도







番号	機器番号	名 称	形 式	メーカ	個数	備 考
1	INV2	인버터	FRN1.5C1S-2J21	富士	1	
2		릴레이	HH54P-L (AC24V)	富士	4	
		소켓	TP514X1	富士	4	
3		단자대	TX20 (4P)	春日	1式	커버부착형
4		단자대	TX10S (30P)	春日	1式	커버부착형
5		함	CH20-43A	日東	1	
6		Door limits switch	KH-9015-HL	KOINO		
7						
8						
9						
10						

단자대 배열

TX20(4P)

R2	S2	T2	E

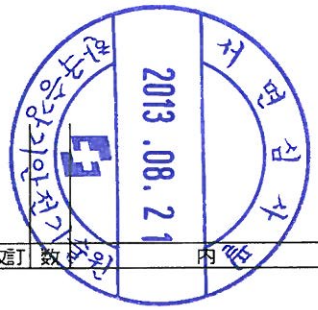
TX10S (30P)

UT	VT	WT	E	CM	X3A	X3	T100	R100	DLL	TX	RX	DL	UPA	UP

DN	HI	TFB	TFA	TRB	TRA	THA	TH	T100	T100	R100	R100			

Note

1) 외함 개방 시 충전 부분이 차단되도록 한다.



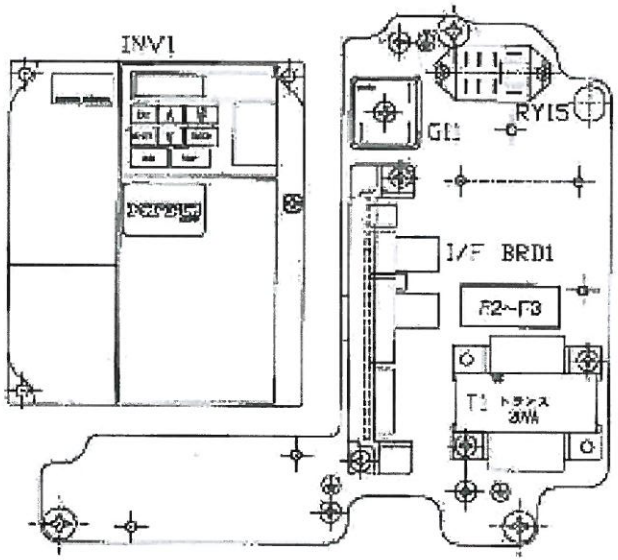
改訂	数	内 容	年.月.日	設計	承認

記事		材質	-	製造番号	303910
		質量	-	名称	セツゾクハコ
承認	斉藤 10.10.8 / 検図 鈴木 10.10.8 / 設計 細田 10.10.8 / 製図 - / 尺度 NOT	図番	303910-35011		

株式会社 キトー　様式 025C-06　三角法 単位：mm

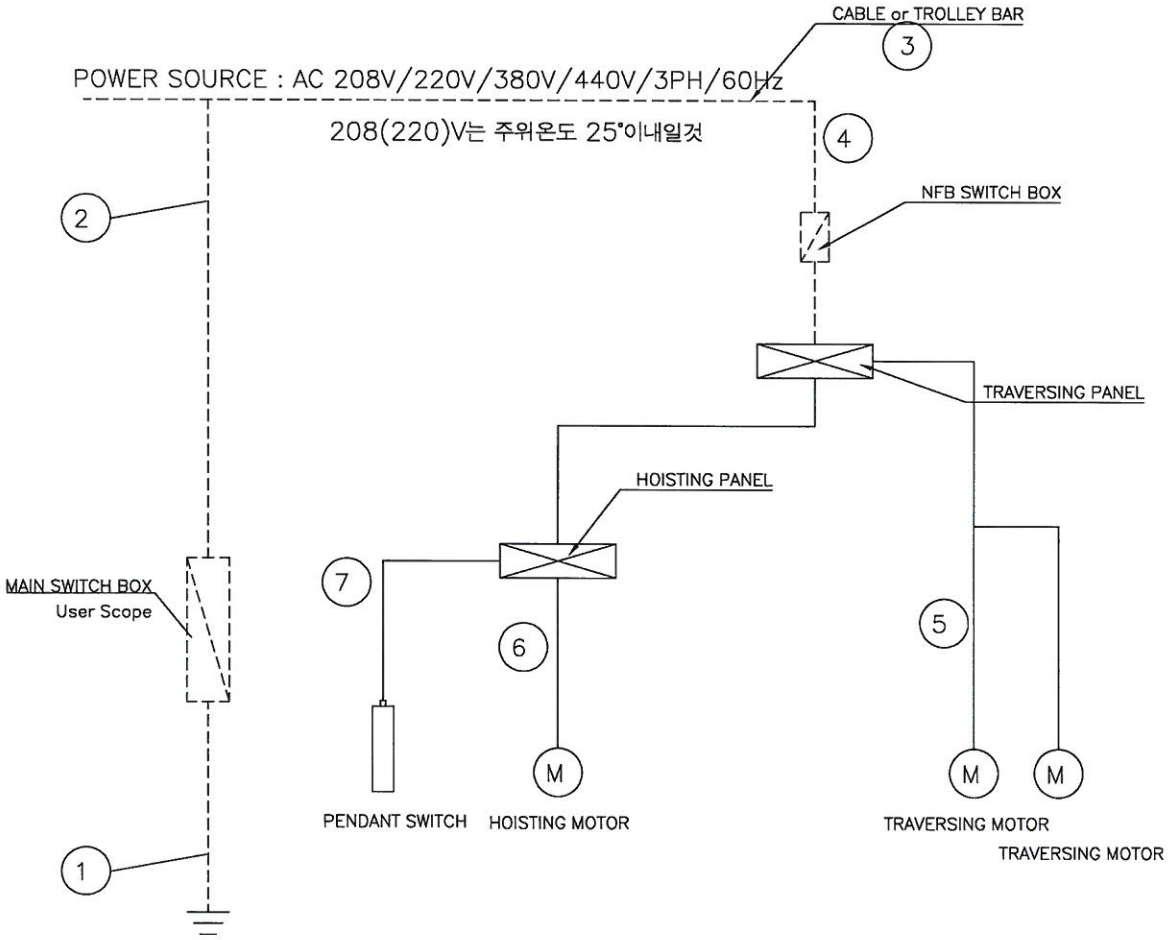
. 호이스트 CONTROL BOX 배치도

HOISTING CONTROL BOX



ENCLOSURE : HOIST BODY – IP55
PUSH BUTTON – IP65

MARK	DESCRIPTION	TYPE OF MODEL			Q'TY	MAKER	REMARKS
		220V	380V	440V			
INV1	INVERTER	V1000	V1000	V1000	1	YASKAWA	UP/DOWN
T1	TRANSFORMER	220V/ 24V(110V) 20VA	380V/ 24V(110V) 20VA	440V/24V(110V) 20VA	1	KITO	CONTROL CIRCUIT
G11	BRIDGE DIODE	S15VB60	S15VB60	S15VB60	1	SHINDENGEN	
I/F BRD1	INTERFACE BOARD	10~15A	10~15A	10~15A	1	KITO	
F2~F3	GLASS FUSE	10A	10A	10A	2	FUJI	
F4~F6	GLASS FUSE	30A	30A	30A	3	FUJI	
RY15	RELAY	110V	110V	110V	1	OMRON	HIGH/LOW
INV2	INVERTER	V1000	V1000	V1000	1	YASKAWA	RIGHT/LEFT
I/F BRD2	INTERFACE BOARD	10~15A	10~15A	10~15A	1	KITO	
RY24	RELAY	110V	110V	110V	1	OMRON	EMERGENCY STOP
TB24	TERMINAL BOARD 24	10~15A	10~15A	10~15A	1	KITO	



접지설비 시공방법

1. 전동기의 외함, 제어반 등은 접지를 해야 하며 그 접지저항은 다음의 규정을 따른다

접지공사		
3종 접지공사	400V 이하	100Ω 이하
특3종 접지공사	400V 이상	10Ω 이하

단,방폭지역은 전압관계없이 10Ω 이하일것

2. 접지전용 Trolley Duct 및 전선은 당해 전기기기, 기구에 대하여 충분한 용량과 전기적,기계적인 강도를 가져야 함.
3. 접지선이 외상을 받을 우려가 있는 경우는 전선관, 합성수지관 등과 함께 사용한다
4. 접지공사는 지표면에서 최저 75cm이상의 깊이에 접지봉을 박고 접지봉에는 접지동판을 연결한다.

CABLE 종류 및 굵기

NO	FROM	CABLE SPEC.	Earth Cable
1	Main Earth Line	VCT 4SQx1C	User Scope(1Core)
2	Main Power Sorce	VCT 4SQ x 4C	User Scope(1Core)
3	Trolley bar or Festoon cable	60A x 4P	User Scope(1Core)
4	Main Power Sorce	VCT 4SQ x 4C	User Scope(1Core)
5	Traversing Motor	VCT 1.25SQ x 6C	(G-1Core)
6	Hoist Motor	VCT 2SQ x 4C	(G-1Core)
7	Push Button Switch	VCT 1.25SQ x 8C	(G-1Core)
8			

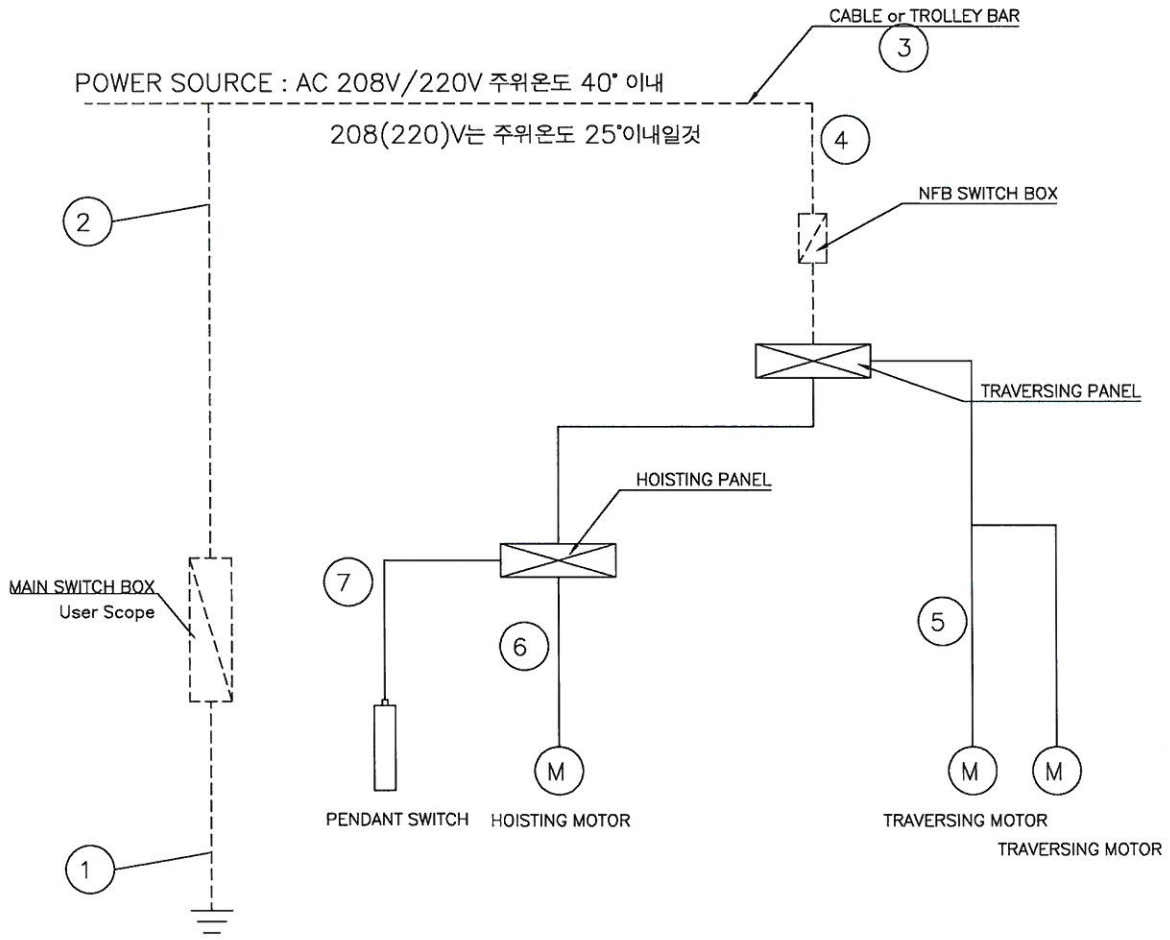
REV.	QTY	CONTENTS	DATE	DRAWN	APPROVED

APPROVED	CHECKED	DESIGNED	DRAWN
M.Fukasawa	I.Iinuma	A.Shimura	---
11.07.20	11.07.20	11.07.20	

KITO CORPORATION

TITLE: 2t MOTORIZED-4점식 케이블 구성도 및 접지계통도

MDL.	942513	SCALE	NOT
DWG. NO.	3NNU942513	REV.	0



접지설비 시공방법

1. 전동기의 외함, 제어반 등은 접지를 해야 하며 그 접지저항은 다음의 규정을 따른다

접지공사		
3종 접지공사	400V 이하	100Ω이하
특3종 접지공사	400V 이상	10Ω이하

단,방폭지역은 전압관계없이 10Ω 이하일것

2. 접지전용 Trolley Duct 및 전선은 당해 전기기기, 기구에 대하여 충분한 용량과 전기적,기계적인 강도를 가져야 함.
3. 접지선이 외상을 받을 우려가 있는 경우는 전선관, 합성수지관 등과 함께 사용한다
4. 접지공사는 지표면에서 최저 75cm이상의 깊이에 접지봉을 박고 접지봉에는 접지동판을 연결한다.

CABLE 종류 및 굵기

NO	FROM	CABLE SPEC.	Earth Cable
1	Main Earth Line	VCT 6SQx1C	User Scope(1Core)
2	Main Power Sorce	VCT 6SQ x 4C	User Scope(1Core)
3	Trolley bar or Festoon cable	60A x 4P	User Scope(1Core)
4	Main Power Sorce	VCT 6SQ x 4C	User Scope(1Core)
5	Traversing Motor	VCT 1.25SQ x 6C	(G-1Core)
6	Hoist Motor	VCT 2SQ x 4C	(G-1Core)
7	Push Button Switch	VCT 1.25SQ x 8C	(G-1Core)
8			

43-1/48

REV.	QTY	CONTENTS	DATE	DRAWN	APPRO-VED

APPROVED	CHECKED	DESIGNED	DRAWN
M.Fukasawa	I.Iinuma	A.Shimura	---
11.07.20	11.07.20	11.07.20	

KITO CORPORATION

TITLE: 2t MOTORIZED－4점식 케이블 구성도 및 접지계통도

MDL.	942513	SCALE	NOT
DWG. NO.	3NNU942513	REV.	0

6. FOR REFERENCE

1) LOAD CHAIN 시험성적서

2) MOTOR DATA SHEET

3) HOIST 사용설명서(operation manual)

KITO CORPORATION

Date: 2009/04/14

Certificate of Compliance

We certify that the ER2 protection degrees conform to the IP rating as follows:

Hoist body - IP55 based on JIS C 4034-5, "Rotating electrical machines – Part5: Classification of degrees of protection provided by enclosures of rotating electrical machines (IP code)".

Push button - IP65 based on JIS C 0920, "Tests to prove protection against ingress of water and degrees of protection against ingress of solid objects for electrical equipment".

Technical Control Group

Certificate No.: MM080011g

Date of Issue: 2009/3/4

Messrs._____

Motor Test Report for Electric Chain Hoist

Motor type : Three phase squirrel cage type induction motor.

Manufacturer : Yasukawa Electric Mfg. Co.

Production No. : -

Rating

Model	Output	Pole	Intermittent Rating	Voltage	Frequency
IBQ	3.5kW	4P	60%ED	220V	60Hz

Full load characteristics

Voltage Frequency		220V 60Hz
Load	%	100
Current	A	16.9
Speed	rpm	1670

Insulation class E

The above characteristics are obtained from calculation where the motor is assembled with an electric chain hoist and the hoist is subjected to full load

KITO CORP.
2000 Tsuijiarai, Showa-cho,
Nakakoma-gun, Yamanashi, JAPAN

Quality Assurance Group
Quality Assurance Department
Development & Technology Division
M. Ogihara (Manager)

Certificate No.: MM070011g

Date of Issue: 2008/03/21

Messrs._____

Motor Test Report for Electric Chain Hoist

Motor type : Three phase squirrel cage type induction motor.

Manufacturer : Yasukawa Electric Mfg. Co.

Production No. :

Rating

Model	Output	Pole	Intermittent Rating	Voltage	Frequency
IBQ	3.5kW	4P	60%ED	380 - 440V	60Hz

Full load characteristics

Voltage Frequency		380 - 440V 60Hz
Load	%	100
Current	A	8.7
Speed	rpm	1650

Insulation class B

The above characteristics are obtained from calculation where the motor is assembled with an electric chain hoist and the hoist is subjected to full load

KITO CORP.
2000 Tsuijiarai, Showa-cho,
Nakakoma-gun, Yamanashi, JAPAN

Quality Assurance Group
Quality Assurance Depertment
Development & Technology Division
(Manager)
K. Kishimoto

Certificate No.: MM080011h

Date of Issue: 2009/3/4

Messrs._____

Motor Test Report for Electric Chain Hoist

Motor type : Three phase squirrel cage type induction motor.

Manufacturer : Yasukawa Electric Mfg. Co.

Production No. : -

Rating

Model	Output	Pole	Intermittent Rating	Voltage	Frequency
IBQ	3.5kW	4P	40/20%ED	220V	Speed Control by Inverter

Full load characteristics

Voltage Frequency		220V Speed Control by Inverter
Load	%	100
Current	A	18.7
Speed	rpm	~

Insulation class E

The above characteristics are obtained from calculation where the motor is assembled with an electric chain hoist and the hoist is subjected to full load

KITO CORP.
2000 Tsuijiarai, Showa-cho,
Nakakoma-gun, Yamanashi, JAPAN

Quality Assurance Group
Quality Assurance Department
Development & Technology Division
M. Ogihara (Manager)

Certificate No.: MM070011h

Date of Issue: 2008/03/21

Messrs._____

Motor Test Report for Electric Chain Hoist

Motor type : Three phase squirrel cage type induction motor.

Manufacturer : Yasukawa Electric Mfg. Co.

Production No. :

Rating

Model	Output	Pole	Intermittent Rating	Voltage	Frequency
IBQ	3.5kW	4P	60%ED	380 - 440V	Speed Control by Inverter

Full load characteristics

Voltage Frequency		380 - 440V Speed Control by Inverter
Load	%	100
Current	A	9.2
Speed	rpm	~

Insulation class B

The above characteristics are obtained from calculation where the motor is assembled with an electric chain hoist and the hoist is subjected to full load

KITO CORP.
2000 Tsuijiarai, Showa-cho,
Nakakoma-gun, Yamanashi, JAPAN

Quality Assurance Group
Quality Assurance Depertment
Development & Technology Division
(Manager)
K. Kishimoto

Certificate No.: MM080012a

Date of Issue: 2009/3/4

Messrs. _____

Motor Test Report for Electric Trolley

Motor type : Three phase squirrel cage type induction motor.

Manufacturer : Yasukawa Electric Mfg. Co.

Production No. : -

Rating

Model	Output	Pole	Intermittent Rating	Voltage	Frequency
IBQ-T	0.4kW	4P	40%ED	220V	60Hz

Full load characteristics

Voltage Frequency		220V 60Hz
Load	%	100
Current	A	3.0
Speed	rpm	1685

Insulation class E

The above characteristics are obtained from calculation where the motor is assembled with an electric trolley and the trolley is subjected to full load

KITO CORP.
2000 Tsuijiarai, Showa-cho,
Nakakoma-gun, Yamanashi, JAPAN

Quality Assurance Group
Quality Assurance Department
Development & Technology Division
M. Ogihara (Manager)

Certificate No.: MM080012b

Date of Issue: 2009/3/4

Messrs. _____

Motor Test Report for Electric Trolley

Motor type : Three phase squirrel cage type induction motor.

Manufacturer : Yasukawa Electric Mfg. Co.

Production No. : -

Rating

Model	Output	Pole	Intermittent Rating	Voltage	Frequency
IBQ-T	0.4kW	4P	27/13%ED	220V	Speed Control by Inverter

Full load characteristics

Voltage Frequency		220V Speed Control by Inverter
Load	%	100
Current	A	3.0
Speed	rpm	~

Insulation class E

The above characteristics are obtained from calculation where the motor is assembled with an electric trolley and the trolley is subjected to full load

KITO CORP.
2000 Tsuijiarai, Showa-cho,
Nakakoma-gun, Yamanashi, JAPAN

Quality Assurance Group
Quality Assurance Department
Development & Technology Division
M. Ogihara (Manager)

Certificate No.: MM070013a

Date of Issue: 2008/03/21

Messrs._____

Motor Test Report for End Carriage

Motor type : Three phase squirrel cage type induction motor.

Manufacturer : Yasukawa Electric Mfg. Co.

Production No. :

Rating

Model	Output	Pole	Intermittent Rating	Voltage	Frequency
IBQ-T	0.4kW	4P	40%ED	380 - 440V	60Hz

Full load characteristics

Voltage Frequency		380 - 440V 60Hz
Load	%	100
Current	A	2.2
Speed	rpm	1670

Insulation class B

The above characteristics are obtained from calculation where the motor is assembled with an electric chain hoist and the hoist is subjected to full load

KITO CORP.
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Certificate No.: MM070013b

Date of Issue: 2008/03/21

Messrs._____

Motor Test Report for End Carriage

Motor type : Three phase squirrel cage type induction motor.

Manufacturer : Yasukawa Electric Mfg. Co.

Production No. :

Rating

Model	Output	Pole	Intermittent Rating	Voltage	Frequency
IBQ-T	0.4kW	4P	40%ED	380 - 440V	Speed Control by Inverter

Full load characteristics

Voltage Frequency		220 – 230V Speed Control by Inverter
Load	%	100
Current	A	2.5
Speed	rpm	~

Insulation class B

The above characteristics are obtained from calculation where the motor is assembled with an electric chain hoist and the hoist is subjected to full load

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