



제 2013 - 58551 호

# 안 전 인 증 서

( 사업장명 )

(주)대산이노텍

( 소재지 )

(314-821)충남 공주시 정안면 사현리523

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

\_\_\_\_\_ 품 목 \_\_\_\_\_  
호이스트

\_\_\_\_\_ 형식,모델(용량,등급)/인증번호 \_\_\_\_\_  
DSM-2.8W (2.8Ton) /13-AG2AC-01683

\_\_\_\_\_ 인 증 기 준 \_\_\_\_\_  
고용노동부 고시 제2012 - 33호 ( 위험기계,기구 의무안전인증 고시 )

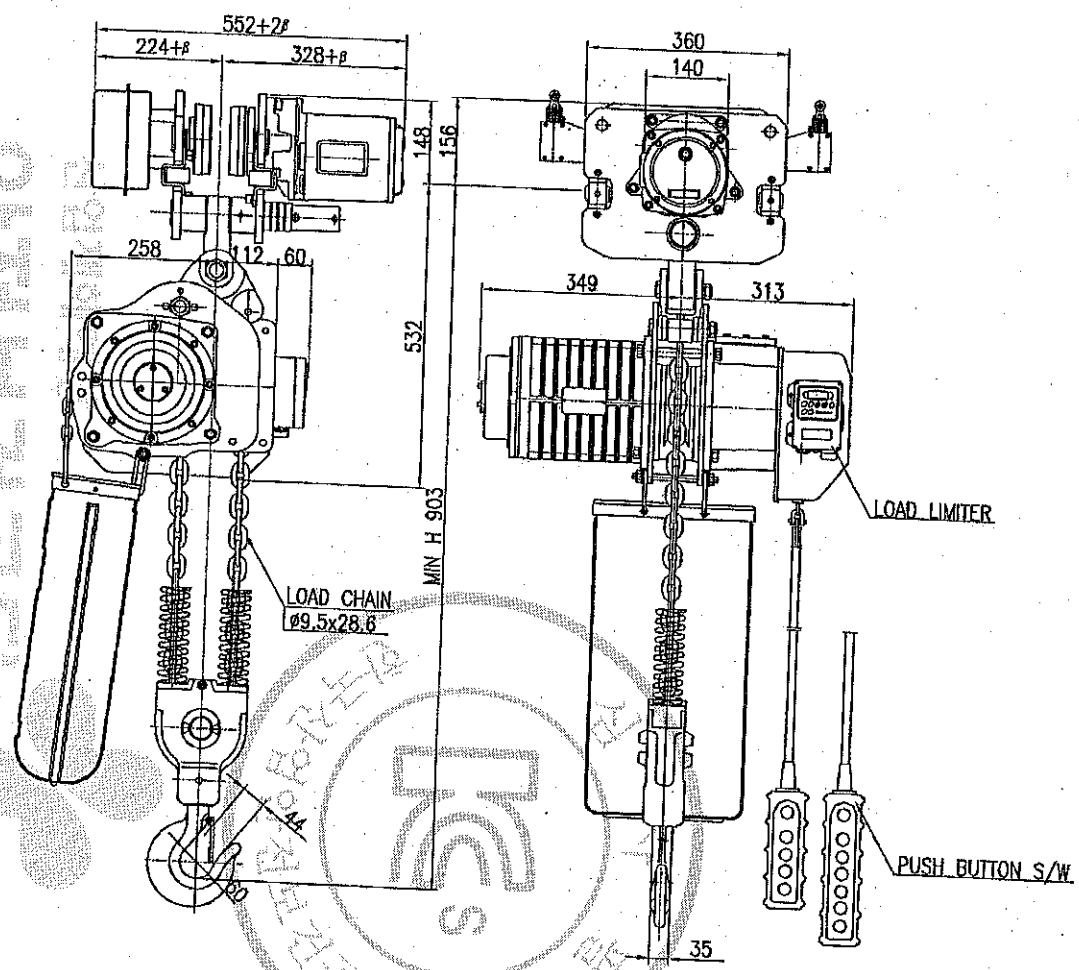
\_\_\_\_\_ 인 증 조 건 \_\_\_\_\_  
인증유효기간 :

2013년 05월 31일

한국산업안전보건공단이사장



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



SPECIFICATION		
HOISTING LOAD	2.8	TON
TESTING LOAD	3.8	TON
LIFTING HEIGHT	50	M
HOISTING	SPEED	4.35/5.15M/MIN
	MOTOR	3.5KW x 4P x 1 SET
TRAVERSING	SPEED	14/21 M/MIN
	MOTOR	0.75 KW x 6/4P x 1 SET
POWER SUPPLY	AC 220,380,440. x 3ø x 60 Hz	
OPERATING METHOD	P.B type ON . FL	
WEIGHT	409 KG	
I-BEAM SIZE	100-150 MM	

**NOTE**

- \* β 는 BEAM 변동값임
- \* ROLLER DIA : ø125
- \* LIMIT SWITCH : OPTION
- \* 본 도면은 1-BEAM 100MM 기준임.

TITLE DSM-2.8W 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	DSM28S001	
2012.06.13	-	2012.06.21	2012.10.31		
DAESAN INOTEC				IND. CO., LTD.	

도면에 지시되지 않은 일반공차					
차수	3-6	6-30	30-120	120-315	315-1000
가공할 산	±0.1	±0.2	±0.3	±0.5	±0.8
구멍간 거리	±0.1	±0.2	±0.3	±0.5	±0.8

REV.NO	DATE	REVISION DESCRIPTION	DRAWN	CHECKED	APPROVED

물범목재 및 배포금재

불법복제 및 배포금지

TECHNICAL SPECIFICATION

DESCRIPTION		2.8 TON MONORAIL HOIST		
TYPE		DSM-2.8W MONORAIL TYPE		
HOISTING LOAD		2.8 TON		
TESTING LOAD		3.5 TON		
LIFT		50 M		
SPEED & MOTOR	SPEED			
	HOISTING	60 Hz	5.15	3.5KW × 4P
		50 Hz	4.35	
	TRAVERSING	60 Hz	14/20	0.75KW × 4P/6P
		50 Hz	11/14	
BRAKE SYSTEM	HOISTING	D.C MAGNET DISC BRAKE		
	TRAVERSING	MECHANICAL BRAKE		
ELECTRIC SPECIFICATION	POWER SOURCE	AC 3Ø 60/50Hz 220V, 380V, 440V, 480V.		
	CONTROL SOURCE	AC 1Ø 50/60Hz 110V		
	LIMIT SWITCH	TWO STEP LIMIT SWITCH		
	OVER LOAD LIMITER	ELECTRICAL TYPE.		
	EM. STOP DEVICE	EMERGENCY STOP BUTTON		
LOAD CHAIN	Ø 9.5 x 28.6			
TRAVERSING POWER SYSTEM	TROLLEY BAR OR FESTOON TYPE			
MAX AMBIENT TEMPERATURE	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	MUN SELL NO EX8816D YELLOW			

산업기계연방  
안전보건공단

KOREA INTERNATIONAL SAFETY & QUALITY AGENCY

2013-03-11 / 2013-05-31 10:18:05

제 2012-BJ-0009 호



# 안 전 인 증 서

정호엔지니어링

경기도 광명시 노동사동 440-5

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

\_\_\_\_\_ 품 목 \_\_\_\_\_  
양중기용 과부하방지장치

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

\_\_\_\_\_ 인 증 기 준 \_\_\_\_\_  
방호장치 의무안전인증 고시(고용노동부고시 제2010-36호)

\_\_\_\_\_ 인 증 조 건 \_\_\_\_\_  
아래 주소에서 생산되는 제품에 한함.  
정호엔지니어링, 경기도 광명시 노동사동 440-5

2012년 06월 11일

한국산업안전보건공단 이사장



# FEC CHAIN

CORPORATION

TEL:+81-53-425-4116 , 2162

337 KANAORI-CHO , HAMAMATSU CITY ,

SHIZUOKA PRE.435-0026 JAPAN

FAX:+81-53-425-5122

## TEST CERTIFICATE

Distributor:	code #: 1080	distributor's name: ASAO & CO., LTD
Couustomer:		couustomer's name:
Article name: (Application)	Load chain for electric chain hoist	
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"/> no-oiled	
Stamping:	<input type="checkbox"/> FEC standard, <input checked="" type="checkbox"/> couustomer's request → DS, JAPAN , (Lot #), FEC#	

Product code#:	FCD09528
description:	φ9.5*P28.6
quality type	G80/ type-DAT

			Result
<b>Dimention:</b>			
Nominal diameter( dn )	[mm]	9.5 +0.3/-0.3	Good
Internal width,min.:	[mm]	11.7	Good
external width, max.:	[mm]	31.5	Good
Nominal pitch 1 t	[mm]	28.5 +0.36/-0.2	Good
5 t	[mm]	-	-
11 t	[mm]	313.3 +0/-1.5	Good
Diameter at the weld(ds), max.:	[mm]	10.5	Good

<b>Mechanical properties:</b>			
Working load limit(WLL), max.:	[ kg ]	2200	-
	(drive mechanism g	-	-
Manufacturing proof force(MPF), min.:	[ KN ]	72	Good
Stress at min. MPF		-	-
Guranteed breaking force(BF), min.:	[ KN ]	113	Good
Stress at min. BF		-	-
Total ultimate elongation(A), min.:	[ % ]	10	Good
Surface hardness/HV3, min.:	[ - ]	500	Good
/HV5, min.:	[ - ]	-	-
Hardness /HRC, min.:	[ - ]	-	-
Case depth,min.:	[ mm ]	0.19	Good
Bend deflection( f ),min.:	[ mm ]	-	-
Fatigue resistance, min.:	[ cycle ]	-	-

<b>Packing:</b>			
Weight per meter:	[kg/m]	1.96	
Length 1	[meter]	100m-10/pc	
2	[meter]	-	
Packing	-	Steel barrel	

I hereby certify above all is true.

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

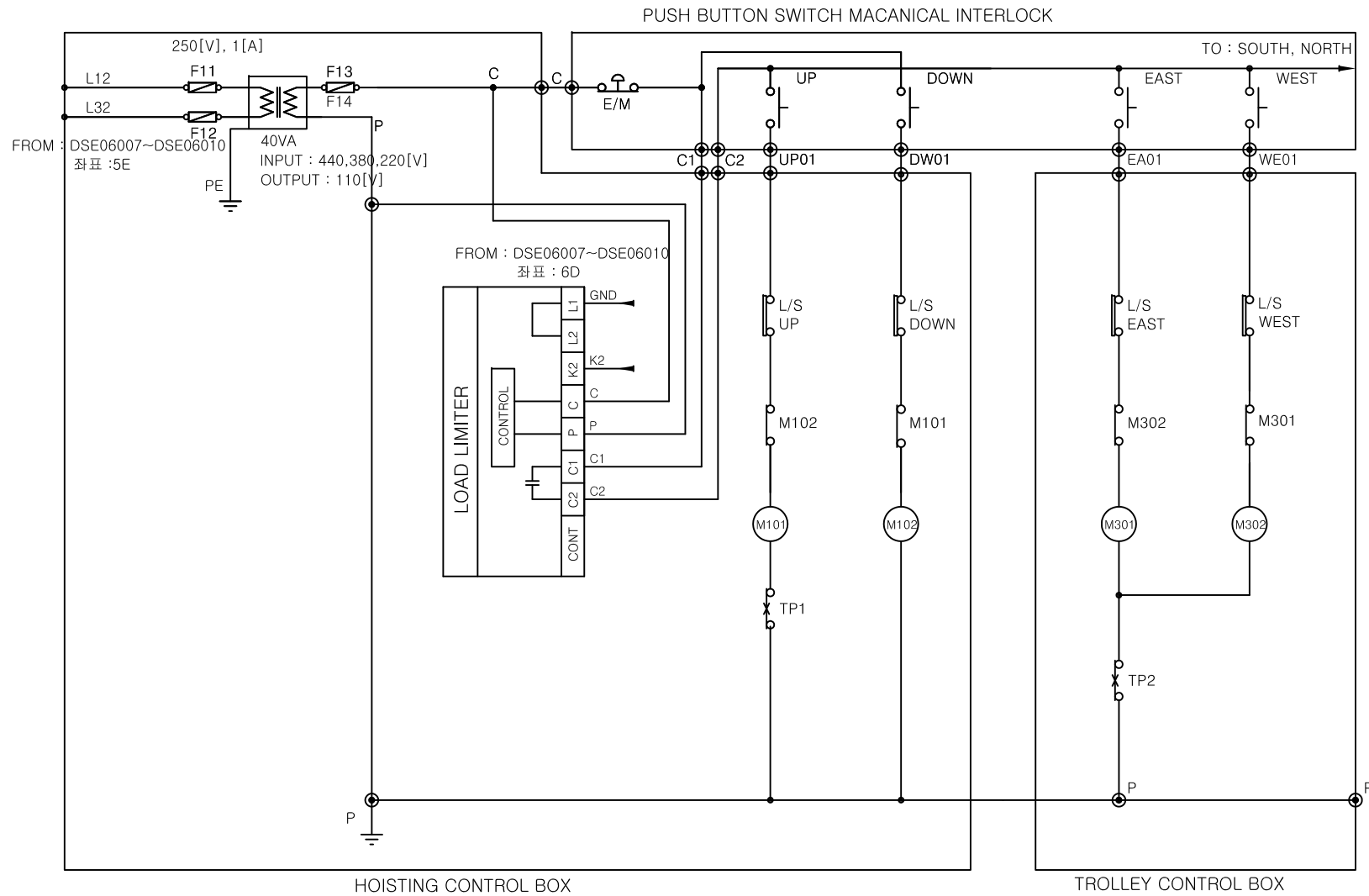
issued date: March 29,2010

[Note]





NO	Commodity	Capacity	Q'TY	Model No.	Maker



-NOTE-  
1. CONNECTION WIRE  
: 1.5SQ(적색)

TITLE CONTROL CIRCUIT DIAGRAM				PROJECTION	
WORD NO		WORK NAME			
		DSM - 1S.1.5S.1.9S.1.9W.2W.2S.2.5S.3W.5W			
		220.380.440[V]			
DRAWN	CHECKED	REVIEWED	APPROVED	DRAWING NO	
Y.D	Y.C		Y.K	DSE06012	
10.09.02	10.09.02		10.09.03		
<b>DAESAN INoTEC IND. CO., LTD.</b>					

REV.NO	DATE	REVISION DESCRIPTION	DRAWN	CHECKED	APPROVED









## SCHEDULE OF TECHNICAL DATA

1. SERVICE	HOISTING
2. MANUFACTURE	DAESAN INOTEC INC.
3. MOTOR MODEL NO.	DSAI - 1.5S - 220
4. RATED POWER	3.5 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)	80°C
11. FULL LOAD SPEED	1740 RPM
12. FULL LOAD CURRENT	17.0 A
13. STARTING CURRENT AT RATED VOLTAGE	76.5 A
14. MINIMUM STATING VOLTAGE	198 V
15. EFFICIENCY AT 100% RAGED LOAD	75.2%
16. POWER FACTOR AT 100% RATED LOAD	79.5%
17. STARTING TORQUE	238%
18. TYPE OF ENCLOSURE	전폐형
19. TYPE OF BEARING	PL : 6205DD OPL : 6008ZZ
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 - 1.5S - 380
4. RATED POWER	3.5 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)	80°C
11. FULL LOAD SPEED	1740 RPM
12. FULL LOAD CURRENT	9.1 A
13. STARTING CURRENT AT RATED VOLTAGE	41.2 A
14. MINIMUM STATING VOLTAGE	342 V
15. EFFICIENCY AT 100% RAGED LOAD	75.2%
16. POWER FACTOR AT 100% RATED LOAD	82.0%
17. STARTING TORQUE	233%
18. TYPE OF ENCLOSURE	전폐형
19. TYPE OF BEARING	PL : 6205DD OPL : 6008ZZ
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 - 1.5S - 440
4. RATED POWER	3.5 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)	80°C
11. FULL LOAD SPEED	1740 RPM
12. FULL LOAD CURRENT	7.9 A
13. STARTING CURRENT AT RATED VOLTAGE	38.8 A
14. MINIMUM STATING VOLTAGE	396 V
15. EFFICIENCY AT 100% RAGED LOAD	72.4%
16. POWER FACTOR AT 100% RATED LOAD	76.8%
17. STARTING TORQUE	243%
18. TYPE OF ENCLOSURE	전폐형
19. TYPE OF BEARING	PL : 6205DD OPL : 6008ZZ
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 - 3 - 220
4. RATED POWER	0.75 KW x 6 P
5. RATED VOLTAGE AND FREQUENCY	220 V 60 HZ
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. RATING	30 MIN
8. LOCATION	IN-DOOR
9. INSULATION CLASS	B
10. DESING TEMPERATURE RISE (BY RESISTANCE)	100°C
11. FULL LOAD SPEED	1140 RPM
12. FULL LOAD CURRENT	5.1 A
13. STARTING CURRENT AT RATED VOLTAGE	17.9 A
14. MINIMUM STATING VOLTAGE	198V
15. EFFICIENCY AT 100% RAGED LOAD	63.5%
16. POWER FACTOR AT 100% RATED LOAD	61.9%
17. STARTING TORQUE	246%
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 - 3 - 380
4. RATED POWER	0.75 KW x 6 P
5. RATED VOLTAGE AND FREQUENCY	380 V 60 HZ
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. RATING	30 MIN
8. LOCATION	IN-DOOR
9. INSULATION CLASS	B
10. DESING TEMPERATURE RISE (BY RESISTANCE)	100°C
11. FULL LOAD SPEED	1140 RPM
12. FULL LOAD CURRENT	2.5 A
13. STARTING CURRENT AT RATED VOLTAGE	14.5 A
14. MINIMUM STATING VOLTAGE	342V
15. EFFICIENCY AT 100% RAGED LOAD	65.5%
16. POWER FACTOR AT 100% RATED LOAD	61.0%
17. STARTING TORQUE	248%
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

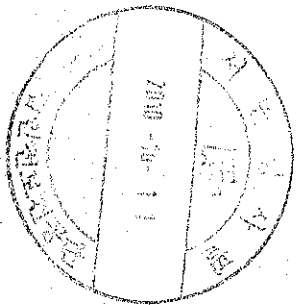
**SCHEDULE OF TECHNICAL DATA**

1. SERVICE	TRAVERSING
2. MANUFACTURE	DAESAN INOTEC INC.
3. MOTOR MODEL NO.	MT - 3 - 440
4. RATED POWER	0.75 KW x 6 P
5. RATED VOLTAGE AND FREQUENCY	440 V 60 HZ
6. MOTOR TYPE	SQUIRREL CAGE ROTOR TYPE
7. RATING	30 MIN
8. LOCATION	IN-DOOR
9. INSULATION CLASS	B
10. DESING TEMPERATURE RISE (BY RESISTANCE)	100°C
11. FULL LOAD SPEED	1140 RPM
12. FULL LOAD CURRENT	2.2 A
13. STARTING CURRENT AT RATED VOLTAGE	12.2 A
14. MINIMUM STATING VOLTAGE	396V
15. EFFICIENCY AT 100% RAGED LOAD	59.5%
16. POWER FACTOR AT 100% RATED LOAD	62.8%
17. STARTING TORQUE	250%
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



I-beam calculation sheets

	I-150x75x5.5/9.5	I-200x100x7/10			I-250x125x7.5/12.5				I-300x150x10/18	I-400x150x10/18		I-600x190x13/25
	1TON	1TON	2(1.9)TON	3TON	1TON	2(1.9)TON	3TON	5TON	2(1.9)TON	3TON	5TON	5TON
SPAN L=Cm	300	400	300	250	600	400	400	250	650	700	400	1000
I <sub>x</sub> (Cm <sup>4</sup> )	819	2170			5180				9480	24100		98400
I <sub>y</sub> (Cm <sup>4</sup> )	57.5	138			337				588	864		2460
z <sub>x</sub> (Cm <sup>3</sup> )	109	217			414				632	1200		3280
z <sub>y</sub> (Cm <sup>3</sup> )	15.3	27.7			53.9				78.4	115		259
S <sub>1</sub> (Kg·Cm <sup>2</sup> )	883	604	863(821)	1124	503	619(589)	683	908	507(484)	588	737	530
δ(Cm)	0.35	0.32	0.26	0.24	0.48	0.26	0.39	0.16	0.48	0.48	0.26	0.59
δ/L	1/854	1/1250	1/1158	1/1030	1/1243	1/1523	1/1025	1/1623	1/1369	1/1470	1/1526	1/1675



## EC Declaration of Conformity

We hereby declare that the following product is in conformity with the essential health and safety requirements of the following EC Directive:

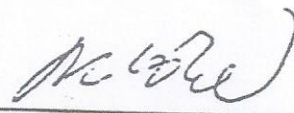
**Product** : AC Motor  
**Model** : DSMI-12  
**Manufacture** : INOTEC IND. CO., LTD  
**Address** : Siwa Ind. Site 3RA 820, Jungwang-Dong 1370-4  
Shheung Gyonggi-Do, Korea  
**Rated input voltage** : AC 220V / 380V / 440V  
**Rated frequency** : 50/60 Hz  
**Rated input current** : 3.3A/1.67A/1.45A  
**Applicable EU Directive** : Low Voltage Directive (73/23/EEC)  
EMC Directive (89/336/EEC)

This product is designed and manufactured in accordance with the following standards


**Applicable standards** : IEC 60034-1: 2004  
IEC 60034-11:2004

**Year of CE Marking** : 2005-12-27

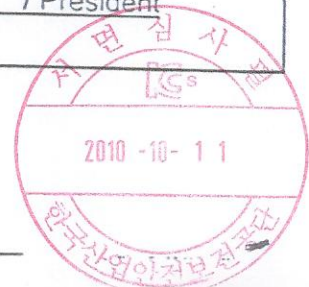
**Authorized signature** :



**Name / Title of signatory** :



/ President



## EC Declaration of Conformity

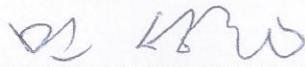
We hereby declare that the following product is in conformity with the essential health and safety requirements of the following EC Directive:

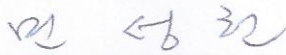
**Product** : AC Motor  
**Model** : DSAI-1.5S  
**Manufacture** : INOTEC IND. CO., LTD  
**Address** : Siwa Ind. Site 3RA 820, Jungwang-Dong 1370-4  
Shheung Gyonggi-Do, Korea  
**Rated input voltage** : AC 220V / 380V / 440V  
**Rated frequency** : 50/60 Hz  
**Rated input current** : 17.0A/9.1A/7.86A  
**Applicable EU Directive** : Low Voltage Directive (73/23/EEC)

This product is designed and manufactured in accordance with the following standards

**Applicable standards** : IEC 60034-1: 2004  
IEC 60034-11:2004

**Year of CE Marking** : 2005-12-27

**Authorized signature** : 

**Name / Title of signatory** : 



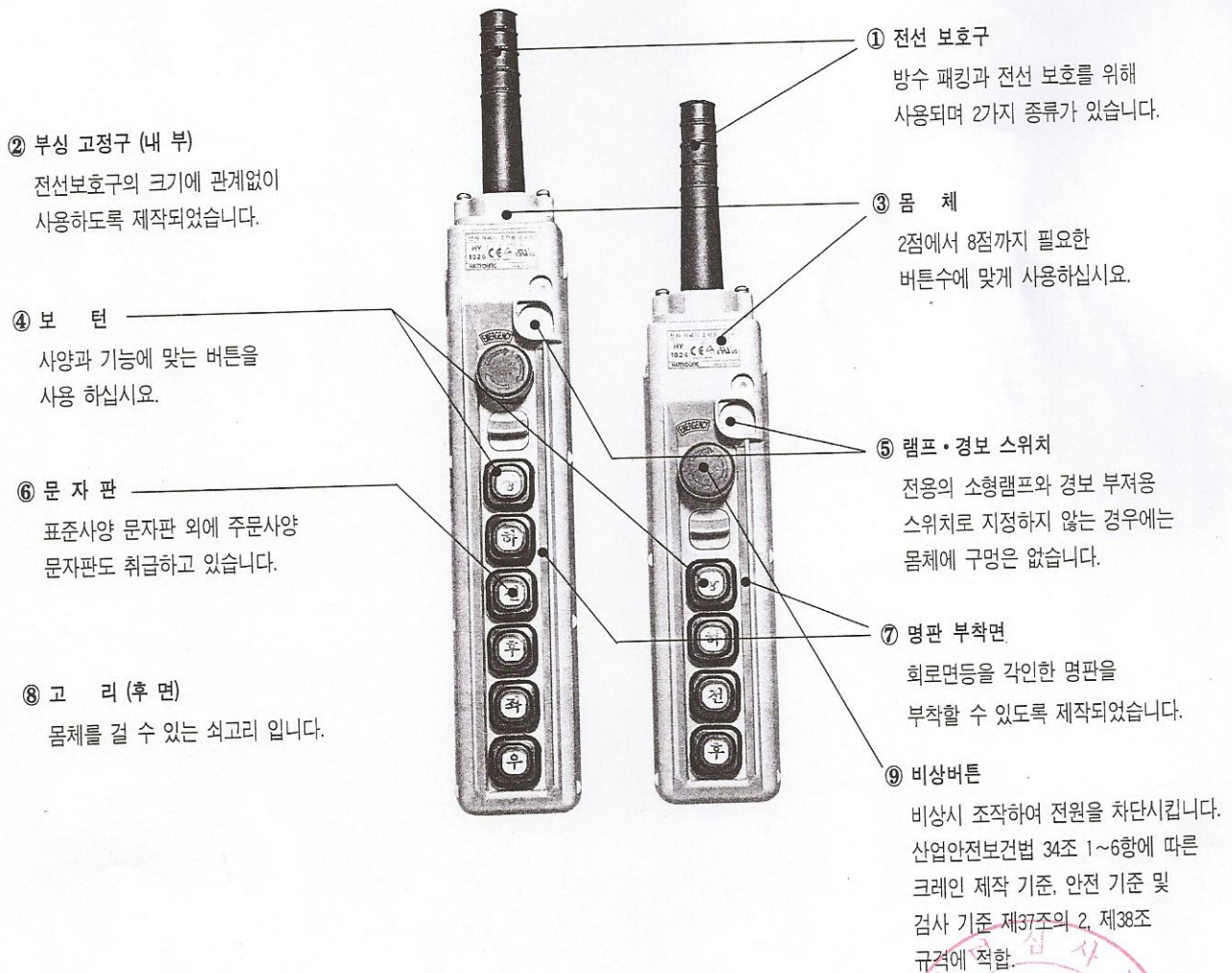
# 호이스트 스위치

## 전자 조작용 개폐 스위치 (HOIST SWITCH)

- 전동 HOIST조작용으로 현수식 놀름버튼형 개폐기입니다.
- 방수형의 구조이며 외곽케이스는 기계적 강도 및 전기적 특성이 우수한 수지를 사용하여 가볍고 견고하게 설계되었습니다.
- 스위치 자체에 전원 단절용으로 주회로를 개폐할 수 있는 구조로 되어 있습니다.
- 접점 부분은 1단(1a)이 기본이며, 전동기 속도 제어용에 필요한 2단 접점이 있어 필요 부분에 부착 사용할 수 있도록 설계되어 있습니다.
- 풍부한 버튼 문자판이 준비되어 있어 용도에 맞추어 선택 사용이 용이합니다.
- 소형 및 경량으로 설계되어 경제적입니다.
- 걸고리가 장착되어 사용이 편리합니다.

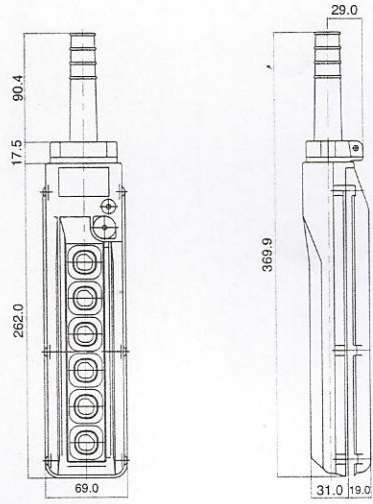
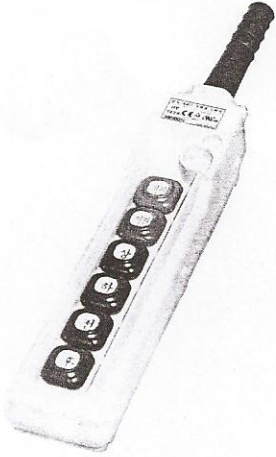


### ■ 구조

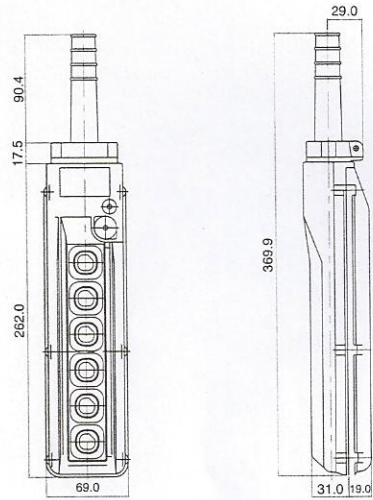
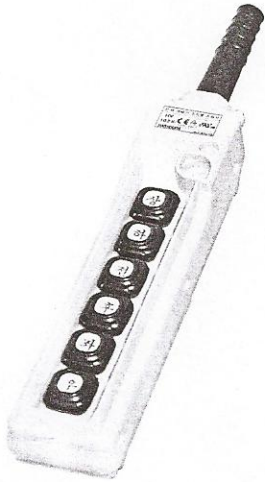


# 호이스트 스위치

HY-1026 ABB



HY-1026 BBB



HY-1026 SBBB

