

 HICO 3 PHASE INDUCTION MOTOR	PERFORMANCE DATASHEET	ISSUED	01/15/2026
		MODEL	150HP 2P

NAMEPLATE INFORMATION										
OUTPUT		RPM	VOLTS	Hz	FRAME SIZE	ENCLOSURE TYPE	S.F.	INS. CALSS	RATING	AMB. TEMP.
HP	KW									
150	110	3575	230/460	60	445TSC	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	95	94.3	89.9	88.1	83.5

CURRENT					
FULL LOAD AMPS	3/4 LOAD AMPS	1/2 LOAD AMPS	NO LOAD AMPS	STARTING CURRENT AMPS	STARTING CURRENT % FLC
328.9/164.4	251.7/125.9	178.4/89.2	103.6/51.8	2302.3/1150.8	700

* Usable at 150HP 50Hz 380V 197.3A 2970R.P.M. S.F. 1.0 EFF. 94.7% (IE2)

TORQUE				ALLOWABLE STARTS PER HOUR	
FULL LOAD (lb-ft)	LOCKED ROTOR % FLT	BREAK DOWN % FLT	PULL UP % FLT	COLD	HOT
220.5	170	225	125	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)			
29.273	133	303	82	55	1768

BEARING		GREASE	MOUNTING	
DE	ODE		TYPE OF CONSTRUCTION	TERMINAL BOX DESIGN
6313C3	6313C3	GREASE(MOBIL Polyrex EM)	RIGID MOUNTING	NEMA

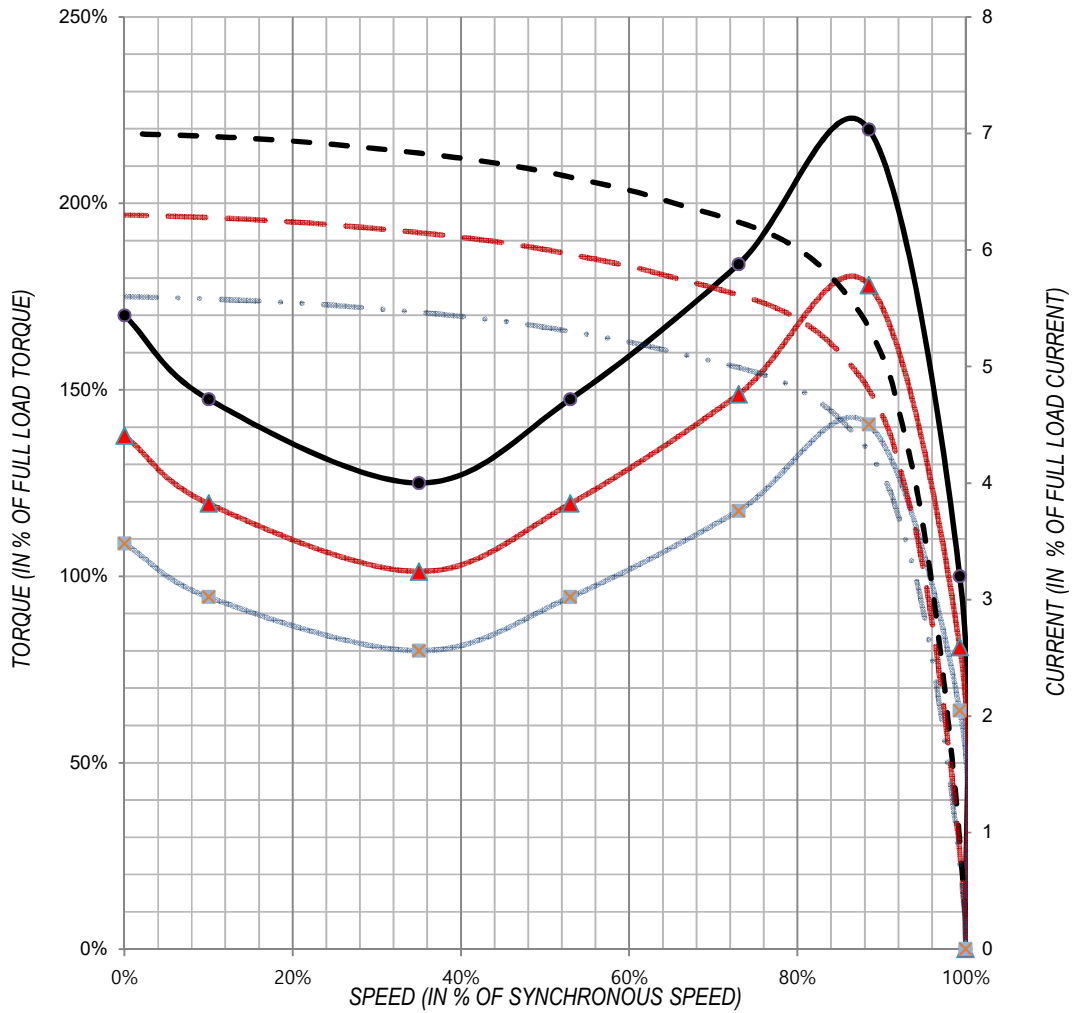
INVERTER DUTY DATA					
TYPE	HZ	HP	RPM	TORQUE(LB-FT)	NOTE
VARIABLE TORQUE	3~60	0.0188~150	180~3600	0.551~220.5	WITH TEMP. RISE CLASS F & S.F. 1.0
CONSTANT TORQUE	6~60	15~150	360~3600	220.5	
CONSTANT HP	60~90	150	3600~5400	220.5~147	

DRAWING NO.	ES1AS180527	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	150	HP	POLES	2	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	220.5	lb-ft	FULL LOAD CURRENT	28.9/164.4	A
LOCKED ROTOR TORQUE	170	%	LOCKED-ROTOR CURRENT	700	%
BREAKDOWN TORQUE	225	%	SPEED (at FULL LOAD)	3575	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	29.273	lb-ft ²

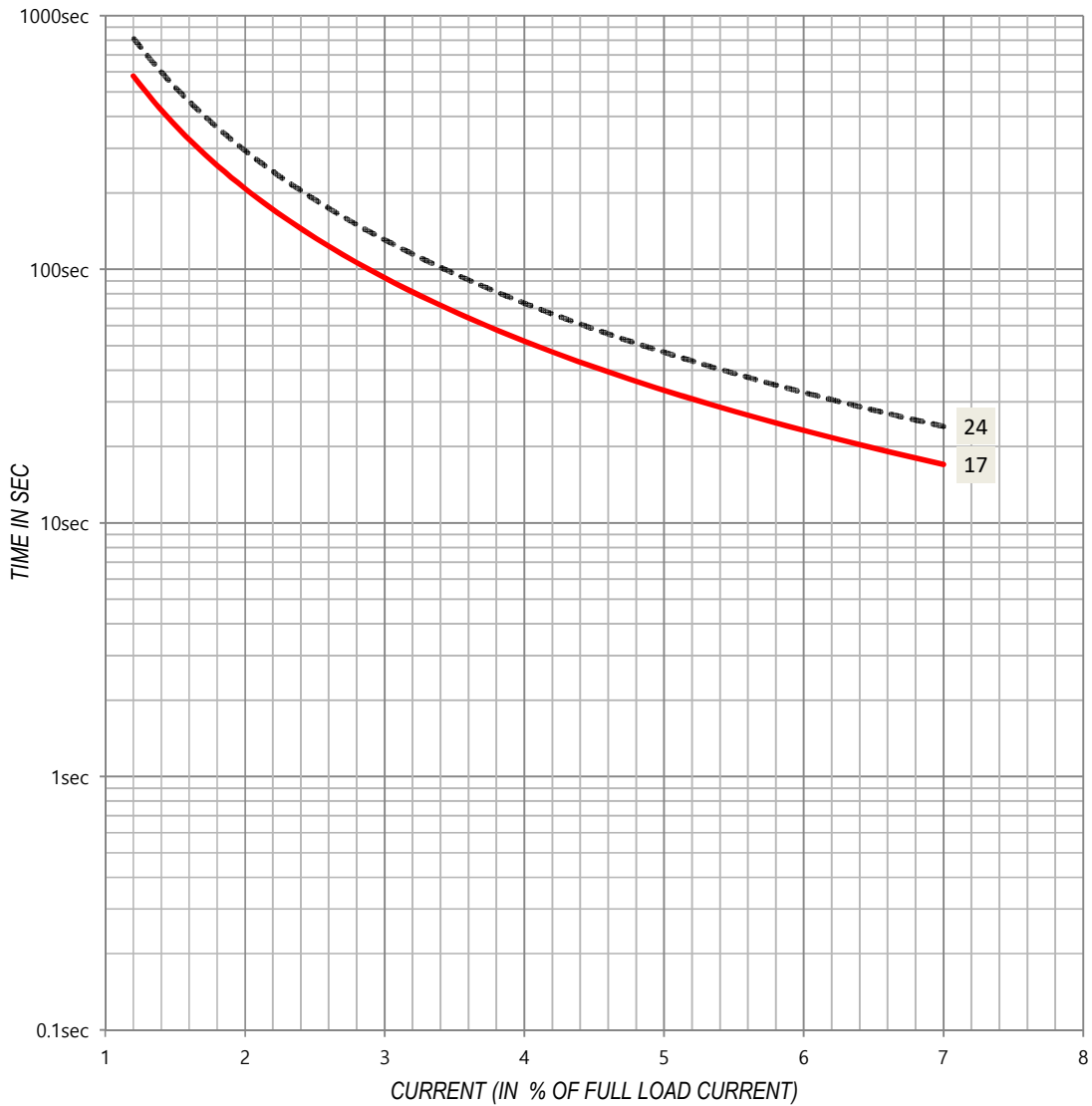


NOTE

- 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	150	HP	POLES	2	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	220.5	lb-ft	FULL LOAD CURRENT	128.9/164.4	A
LOCKED ROTOR TORQUE	170	%	LOCKED-ROTOR CURRENT	700	%
BREAKDOWN TORQUE	225	%	SPEED (at FULL LOAD)	3575	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	29.273	lb-ft ²

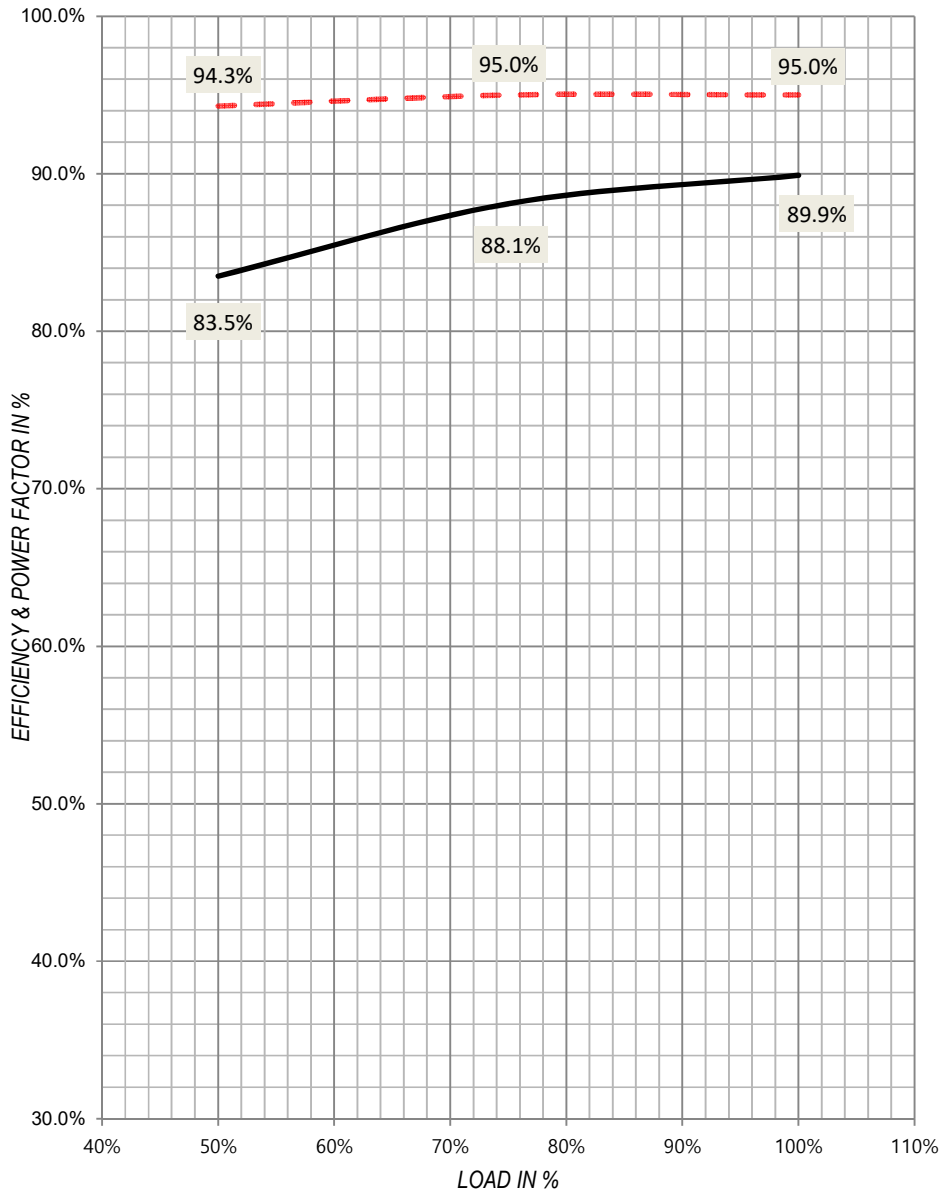


NOTE

- 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

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

OUTPUT	150	HP	POLES	2	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	220.5	lb-ft	FULL LOAD CURRENT	28.9/164.4	A
LOCKED ROTOR TORQUE	170	%	LOCKED-ROTOR CURRENT	700	%
BREAKDOWN TORQUE	225	%	SPEED (at FULL LOAD)	3575	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	29.273	lb-ft ²



NOTE

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

