

 HICO 3 PHASE INDUCTION MOTOR	PERFORMANCE DATASHEET	ISSUED	01/15/2026
		MODEL	60HP 4P

NAMEPLATE INFORMATION										
OUTPUT		RPM	VOLTS	Hz	FRAME SIZE	ENCLOSURE TYPE	S.F.	INS. CALSS	RATING	AMB. TEMP.
HP	KW									
60	45	1785	230/460	60	364TC	TEFC	1.25	F	CONT.	40°C
TEMP. RISE	NEMA DESIGN	kVA CODE	Class/Division Hazardous Location							
B	B	G	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.					
94.1	95	94.9	93.7	85.2	82.7	75.5

CURRENT					
FULL LOAD AMPS	3/4 LOAD AMPS	1/2 LOAD AMPS	NO LOAD AMPS	STARTING CURRENT AMPS	STARTING CURRENT % FLC
138.8/69.4	107.4/53.7	79.4/39.7	55.0/27.5	930/465	670

* Usable at 60HP 50Hz 380V 83.3A 1480R.P.M. S.F. 1.0 EFF. 93.9% (IE2)

TORQUE				ALLOWABLE STARTS PER HOUR	
FULL LOAD (lb-ft)	LOCKED ROTOR % FLT	BREAK DOWN % FLT	PULL UP % FLT	COLD	HOT
176.7	170	255	133	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)			
16.487	275	571	72	55	765

BEARING		GREASE	MOUNTING	
DE	ODE		TYPE OF CONSTRUCTION	TERMINAL BOX DESIGN
6314C3	6312C3	GREASE(MOBIL Polyrex EM)	RIGID MOUNTING	NEMA

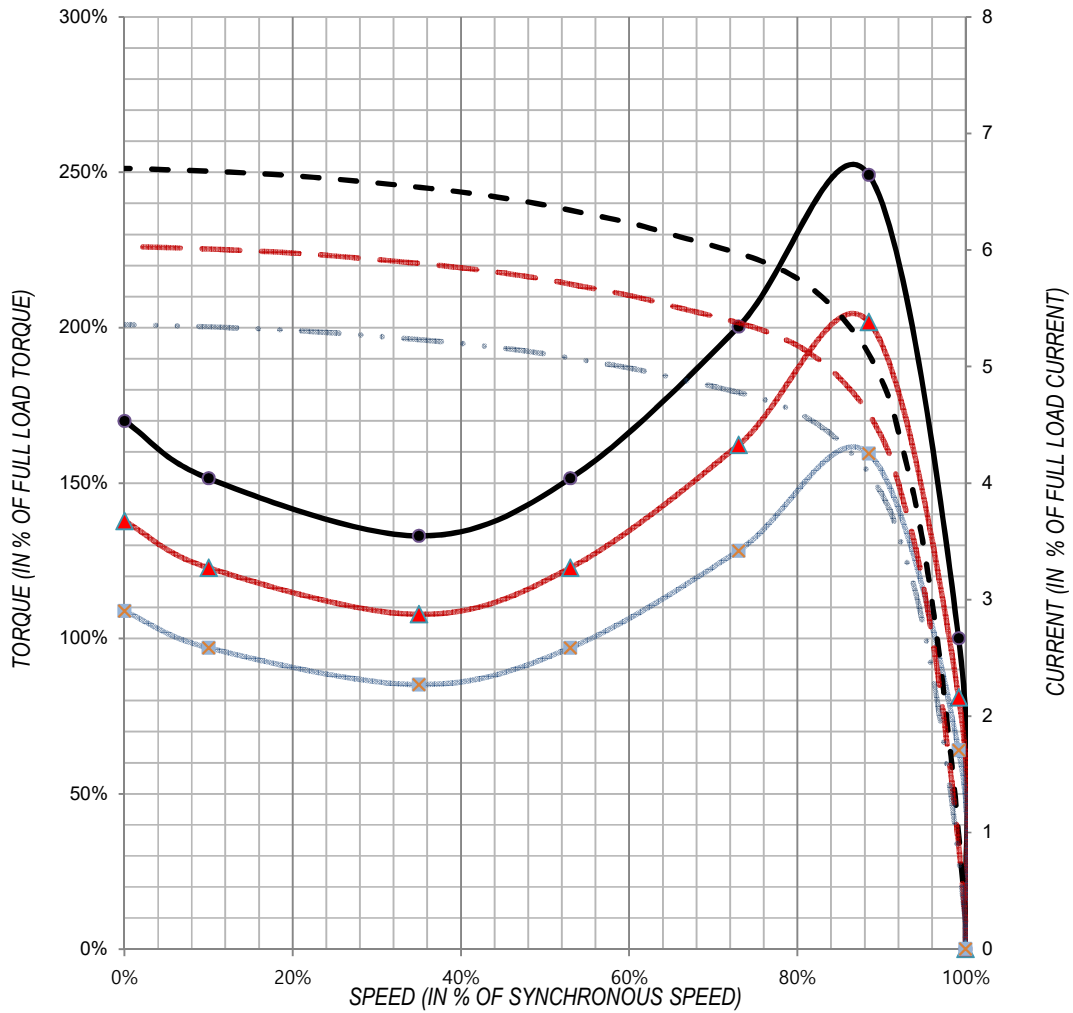
INVERTER DUTY DATA					
TYPE	HZ	HP	RPM	TORQUE(LB-FT)	NOTE
VARIABLE TORQUE	3~60	0.0075~60	90~1800	0.442~176.7	WITH TEMP. RISE CLASS F & S.F. 1.0
CONSTANT TORQUE	6~60	6~60	180~1800	176.7	
CONSTANT HP	60~90	60	1800~2700	176.7~117.8	

DRAWING NO.	ES1AS180518	REVISION	0.1
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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	60	HP	POLES	4	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	176.7	lb-ft	FULL LOAD CURRENT	138.8/69.4	A
LOCKED ROTOR TORQUE	170	%	LOCKED-ROTOR CURRENT	670	%
BREAKDOWN TORQUE	255	%	SPEED (at FULL LOAD)	1785	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	16.487	lb-ft ²

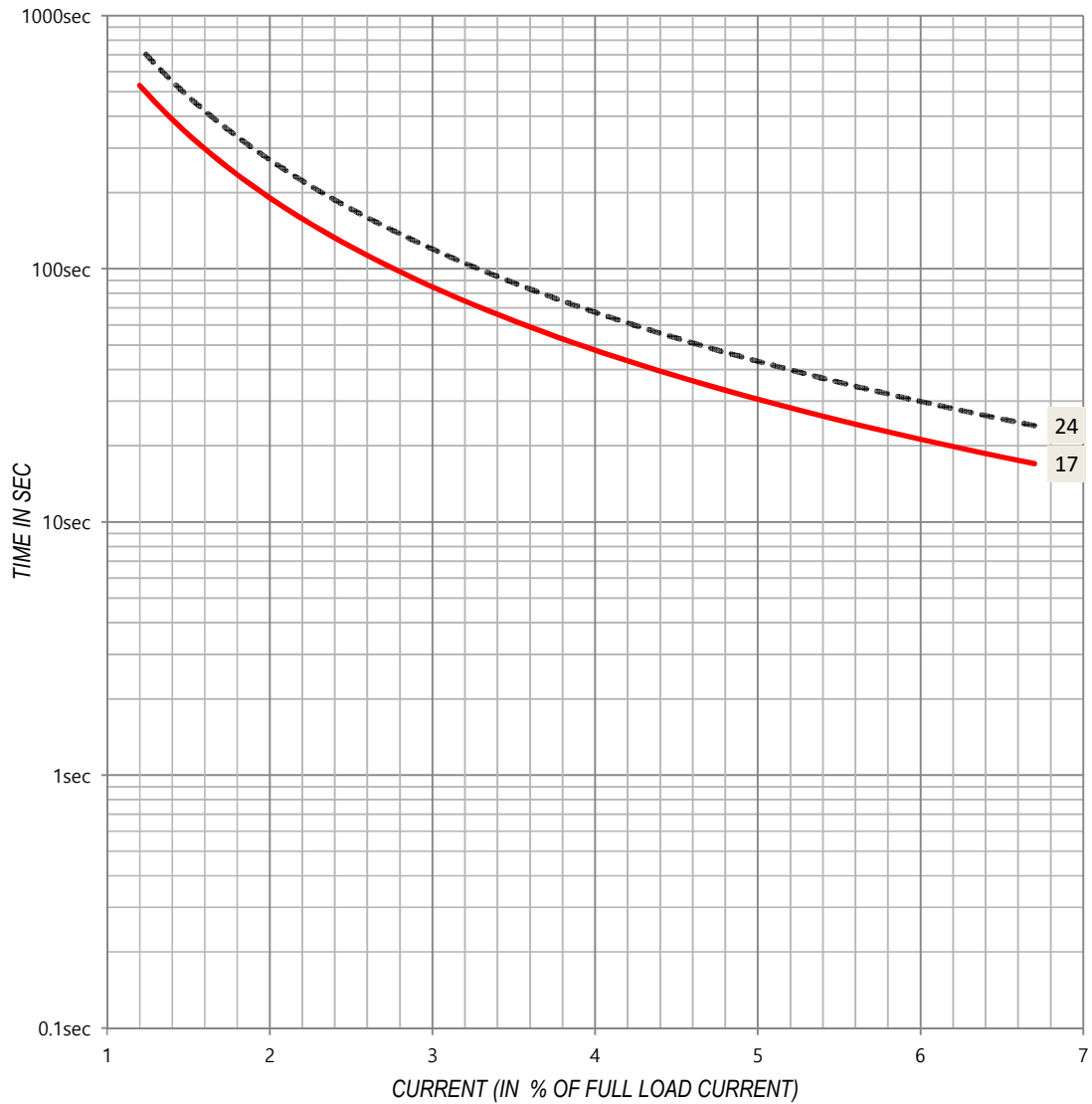


NOTE

- 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	60	HP	POLES	4	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	176.7	lb-ft	FULL LOAD CURRENT	138.8/69.4	A
LOCKED ROTOR TORQUE	170	%	LOCKED-ROTOR CURRENT	670	%
BREAKDOWN TORQUE	255	%	SPEED (at FULL LOAD)	1785	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	16.487	lb-ft ²

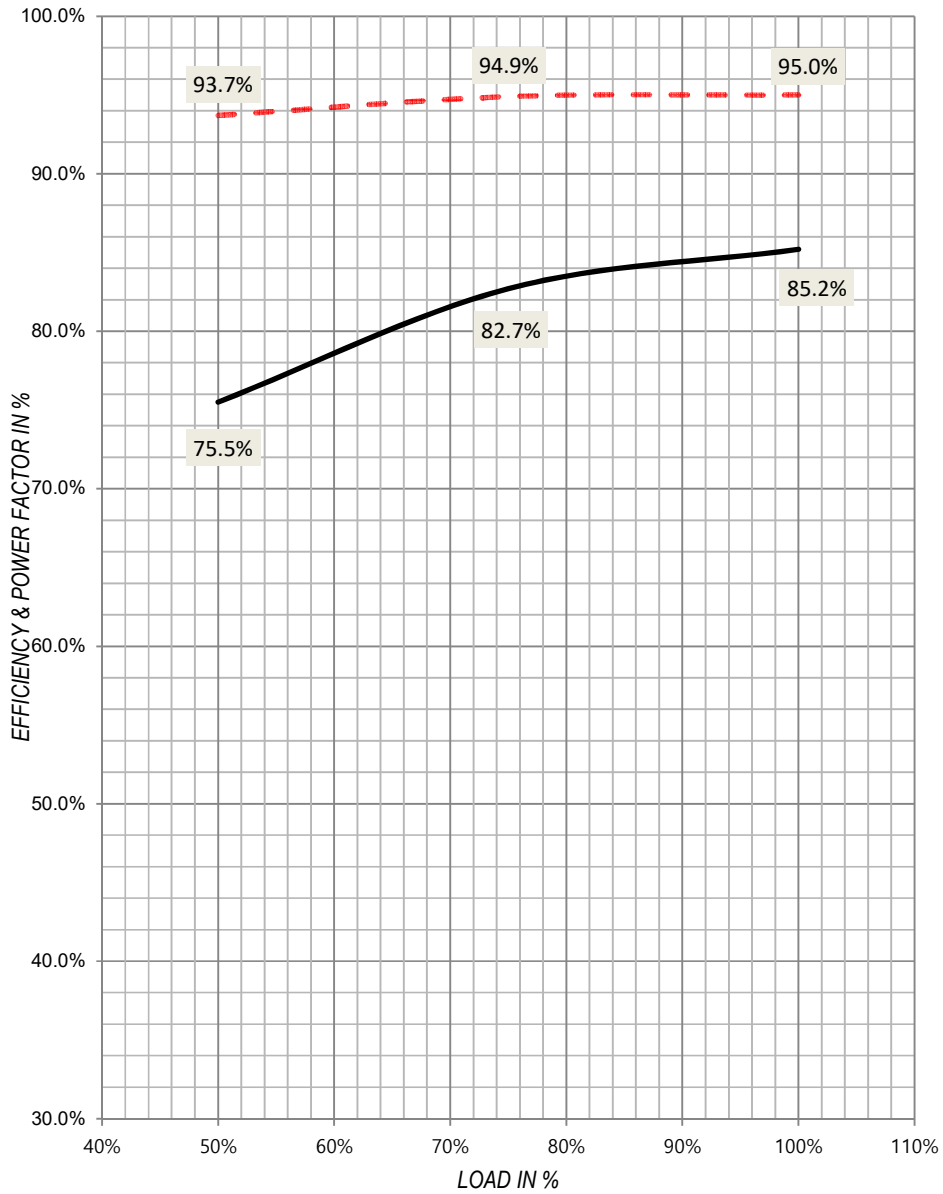


NOTE

- 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

<h1 style="margin: 0;">HICO</h1> <p style="margin: 0;">3 PHASE INDUCTION MOTOR</p>	<h2 style="margin: 0;">LOAD - POWER FACTOR & EFFICIENCY CURVE</h2>		Curve No.	
			1PE	

OUTPUT	60	HP	POLES	4	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	176.7	lb-ft	FULL LOAD CURRENT	138.8/69.4	A
LOCKED ROTOR TORQUE	170	%	LOCKED-ROTOR CURRENT	670	%
BREAKDOWN TORQUE	255	%	SPEED (at FULL LOAD)	1785	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	16.487	lb-ft ²



NOTE

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

