

HICO 3 PHASE INDUCTION MOTOR	PERFORMANCE DATASHEET	ISSUED	01/15/2026
		MODEL	5HP 2P

NAMEPLATE INFORMATION										
OUTPUT		RPM	VOLTS	Hz	FRAME SIZE	ENCLOSURE TYPE	S.F.	INS. CALSS	RATING	AMB. TEMP.
HP	kW									
5	3.7	3505	230/460	60	184TC	TEFC	1.25	F	CONT.	40°C
TEMP. RISE	NEMA DESIGN	kVA CODE	Class/Division Hazardous Location							
B	B	J	Class I, Division 2, Group B, C & D							

TYPICAL PERFORMANCE DATA						
EFFICIENCY (%)				POWER FACTOR (%)		
FULL LOAD		3/4 LOAD	1/2 LOAD	FULL LOAD	3/4 LOAD	1/2 LOAD
MIN.	NOM.					
86.5	88.5	89.1	88.3	86.2	81	70.1

CURRENT					
FULL LOAD AMPS	3/4 LOAD AMPS	1/2 LOAD AMPS	NO LOAD AMPS	STARTING CURRENT AMPS	STARTING CURRENT % FLC
12.3/6.1	9.7/4.9	7.6/3.8	5.2/2.6	95.9/47.6	780

* Usable at 208V: 13.4 AMPS (FULL LOAD)

* Usable at 5HP 50Hz 380V 7.4A 2875R.P.M. S.F. 1.0 EFF. 86% (IE2)

TORQUE				ALLOWABLE STARTS PER HOUR	
FULL LOAD (lb-ft)	LOCKED ROTOR % FLT	BREAK DOWN % FLT	PULL UP % FLT	COLD	HOT
7.5	260	305	230	2	1

MECHANICAL DATA					
INERTIA			SOUND PRESSURE LEVEL @ 3 ft (dB(A))	PROTECTION GRADE	WEIGHT (Lbs)
ROTOR WR ² (lb-ft ²)	NEMA LOAD WK ² (lb-ft ²)	MAX ALLOWABLE WK ² (lb-ft ²)			
0.202	6	15	68	55	97

BEARING		GREASE	MOUNTING	
DE	ODE		TYPE OF CONSTRUCTION	TERMINAL BOX DESIGN
6207ZZ	6206ZZ	N/A	RIGID MOUNTING	NEMA

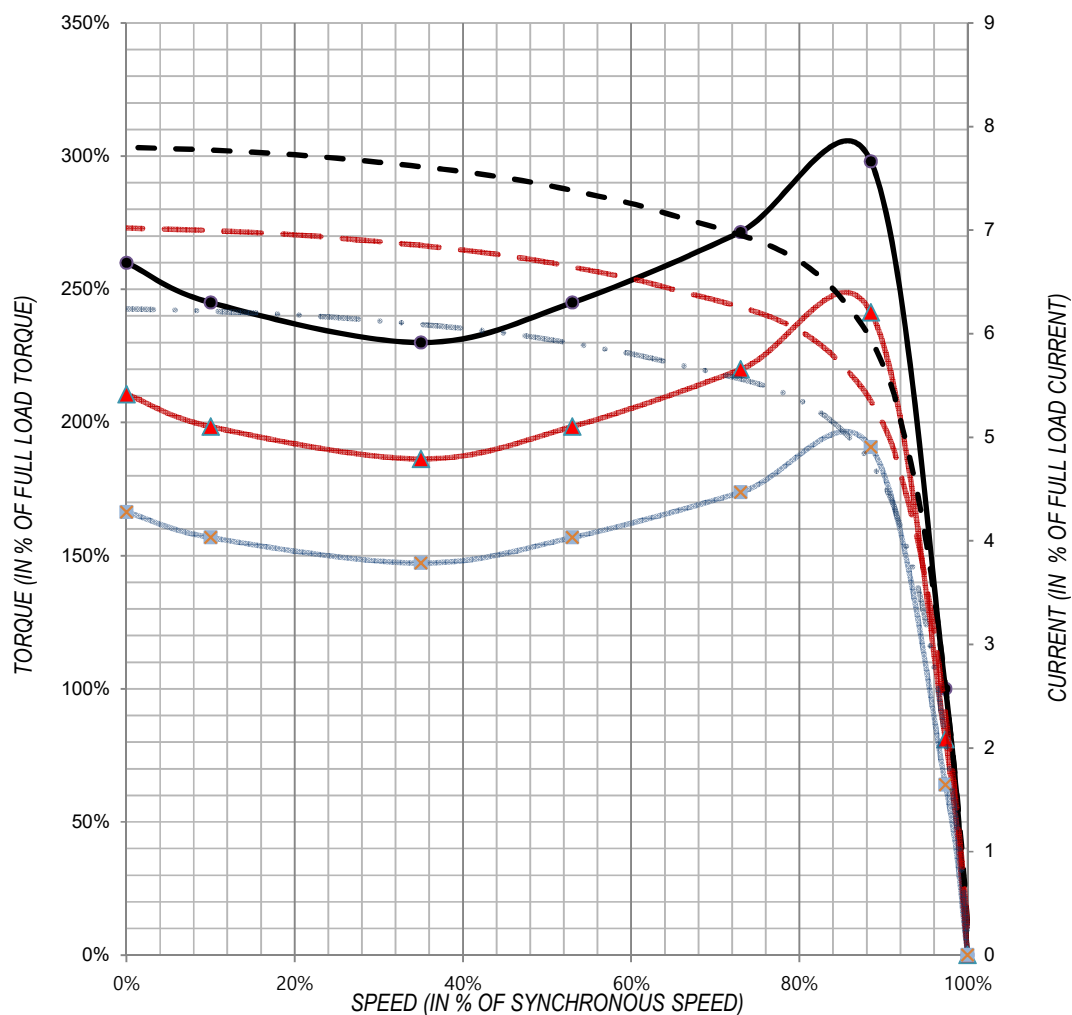
INVERTER DUTY DATA					
TYPE	HZ	HP	RPM	TORQUE(LB-FT)	NOTE
VARIABLE TORQUE	3~60	0.0006~5	180~3600	0.019~7.5	WITH TEMP. RISE CLASS F & S.F. 1.0
CONSTANT TORQUE	6~60	0.5~5	360~3600	7.5	
CONSTANT HP	60~90	5	3600~5400	7.5~5	

DRAWING NO.	ES1AS180504	REVISION	2.1
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ALL DATA ABOVE ARE SUBJECTED TO CHANGE WITHOUT NOTICE.

HICO 3 PHASE INDUCTION MOTOR	SPEED - TORQUE & CURRENT CURVE		Curve No.	
			1ST	

OUTPUT	5	HP	POLES	2	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	7.5	lb-ft	FULL LOAD CURRENT	12.3/6.1	A
LOCKED ROTOR TORQUE	260	%	LOCKED-ROTOR CURRENT	780	%
BREAKDOWN TORQUE	305	%	SPEED (at FULL LOAD)	3505	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	0.202	lb-ft ²

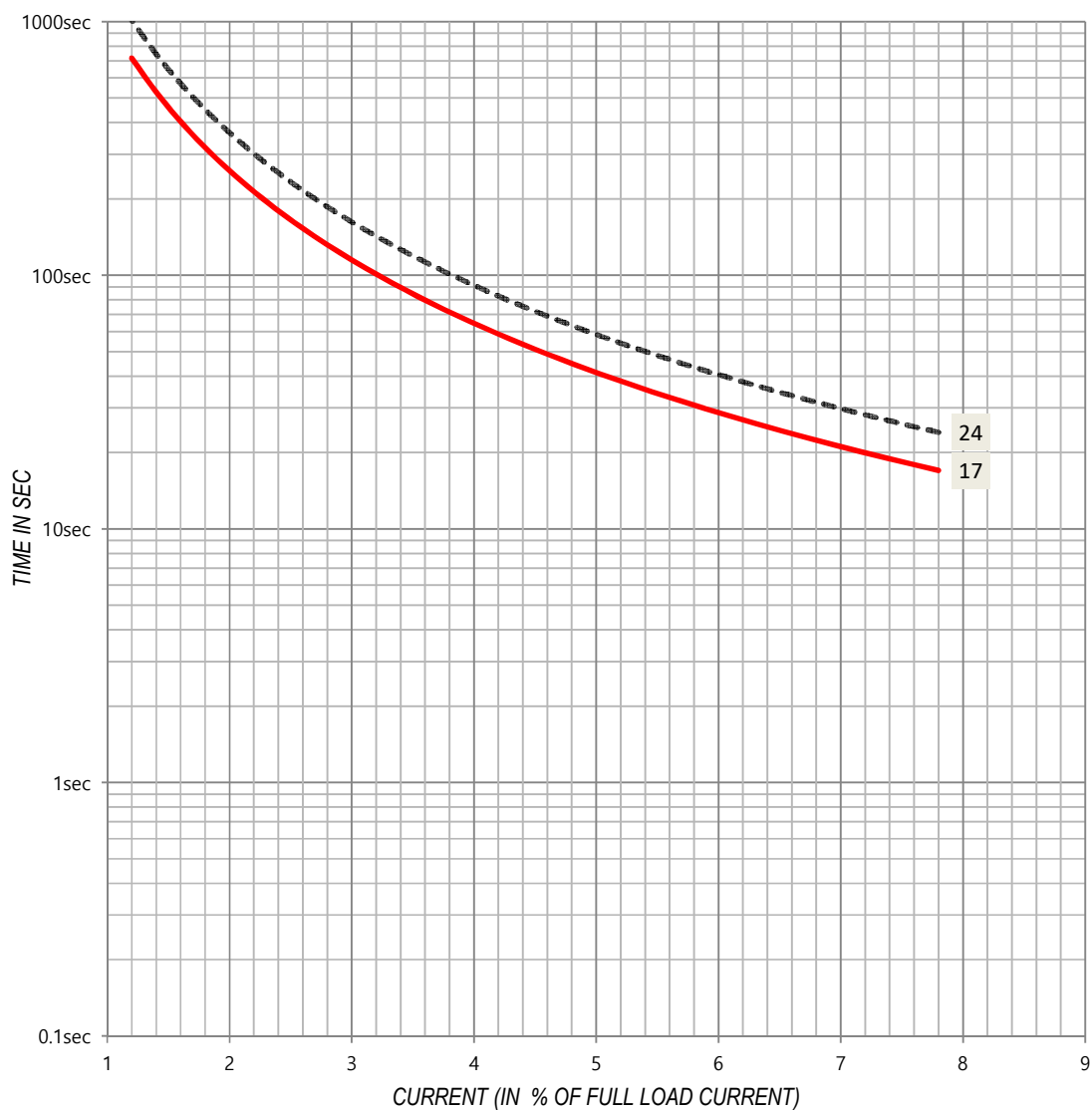


NOTE

	A : SPEED-TORQUE CURVE AT	100% RATED VOLTAGE
	B : SPEED-TORQUE CURVE AT	90% RATED VOLTAGE
	C : SPEED-TORQUE CURVE AT	80% RATED VOLTAGE
	D : SPEED-CURRENT CURVE AT	100% RATED VOLTAGE
	E : SPEED-CURRENT CURVE AT	90% RATED VOLTAGE
	F : SPEED-CURRENT CURVE AT	80% RATED VOLTAGE

HICO 3 PHASE INDUCTION MOTOR	THERMAL LIMIT & TIME - CURRENT CURVE				Curve No.
					1TL

OUTPUT	5	HP	POLES	2	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	7.5	lb-ft	FULL LOAD CURRENT	12.3/6.1	A
LOCKED ROTOR TORQUE	260	%	LOCKED-ROTOR CURRENT	780	%
BREAKDOWN TORQUE	305	%	SPEED (at FULL LOAD)	3505	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	0.202	lb-ft ²

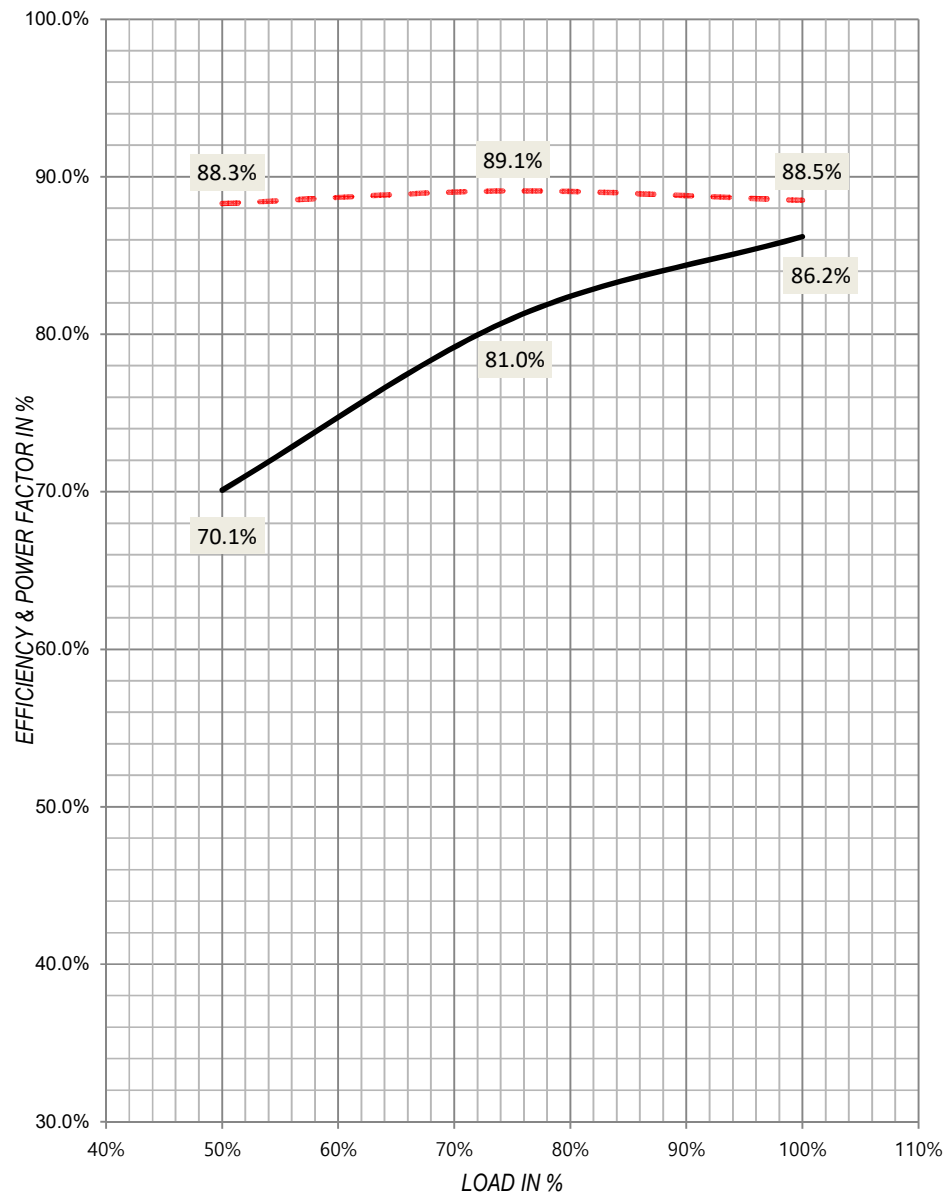


NOTE

- A : THERMAL LIMIT CURVE AT HOT CONDITION
- - - - - B : THERMAL LIMIT CURVE AT COLD CONDITION
- - - - - C : ※TIME-CURRENT CURVES(C,D,E) NEED BELOW DATA TO BE DRAWN
- - - - - D : * LOAD GD2 AT MOTOR SHAFT
- - - - - E : * SPEED-TORQUE CURVE OF LOAD

HICO 3 PHASE INDUCTION MOTOR	LOAD - POWER FACTOR & EFFICIENCY CURVE				Curve No.
					1PE

OUTPUT	5	HP	POLES	2	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	7.5	lb-ft	FULL LOAD CURRENT	12.3/6.1	A
LOCKED ROTOR TORQUE	260	%	LOCKED-ROTOR CURRENT	780	%
BREAKDOWN TORQUE	305	%	SPEED (at FULL LOAD)	3505	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	0.202	lb-ft ²



NOTE

- A : LOAD - POWER FACTOR CURVE
- - - B : LOAD - EFFICIENCY CURVE

HICO

3 PHASE INDUCTION MOTOR

CONNECTION DIAGRAM

ISSUED

12/01/2024



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