

HICO 3 PHASE INDUCTION MOTOR	PERFORMANCE DATASHEET	ISSUED	01/15/2026
		MODEL	125HP 6P

NAMEPLATE INFORMATION										
OUTPUT		RPM	VOLTS	Hz	FRAME SIZE	ENCLOSURE TYPE	S.F.	INS. CALSS	RATING	AMB. TEMP.
HP	kW									
125	90	1190	575	60	445TD	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	95.3	95.1	83.5	82	76.2

CURRENT					
FULL LOAD AMPS	3/4 LOAD AMPS	1/2 LOAD AMPS	NO LOAD AMPS	STARTING CURRENT AMPS	STARTING CURRENT % FLC
118.0	89.9	64.6	35.4	778.8	660

TORQUE				ALLOWABLE STARTS PER HOUR	
FULL LOAD (lb-ft)	LOCKED ROTOR % FLT	BREAK DOWN % FLT	PULL UP % FLT	COLD	HOT
552.1	125	200	100	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)			
94.132	1,450	1,780	74	55	1842

BEARING		GREASE	MOUNTING	
DE	ODE		TYPE OF CONSTRUCTION	TERMINAL BOX DESIGN
6319C3	6316C3	GREASE(MOBIL Polyrex EM)	RIGID MOUNTING	NEMA

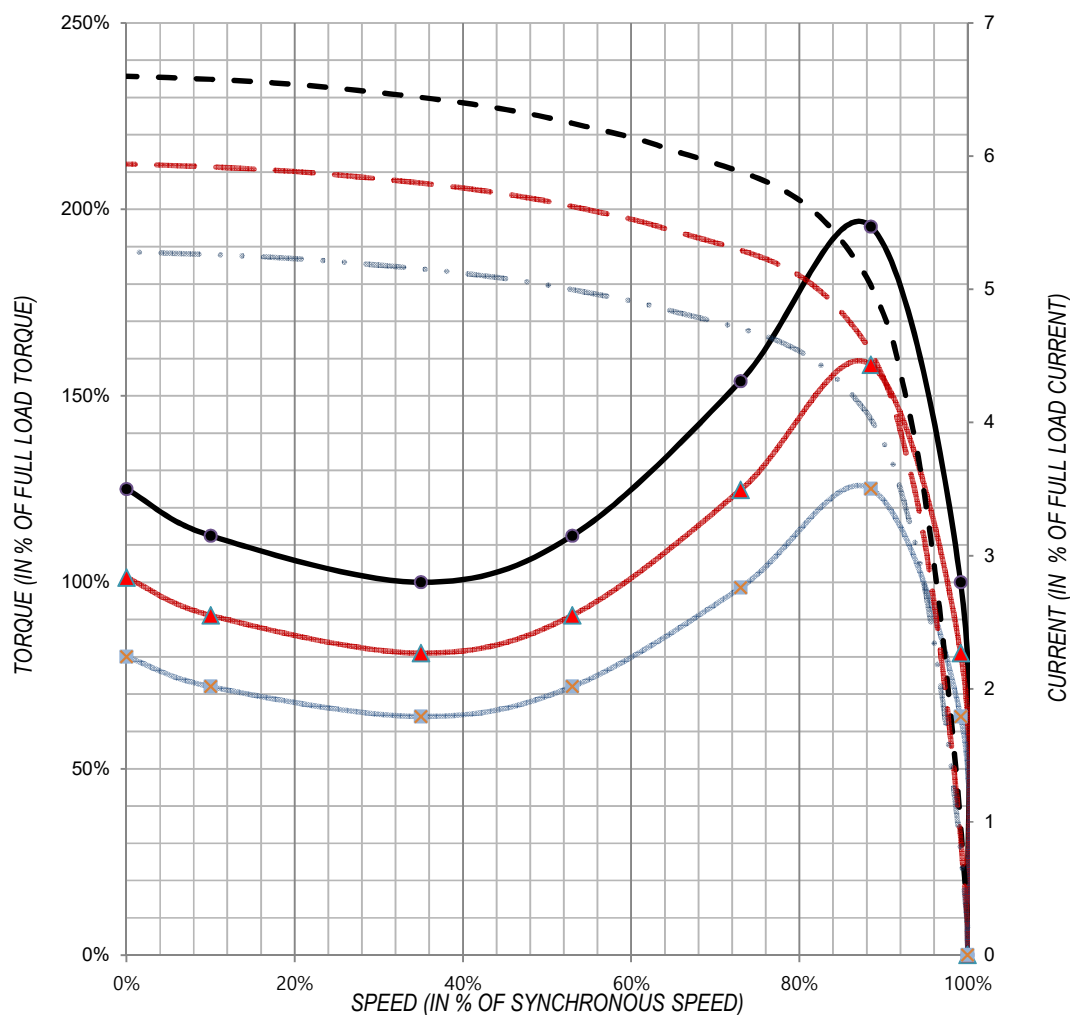
INVERTER DUTY DATA					
TYPE	HZ	HP	RPM	TORQUE(LB-FT)	NOTE
VARIABLE TORQUE	3~60	0.0156~125	60~1200	1.38~552.1	WITH TEMP. RISE CLASS F & S.F. 1.0
CONSTANT TORQUE	6~60	12.5~125	120~1200	552.1	
CONSTANT HP	60~90	125	1200~1800	552.1~368.067	

DRAWING NO.	ES1AS185728	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	125	HP	POLES	6	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	552.1	lb-ft	FULL LOAD CURRENT	118.0	A
LOCKED ROTOR TORQUE	125	%	LOCKED-ROTOR CURRENT	660	%
BREAKDOWN TORQUE	200	%	SPEED (at FULL LOAD)	1190	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	94.132	lb-ft ²

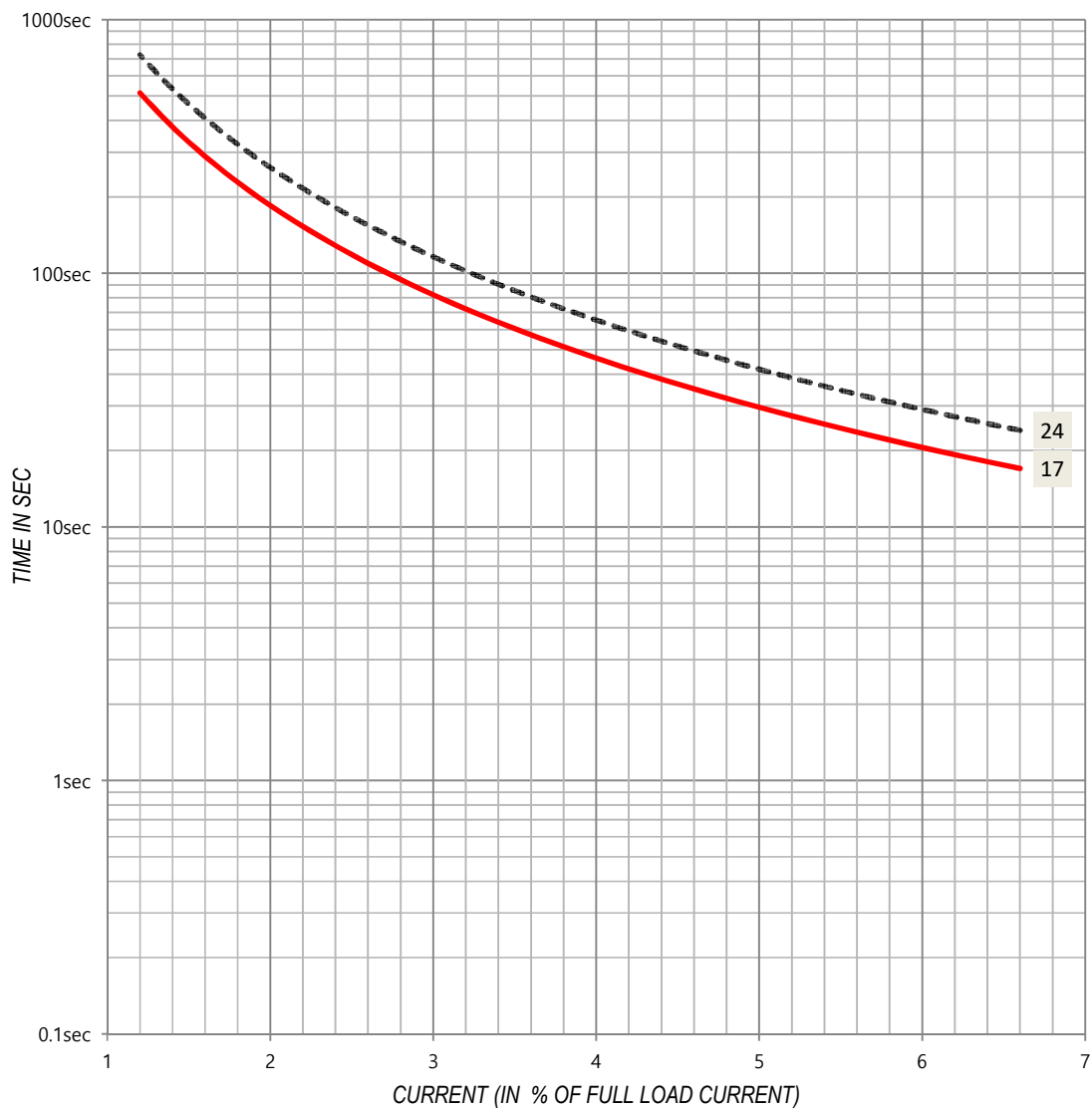


NOTE

	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	125	HP	POLES	6	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	552.1	lb-ft	FULL LOAD CURRENT	118.0	A
LOCKED ROTOR TORQUE	125	%	LOCKED-ROTOR CURRENT	660	%
BREAKDOWN TORQUE	200	%	SPEED (at FULL LOAD)	1190	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	94.132	lb-ft ²

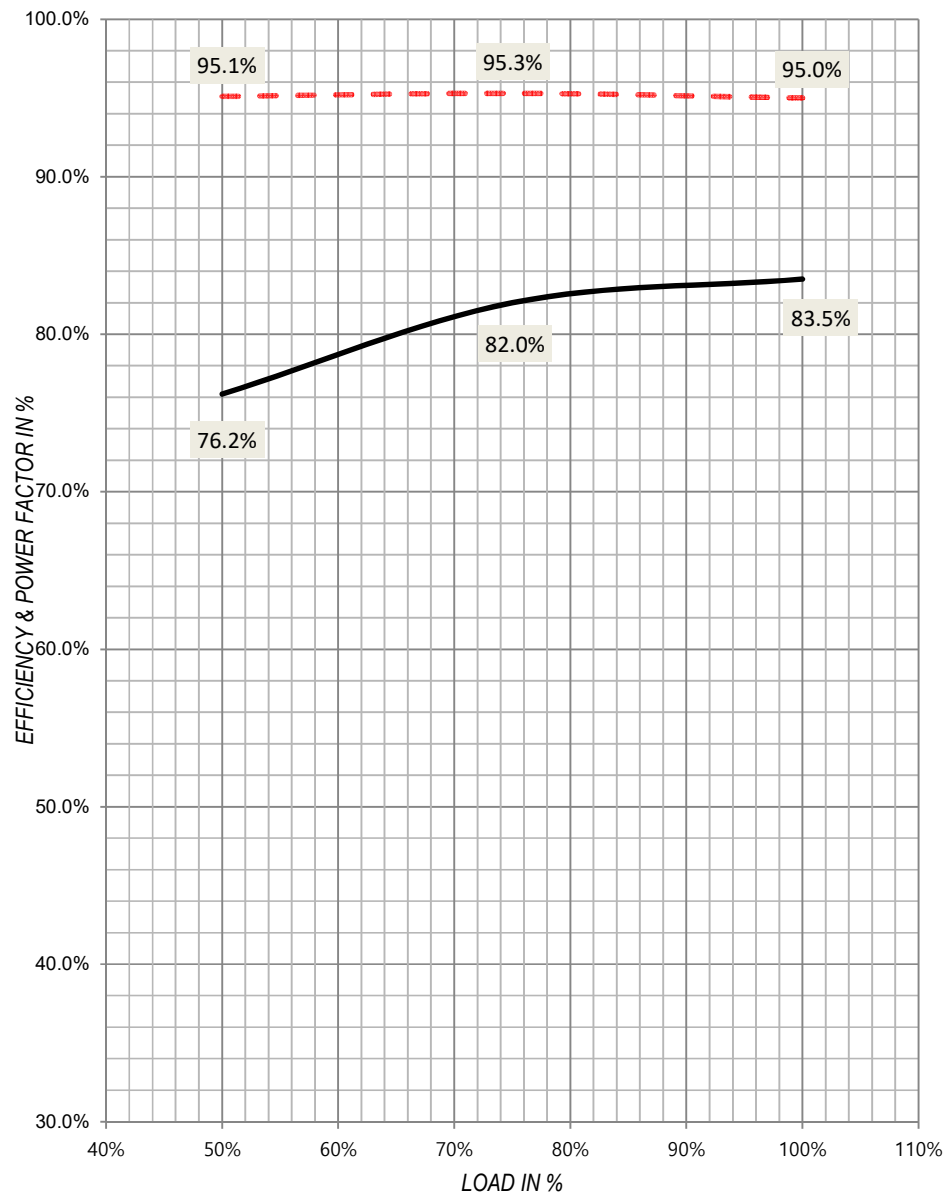


NOTE

- 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	125	HP	POLES	6	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	552.1	lb-ft	FULL LOAD CURRENT	118.0	A
LOCKED ROTOR TORQUE	125	%	LOCKED-ROTOR CURRENT	660	%
BREAKDOWN TORQUE	200	%	SPEED (at FULL LOAD)	1190	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	94.132	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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