



심사결과 통지서

신청인	사업장명	(주)대산이노텍	사업장관리번호	134-81-628890
	사업자등록번호	134-81-62889	대표자 성명	강성원
	소재지	(314821) 충남 공주시 정안면 정안농공단지길 32-32		
안전인증대상 기계·기구명		모노레일식호이스트 모노레일식호이스트 (국내품)		
형식(규격)	EDSTM-1.9T (K1803008)	용량(등급)	1.9 Ton	

산업안전보건법 제 34조 및 같은 법 시행규칙 제58조의4에 따라 실시한

예비심사

서면심사

기술능력 및 생산체계 심사

개별 제품심사

개별 제품심사(제작중)

형식별 제품심사

결과가 적 합
 부적합

함을 통지합니다.

2018년 03월 07일

인증심사원

박재범, 권희만

(서명 또는 인)

한국산업안전보건공단 대전지역본부





제2018 - 2013239 호

안 전 인 증 서

(사업장명) (주)대산이노텍

(소 재 지) (314-821)충남 공주시 정안면 정안농공단지길 32-32

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

품 목

모노레일식호이스트 모노레일식호이스트 (국내품)

형식,모델(용량,등급)/인증번호

EDSTM-1.9T (1.9Ton) / 18-AG2AC-01212

인 증 기 준

고용노동부 고시 제2016 - 29호 (위험기계·기구 안전인증 고시)

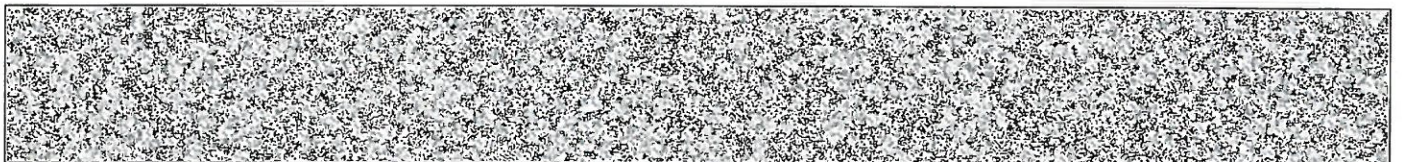
인 증 조 건

인증유효기간 : 해당없음

설치장소 : 옥내

2018년 03월 07일

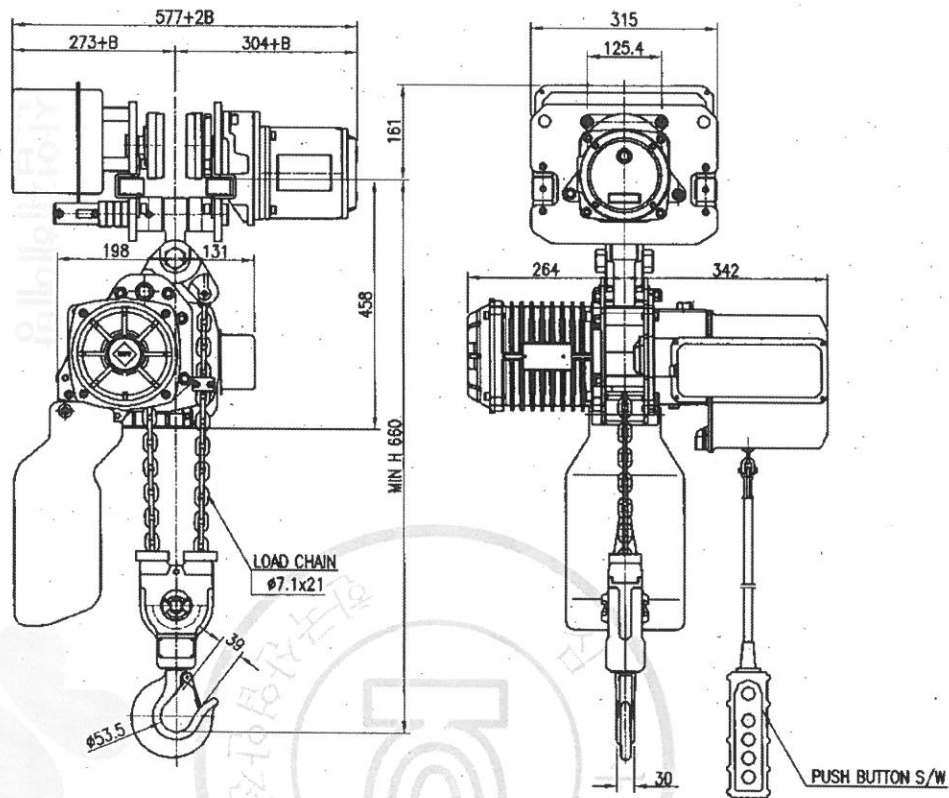
한국산업안전보건공단이사장



TECHNICAL SPECIFICATION

DESCRIPTION		1.9 TON MONORAIL HOIST	
TYPE		EDSTM - 1.9T MONORAIL	
RATED LOAD		1.9 [TON]	
TESTING LOAD		2.375 [TON]	
LIFT		30 [M]	
SPEED & MOTOR	HOISTING (M/MIN)	1.3 ~ 4.1	1.8[Kw] × 4P
	TRAVERSING (M/MIN)	5.2 ~ 22	0.4[Kw] × 4P
BRAKE SYSTEM	HOISTING	MAGNET CONE BRAKE	
	TRAVERSING	MAGNET CONE BRAKE	
ELECTRIC SPECIFIC- ATION	POWER SOURCE	AC 3PH 60[Hz] 220, 380, 440, 460, 480[V]	
	CONTROL SOURCE	AC 1PH 60[Hz] 110[V]	
	LIMIT SWITCH	ONE STEP LIMIT SWITCH & SLEEP CLUTCH	
	OVER LOAD LIMITER	ELECTRICAL TYPE.	
	EM. STOP DEVICE	EMERGENCY STOP BUTTON	
LOAD CHAIN	Ø 7.1 × P21.0 < 2 FALL >		
TRAVERSING POWER SYSTEM		TROLLEY BAR OR FESTOON TYPE	
MAX AMBIENT TEMPERATUE		40[°C]	
RATING		30[min]	
RATED DUTY		40%ED, ED = $\frac{\text{motor operation period(min) at maximum duty per hour}}{60\text{min}}$	
AREA CLASSIFICATION		INDOOR	
CONTROL METHOD		BY PENDANT PUSH BUTTON S/W	
PAINTING COLOR		MUNSELL NO EX8816D YELLOW	

NO	DESCRIPTION	MAT'L	Q'TY	WT(kg)	REMARKS



SPECIFICATION		
HOISTING LOAD	1.9	TON
TESTING LOAD	2.375	TON
LIFTING HEIGHT	30	M
HOISTING	SPEED	1.3~4.1 M/MIN
	MOTOR	1.8 KW x 4P x 1 SET
TRAVERSING	SPEED	5.2~22 M/MIN
	MOTOR	0.4 KW x 4P x 1 SET
POWER SUPPLY	AC 220,380,440,460,480 x 3Ø x 60 Hz	
OPERATING METHOD	P.B type ON . FL	
WEIGHT	183 KG	
I-BEAM SIZE	100-150	

* B CALCULATION $B=1/2 \times (\text{I BEAM WIDTH})$

* ROLLER DIA : Ø110

* LIMIT SWITCH : OPTION

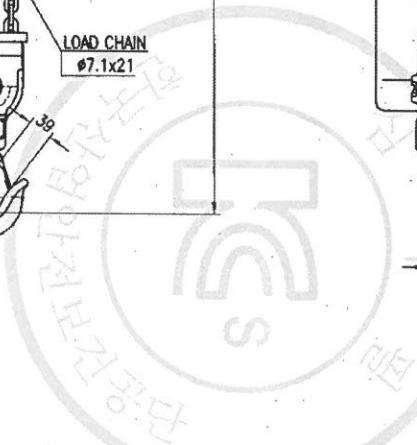
TITLE EDSTM-1.9T CHAIN HOIST				PROJECTION	
WORK NO	WORK NAME				
				SCALE	Q'TY
				1/1	1
DRAWN	CHECKED	REVIEWED	APPROVED	DRAWING NO	
YOO.M.R	-	LEE.H.J	Y.K	EDSTM19T01	
2013.08.29	-	2013.08.29	2013.08.29		
DAESAN INoTEC INC					

REV.NO	DATE	REVISION DESCRIPTION	DRAWN	CHECKED	APPROVED

물범복지 및 배포금지

192.168.0.24 / 2018-12-27 09:08:03

KOREA OCCUPATIONAL SAFETY & HEALTH AGENCY



DRAWING NO.	DESCRIPTION	REVISION	REVISION NOTATION	DESIGNER	DATE
EDSTM010E01	DRAWING LIST	-	0	Sun-Tack.Kim	2017.11.21
EDSTM010E02	SYMBOL LIST	-	0	Sun-Tack.Kim	2017.11.21
EDSTM010E03	BASIC CONTROL COMPONENT - TROLLEY CONTROL BOX	-	0	Sun-Tack.Kim	2017.11.21
EDSTM010E04	BASIC CONTROL COMPONENT - HOIST CONTROL BOX	-	0	Sun-Tack.Kim	2017.11.21
EDSTM010E05	SCHEMATIC DIAGRAM	-	0	Sun-Tack.Kim	2017.11.21
EDSTM010E06	CIRCUIT DIAGRAM	-	0	Sun-Tack.Kim	2017.11.21
EDSTM010E07	LOAD LIMITER SETTING DATA & CIRCUIT BREAKER & SAFETY & WIRE COLOR	-	0	Sun-Tack.Kim	2017.11.21

192.168.0.34 / 2016-03-27 09:08:00

KOREA OCCUPATIONAL SAFETY & HEALTH AGENCY

안전보건공단

안전보건공단



안전보건공단

TITLE				SHEET
EDSTM-05T,1T,19T,2T				1/1
3Phase 220,380,440,460,480V 50/60Hz				REVISION NO
Drawing List.				0
DRAWING	CHECKED	REVIEWED	APPROVED	DRAWING NO
S.T			Y.K	EDSTM010E01
17.11.21			17.11.21	
DAESAN INoTEC INC.				

NO	SYMBOL	DESCRIPTION
1		Three Pole Circuit Breaker
2		Three Pole Contactor (NO)
3		Normally Open Contactor (NO)
4		Normally Closed Contactor (NC)
5		Emergency Push Button (NC)
6		Push button (NO) Mechanical Interlock
7		2 Layer Push button (NO) Mechanical Interlock
8		Limit Switch (NC) Cam Operating
9		Limit Switch (NC) Roller
10		Limit Switch (NC) Micro Switch
11		Self Operating Thermal Switch (NC) Motor Thermal Protector
12		Contactor Coil
13		Fuse
14		Resistor
15		Capacitor
16		Current Transformer
17		Rectifier
18		Earth
19		Terminal Block
21		3P Thermal Relay
22		Jack & Plug
23		Transformer

NO	SYMBOL	DESCRIPTION
24		3 Phase Motor Only 220V or 440V or 460V
25		3 Phase Motor 220/380V 220V Wiring
26		3 Phase Motor 220/380V 380V Wiring
27		3 Phase Motor 230/460V 230V Wiring
28		3 Phase Motor 230/460V 460V Wiring
29		1 Phase Motor 110/220V
30		Solenoid Brake Coil Only DC100V or DC200V
31		Solenoid Brake Coil DC100/200V DC100V Wiring
32		Solenoid Brake Coil DC100/200V DC200V Wiring

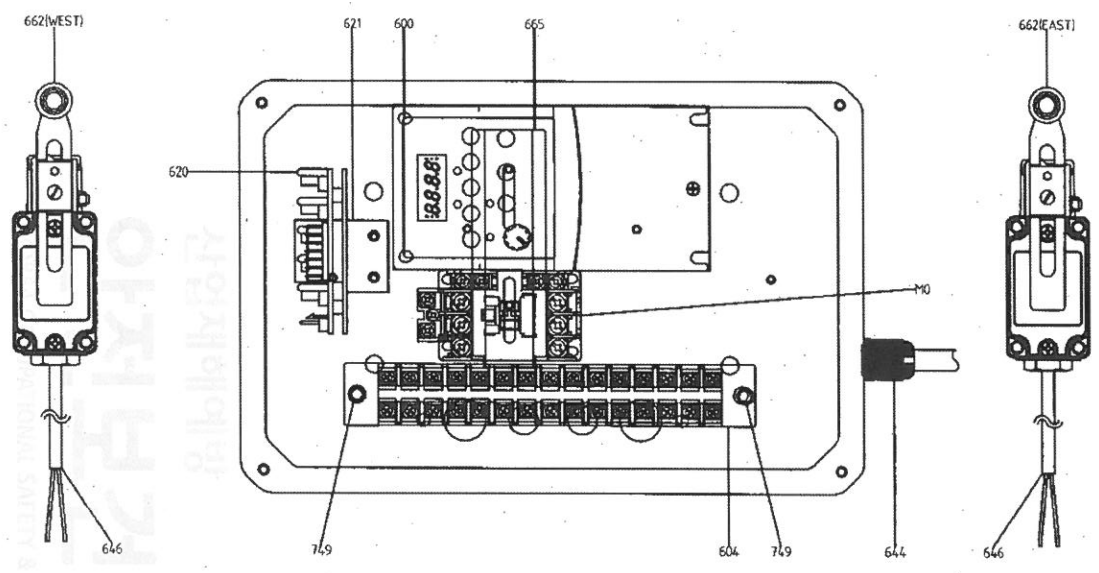
NO	SYMBOL	DESCRIPTION
33		Changeover switch with OFF position in center
34		Changeover switch

TITLE				SHEET	
EDSTM-0.5T,1T,19T,2T				1/1	
3Phase 220,380,440,460,480V 50/60Hz				REVISION NO	
Symbol List				•	
DRAWING	CHECKED	REVIEWED	APPROVED	DRAWING NO	
S.T			Y.K	EDSTM010ER2	
17.11.21			17.12.21		
DAESAN INoTEC INC.					

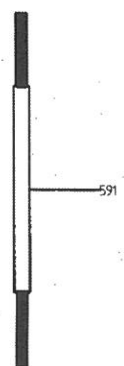
설계도면 및 배선도

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PART NO	COMMODITY	STANDARD	CAPACITY	QTY	M/	REMARK
591	POWER CABLE	VCT	2.5SQx4C	15M	KI C.	-
600	INVERTER	22A-B4PSN104	0.75kW 200-240VAC	1	ALLEN-BRADLEY	-
		22A-D2P3N104	0.75kW 380-480VAC			
604	TERMINAL BLOCK	KTB1-02015	20A 600VAC	1	HANYOUNG NUX	Machine Screw S/W P/W M4x12 (P/W #8)
620	INTERFACE	ITF-110	110V	1	JUNGHO ENG	Machine Screw S/W P/W M4x12 (P/W #8)
621	INTERFACE BOARD	-	-	1	DAESAN INOTEC	Machine Screw S/W P/W M4x8 (P/W #8)
644	CABLE GLAND	BC-MB5-G	M13.5	1	BOXCO	φ21
646	LIMIT SWITCH CABLE	VCT	2.5SQx2Cx0.7M	2	KI CABLE	-
662	*OPTION : LIMIT SWITCH	HY-M904	6A-250VAC	2	HANYOUNG NUX	-
665	CHANNEL	-	115mm	1	DAESAN INOTEC	Machine Screw S/W P/W M4 X 8 (P/W #10)
667	CHANNEL STOPPER	JTSN-2	-	1	JEONO	Do not install when installing M0.
749	HEX STAY BOLT	-	62mm	1	DAESAN INOTEC	-
M0	MAIN MAGNETIC CONTACTOR	DMC-12b	AC3	1	DONG-A	-



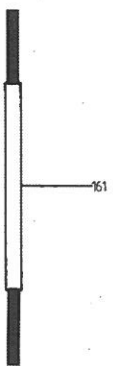
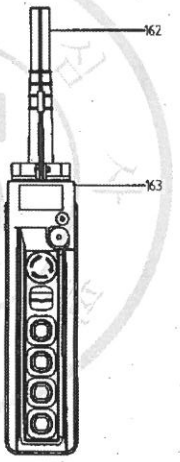
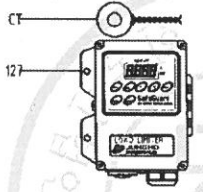
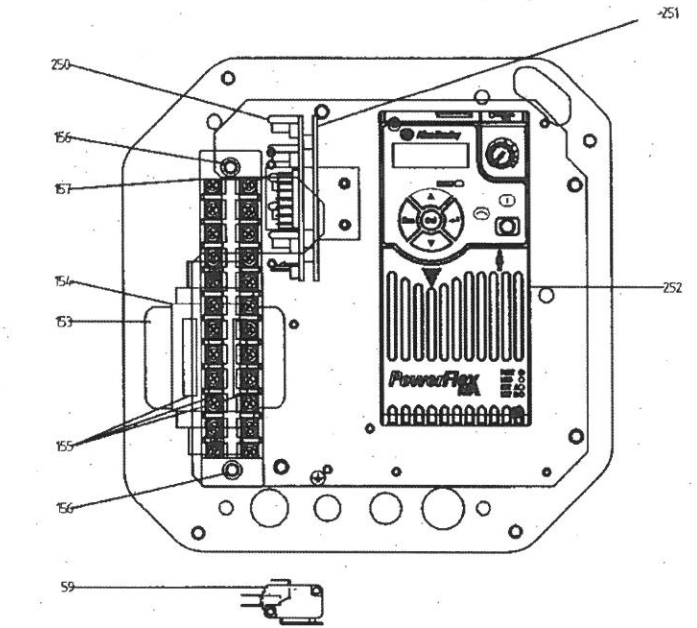
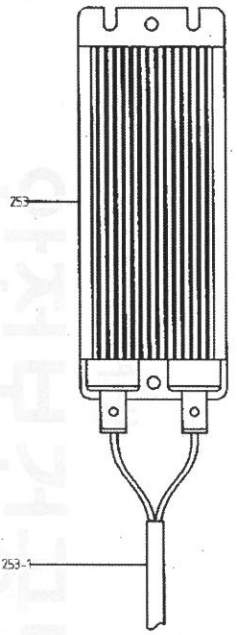
물품명: 기본제 및 배포구지

TITLE				SHEET	
EDSTM-05T,1T,1.9T,2T				1/2	
3Phase 220,380,440,460,480V 50/60Hz				REVISION NO	
Basic Control Component				0	
Trolley Control Box				DRAWING NO	
DRAWING	CHECKED	REVIEWED	APPROVED	DRAWING NO	
S.T			Y.K	EDSTM010E03	
17.11.21			17.11.21		

DAESAN INOTEC INC.

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KOREA OCCUPATIONAL SAFETY & HEALTH AGENCY

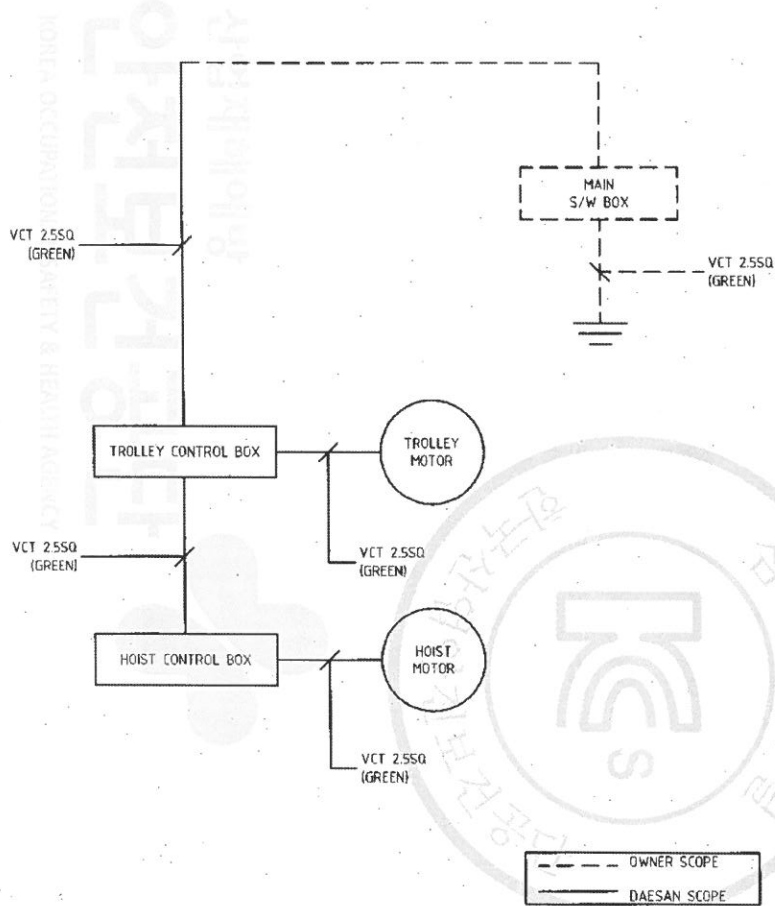


PART NO	COMMODITY	STANDARD	CAPACITY	Q'TY	M'	REMARK
59	MICRO SWITCH (UPPER LIMIT SWITCH)	KH-9012-HLLC	6A-250VAC	1	KL	-
127	LOAD LIMITER (0.5S)	JOLS-70(9.99)	110VAC	-1	JUNGHO ENG	Machine Screw S/W M5 X 10
	LOAD LIMITER (1S,2W)	JOLS-70				
153	TRANSFORMER	35VA	220,380,440V -110V	1	KWANGIL ELECTRONICS	Machine Screw S/W P/W M4x8 (P/W #10)
154	FUSE HOLDER	3P	20A 250VAC	1	K SUNG	Tapping Screw M4x12
155	FUSE	S61	1A 250VAC	3	ORISEL	-
156	HEX STAY BOLT	-	120mm	2	DAESAN INOTEC	-
157	TERMINAL BLOCK	KTB1-02012	20A 600VAC	1	HANYOUNG NUX	Machine Screw S/W P/W M4x12 (P/W #8)
161	POWER & CONTROL CABLE	VCT	25SQx4C+15SQx8C	1.3M	KI CABLE	-
162	PUSH BUTTON CABLE	HOIST CABLE	0.75SQx9C	-	KI CABLE	Order Specification
163	PUSH BUTTON	HY-1024-SBB	6A-250VAC	1	HANYOUNG NUX	2 SPEED BUTTON KASJGA LNB00140
250	INTERFACE	ITF-110	110V	1	JUNGHO ENG	Machine Screw S/W P/W M4x12 (P/W #8)
251	INTERFACE BOARD	-	-	1	DAESAN INOTEC	Machine Screw S/W P/W M4x8 (P/W #8)
252	INVERTER	Z5A-B01N104	2.2KW 200-240VAC	1	ALLEN-BRADLEY	Machine Screw S/W P/W M4x12 (P/W #8)
		Z5A-D6P0N104	2.2KW 380-480VAC			
253	BRAKING RESISTANCE	MCRF-300	300W 40Ω	1	FULLOHM	-
253-1	BRAKING RESISTANCE CABLE	VCT	2.5SQx2C	0.5M	KI CABLE	-
CT	CURRENT TRANSFORMER	C-20	80 : 0.08A	1	JUNGHO ENG	-

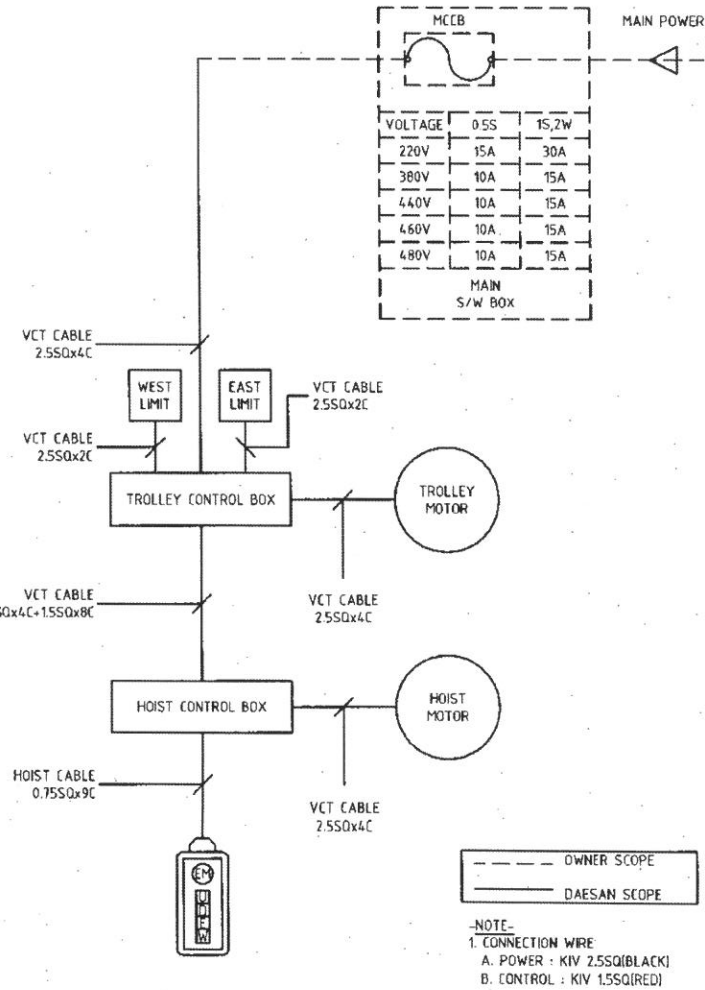
이음표기 및 배선규격

TITLE					SHEET
EDSTM-0.ST.1T.19T.2T					2/2
3Phase 220,380,440,460,480V 50/60Hz					REVISION NO
Basic Control Component					1
Hoist Control Box					DRAWING NO
DRAWING	CHECKED	REVIEWED	APPROVED	DRAWING INO	
S.T			Y.K	EDSTM10CAC	
17.11.21			17.11.21		
DAESAN INoTEC INC.					

GROUNDING



CABLE



■ 접지공사 시실방법

1. 진동기의 프레임, 제어반, 레일등은 접지를 해야 하며 다음의 규정을 따른다.

접지 저항		
3층 접지	400V 이하	100Ω 이하
특별 제3종 접지	400V 초과	100Ω 이하

단 방폭지역은 전압에 관계없이 10Ω 이하일 것.

2. 접지전용 트롤리선 및 전선은 당해 전기기기, 기구에 대하여 충분한 용량 및 전기적, 기계적 강도를 가져야 한다.
3. 접지선이 외상을 받을 우려가 있는 경우에는 전선관, 합성 수지관 등에 넣어야 한다.
4. 접지공사는 지표면에서 최저 75cm 이상의 깊이에 접지봉을 박고 접지봉에는 접지 동판을 연결한다.

■ NOTE

1. TROLLEY-BAR는 전기 기술기준 제226호(저압접촉전선)에 준하여 설치 한다.
2. MAIN S/W BOX는 당해 크레인을 지상에서 쉽게 개폐할 수 있는 잘 보이는 곳에 설치 한다.

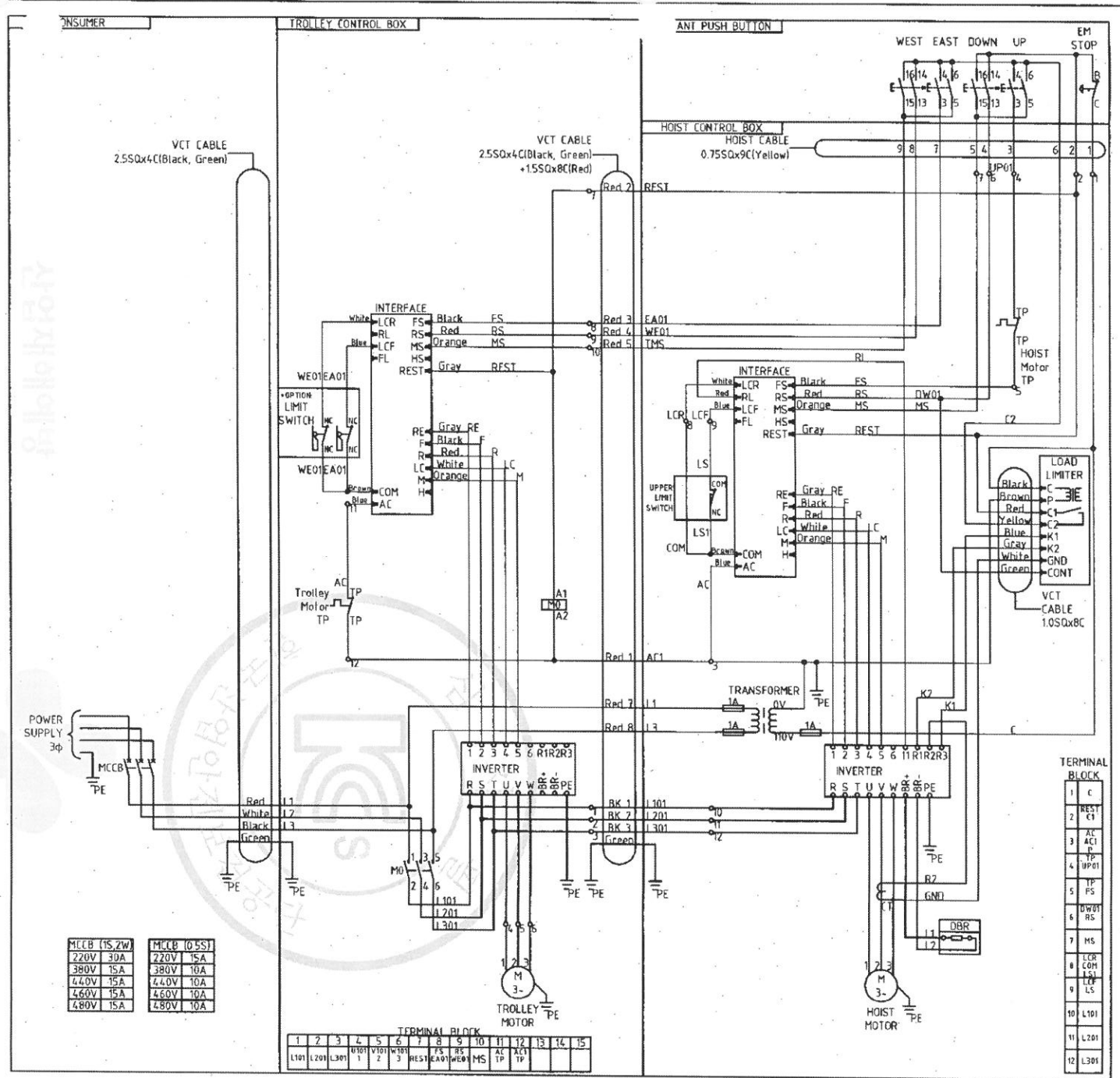
TITLE				SHEET	
EDSTM-05T,1T,19T,2T				1/1	
3Phase 220,380,440,460,480V 50/60Hz				REVISION NO	
Schematic Diagram				0	
DRAWING	CHECKED	REVIEWED	APPROVED	DRAWING NO	
S.T			Y.K	EDSTM05MS	
17.11.21			17.11.21		

DAESAN INoTEC INC.

이음표기 및 배선규칙

100-00-60 / 2-50-00 / 2010-07-06 / 01-00-00

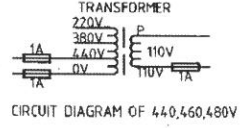
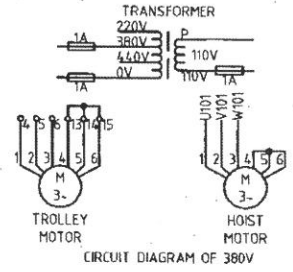
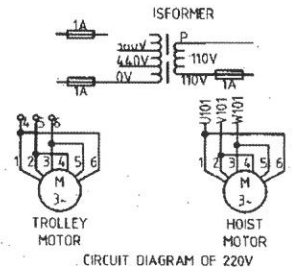
KOREA OCCUPATIONAL SAFETY & HEALTH AGENCY
한국직업안전보건공단



MCB (15.2W)		MCB (0.5S)	
220V	30A	220V	15A
380V	15A	380V	10A
440V	15A	440V	10A
460V	15A	460V	10A
480V	15A	480V	10A

TERMINAL BLOCK														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
L101	L201	L301	U101	U101	W101	W101	FS	RS	MS	AC	AC1	TP	TP	

TERMINAL BLOCK	
1	C
2	REST
3	AC
4	AC1
5	TP
6	UW01
7	RS
8	MS
9	COM
10	L101
11	L201
12	L301



NOTE
 1. POWER WIRE : 2.5SQ BLACK
 2. CONTROL WIRE : 1.5SQ RED
 3. EARTH WIRE : 2.5SQ GREEN

ABBREVIATION
 CT : CURRENT TRANSFORMER
 EMPR : ELECTRONIC MOTOR
 PROTECTION RELAY
 DBR : DYNAMIC BRAKING RESISTOR
 TP : THERMAL PROTECTOR
 EM : EMERGENCY
 RD : RED
 BK : BLACK

MOTOR SPEC.
 1. HOIST :
 3φ 1.8kW 4P (1T,2T)
 3φ 0.8kW 4P (0.5T)
 2. TROLLEY : 3φ 0.4kW 4P

TITLE				SHEET	
EDSTM-0.5T,1T,19T,2T				1/1	
3Phase 220,380,440,460,480V 50/60Hz				REVISION NO.	
CIRCUIT DIAGRAM				0	
DRAWING				CHECKED	REVIEWED
S.T				Y.K	
17.11.21				17.11.21	
DAESAN INOTEC INC.				EDSTW191004	

물품명제 및 배품규지

LOAD LIMITER SETTING DATA

Motor	Motor pole	Weight	Power source	Load limiter setting data				
				Start Delay time	Overload time	Reset time	L current	H current
0.8kW	4	0.55 ton (110%)	220V 60Hz	1.0	1.0	1.0	2.8	3.6
			380V 60Hz	1.0	1.0	1.0	1.6	2.0
			440V 60Hz	1.0	1.0	1.0	1.6	2.0
			460V 60Hz	1.0	1.0	1.0	1.6	2.0
			480V 60Hz	1.0	1.0	1.0	1.6	2.0
1.8kW	4	1.10 ton (110%) 2.09 ton (110%) 2.20 ton (110%)	220V 60Hz	1.0	1.0	1.0	7.6	7.6
			380V 60Hz	1.0	1.0	1.0	4.4	4.4
			440V 60Hz	1.0	1.0	1.0	4.4	4.4
			460V 60Hz	1.0	1.0	1.0	4.4	4.4
			480V 60Hz	1.0	1.0	1.0	4.4	4.4

- LOAD LIMITER 설정은 무게 110%의 값으로 함.
- 위 DATA는 대산이노텍 공장내부 전압 기준으로 설정됨.
- 각각의 전동기 특성 및 현장 조건에 따라 전류의 설정치는 약간의 변동이 발생될 수 있음.

CIRCUIT BREAKER (0.5S)

Power source	Rated current (A)			Total rated current (A)		Circuit breaker	
	Hoist motor (I _h)	Trolley motor (I _t)	Control (I _c)	I _h +I _t	I _h *250%	AF (Ampere Frame)	AT (Ampere Trip)
220V 60Hz	4.2	3.3	1.0	8.5	21	30AF	15AT
380V 60Hz	2.7	1.7	1.0	5.4	13	30AF	10AT
440V 60Hz	2.7	1.7	1.0	5.4	13	30AF	10AT
460V 60Hz	2.7	1.7	1.0	5.4	13	30AF	10AT
480V 60Hz	2.7	1.7	1.0	5.4	13	30AF	10AT

CIRCUIT BREAKER (1S,1.9W,2W)

Power source	Rated current (A)			Total rated current (A)		Circuit breaker	
	Hoist motor (I _h)	Trolley motor (I _t)	Control (I _c)	I _h +I _t	I _h *250%	AF (Ampere Frame)	AT (Ampere Trip)
220V 60Hz	9.2	3.3	1.0	13.5	33	30AF	30AT
380V 60Hz	4.9	1.7	1.0	7.6	19	30AF	15AT
440V 60Hz	4.9	1.7	1.0	7.6	19	30AF	15AT
460V 60Hz	4.9	1.7	1.0	7.6	19	30AF	15AT
480V 60Hz	4.9	1.7	1.0	7.6	19	30AF	15AT

※위 표는 각 제품 1대에 대한 권고치임.

※과전류 보호

- 과전류 보호를 위하여 각 부품의 정격전류 또는 도체의 허용전류 값 중에서 더 작은 값에 대하여 보호되어야 한다.
- 퓨즈의 정격전류 또는 기타 과전류 보호장치의 전류 설정값은 가능한 낮게 선정하되 예상되는 과전류(전동기 기동 전류 등)에 적절하여야 한다.
- 과전류 보호용으로 차단기 또는 퓨즈를 설치시 차단용량은 해당 전동기 등의 정격전류에 대하여 **차단기는 250%**, 퓨즈는 300% 이하하여야 한다.
- 과전류차단장치는 각 분기회로마다 설치되어야 한다.
- 전원전압에 직접 접속되는 제어회로 및 제어회로 변압기는 과전류 보호가 되어야 한다.
- 제어용 변압기 2차측 회로의 과전류보호장치는 접지회로가 아닌 다른 단에 설치되어야 한다.

SAFETY

※감전 방지를 위한 외함구조

- 숙련자만이 취급할 수 있도록 키 등을 부착하거나 고정식 덮개의 구조일 것.
- 외함 개방시 충전 부분이 차단 되도록 할 것.
- 외함 개방 후 충전 되어 있는 부분은 IP2X 이상의 직접접촉 방호가 되어 있을 것.

WIRE COLOR

※전선 및 조작 버튼의 색상

1. 조작 버튼의 색상

- 빨강색(RED) -----> 비상 스위치
- 노랑색(YELLOW) -----> 비정상
- 녹색(GREEN) -----> 정상
- 청색(BLUE) -----> 의무
- 흰색, 회색 또는 흑색 -----> 지정된 의미 없음

2. 표시등의 색상

- 빨강색(RED) -----> 비상
- 노랑색(YELLOW) -----> 비정상
- 녹색(GREEN) -----> 정상
- 청색(BLUE) -----> 의무
- 흰색, 회색 또는 흑색 -----> 지정된 의미 없음

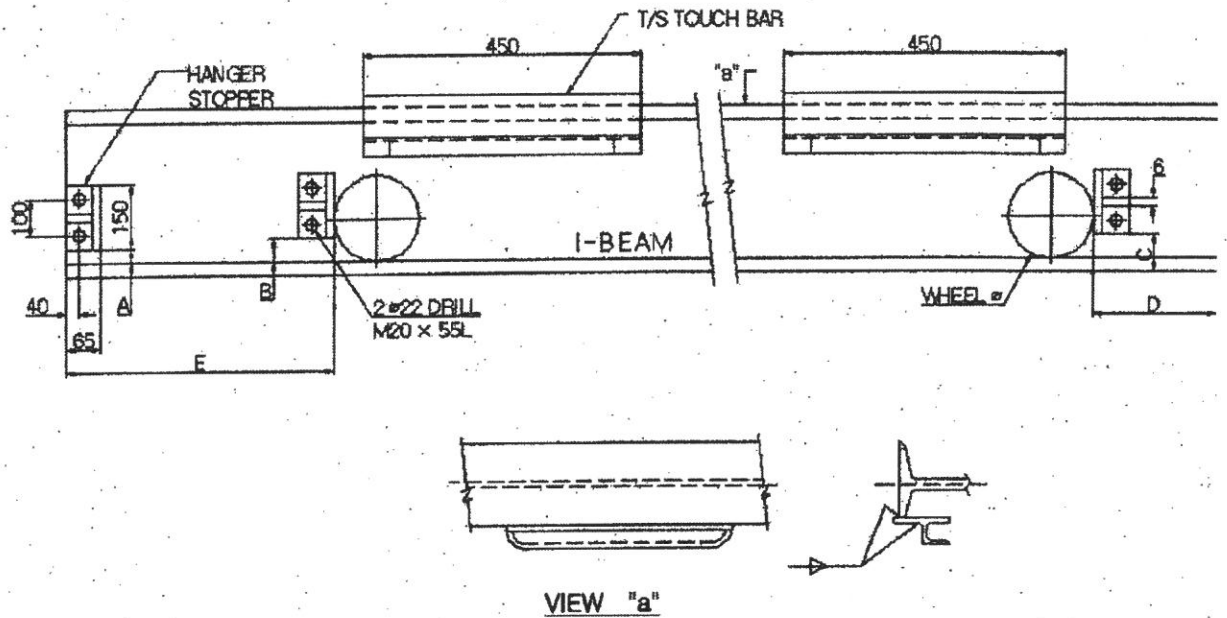
3. 전선의 색상

- 검정색(BLACK) -----> 전원선(POWER)
- 빨강색(RED) -----> 교류제어선(CONTROL)
- 청색(BLUE) -----> 직류제어선
- 노랑색(YELLOW) -----> 외부에서 공급되는 연동장치 제어회로
- 녹색(GREEN) 또는 녹색과 노랑(YELLOW) 혼용 -----> 접지

TITLE				SHEET	
EDSTM-0.5T,1T,1.9T,2T				1/1	
3Phase 220,380,440,460,480V 50/60Hz				REVISION NO	
Load Limiter Setting Data, Circuit Breaker				0	
Safety, Wire Color				DRAWING NO	
DRAWING	CHECKED	REVIEWED	APPROVED	DRAWING NO	
S.T			Y.K	EDSTH010E07	
17.11.21			17.11.21		

DAESAN INoTEC INC.

TRAVERSING STOPPER



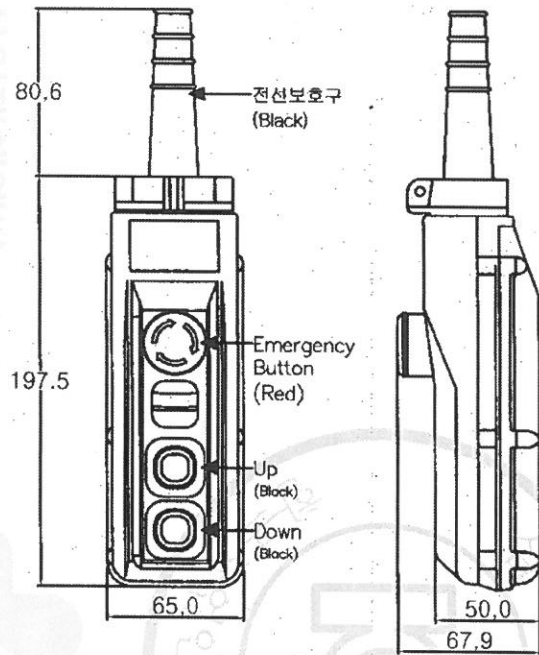
T/S WHEEL DIA									
MODEL	CAPACITY	DIA							
DSTM-0.5S, EDSTM-0.5S DSTM-1S, EDSTM-1S, EDSTM-1T	1TON	ø95							
EDSTM-2T(1.9T)	1.9TON, 2TON	ø110							
DSM-3W, DSHM-3W	3TON	ø125							
DSM-5W, DSHM-5W	5TON	ø140							
			I-BEAM	ANGLE	A	B	C	D	E
DSTM-0.5S, EDSTM-0.5S DSTM-1S, EDSTM-1S, EDSTM-1T	1TON		I-250×125×7.5/12.5 I-200×100×7/10 I-150×75×5/5	L 65 × 6	30	60	30	450	산출방법 E=70+N×60 (N:MAGNIC HANGER갯수)
EDSTM-2T(1.9T)	2TON		I-300×150×10/18 I-250×125×7.5/12.5 I-200×100×7/10		40	70	40	350	
DSM-3W, DSHM-3W	3TON		I-400×150×10/18 I-250×125×7.5/12.5 I-200×100×7/10		45	75	40	300	
DSM-5W, DSHM-5W	5TON		I-400×150×10/18 I-250×125×7.5/12.5 I-600×190×13/25		45	75	40	350	

EDSTM-1.9T I-BEAM CALCULATION SHEET

	I-200x100x7	I-250x125x7.5	I-300x150x10
SPAN L=CM	340	540	850
$I_x(\text{Cm}^4)$	2170	5180	12700
$I_y(\text{Cm}^4)$	138	337	886
$Z_x(\text{Cm}^3)$	217	414	849
$Z_y(\text{Cm}^3)$	28	54	118
$\sigma 1(\text{Kg. Cm}^2)$	1042.71	890.04	674.4
$\delta 2(\text{Cm})$	0.374	0.628	0.999
δ /L	1/885.085	1/809.552	1/815.226



※ 외형도



※ 사양

정격전류	6 A 250 V.a.c.
접연저항	10 A 250 V.a.c. 비상용 스위치 (푸쉬 록-턴 리셋)
내전압	100 MΩ (500 V.a.c.)
내전압	2000 V.a.c. 1분간 (충전부-비충전부 사이)
보호구조	IP-65
재질	케이스: 고충격용 ABS수지 버튼 및 전선보호구: 특수고무
진동 (내구)	10 - 55 Hz 복진폭 1.0 mm
충격 (내구)	500 m/s ²
사용주위 온도	-10 ~ 45 °C
사용주위 습도	45 ~ 85 % R.H.

※ 접점구성

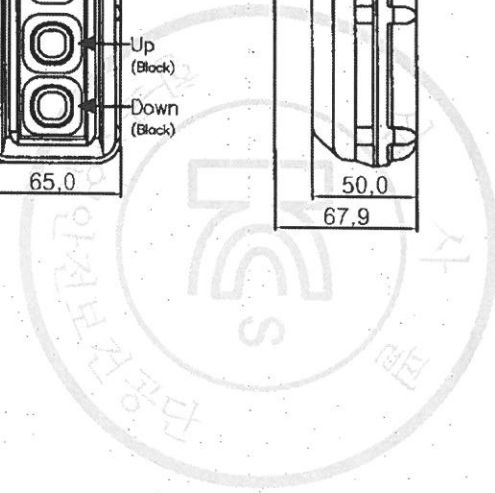
비상용 스위치	1단 스위치	2단 스위치

TITLE HOIST SWITCH HY-1024SB 2 POINT				SHEET 1/1
				REVISION NO 0
DRAWING S.T 16.12.27	CHECKED	REVIEWED	APPROVED Y.K 16.12.27	DR./WING NO HY-1024SB
DAESAN INoTEC INC.				

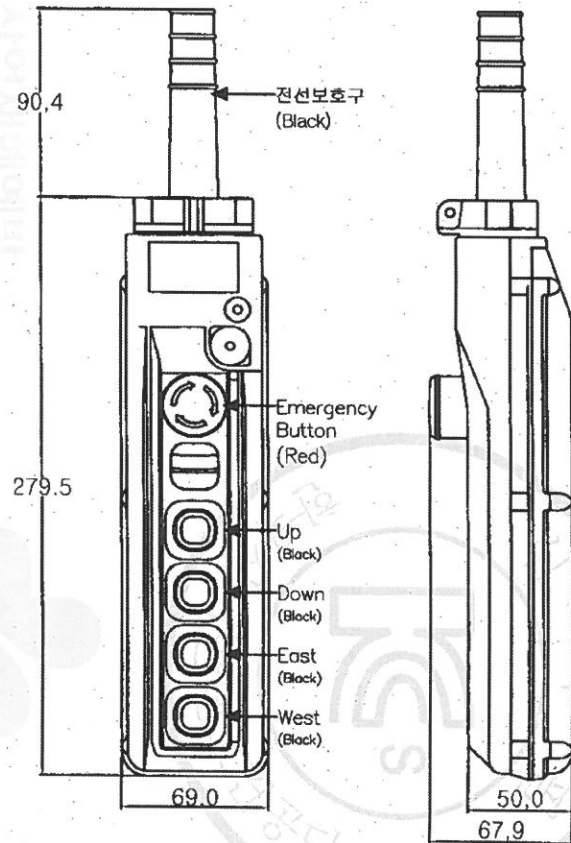
제본 및 배포금지

192.168.0.54 / 2018-03-27 09:08:03

KOREAN OCCUPATIONAL SAFETY & HEALTH AGENCY
안전보건공단



※ 외형도



※ 사양

정격전류	6 A 250 V a.c.
절연저항	10 A 250 V a.c. 비상용 스위치 (푸쉬 록-턴 리셋)
내전압	100 MΩ (500 V a.c.)
보호구조	2000 V a.c. 1분간 (충전부-비충전부 사이)
재질	IP-65
진동 (내구)	케이스 : 고충격용 ABS수지
충격 (내구)	내트 및 전선보호구 : 특수고무
사용주위 온도	10 ~ 55 Hz 복진폭 1.0 mm
사용주위 습도	500 m/s ²
	-10 ~ 45 °C
	45 ~ 85 % R.H.

※ 접점구성

비상용 스위치	1단 스위치	2단 스위치

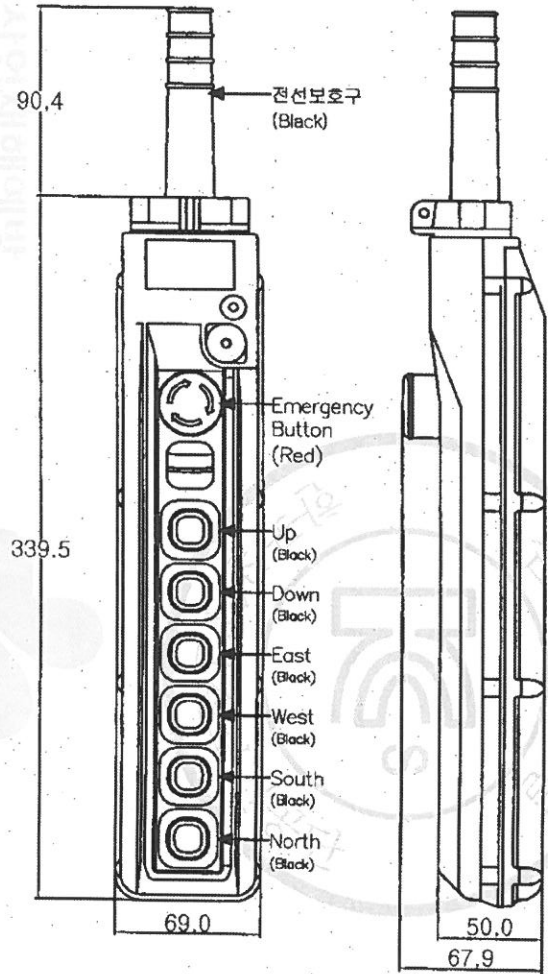
TITLE				SHEET
HOIST SWITCH				1/1
HY-1024SBB				REVISION NO
4 POINT				0
DRAWING	CHECKED	REVIEWED	APPROVED	DRAWING NO
S.T			Y.K	HY-1024SBB
16.12.27			16.12.27	
DAESAN INoTEC INC.				

물품명 및 배품금지

192, 168 0.54 / 2016-03-27 09:08:05

KOREA OCCUPATIONAL SAFETY & HEALTH AGENCY
안전보건공단

※ 외형도



※ 사양

정격 전류	6 A 250 V.a.c.
결연 저항	10 A 250 V.a.c. 비상용 스위치 (푸쉬 록-턴 리셋)
내전압	100 MVA (500 V.a.c.)
보호구조	2000 V.a.c. 1분간 (충전부-비충전부 사이)
재질	IP-65
진동 (내구)	케이스 : 고충격용 ABS수지
충격 (내구)	버튼 및 전선보호구 : 특수고무
사용주위 온도	10 - 55 Hz 복진폭 1.0 mm
사용주위 습도	500 ㎫
	-10 ~ 45 °C
	45 ~ 85 % R.H.

※ 접점구성

비상용 스위치	1단 스위치	2단 스위치

TITLE HOIST SWITCH HY-1024SBBB 6 POINT				SHEET 1/1
				REVISION NO 0
DRAWING S.T	CHECKED	REVIEWED	APPROVED Y.K	DRAWING NO HY-1024SBBB
16.12.27			16.12.27	

DAESAN INoTEC INC.

물품명 및 배품금지

192 168 0.54 / 2018-03-27 03:08:05

제 2012-BJ-0008 호



안 전 인 증 서

정호엔지니어링

경기도 광명시 노동사동 440-5

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

품 목

양중기용 과부하방지장치

형식·모델/용량·등급·등급/인증번호

형식·모델	용량·등급	인증번호
JDLS-70	J-2	12-AV2BJ-0008

인 증 기 준

방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

인 증 조 건

아래 주소에서 생산되는 제품에 한함.
정호엔지니어링, 경기도 광명시 노동사동 440-5

2012년 06월 11일

한국산업안전보건공단 이사장



SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	DAESAN INOTEC INC.
3. MOTOR MODEL NO.	DSAI - 1S - 220
4. RATED POWER	1.8 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	220 V 60 HZ
6. MOTOR TYPE	SQUIRREL CAGE ROTOR YPE
7. RATING	30 MIN
8. LOCATION	IN-DOOR , OUT-DOOR
9. INSULATION CLASS	B
10. DESING TEMPERATURE RISE (BY RESISTANCE)	80°C
11. FULL LOAD SPEED	1740 RPM
12. FULL LOAD CURRENT	9.4 A
13. STARTING CURRENT AT RATED VOLTAGE	47.0 A
14. MINIMUM STATING VOLTAGE	198 V
15. EFFICIENCY AT 100% RAGED LOAD	72.0%
16. POWER FACTOR AT 100% RATED LOAD	70.0%
17. STARTING TORQUE	238%
18. TYPE OF ENCLOSURE	전폐형
19. TYPE OF BEARING	PL : 6008DD OPL : 6207ZZ
20. MOUNTING	VERTICAL
21. MAXIMUM AMBIENT TEMPURE	40°C
22. BEARING LUBRICATION	GREASE
23. STARTING METHOD	FULL VOLTAGE

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	DAESAN INOTEC INC.
3. MOTOR MODEL NO.	DSAI - 1S - 380
4. RATED POWER	1.8 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	380 V 60 HZ
6. MOTOR TYPE	SQUIRREL CAGE ROTOR YPE
7. RATING	30 MIN
8. LOCATION	IN-DOOR , OUT-DOOR
9. INSULATION CLASS	B
10. DESING TEMPERATURE RISE (BY RESISTANCE)	80°C
11. FULL LOAD SPEED	1740 RPM
12. FULL LOAD CURRENT	5.5 A
13. STARTING CURRENT AT RATED VOLTAGE	26.8 A
14. MINIMUM STATING VOLTAGE	342 V
15. EFFICIENCY AT 100% RAGED LOAD	72.5%
16. POWER FACTOR AT 100% RATED LOAD	68.8%
17. STARTING TORQUE	243%
18. TYPE OF ENCLOSURE	전폐형
19. TYPE OF BEARING	PL : 6008DD OPL : 6207ZZ
20. MOUNTING	VERTICAL
21. MAXIMUM AMBIENT TEMPURE	40°C
22. BEARING LUBRICATION	GREASE
23. STARTING METHOD	FULL VOLTAGE

SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	DAESAN INOTEC INC.
3. MOTOR MODEL NO.	DSAI - 1S - 440
4. RATED POWER	1.8 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	440 V 60 HZ
6. MOTOR TYPE	SQUIRREL CAGE ROTOR YPE
7. RATING	30 MIN
8. LOCATION	IN-DOOR , OUT-DOOR
9. INSULATION CLASS	B
10. DESING TEMPERATURE RISE (BY RESISTANCE)	80°C
11. FULL LOAD SPEED	1740 RPM
12. FULL LOAD CURRENT	4.7 A
13. STARTING CURRENT AT RATED VOLTAGE	22.8 A
14. MINIMUM STATING VOLTAGE	396 V
15. EFFICIENCY AT 100% RAGED LOAD	71.9%
16. POWER FACTOR AT 100% RATED LOAD	69.8%
17. STARTING TORQUE	245%
18. TYPE OF ENCLOSURE	전폐형
19. TYPE OF BEARING	PL : 6008DD OPL : 6207ZZ
20. MOUNTING	VERTICAL
21. MAXIMUM AMBIENT TEMPURE	40°C
22. BEARING LUBRICATION	GREASE
23. STARTING METHOD	FULL VOLTAGE

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	DAESAN INOTEC INC.
3. MOTOR MODEL NO.	MT - 1 - 220
4. RATED POWER	0.4 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	220 V 60 HZ
6. MOTOR TYPE	SQUIRREL CAGE ROTOR YPE
7. RATING	30 MIN
8. LOCATION	IN-DOOR
9. INSULATION CLASS	B
10. DESING TEMPERATURE RISE (BY RESISTANCE)	100°C
11. FULL LOAD SPEED	1750 RPM
12. FULL LOAD CURRENT	3.3 A
13. STARTING CURRENT AT RATED VOLTAGE	13.9 A
14. MINIMUM STATING VOLTAGE	198V
15. EFFICIENCY AT 100% RAGED LOAD	57.5%
16. POWER FACTOR AT 100% RATED LOAD	54.5%
17. STARTING TORQUE	249%
18. TYPE OF ENCLOSURE	전폐형
19. TYPE OF BEARING	PL : 6202DD OPL : 6204ZZ
20. MOUNTING	VERTICAL
21. MAXIMUM AMBIENT TEMPURE	40°C
22. BEARING LUBRICATION	GREASE
23. STARTING METHOD	FULL VOLTAGE

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	DAESAN INOTEC INC.
3. MOTOR MODEL NO.	MT - 1 - 380
4. RATED POWER	0.4 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	380 V 60 HZ
6. MOTOR TYPE	SQUIRREL CAGE ROTOR YPE
7. RATING	30 MIN
8. LOCATION	IN-DOOR
9. INSULATION CLASS	B
10. DESING TEMPERATURE RISE (BY RESISTANCE)	100°C
11. FULL LOAD SPEED	1750 RPM
12. FULL LOAD CURRENT	1.7 A
13. STARTING CURRENT AT RATED VOLTAGE	9.2 A
14. MINIMUM STATING VOLTAGE	342V
15. EFFICIENCY AT 100% RAGED LOAD	53.0%
16. POWER FACTOR AT 100% RATED LOAD	51.0%
17. STARTING TORQUE	249%
18. TYPE OF ENCLOSURE	전폐형
19. TYPE OF BEARING	PL : 6202DD OPL : 6204ZZ
20. MOUNTING	VERTICAL
21. MAXIMUM AMBIENT TEMPURE	40°C
22. BEARING LUBRICATION	GREASE
23. STARTING METHOD	FULL VOLTAGE

SCHEDULE OF TECHNICAL DATA

1. SERVICE	TRAVERSING
2. MANUFACTURE	DAESAN INOTEC INC.
3. MOTOR MODEL NO.	MT - 1 - 440
4. RATED POWER	0.4 KW x 4 P
5. RATED VOLTAGE AND FREQUENCY	440 V 60 HZ
6. MOTOR TYPE	SQUIRREL CAGE ROTOR YPE
7. RATING	30 MIN
8. LOCATION	IN-DOOR
9. INSULATION CLASS	B
10. DESING TEMPERATURE RISE (BY RESISTANCE)	100°C
11. FULL LOAD SPEED	1150 RPM
12. FULL LOAD CURRENT	1.5 A
13. STARTING CURRENT AT RATED VOLTAGE	9.2 A
14. MINIMUM STATING VOLTAGE	396V
15. EFFICIENCY AT 100% RAGED LOAD	55.3%
16. POWER FACTOR AT 100% RATED LOAD	57.2%
17. STARTING TORQUE	249%
18. TYPE OF ENCLOSURE	전폐형
19. TYPE OF BEARING	PL : 6202DD OPL : 6204ZZ
20. MOUNTING	VERTICAL
21. MAXIMUM AMBIENT TEMPURE	40°C
22. BEARING LUBRICATION	GREASE
23. STARTING METHOD	FULL VOLTAGE

FEC CHAIN CORPORATION TEL:+81-53-425-4116 , 2162	337 KANAORI-CHO , HAMAMATSU CITY , SHIZUOKA PRE.435-0026 JAPAN FAX:+81-53-425-5122
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TEST CERTIFICATE

Distributor:	code #: 1080	distributor's name: ASAO & CO., LTD
Coustermer:	coustermer's name:	

Article name: (Application)	Load chain for electric chain hoist
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Spec. standard	<input type="checkbox"/> DIN EN 818-7:2002 , <input type="checkbox"/> JIS B 8812:1999 <input type="checkbox"/> ISO 3077 , <input checked="" type="checkbox"/> FEC
----------------	--

Material spec.:	SAE15B24(Mn-B steel)
-----------------	----------------------

Finish:	<input checked="" type="checkbox"/> temper-colored, <input type="checkbox"/> zinc-plated, <input type="checkbox"/> coated() <input type="checkbox"/> zinc-phosphated, <input type="checkbox"/> manganese-phosphated <input checked="" type="checkbox"/> oiled, <input type="checkbox"/> o-oiled
---------	--

Stamping:	<input type="checkbox"/> FEC standard, <input checked="" type="checkbox"/> coustermer's request → DS, JAPAN , (Lot #), FEC#
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Product code#:	FCD07121
description:	φ7.1*P21
quality type	G80/ type-DAT

Dimention:			Result
Nominal diameter(dn)	[mm]	7.1 +0.0/-0.3	OK
Internal width, min.:	[mm]	8.8	
external width, max.:	[mm]	23.6	
Nominal pitch 1 t	[mm]	21.0 +0.3/-0.1	
5 t	[mm]	-	
11 t	[mm]	231.0 +0.3/-0.7	
Diameter at the weld(ds), max.:	[mm]	7.6	

Mechanical properties:			Result
Working load limit(WLL), max.:	[kg]	1500	OK
(drive mechanism g	-	-	
Manufacturing proof force(MPF), min.:	[KN]	40	
Stress at min. MPF	-	-	
Guranteed breaking force(BF), min.:	[KN]	63	
Stress at min. BF	-	-	
Total ultimate elongation(A), min.:	[%]	10	
Surface hardness/HV3, min.:	[-]	500	
/HV5, min.:	[-]	-	
Hardness /HRC, min.:	[-]	-	
Case depth, min.:	[mm]	0.14	
Bend deflection(f), min.:	[mm]	-	
Fatigue resistance, min.:	[cycle]	-	

Packing:		
Weight per meter:	[kg/m]	1.1
Length 1	[meter]	200m-15/pcs
2	[meter]	-
Packing	-	Steel barrel

I hereby certify above all is true.

K. Sugimura
 KAZUYUKI SUGIMURA
 Quality Assurance Dept.,
 Chief Inspector

issued date: March 29, 2010

[Note]

