



## 심사결과 통지서

신청인	사업장명	(주)키토코리아	사업장관리번호	1258178204
	사업자등록번호	125-81-78204	대표자 성명	김원세
	소재지	경기 성남시 분당구 삼평동 625 판교세븐벤처벨리 1단지 3동 9층		
안전인증대상기계·기구명 호이스트				
형식(규격)	KDL-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
- 합을 통지합니다.

2013년 08월 21일

인증심사원 최 창 일  
이 정 우

최창일  
이정우



한국승강기안전기술원 이사장





제 CA-2013-0005 호

# 안 전 인 증 서

( 사업장명 ) (주)KITO

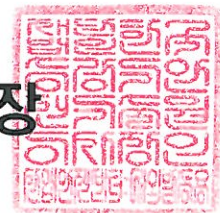
( 소재지 ) 2000, Tsuijiarai, Showa-Cho, Nakakoma-Gun, Yamanashi, Japan

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): KDL-ER2-020(2 ton)	_____
_____	인증번호 : 13-CA4AC-0005	_____
_____	인증기준 : 위험기계·기구 의무안전인증기준 (고용노동부고시 제2012-33호)	_____
_____	인증조건 : 산업안전보건법 "제34조 준수"	_____

2013년 08월 23일

한국승강기안전기술원 이사장



【별지 제4호서식】

동 일 형 식 일 람 표

사업장명	KITO CORP.		개정일자 및 번호	2013.07.31	인증번호	
형식 및 모델번호		동일형식 항목 및 내역			비고	
형식번호	모델번호	동일형식 항목1	동일형식 항목2	동일형식 항목3		
KDL-ER2-020	KITO-ER2D020L-S	Lift max 30m  권상모타 1.8kW .S : 4.4m/min .IS: 4.3/0.7m/min Inverter control	횡행모터 0.4kW .S : 24m/min .L: 12m/min .IS:24/4m/min .IL:12/2m/min	전기Trolley 결합 type		
	KITO-ER2D020L-L					
	KITO-ER2D020L-IS					
	KITO-ER2D020L-IL					
	KITO-ER2D020IL-S					
	KITO-ER2D020IL-L					
	KITO-ER2D020IL-IS					
	KITO-ER2D020IL-IL					
	KITO-C-ER2D020L-S					
	KITO-C-ER2D020L-L					
	KITO-C-ER2D020L-IS					
	KITO-C-ER2D020L-IL					
	KITO-C-ER2D020IL-S					
	KITO-C-ER2D020IL-L					
	KITO-C-ER2D020IL-IS					
KITO-C-ER2D020IL-IL						
				전기Trolley 결합 Clean type		



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

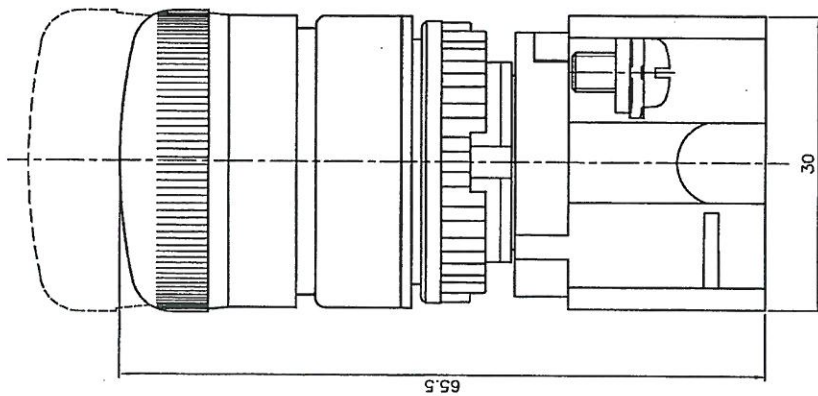
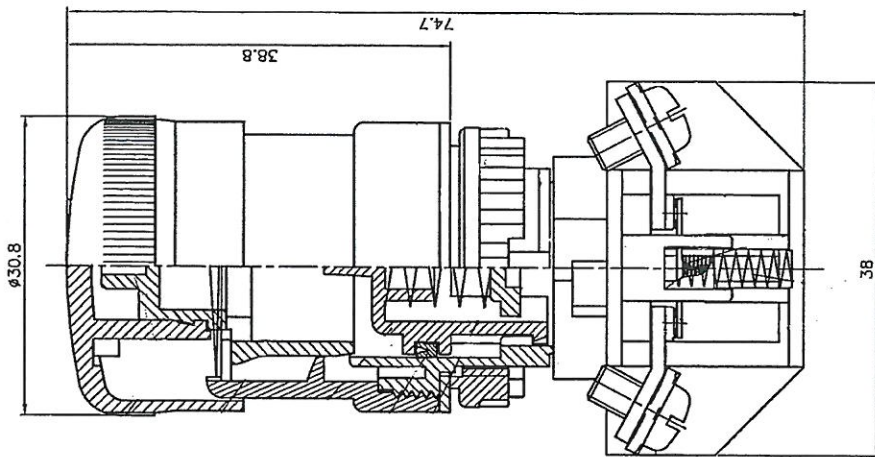
아래 주소에서 생산되는 제품에 한함.

정호엔지니어링, 경기도 광명시 노온사동 440-5

2012년 06월 11일

한국산업안전보건공단 이사장

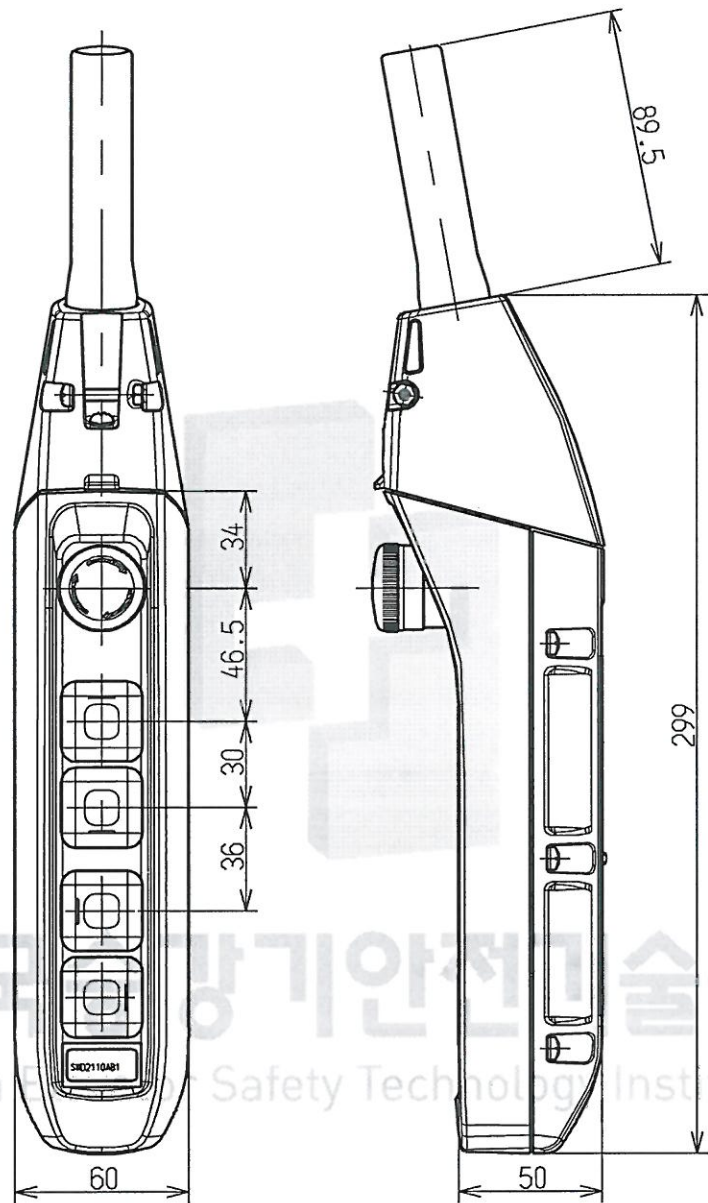




一般公差	0.2~30mm: ±0.2	30.1~60mm: ±0.3	60.1~300mm: ±0.5	模具材質	模具數量	研發部 95.05.24 陳建廷	研發部 95.05.24 周欽洋	模具孔數	繪圖	發料部 95.05.24 吳宗達	單位	mm	材質	圖號	T2-BKH
最新修正				枚	枚	對	周欽洋	枚	繪圖	吳宗達	比例	2:1	表面處理	品名	T2 BKH 連鎖開關
前次修正				品保	品保						投影法	第一角	顏色		



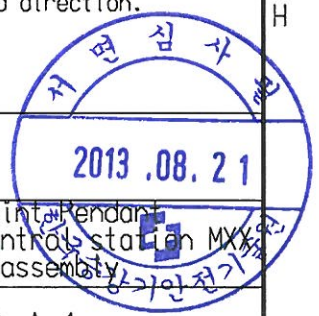
Revision	Incidence	Description	Date	Charge	Approved



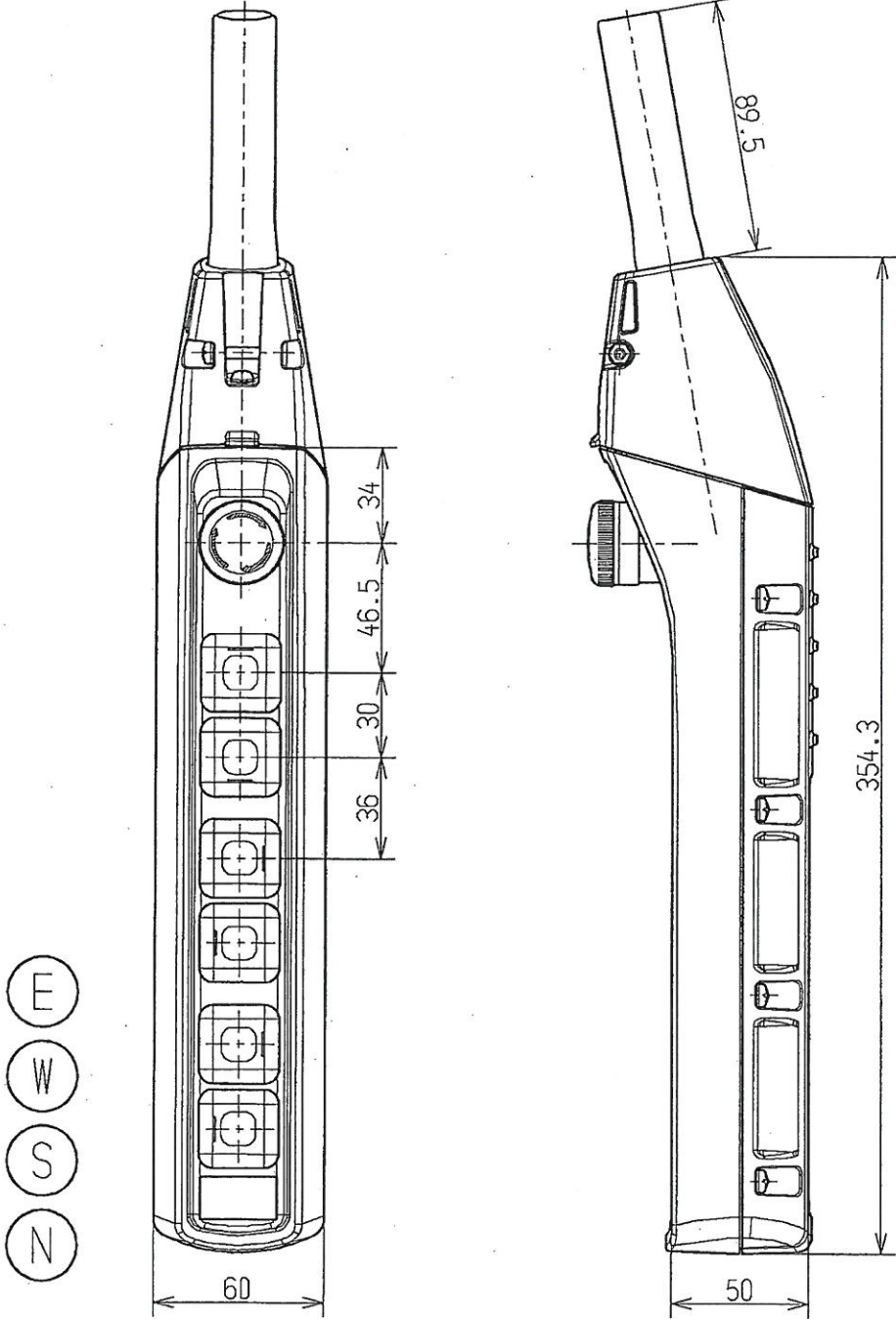
The lifting and lowering push buttons are marked with  $\uparrow\downarrow$  for single speed or  $\blacktriangle\blacktriangledown$  for dual speed.  
 The traveling push buttons are marked with E W or N S depending on the installed direction.

⑥
⑤
④
③
②
①

NOTE								DWG. NO.	S W D 2 X X 0 A A 1
APPROVED	H. FURIYA	T. HATANO	DESIGNED	KOBAYASHI	DRAWN	KOBAYASHI	SCALE	-	5point, Pendant control station MXX subassembly
Date issued	09.04.21	CHECKED 09.04.21	09.04.21	09.04.21	09.04.21	09.04.21			



Revision	Incidence	Description	Date	Charge	Approved



E  
W  
S  
N

6
5
4
3
2
1

APPROVED	ISHIKAWA	FURIYA	DESIGNED	KOBAYASHI	DRAWN	KOBAYASHI	SCALE	-	DWG. NO.	S W D 2 X X X A A 1	NOS./UNIT	MATERIAL	CODE	NAME	/point Pendant control station MXXX subassembly
	08.02.08	08.02.08	08.02.08	08.02.08	08.02.08	08.02.08									









#### 4. 전 기 도 면

- 1) ELECTRICAL SPECIFICATION
- 2) SYMBOL LIST
- 3) 배선배관도 & 접지계통도
- 4) 전기회로도
- 5) PANEL 관련도



한국승강기안전기술원  
Korea Elevator Safety Technology Institute



# LOAD SUMMARY 1 – INVERTER 사양

\*POWER SOURCE : AC 3Φ 220(208)V

OBJECT	HOISTING	TRAVERSING	CONTROL CIRCUIT
MOTOR OUTPUT	1.8KW x 4P	0.4KW x 4P x 2SET	
FULL LOAD CURRENT	11.2 (A)	6 (A)	0.5 (A)

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

\*\*\* NOMAL 전류값 \*\*\*

권상과 횡행시 : HOISTING + TRAVERSING + CONTROL CIRCUIT = 17.7 A

\*\*\* PEAK 전류값 \*\*\*

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

NOMAL 전류값 \* K = 17.7 \* 1.25 = 22.1 A

\*POWER SOURCE : AC 3Φ 380(440)V

OBJECT	HOISTING	TRAVERSING	CONTROL CIRCUIT
MOTOR OUTPUT	1.8KW x 4P	0.4KW x 4P x 2SET	
FULL LOAD CURRENT	5.1 (A)	5 (A)	0.5 (A)

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

\*\*\* NOMAL 전류값 \*\*\*

권상과 횡행시 : HOISTING + TRAVERSING + CONTROL CIRCUIT = 10.6 A

\*\*\* PEAK 전류값 \*\*\*

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

NOMAL 전류값 \* K = 10.6 \* 1.25 = 13.2 A



# LOAD SUMMARY 2 – 1속형사양

\*POWER SOURCE : AC 3Φ 220(208)V

OBJECT	HOISTING	TRAVERSING	CONTROL CIRCUIT
MOTOR OUTPUT	1.8KW x 4P	0.4KW x 4P x 2SET	
FULL LOAD CURRENT	8.4 (A)	6 (A)	0.5 (A)

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

\*\*\* NOMAL 전류값 \*\*\*

권상과 횡행시 : HOISTING + TRAVERSING + CONTROL CIRCUIT = 14.9 A

\*\*\* PEAK 전류값 \*\*\*

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

NOMAL 전류값 \* K = 14.9 \* 1.25 = 18.6 A

\*POWER SOURCE : AC 3Φ 380(440)V

OBJECT	HOISTING	TRAVERSING	CONTROL CIRCUIT
MOTOR OUTPUT	1.8KW x 4P	0.4KW x 4P x 2SET	
FULL LOAD CURRENT	4.6 (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 = 9.5 A




\*\*\* PEAK 전류값 \*\*\*

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

NOMAL 전류값 \* K = 9.5 \* 1.25 = 11.8 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**





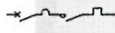
-  POWER CIRCUIT BREAKER, FIXED TYPE
- GCB : SF6 GAS CIRCUIT BREAKER
- VCB : VACUUM CIRCUIT BREAKER
- ACB : AIR CIRCUIT BREAKER
-  POWER CIRCUIT BREAKER, DRAWOUT TYPE

**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)

-  CIRCUIT BREAKER, FIXED TYPE
- MCB : MOULDED CASE CIRCUIT BREAKER
- 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

**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 CIRCUIT BREAKER, BUILT IN ELECTRONIC OVER-CURRENT RELAY WITH ADJUSTABLE TRIP RATING
-  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**

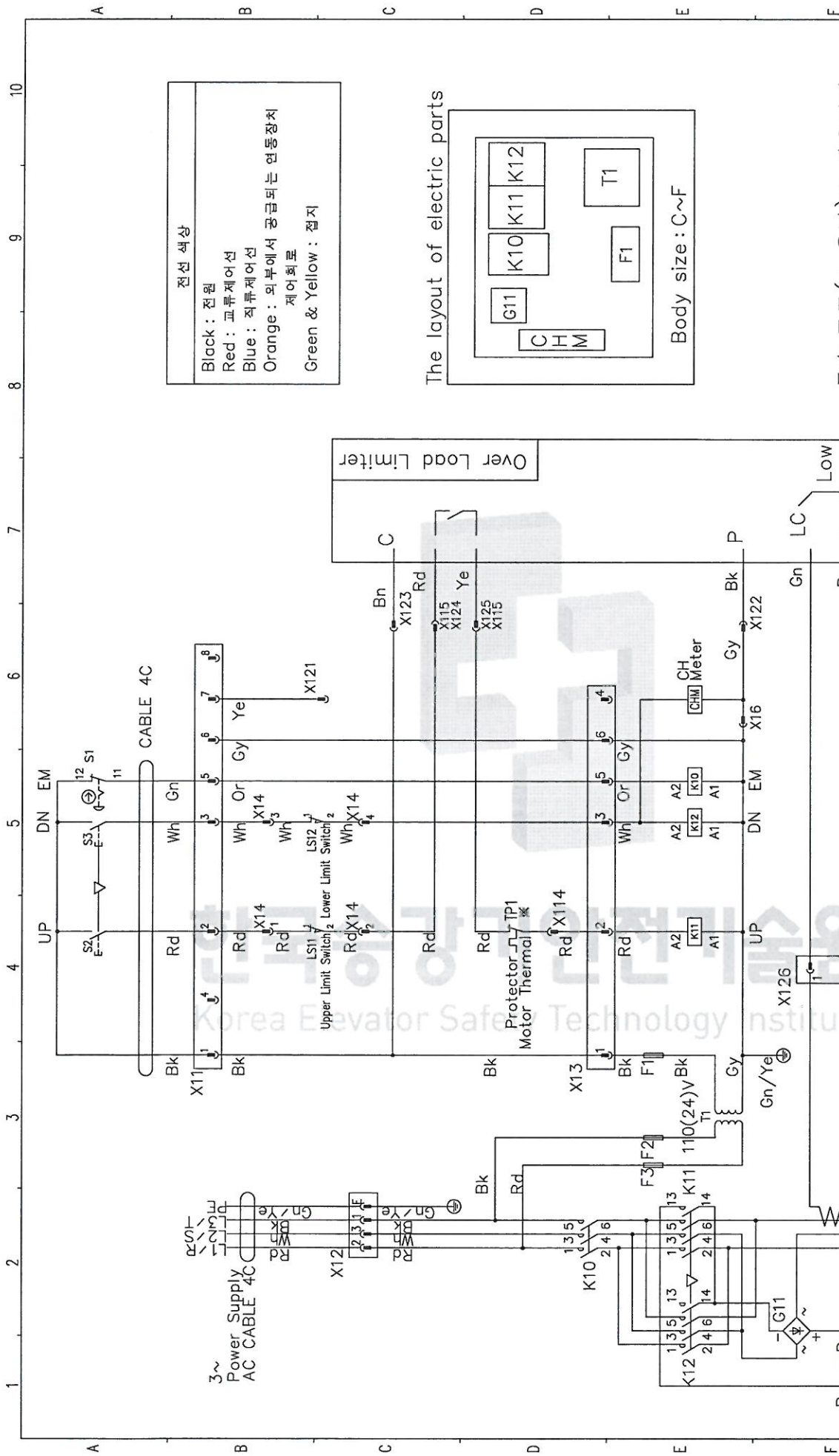
-  GENERAL OPERATING COIL
-  CAPACITOR
-  CAPACITOR VOLTAGE TRANSFORMER (CVT)
-  RESISTOR
-  DIODE
-  BUS DUCT
- SPB : SEGREGATED PHASE BUS DUCT
- PB : ISOLATED PHASE BUS DUCT
-  CABLE HEAD AND CABLE CONNECTION
-  AMMETER SWITCH
-  VOLTMETER SWITCH
-  SIGNAL LAMP
- \* R = RED
- G = GREEN
- W = WHITE
- A = AMBER
- C = CYAN

-  CONTROLLED RECTIFIER
-  DC-DC CONVERTER
-  RECTIFIER, BATTERY CHARGER
-  DC-AC INVERTER
-  BATTERY BANK
-  ELECTRIC HEATER, INDICATE 1<sup>st</sup> OR 3<sup>rd</sup> AND kW RATING, UNLESS OTHERWISE SPECIFIED, TO BE REGARDED AS 1<sup>st</sup>.
-  EARTHING CONNECTION
-  DISCONNECTION LINK
-  CROSSING OF CONDUCTORS NOT CONNECTED
-  JUNCTION OF CONDUCTORS OR WIRES

**SYMBOL LIST**

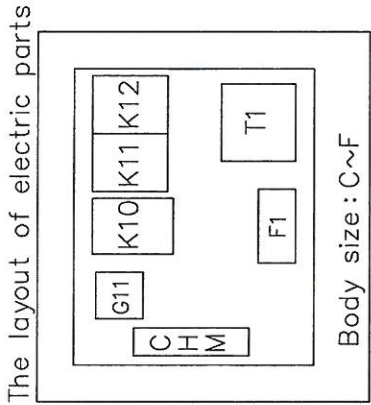
APPROVED	CHECKED	DESIGNED	CODE	SCALE
				—
KSTTO CORP.			SYMBOL LIST	DATE





전선 색상

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

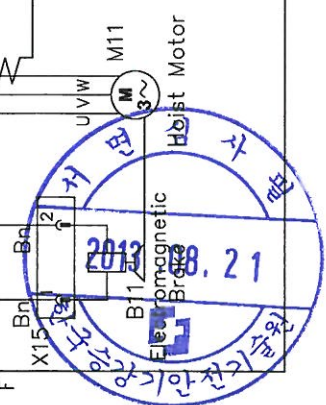


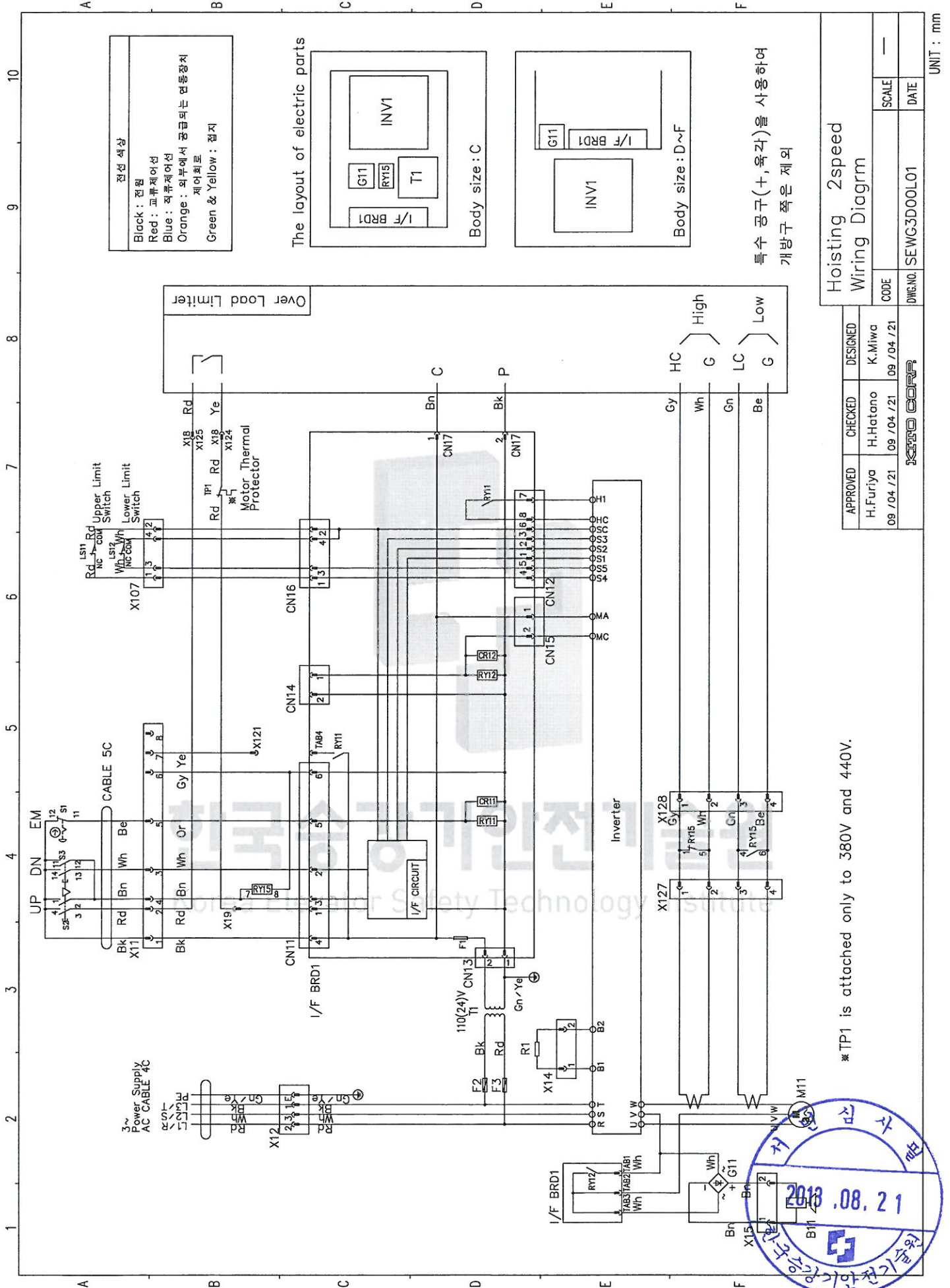
특수 공구(+, 육각)를 사용하여  
개방구 쪽은 제외

APPROVED	CHECKED	DESIGNED
H.Furiya 09 / 04 / 21	T.Hatano 09 / 04 / 21	K.Miwa 09 / 04 / 21
KOREA ELEVATOR SAFETY CO., LTD.		
DWG.NO. SEWC3100L01		SCALE —
DATE		DATE

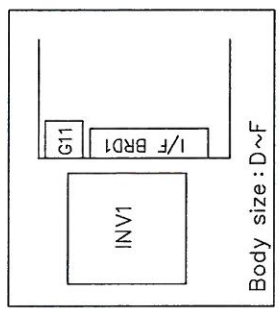
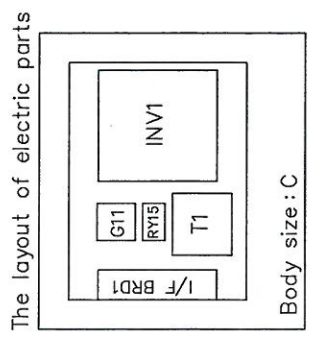
Hoisting : 1 speed  
Wiring Diagram

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





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



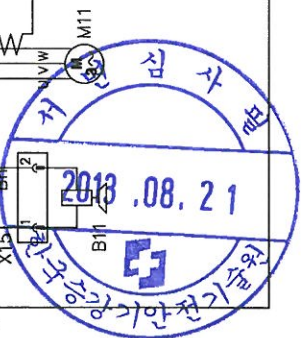
특수 공구 (+, 육각)를 사용하여  
 개방구 쪽은 제외

Hoisting 2speed  
 Wiring Diagram

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

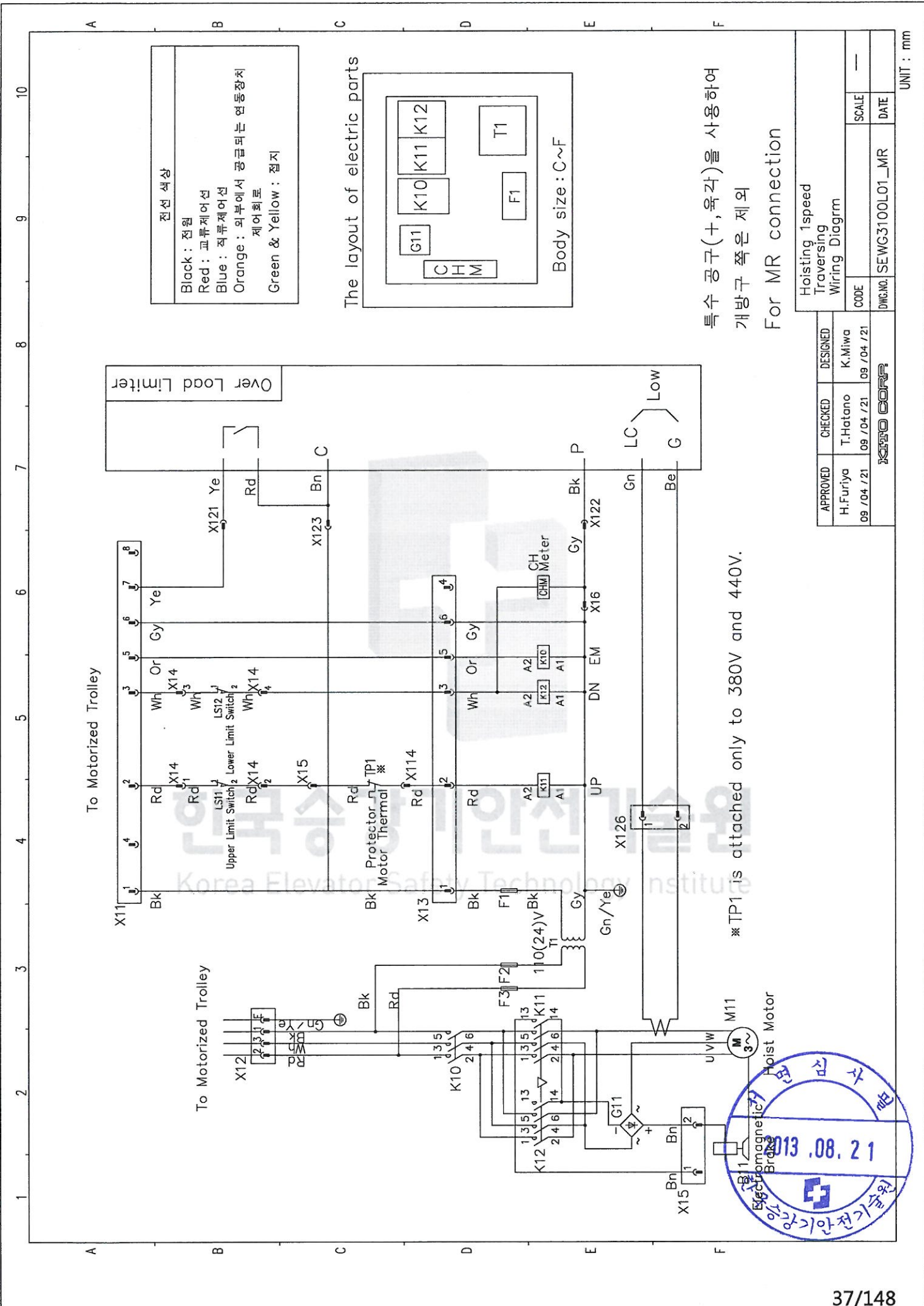
CODE  
 DWG.NO. SEWG3D00L01  
 SCALE  
 DATE

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

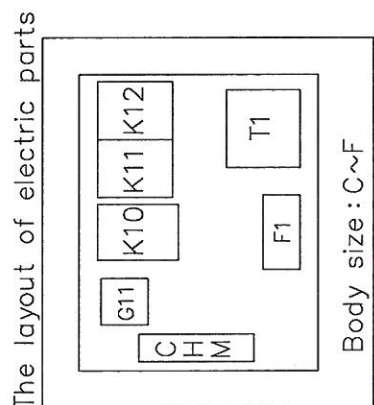


UNIT : mm





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



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

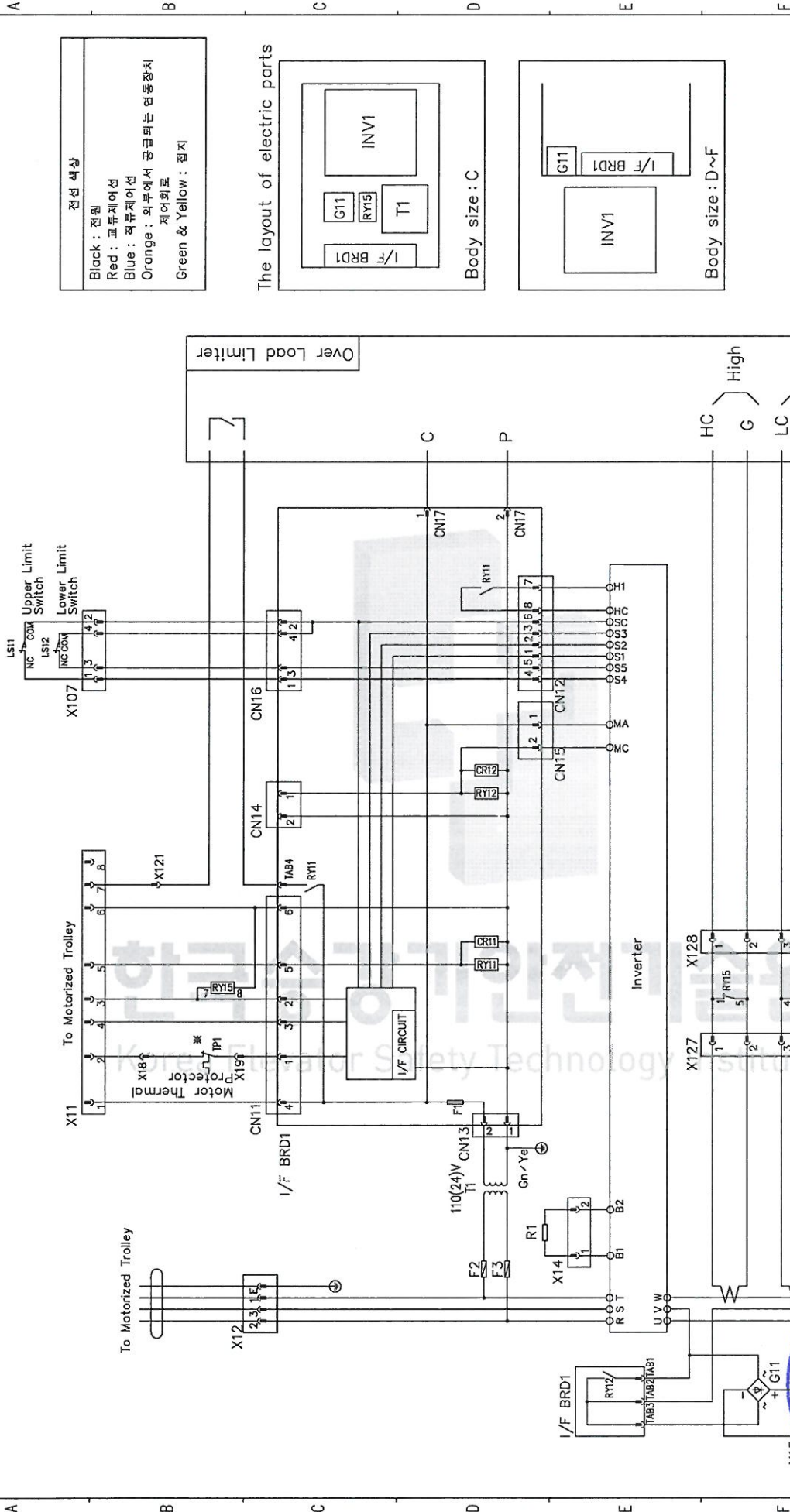
APPROVED	CHECKED	DESIGNED	Hoisting 1speed Traversing Wiring Diagram	
H.Furiya 09 / 04 / 21	T.Hatano 09 / 04 / 21	K.Miwa 09 / 04 / 21	CODE	SCALE
KOREA ELEVATOR SAFETY TECHNOLOGY INSTITUTE			SEWG3100L01_MR	DATE

UNIT : mm

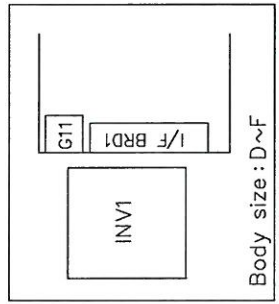
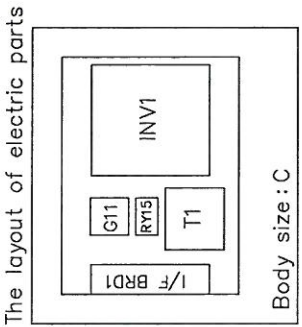
\* TP1 is attached only to 380V and 440V.



10 9 8 7 6 5 4 3 2 1



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



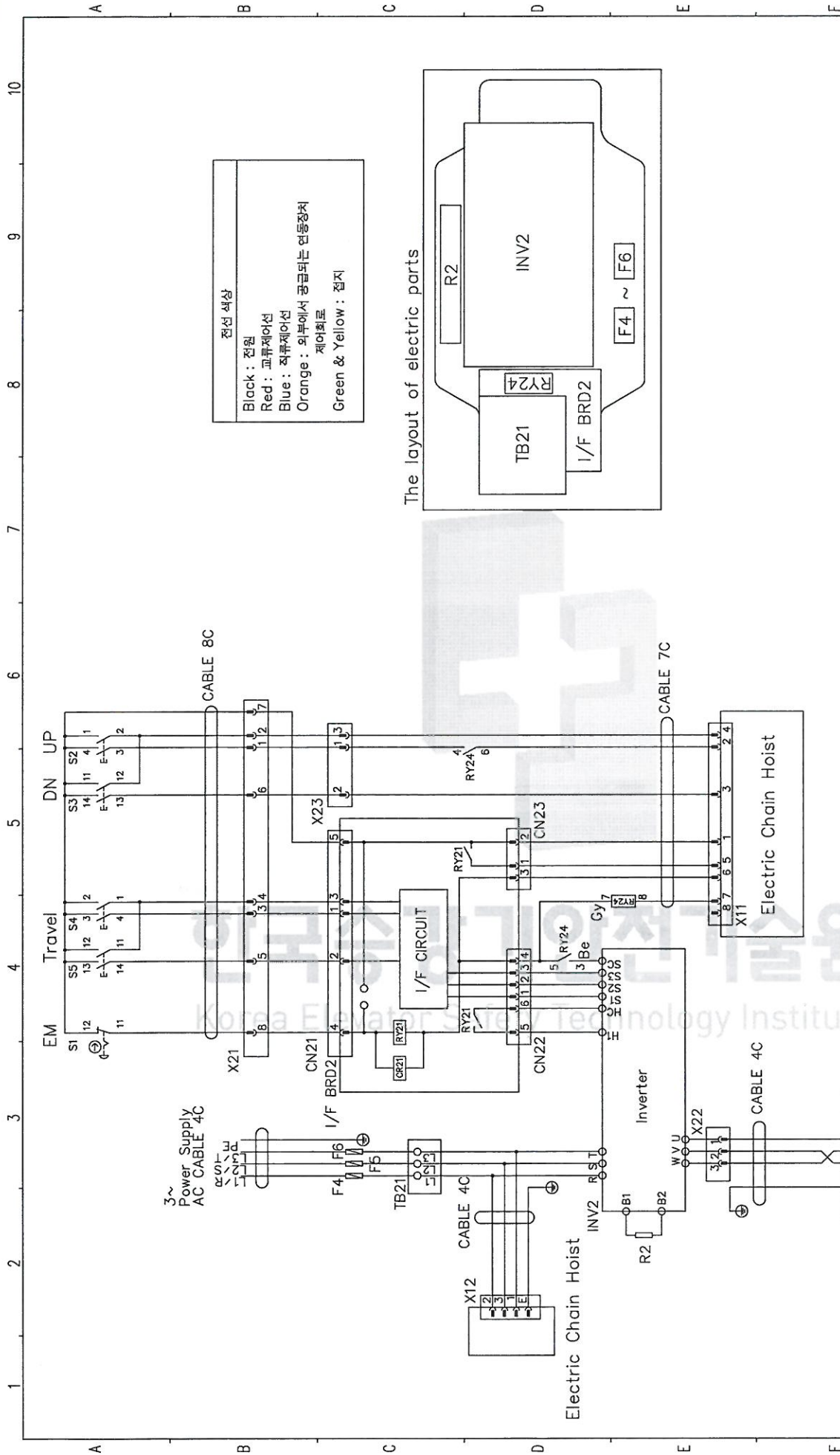
Hoisting 2speed Traversing Wiring Diagram

APPROVED	CHECKED	DESIGNED
H.Furiya 09 / 04 / 21	H.Hatano 09 / 04 / 21	K.Miwa 09 / 04 / 21
CODE DWG.NO. SEWC3D00L01_MR		
SCALE		DATE

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

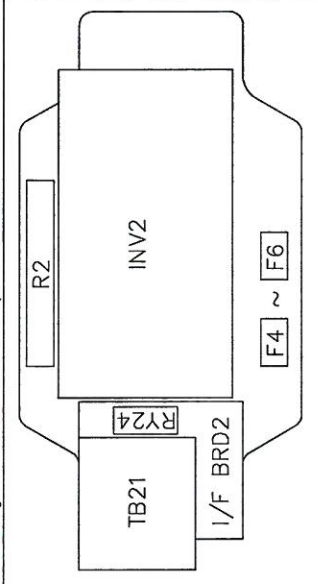


UNIT : mm



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

The layout of electric parts

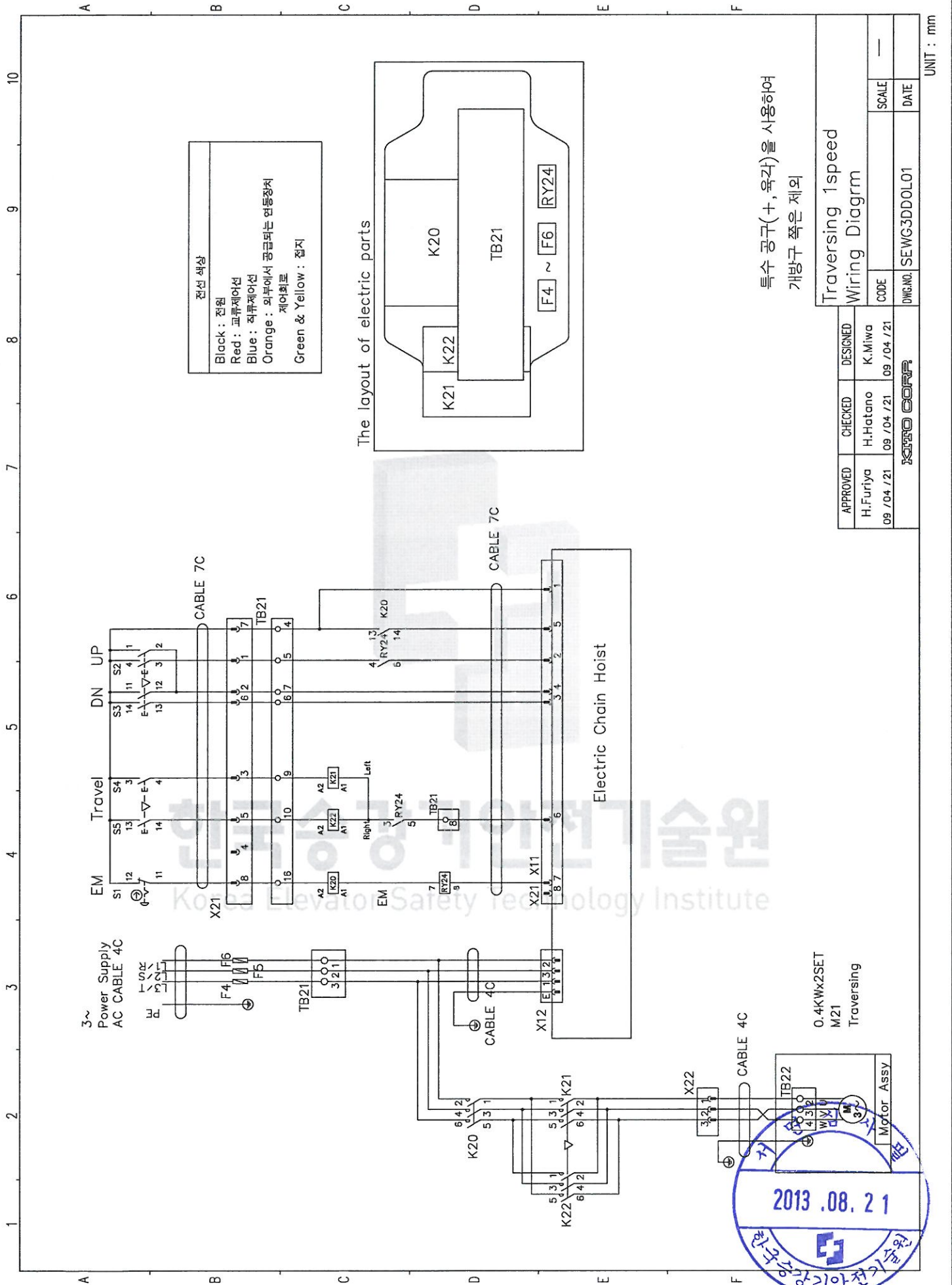


투수 공구(+, 육각)를 사용하여  
 개방구 쪽은 제외

APPROVED		CHECKED		DESIGNED		
H.Furiya 09 / 04 / 21		H.Hatano 09 / 04 / 21		K.Miwa 09 / 04 / 21		
SEW EURO DRIVE						
Traversing 2speed Wiring Diagram				CODE	SCALE	DATE
DWG.NO. SEWC3DD0L01						

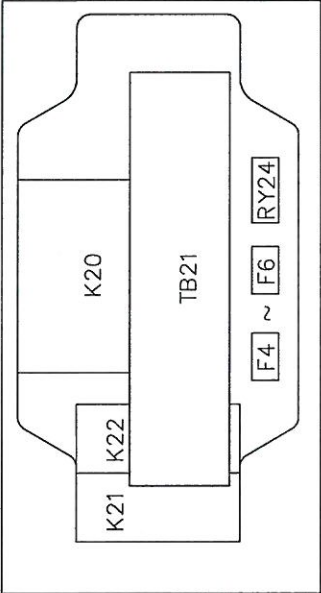
UNIT : mm





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

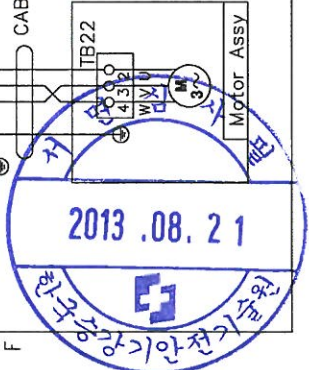
The layout of electric parts



특수 공구(+, 육각)를 사용하여  
 개방구 쪽은 제외

APPROVED		CHECKED		DESIGNED		
H.Furiya		H.Hatano		K.Miwa		
09 / 04 / 21		09 / 04 / 21		09 / 04 / 21		
<b>ISETO CORP</b>						
Traversing 1speed Wiring Diagram				CODE	SCALE	DATE
DWG.NO. SEWC3DD0L01						

UNIT : mm



CABLE 구성도 및 사양 - 권상 용량 1.8kw

CABLE SPECIFICATION FOR ER2M

NO	ITEM	TYPE	ER2M30	
			SIZE	
①	Power Line	VCT	3.5sq 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	1.5sq x 4C	
⑤	Control Line for ER	VCT	1.25sq x 6C	
⑥	Traversing Motor With Earth	VCT	1.25sq x 4C	

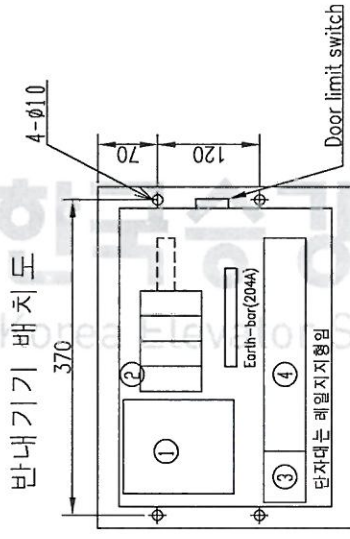
(3Φ 220(208)V / 380V / 440V 60Hz)



1	2	3	4	5	6	7	8	9	10
공 番								製作 數量	納期
JIS B0405 中級								削切加工普通公差	
0.5mm ±0.1								6mm ±0.2	
30 , ±0.3								120 , ±0.3	
120 , ±0.5								400 , ±0.5	
400 , ±0.8								1000 , ±1.2	
1000 , ±1.2								2000 , ±2.0	

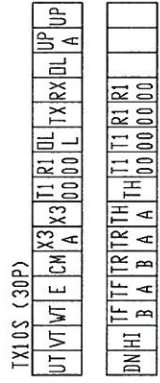
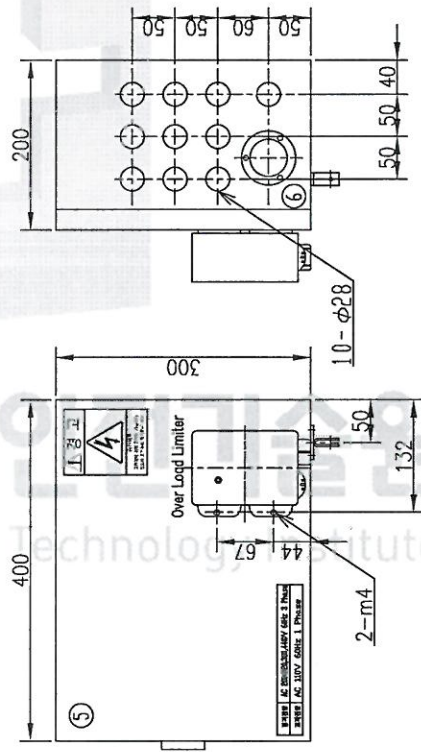
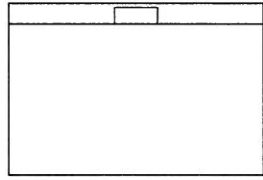
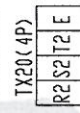
압착단자는 전부 절연피복 부착타입을 사용할것

塗裝色 : 먼셀넘버 5Y7/1 (에이커 표준색)  
設定機器 : 인버터



機器 番號	名 稱	形 式	メーカ	個數	備 考
1	인버터	FRN1.5CJS-2J21	富士	1	
2	릴레이	HHS4P-L (ACE4W)	富士	4	
	소켓	TP514X1	富士	4	
3	단자대	TX20 (4P)	春日	1	커버부착형
4	단자대	TX10S (30P)	春日	1	커버부착형
5	함	CH20-43A	日東	1	
6	Door limits switch	KH-9015-HL	KOINO		
7					
8					
9					
10					

단자대 배열



Note

1) 외함 개방 시 충전 부분이 차단되도록 한다.



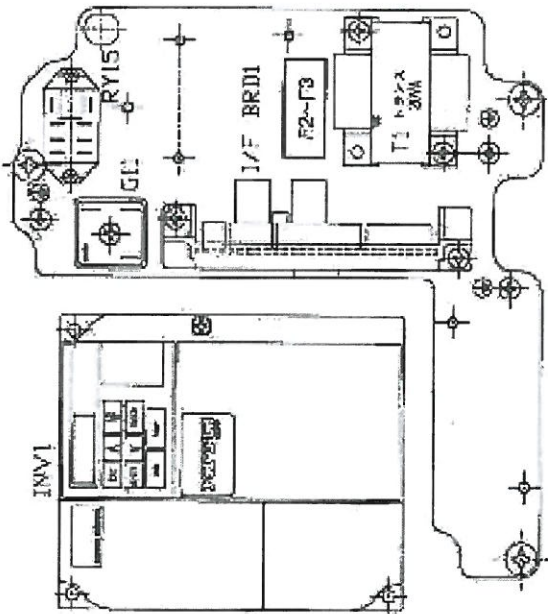
年 月 日	設 計 承 認
年 月 日	設 計 承 認
年 月 日	設 計 承 認

材 質	-	材 質	-
製 造 番 號	303910	名 稱	セツゾクハコ
製 圖 尺 度	NDT	製 圖 尺 度	NDT
設 計 尺 寸	10.10.8	設 計 尺 寸	10.10.8
檢 査 尺 寸	10.10.8	檢 査 尺 寸	10.10.8
承 認 尺 寸	10.10.8	承 認 尺 寸	10.10.8
圖 番	303910-35011	圖 番	303910-35011

樣式 025C-06 三角法 單位: mm

# 호이스트 CONTROL BOX 배치도

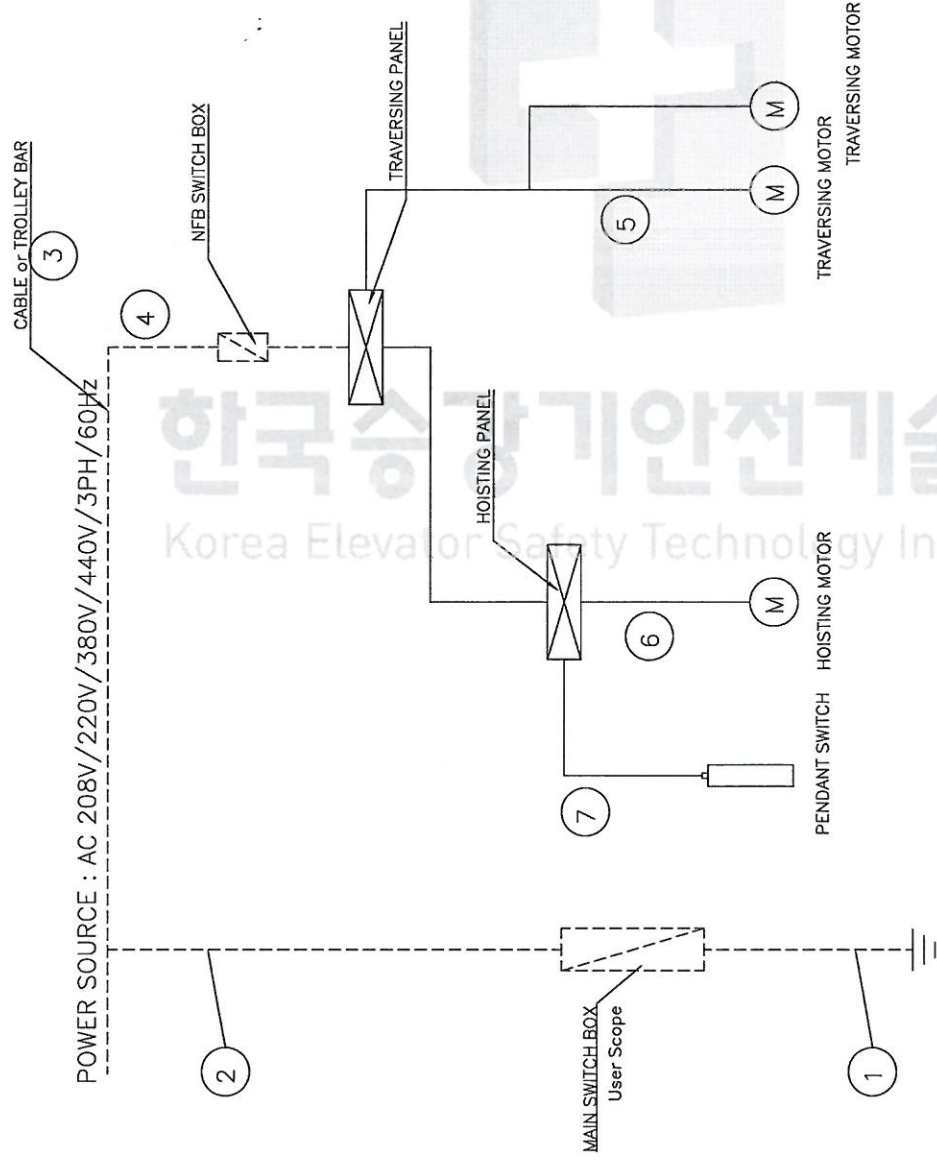
## HOISTING CONTROL BOX



ENCLOSURE : HOIST BODY - IP55  
PUSH BUTTON - IP65

MARK	DESCRIPTION	TYPE OF MODEL			QTY	MAKER	REMARKS
		220V	380V	440V			
INV1	INVERTER	V5000	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	S15V850	S15V850	S15V850	1	SHINDENGEN	
IF BRDI	INTERFACE BOARD	10~15A	10~15A	10~15A	1	KITO	
F2~F3	GLASS FUSE	10A	10A	10A	2	FUJI	
F4~F8	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
IF BRDI	INTERFACE BOARD	10~15A	10~15A	10~15A	1	KITO	
RY24	RELAY	110V	110V	110V	1	OMRON	EMERGENCY STOP
TB21	TERMINAL BOARD 21	10~15A	10~15A	10~15A	1	KITO	





- 접지설비 시공방법
- 전동기의 외함, 제어반 등은 접지를 해야 하며 그 접지저항은 다음의 규정을 따른다
  - 접지전용 Trolley Duct 및 전선은 당해 전기기기, 기구에 대하여 충분한 용량과 전기적, 기계적인 강도를 가져야 함.
  - 접지선이 외상을 받을 우려가 있는 경우는 전선관, 합성수지관 등과 함께 사용한다
  - 접지공사는 지표면에서 최저 75cm이상의 깊이에 접지봉을 박고 접지봉에는 접지동판을 연결한다.

접지공사	
3중 접지공사	400V이하 100Ω이하
복3중 접지공사	400V이상 10 Ω이하

CABLE 종류 및 굵기

NO	FROM	CABLE SPEC.	Earth Cable
1	Main Earth Line	VCT 45Qx1C	User Scope(1Core)
2	Main Power Sorce	VCT 45Q x 4C	User Scope(1Core)
3	Trolley bar or Festoon cable	60A x 4P	User Scope(1Core)
4	Main Power Sorce	VCT 45Q x 4C	User Scope(1Core)
5	Traversing Motor	VCT 1.2550 x 6C	(G-1Core)
6	Hoist Motor	VCT 1.550 x 4C	(G-1Core)
7	Push Button Switch	VCT 1.2550 x 8C	(G-1Core)
8			



REV.	QTY	CONTENTS	DATE	DRAWN	APPROVED	CHECKED	DESIGNED	DRAWN	TITLE
									2t MOTORIZED-4점식 케이블 구성도 및 접지계통도
									MDL 942513
									DWG NO. 3NNU942513
									SCALE NOT
									REV. 0



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".

한국승강기안전기술원  
Korea Elevator Safety Technology Institute

Technical Control Group

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	1.8kW	4P	60%ED	220V	60Hz

## Full load characteristics

Voltage Frequency	220V 60Hz	
Load	%	100
Current	A	8.4
Speed	rpm	1620

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



2000 Tsuijirai, Showa-cho,  
Nakakoma-gun, Yamanashi, JAPAN

Quality Assurance Group  
Quality Assurance Department  
Development & Technology Division

*M. Ogihara* (Manager)

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	1.8kW	4P	40/20%ED	220V	Speed Control by Inverter

## Full load characteristics

Voltage	Frequency	220V	Speed Control by Inverter
Load	%		100
Current	A		11.2
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



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Quality Assurance Group  
Quality Assurance Department  
Development & Technology Division

*M. Ogihara* (Manager)

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	1.8kW	4P	60%ED	380 - 440V	60Hz

## Full load characteristics

Voltage Frequency	380 - 440V 60Hz	
Load	%	100
Current	A	4.6
Speed	rpm	1610

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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Nakakoma-gun, Yamanashi, JAPAN

Quality Assurance Group  
Quality Assurance Department  
Development & Technology Division

(Manager)

*K. Kishimoto*

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	1.8kW	4P	60%ED	380 - 440V	Speed Control by Inverter

## Full load characteristics

Voltage	Frequency	380 - 440V	Speed Control by Inverter
Load	%	100	
Current	A	5.1	
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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Quality Assurance Group  
Quality Assurance Department  
Development & Technology Division

(Manager)

*K. Kishimoto*

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



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Quality Assurance Group  
Quality Assurance Department  
Development & Technology Division

*M. Ogihara* (Manager)

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



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Quality Assurance Group  
Quality Assurance Department  
Development & Technology Division

*M. Ogihara* (Manager)

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



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Nakakoma-gun, Yamanashi, JAPAN

Quality Assurance Group  
Quality Assurance Department  
Development & Technology Division

(Manager)

*K. Kishimoto*



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



2000 Tsuijirai, Showa-cho,  
Nakakoma-gun, Yamanashi, JAPAN

Quality Assurance Group  
Quality Assurance Department  
Development & Technology Division

(Manager)

*K. Kishimoto*