

HICO 3 PHASE INDUCTION MOTOR	PERFORMANCE DATASHEET	ISSUED	01/15/2026
		MODEL	1HP 6P

NAMEPLATE INFORMATION										
OUTPUT		RPM	VOLTS	Hz	FRAME SIZE	ENCLOSURE TYPE	S.F.	INS. CALSS	RATING	AMB. TEMP.
HP	KW									
1	0.75	1150	230/460	60	145T	TEFC	1.25	F	CONT.	40°C
TEMP. RISE	NEMA DESIGN	KVA CODE	Class/Division Hazardous Location							
B	B	H	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.					
80.0	82.5	82.9	81.2	67.9	59.6	47

CURRENT					
FULL LOAD AMPS	3/4 LOAD AMPS	1/2 LOAD AMPS	NO LOAD AMPS	STARTING CURRENT AMPS	STARTING CURRENT % FLC
3.3/1.7	2.8/1.4	2.5/1.2	2.2/1.1	16.5/8.5	500

* Usable at 208V: 3.5 AMPS (FULL LOAD)

* Usable at 1HP 50Hz 380V 1.9A 930R.P.M. S.F. 1.0 EFF. 78.4% (IE2)

TORQUE				ALLOWABLE STARTS PER HOUR	
FULL LOAD (lb-ft)	LOCKED ROTOR % FLT	BREAK DOWN % FLT	PULL UP % FLT	COLD	HOT
4.6	170	270	138	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)			
0.166	15	49	67	55	61

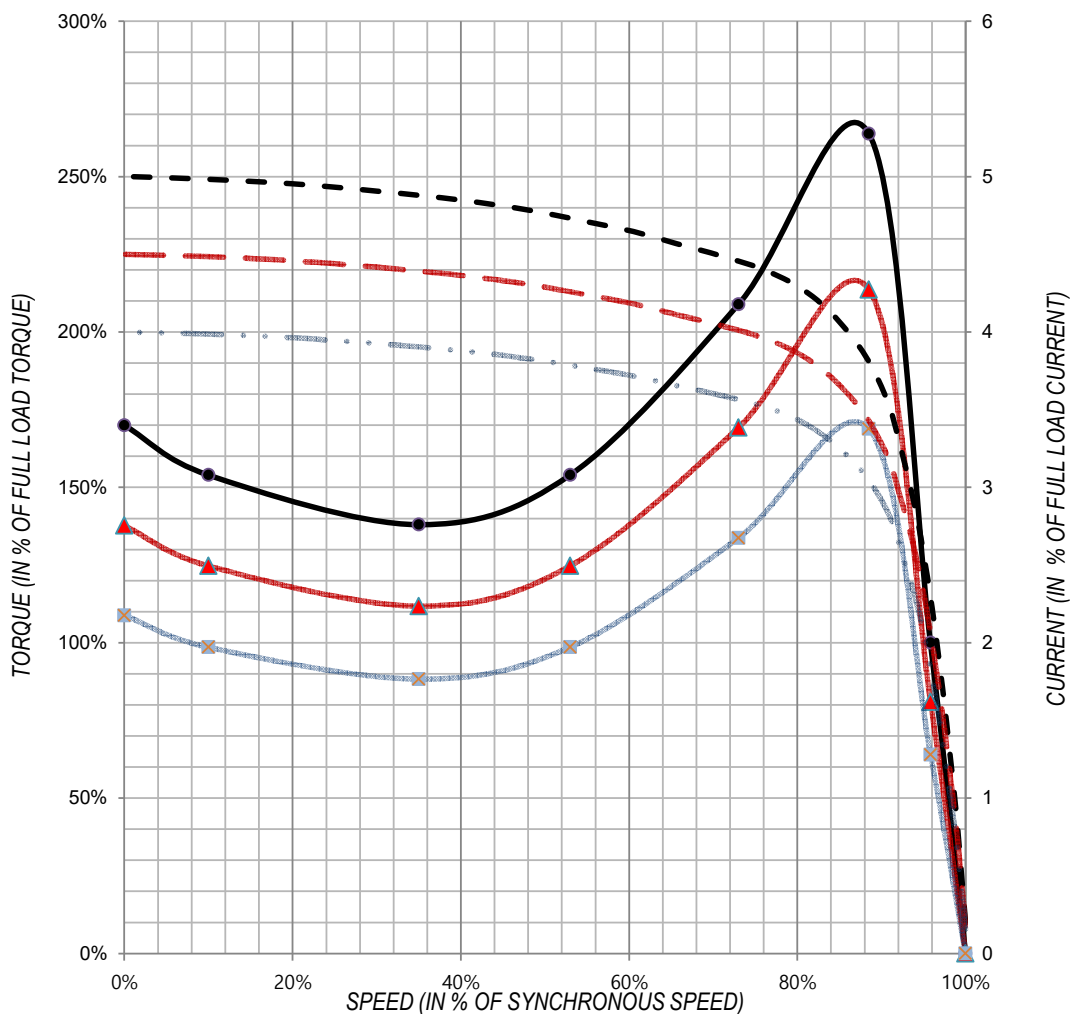
BEARING		GREASE	MOUNTING	
DE	ODE		TYPE OF CONSTRUCTION	TERMINAL BOX DESIGN
6205ZZ	6204ZZ	N/A	RIGID MOUNTING	NEMA

INVERTER DUTY DATA					
TYPE	HZ	HP	RPM	TORQUE(LB-FT)	NOTE
VARIABLE TORQUE	3~60	0.0001~1	60~1200	0.012~4.6	WITH TEMP. RISE CLASS F & S.F. 1.0
CONSTANT TORQUE	6~60	0.1~1	120~1200	4.6	
CONSTANT HP	60~90	1	1200~1800	4.6~3.067	

DRAWING NO.	ES1AS180402	REVISION	2.1
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ALL DATA ABOVE ARE SUBJECTED TO CHANGE WITHOUT NOTICE.

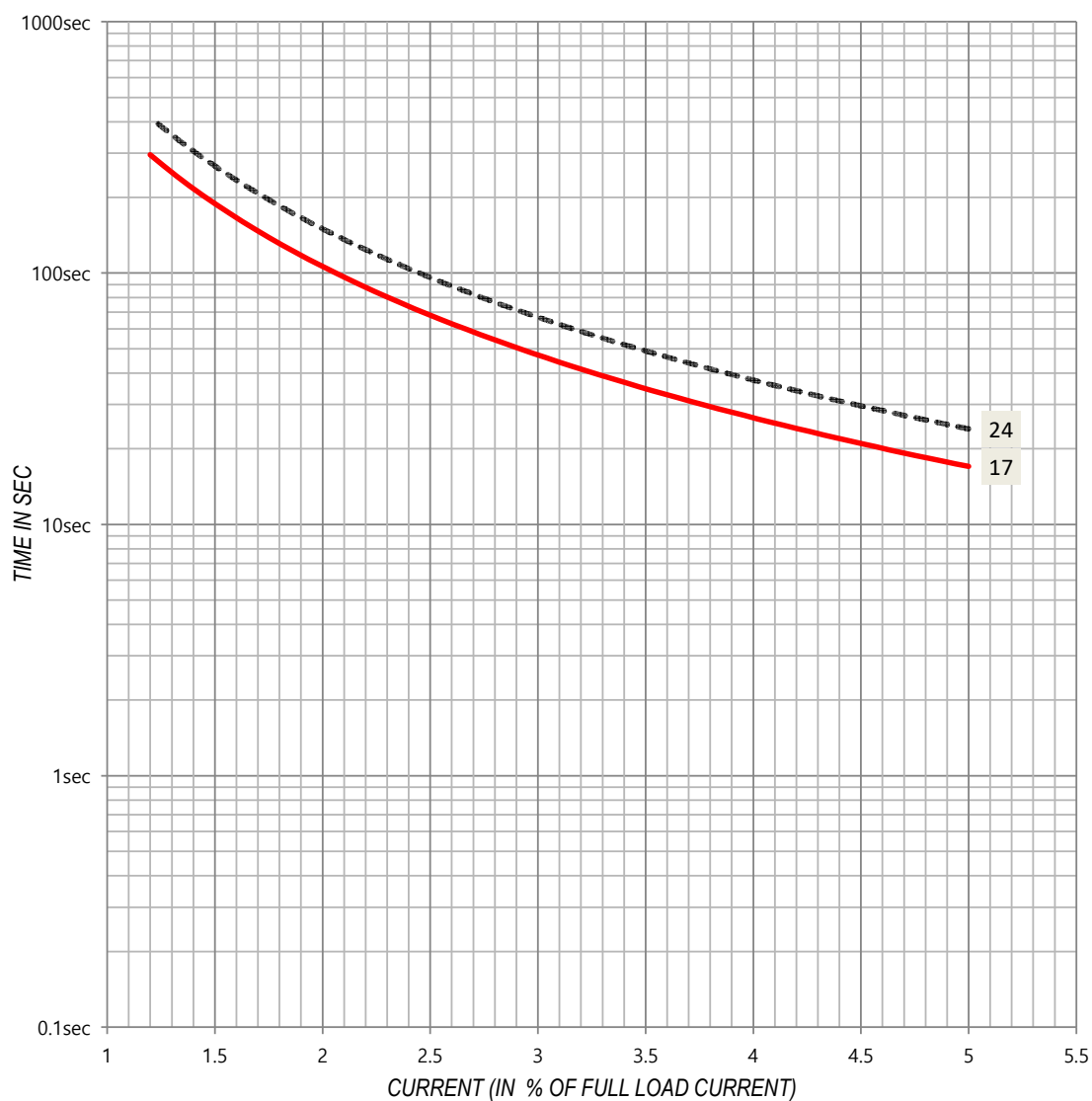
HICO 3 PHASE INDUCTION MOTOR	SPEED - TORQUE & CURRENT CURVE			Curve No.	
				1ST	
OUTPUT	1	HP	POLES	6	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	4.6	lb-ft	FULL LOAD CURRENT	3.3/1.7	A
LOCKED ROTOR TORQUE	170	%	LOCKED-ROTOR CURRENT	500	%
BREAKDOWN TORQUE	270	%	SPEED (at FULL LOAD)	1150	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	0.166	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

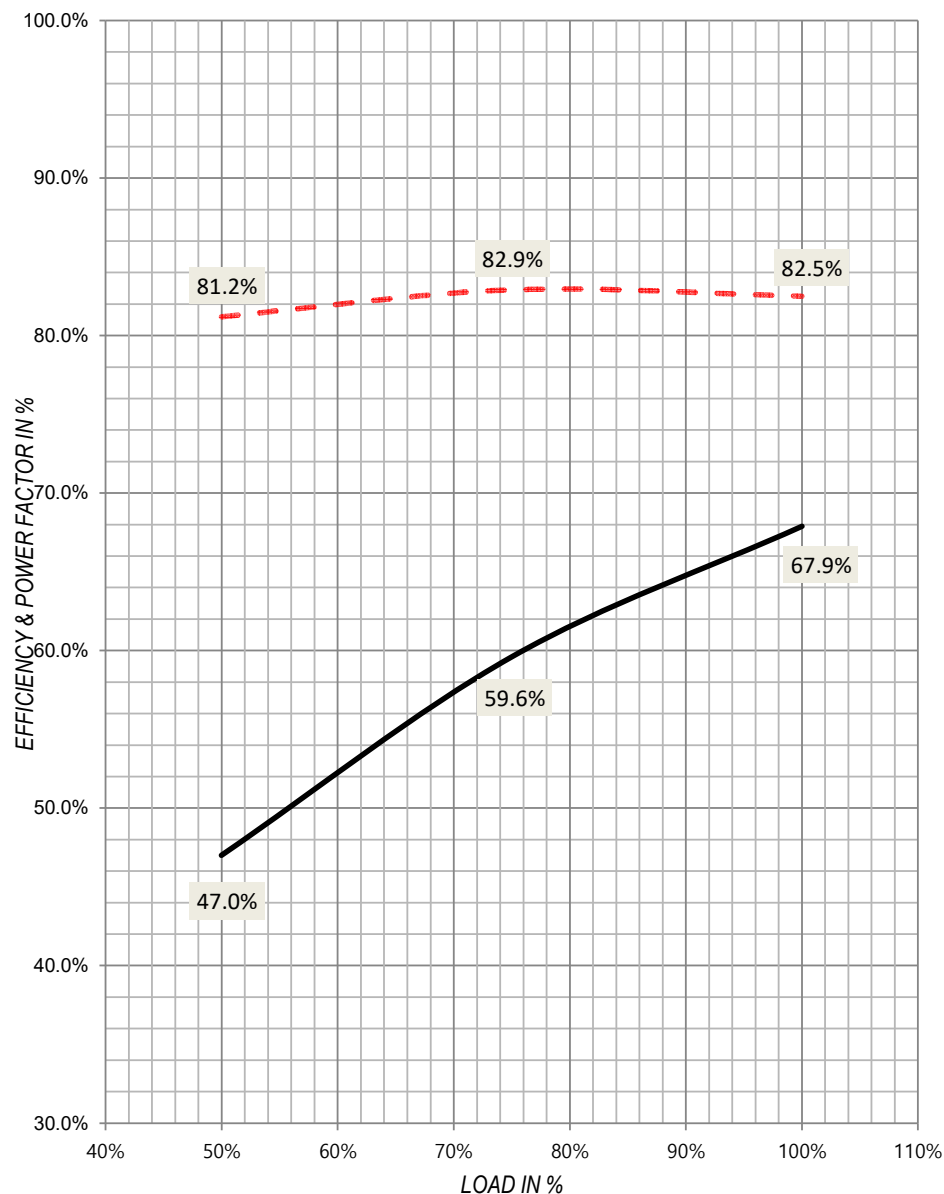
HICO 3 PHASE INDUCTION MOTOR	THERMAL LIMIT & TIME - CURRENT CURVE			Curve No.	
				1TL	
OUTPUT	1	HP	POLES	6	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	4.6	lb-ft	FULL LOAD CURRENT	3.3/1.7	A
LOCKED ROTOR TORQUE	170	%	LOCKED-ROTOR CURRENT	500	%
BREAKDOWN TORQUE	270	%	SPEED (at FULL LOAD)	1150	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	0.166	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	1	HP	POLES	6	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	4.6	lb-ft	FULL LOAD CURRENT	3.3/1.7	A
LOCKED ROTOR TORQUE	170	%	LOCKED-ROTOR CURRENT	500	%
BREAKDOWN TORQUE	270	%	SPEED (at FULL LOAD)	1150	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	0.166	lb-ft ²



NOTE

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

HICO

3 PHASE INDUCTION MOTOR

CONNECTION DIAGRAM

ISSUED

12/01/2024

DOUBLE VOLTAGE DELTA CONNECTION		DOUBLE VOLTAGE STAR CONNECTION		SINGLE VOLTAGE STAR-DELTA CONNECTION		DOUBLE VOLTAGE-STAR-DELTA CONNECTION			
LOW VOLTAGE	HIGH VOLTAGE	LOW VOLTAGE	HIGH VOLTAGE	STAR CONNECTION	DELTA CONNECTION	LOW VOLTAGE		HIGH VOLTAGE	
						STAR CONN.	DELTA CONN.	STAR CONN.	DELTA CONN.
				DIRECT-ON-LINE STARTING		DIRECT-ON-LINE STARTING		WYE-DELTA STARTING	

SINGLE VOLTAGE PART-WINDING CONNECTION		DOUBLE VOLTAGE PART WINDING CONNECTION			DOUBLE VOLTAGE-STAR-DELTA AND PART WINDING (at LOW VOLTAGE) CONNECTION				
PART WINDING CONNECTION	RUN	LOW VOLTAGE		HIGH VOLTAGE	LOW VOLTAGE			HIGH VOLTAGE	
		STARTING	RUN		PART-WINDING STARTING	STAR-DELTA STARTING	RUN	STAR-DELTA STARTING	RUN
PART-WINDING STARTING		LOW VOLTAGE PART-WINDING STARTING			LOW VOLTAGE PART-WINDING/STAR-DELTA STARTING				
		HIGH VOLTAGE DIRECT-ON-LINE STARTING			HIGH VOLTAGE DIRECT-ON-LINE STARTING				

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