HD HYUNDAI ELECTRIC

Essential for Today
Potential for Tomorrow

Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION
for
INDUCTION MOTOR

0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

AC INDUCTION MOTOR DATA SHEET

Catalog No.	HES5.5-36-112S/M	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION

Frame Size		112M
Type		PJP
Enclosure(Protection)		Totally Enclosed / IP55
Method of Cooling		IC411(FC)
Rated Frequency		60 Hz
Number of Phases		3
Insulation Class		F
Temp. Rise at full load (by resistance method)		
	at 1.0 S.F	80 deg. C
Motor Location		☐ Indoor ☐ Outdoor
Altitude		Less than 1,000 meter
Relative Humidity		Less than 80 %
Ambient Temp.		40 deg. C (Max.)
Duty Type		Continuous (S1)
Service Factor		1.15
Mounting		B3
Bearing	Type	Anti-Friction
	DE/N-DE	6206ZZC3 / 6206ZZC3
	Lubricant	Grease(Polyrex-EM)
External Thrust		Not applicable
Coupling Method		☑ Direct ☐ V-belt
Shaft Extension		Single
Terminal Box	Main	Cast Iron
	Aux.	No
	Location	Refer to Outline Drawing
Application		
Area classification		Hazardous
Type of Ex-Protection		Class I&II, Division 2
Applicable Standard		IEC, CSA C390

ACCESSORIES

SPARE PARTS

PERFORMANCE DATA

Rated Output		4 kW		5.5 HP
Number of Poles		2		
Rotor Type		Squirrel Cage		
Starting Method*		D.O.L		
Rated Voltage			460 V	230 V
Current	Full Load		6.60 A	13.2 A
	Locked-rotor**		870 %	870 %
Efficiency				
	50% Load	85.5 %		
	75% Load	87.5 %		
	100% Load	88.5 %		
Power Factor(p.u)				
	50% Load	0.710		
	75% Load	0.810		
	100% Load	0.860		
Speed at Full Load		3515 r.p.m		
Torque				
	Full Load	8.02 lb.ft		
	Locked-rotor**	260 %		
	Breakdown**	270 %		
Moment of Inertia (J)				
	Load(Max.)	6.170 lb.ft2		
	Motor	0.166 lb.ft2		
Sound Pressure Level (No-load & mean value at 1m from motor)		72 dB(A)		
Vibration		2.8 mm/s (r.m.s)		
Permissible number of consecutive starts		Cold 3 times		
		Hot 2 times		
Paint	PANTONE	PANTONE279C		

SUBMITTAL DRAWING

Outline Dimension Drawing		\ Motor Weight(Approx.)
B3	LM-T2113B3PTV09	110 lb.

REMARK

1. IE3 (Premium efficiency) according to IEC60034-30-1
2. Inverter Duty @ 1.0 Service Factor & F Temperature rise
   -. 10:1 VT (20:1 VT at 50% load)
   -. 10:1 CT
   -. CHP up to 1.5 times base speed, NEMA MG1 Part31
3. CSA Certification
   -. Class I, Division 2, Group A, B, C & D
   -. Class II, Division 2 Group E, F & G (Group E : up to 200Fr.)
4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.
5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.
6. Temp. code : T3C(160°C) at sine wave

Date	DSND	CHKD	CHKD	APPD
2025-09-19	S.H. LEE	I.K. KIM	R.G. KIM	S.W. KIM

[Note] Others not mentioned in this data sheet shall be in accordance with maker standard.
Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
Inspection and performance test shall be done according to maker standard, if not mentioned.

* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

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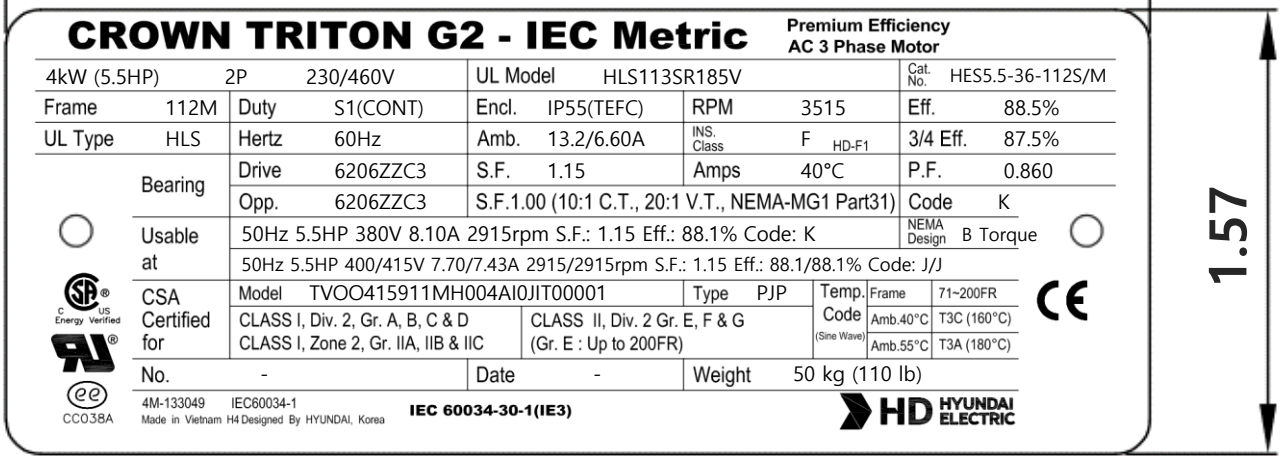
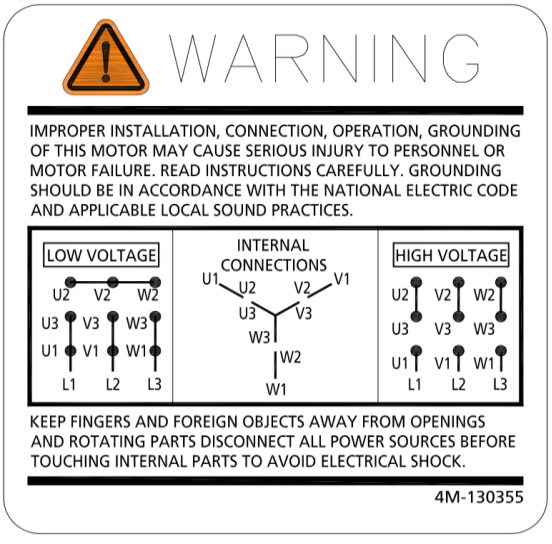
REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

▣ MAIN NAMEPLATE

3.94



▣ WIRING DIAGRAM

D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
	N/A

APPD BY	S.Y.KIM	UNIT	INCH
CHKD BY	I.K.KIM	SCALE	NONE
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle
DSND BY	S.H.LEE	DATE	2024.06.07

HD HYUNDAI ELECTRIC

SUBJECT	CSA Class I, Division2 Severe Duty (IEC, 71-132)	DWG SIZE	A4 (1:1)
TITLE	NAMEPLATE DRAWING		
REF. NO	4M-133049 / 4M-130355	Sheet No.	of
DWG NO	NP-HES5.5-36-112S/M	Revision No.	0

HYUNDAI ELECTRIC

PERFORMANCE CURVE

CURVE NO.

PC-HES5.5-36-112S/M

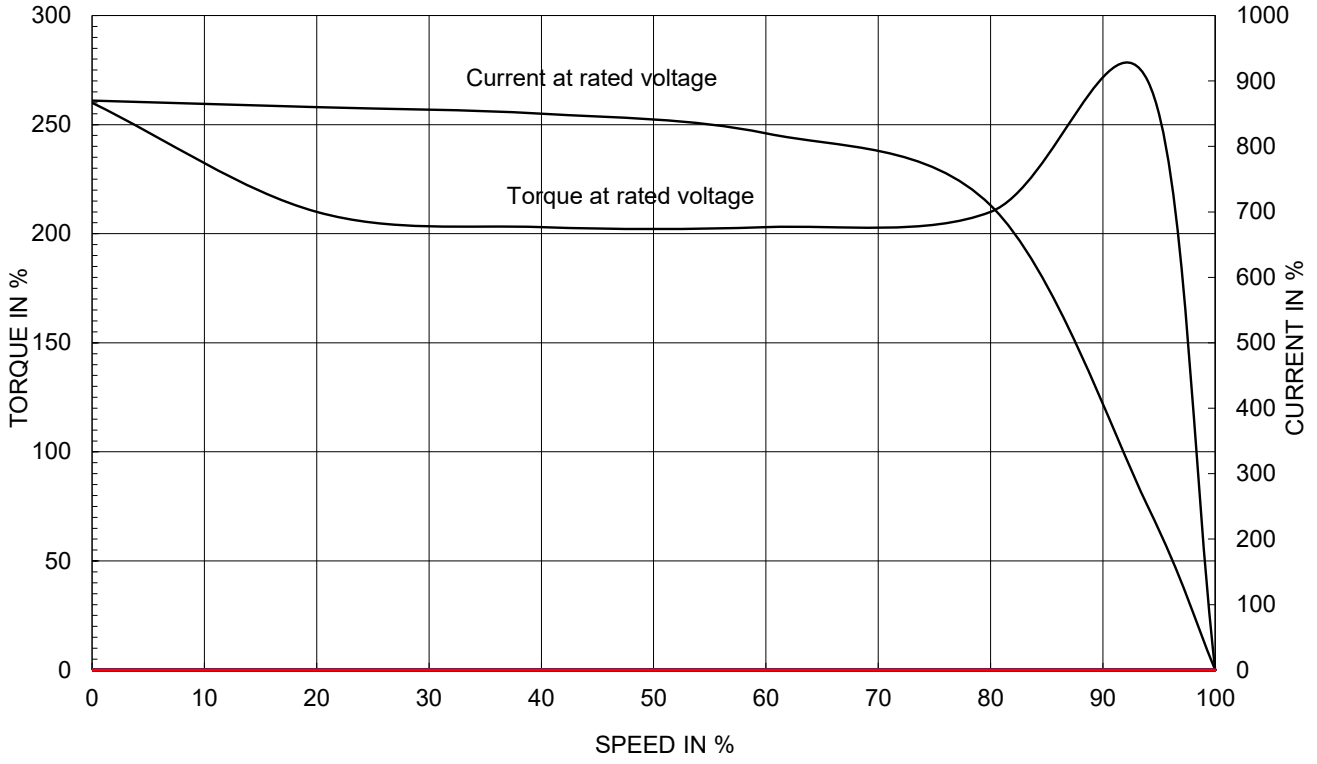
Type :	PJP	
Full Load Torque :	8.02	lb.ft
Load moment of Inertia (J) :	6.170	lb.ft2
Motor moment of Inertia (J) :	0.166	lb.ft2

4kW 5.5HP 2 P 60 Hz

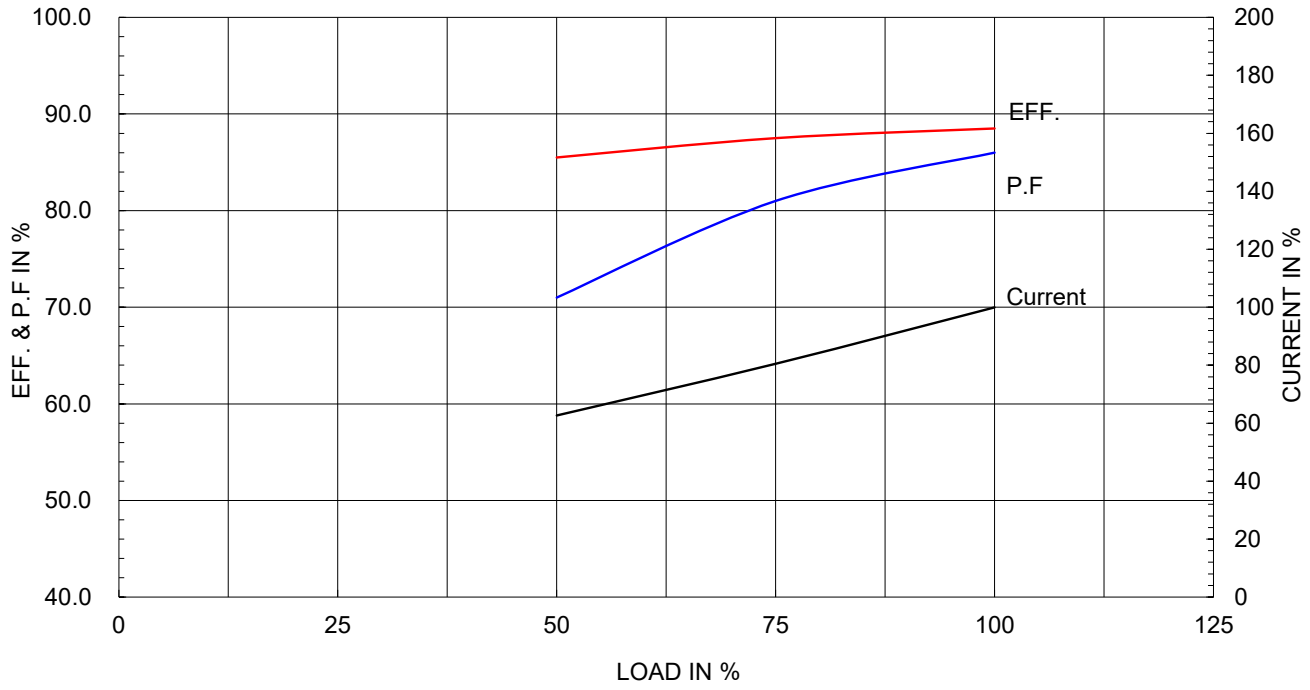
Speed at Full Load : 3515 RPM

Rated Voltage		460V	230V
Full Load Current		6.60A	13.2A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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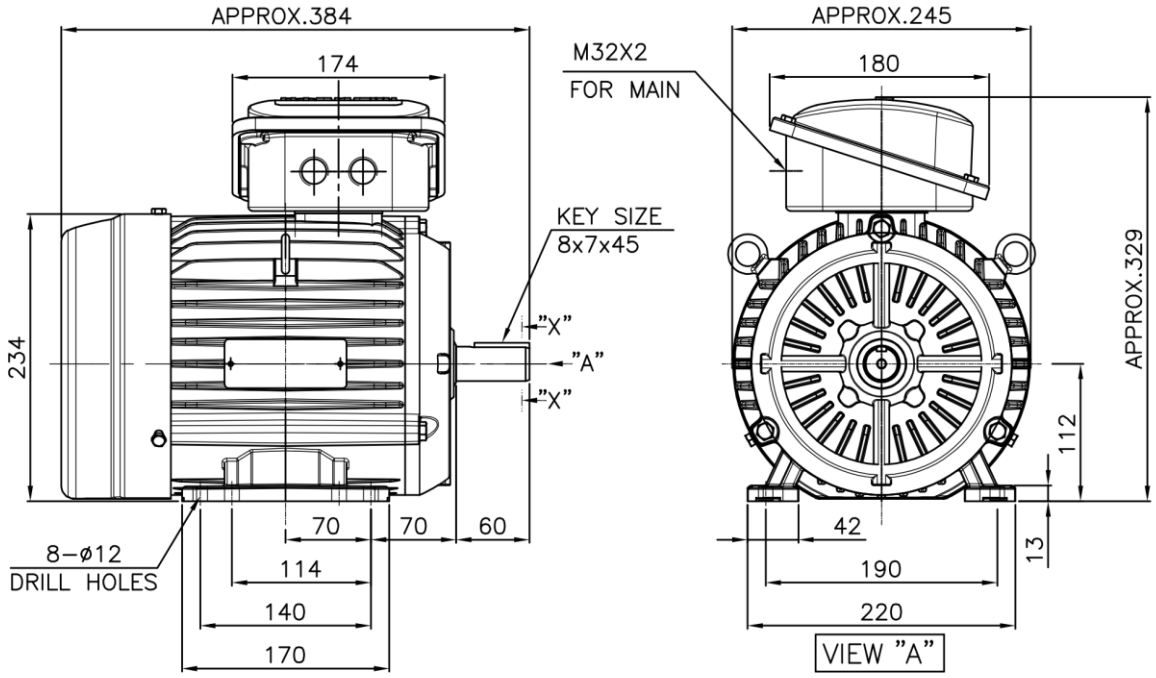
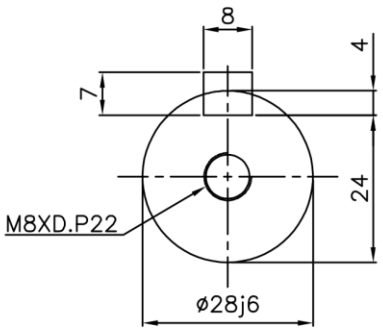
▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



NOTE

1.TOLERANCE :

CENTER HEIGHT	112	$^{0}_{-0.5}$
BASE HOLES	ø12	$^{+0.43}_{0}$
SHAFT DIAMETER	ø28	$^{+0.009}_{-0.004}$
KEYWAY WIDTH	8	$^{0}_{-0.036}$
KEYWAY DEPTH	4	$^{+0.2}_{0}$
KEY WIDTH	8	$^{0}_{-0.036}$
KEY HEIGHT	7	$^{0}_{-0.090}$



SECTION "X-X"

SCALE 5/6

APPD BY	S.Y.KIM	UNIT	mm
CHKD BY	I.K.KIM	SCALE	1/6
CHKD BY		PROJEC'N	3rd Angle
DSND BY	C.W.PARK	DATE	2022-04-15

SUBJECT	IEC 112S/M (Dual hole)	DWG SIZE	A4 (1:6)
TITLE	OUTLINE		
REF. NO		Sheet No.	of
DWG NO	LM-T2113B3PTV09	Revision No.	0

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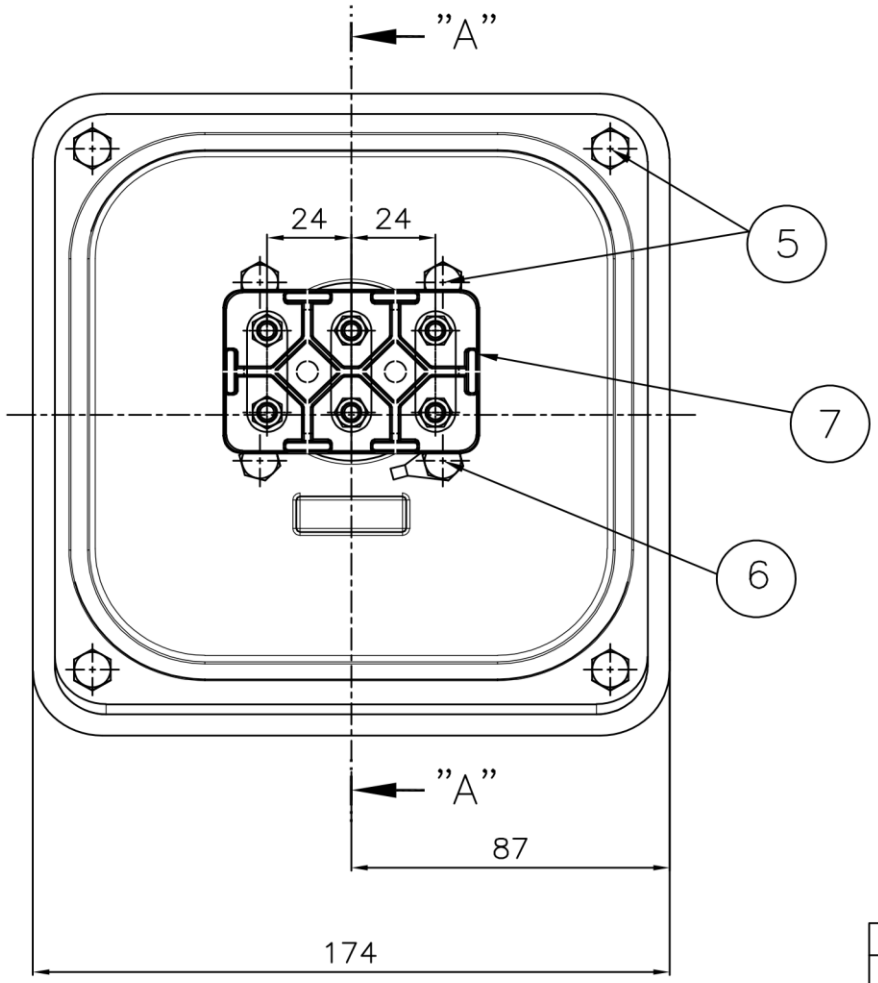

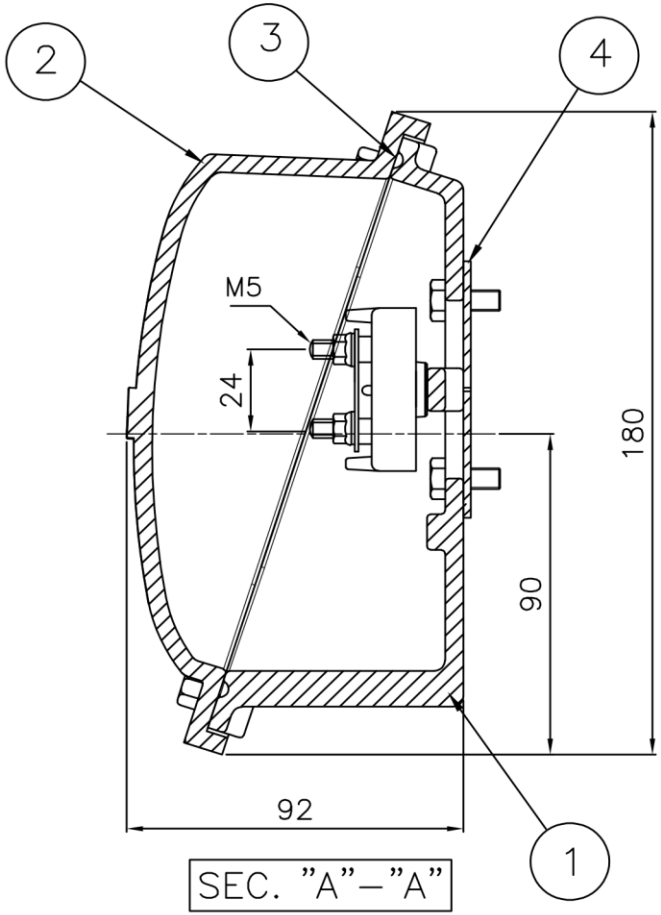

SEC. "A"–"A"

NO.	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	Q'TY
7	TERMINAL BLOCK	STD	M5				1
6	GROUND TERMINAL LUG	CU	--				1
5	BOX+FRAME HEX BOLT	S45C	M6				8
4	BOX GASKET	NBR	--				1
3	COVER GASKET (O-RING)	NBR	--				1
2	CONDUIT BOX COVER	CAST	--				1
1	CONDUIT BOX	CAST	--				1

APPD BY	S.Y.KIM	UNIT	mm	SUBJECT	FR.132 (CAST IRON)
CHKD BY	I.K.KIM	SCALE	1/1.5	DWG SIZE	A3 (1:1.5)
CHKD BY	–	PROJEC'N	3rd Angle	TITLE	TERMINAL BOX ASS'Y
DSND BY	S.H.LEE	DATE	2021-12-17	REF. NO	Sheet No. of
				DWG NO	3M-241772 Revision No. 0

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반가공공차		일반제관공차	
1–4	±0.1	6–30	±0.5
4–18	±0.2	30–120	±0.8
18–63	±0.3	120–315	±1.2
63–250	±0.5	315–1000	±2.0
250–	±0.8	1000–	±3.0