

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

## IEEE841 TYPE

Catalog No.	IEEE40-18-324T	Item No.	Rev. No.	[      ]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	324T	Rated Output	30 kW		40 HP	
Type	PJP	Number of Poles	4			
Enclosure(Protection)	Totally Enclosed / IP55	Rotor Type	Squirrel Cage			
Method of Cooling	IC411(FC)	Starting Method*	D.O.L			
Rated Frequency	60 Hz	Rated Voltage	575 V	460 V	230 V	
Number of Phases	3	Current	Full Load	39.0 A	48.8 A	97.6 A
Insulation Class	F		Locked-rotor**	850 %	850 %	850 %
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F	80 deg. C	50% Load		91.1 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		93.1 %		
Altitude	Less than 1,000 meter	100% Load		94.1 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.670		
Duty Type	Continuous ( S1 )	75% Load		0.770		
Service Factor	1.15	100% Load		0.820		
Mounting	B3	Speed at Full Load		1780 r.p.m		
Bearing	Type	Anti-Friction				
	DE/N-DE	6313ZC3 / 6212ZC3				
	Lubricant	Grease(Polyrex-EM)				
External Thrust	Not applicable					
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Torque				
Shaft Extension	Single	Full Load		118.7 lb.ft		
Terminal Box	Main	Locked-rotor**		170 %		
	Aux.	Breakdown**		220 %		
Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		218.553 lb.ft2		
Area classification	Hazardous	Motor		7.121 lb.ft2		
Type of Ex-Protection	Class I&II, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)				
Applicable Standard	IEEE841, NEMA MG1, CSA C390	77 dB(A)				
ACCESSORIES		Vibration				
		3.8 mm/sec (peak)				
		Permissible number of consecutive starts		Cold		3 times
				Hot		2 times
		Paint	Munsell No.	7.5BG6/1.5		

ACCESSORIES	SUBMITTAL DRAWING
	Outline Dimension Drawing \ Motor Weight(Approx.)
	B3      LM-I1326B3PL001      550 lb.

SPARE PARTS	REMARK
	1. Premium efficiency according to NEMA MG1
	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 320Fr.)	
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.	
	Date      DSND      CHKD      CHKD      APPD
	2024-07-13      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.

1	2	3	4
REV	DATE	CONTENTS	REVD BY   CHKD BY   CHKD BY   APPD BY

4.72

**CROWN TRITON**  
Premium Efficiency AC 3 Phase Motor

40HP	4P	460V	Cat. No.	IEEE40-18-324T			
Model	HLS324SR23		INS. Class	F	HD-F1	Amps	48.8
Type	HLS	Duty	CONT	Code	K	Amb.	40°C
Frame	324T	Encl.	TEFC	S.F.	1.15	RPM	1780
Bearing	Drive	6313ZC3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.	93.1%
	Opp.	6212ZC3				NEMA Design	B Torque
Usable at	50Hz 30HP 380V 49.9A 1480rpm S.F.: 1.0 Eff.: 91.6% Code: L						
	50Hz 30HP 400/415V 48.7/48.1A 1485/1485rpm S.F.: 1.0 Eff.: 91.6/91.6% Code: L/L						
CSA Certified for	Model	LATER		Type	PJP	Temp. Code	
	CLASS I, Div. 2, Gr. A, B, C & D		CLASS II, Div. 2, Gr. E, F & G (Gr. E : Up to 320FR)		Frame	Amb. 40°C	140~320FR
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC				Frame	Amb. 55°C	360~400FR
No.	-		Date	-		Weight	550 lb

**IEEE Std 841-2021**

4M-135701

**MARINE DUTY IEEE45**

Made in Korea H1

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APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (HL)	DWG SIZE	A4 ( 1:1 )
CHKD BY	I.K.KIM	SCALE	NONE				
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE <b>NAMEPLATE DRAWING</b>			
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	<b>4M-135701</b>	Sheet No. of	
				DWG NO	<b>NP-IEEE40-18-324T</b>	Revision No. <b>0</b>	



# PERFORMANCE CURVE

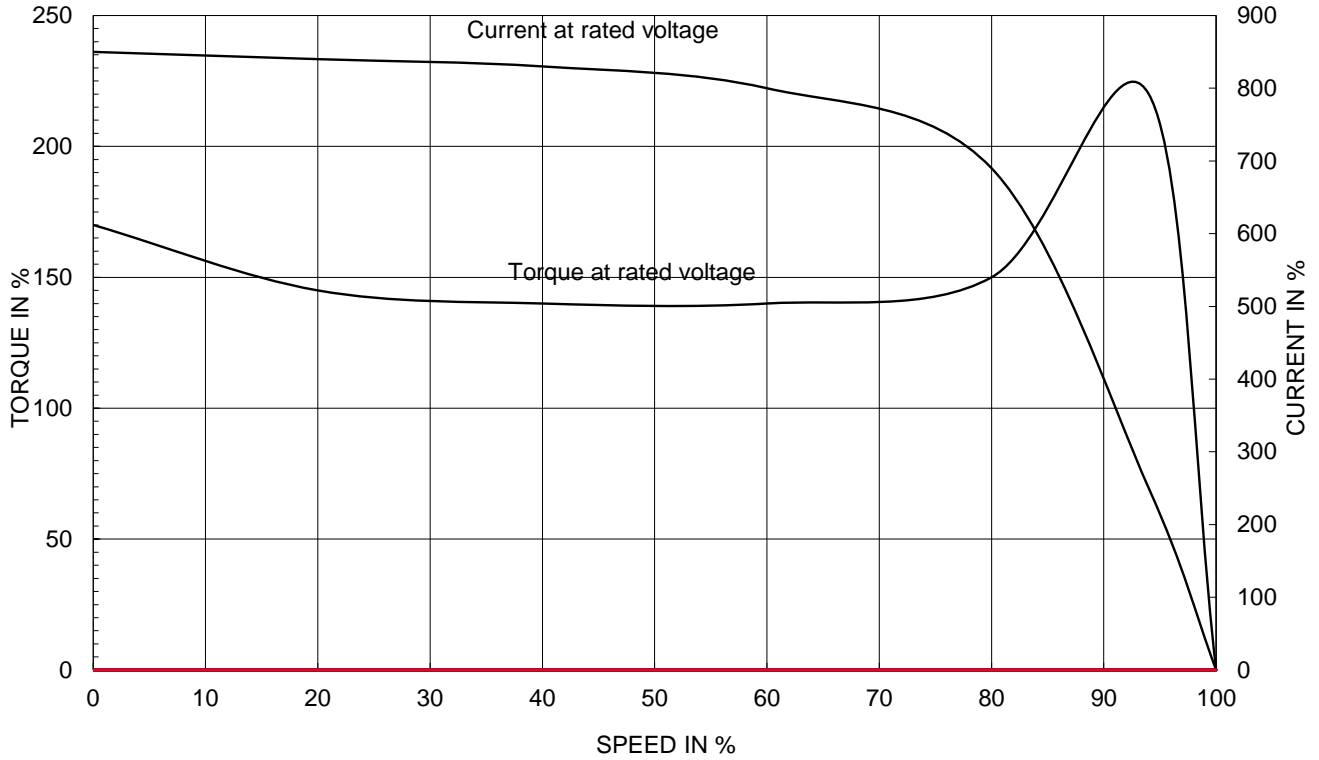
CURVE NO.

PC-IEEE40-18-324T

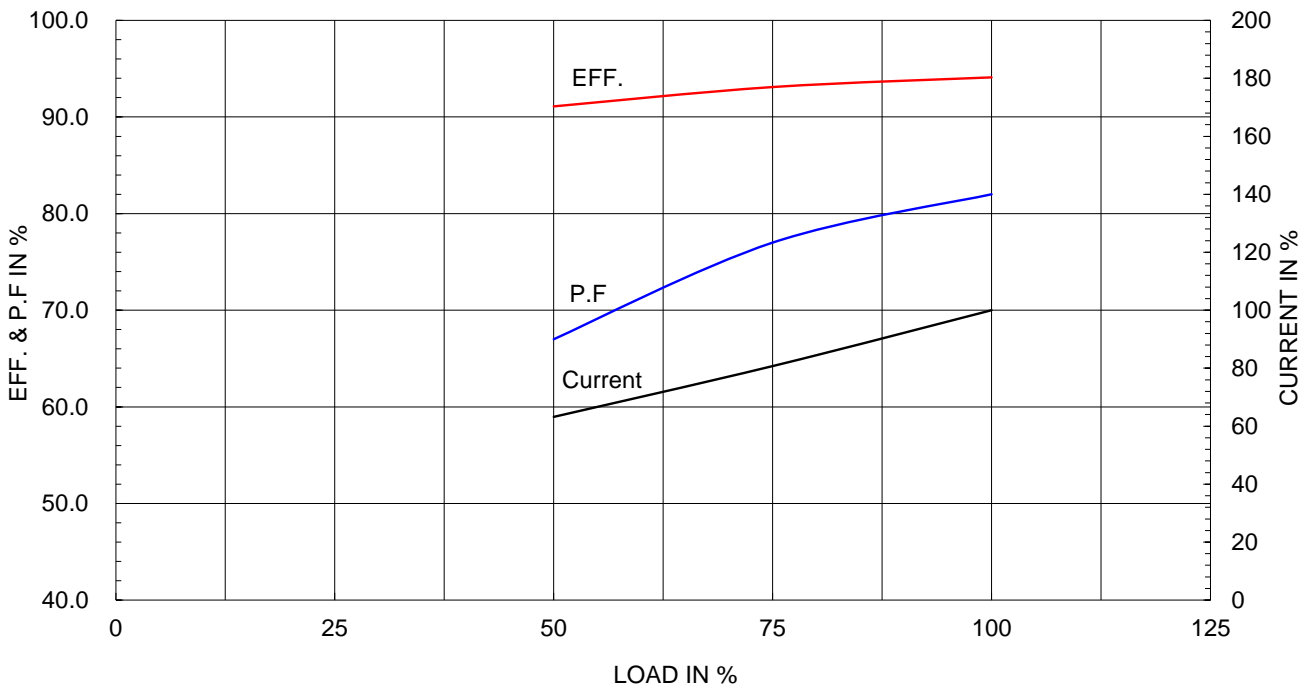
Type :	PJP	
Full Load Torque :	118.7	lb.ft
Load moment of Inertia (J) :	218.553	lb.ft <sup>2</sup>
Motor moment of Inertia (J) :	7.121	lb.ft <sup>2</sup>

30kW	40HP	4 P	60 Hz	
Speed at Full Load :			1780 RPM	
Rated Voltage		575V	460V	230V
Full Load Current		39.0A	48.8A	97.6A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE







Cls. I&II, Div. 2  
IEEE 841



▽	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

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. 250-280 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/2	TITLE	TERMINAL BOX ASS'Y	A3 ( 1:2 )	
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	DATE	2023-10-19		
DSND BY	배승희						
REF. NO		Sheet No.	of				
DWG NO	3M-248458	Revision No.	0				

