

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

NAMEPLATE INFORMATION										
OUTPUT		RPM	VOLTS	Hz	FRAME SIZE	ENCLOSURE TYPE	S.F.	INS. CALSS	RATING	AMB. TEMP.
HP	KW									
3	2.2	3520	230/460	60	182T	TEFC	1.25	F	CONT.	40°C
TEMP. RISE	NEMA DESIGN	KVA CODE	Class/Division Hazardous Location							
B	B	K	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.					
84.0	86.5	86.4	84.6	84	79	68.1

CURRENT					
FULL LOAD AMPS	3/4 LOAD AMPS	1/2 LOAD AMPS	NO LOAD AMPS	STARTING CURRENT AMPS	STARTING CURRENT % FLC
7.7/3.9	6.2/3.1	4.9/2.4	3.4/1.7	63.9/32.4	830

* Usable at 208V: 8.4 AMPS (FULL LOAD)

* Usable at 3HP 50Hz 380V 4.6A 2890R.P.M. S.F. 1.0 EFF. 84.2% (IE2)

TORQUE				ALLOWABLE STARTS PER HOUR	
FULL LOAD (lb-ft)	LOCKED ROTOR % FLT	BREAK DOWN % FLT	PULL UP % FLT	COLD	HOT
4.5	300	400	270	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)			
0.190	4	11	68	55	89

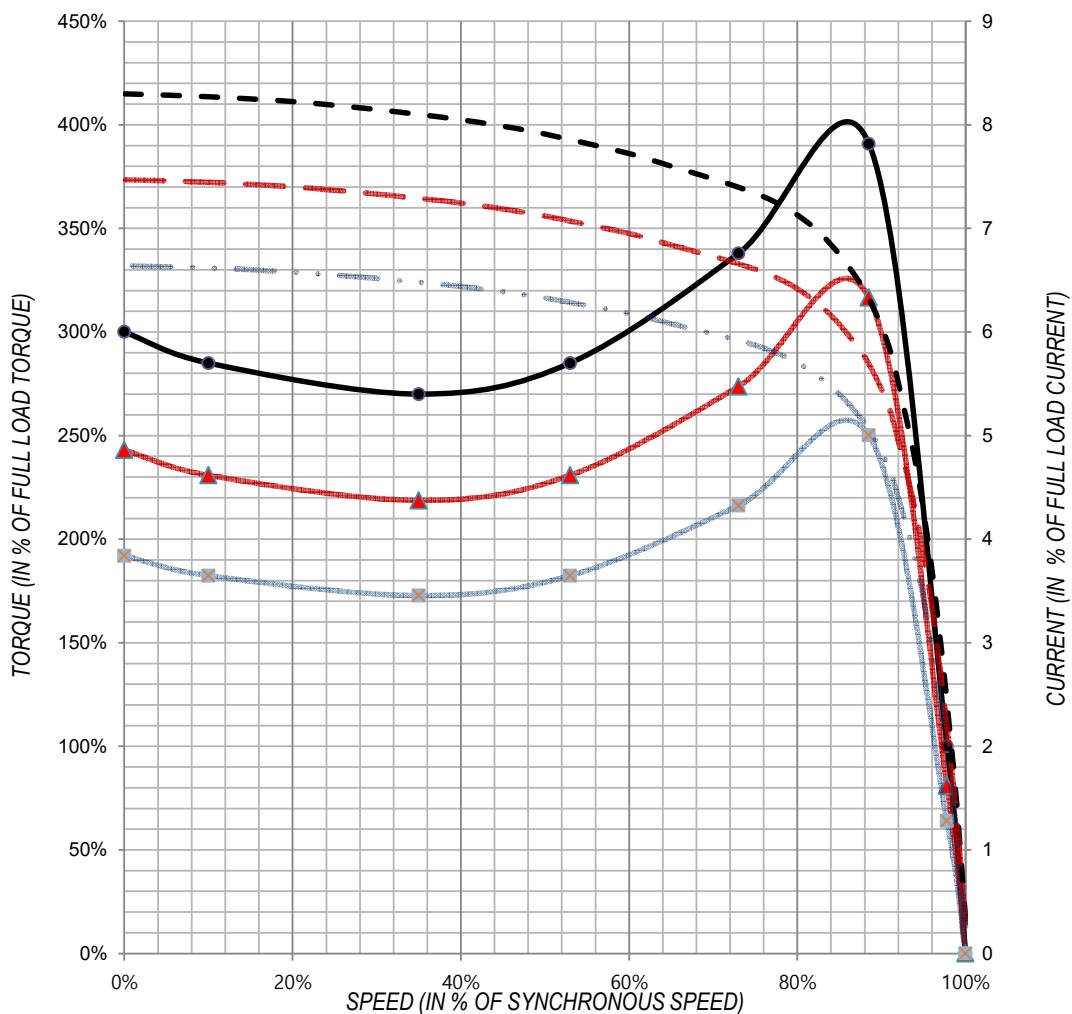
BEARING		GREASE	MOUNTING	
DE	ODE		TYPE OF CONSTRUCTION	TERMINAL BOX DESIGN
6207ZZ	6206ZZ	N/A	RIGID MOUNTING	NEMA

INVERTER DUTY DATA					
TYPE	HZ	HP	RPM	TORQUE(LB-FT)	NOTE
VARIABLE TORQUE	3~60	0.0004~3	180~3600	0.011~4.5	WITH TEMP. RISE CLASS F & S.F. 1.0
CONSTANT TORQUE	6~60	0.3~3	360~3600	4.5	
CONSTANT HP	60~90	3	3600~5400	4.5~3	

DRAWING NO.	ES1AS180403	REVISION	2.1
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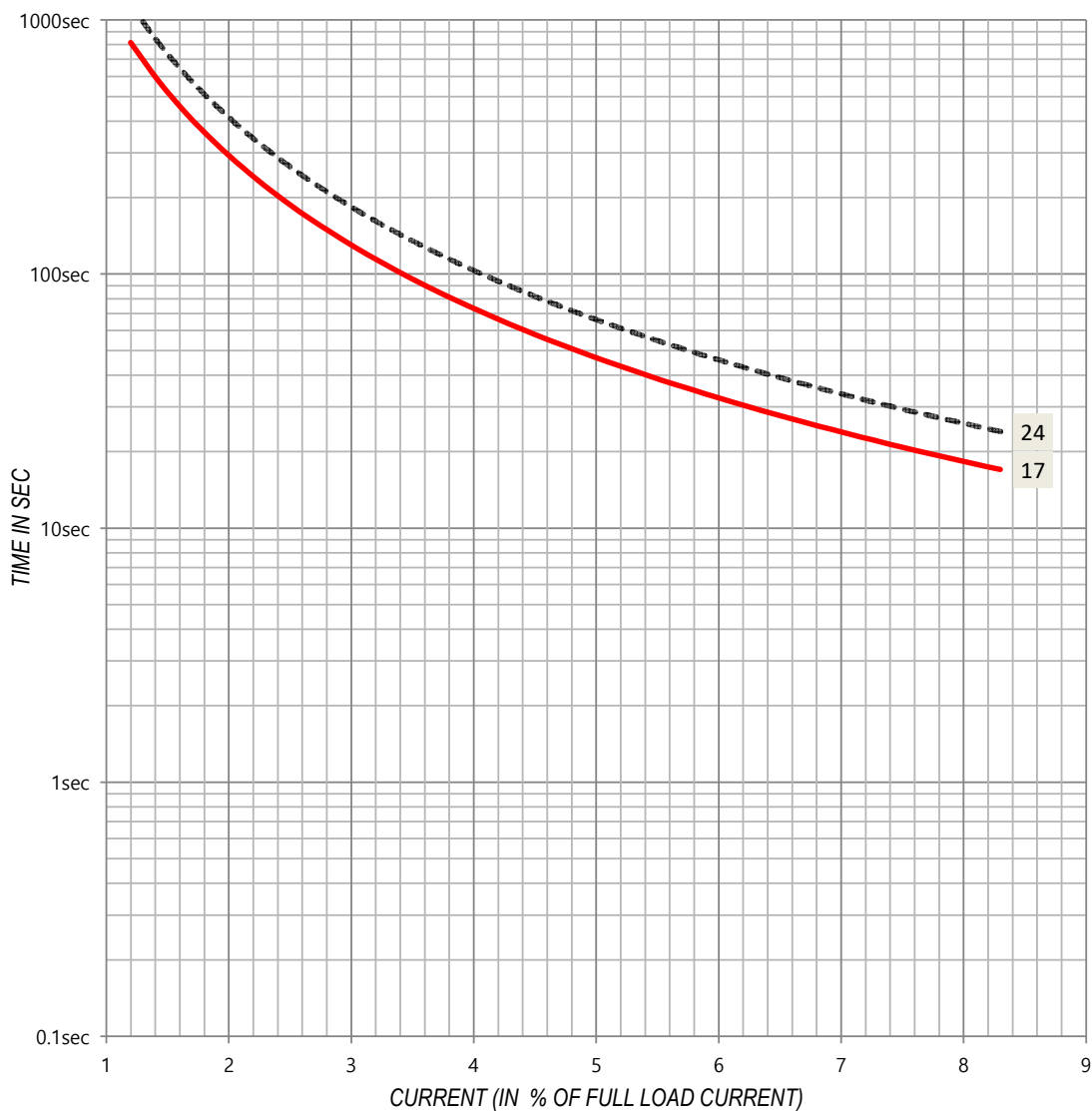
ALL DATA ABOVE ARE SUBJECTED TO CHANGE WITHOUT NOTICE.

HICO 3 PHASE INDUCTION MOTOR	SPEED - TORQUE & CURRENT CURVE			Curve No.	
				1ST	
OUTPUT	3	HP	POLES	2	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	4.5	lb-ft	FULL LOAD CURRENT	7.7/3.9	A
LOCKED ROTOR TORQUE	300	%	LOCKED-ROTOR CURRENT	830	%
BREAKDOWN TORQUE	400	%	SPEED (at FULL LOAD)	3520	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	0.19	lb-ft ²



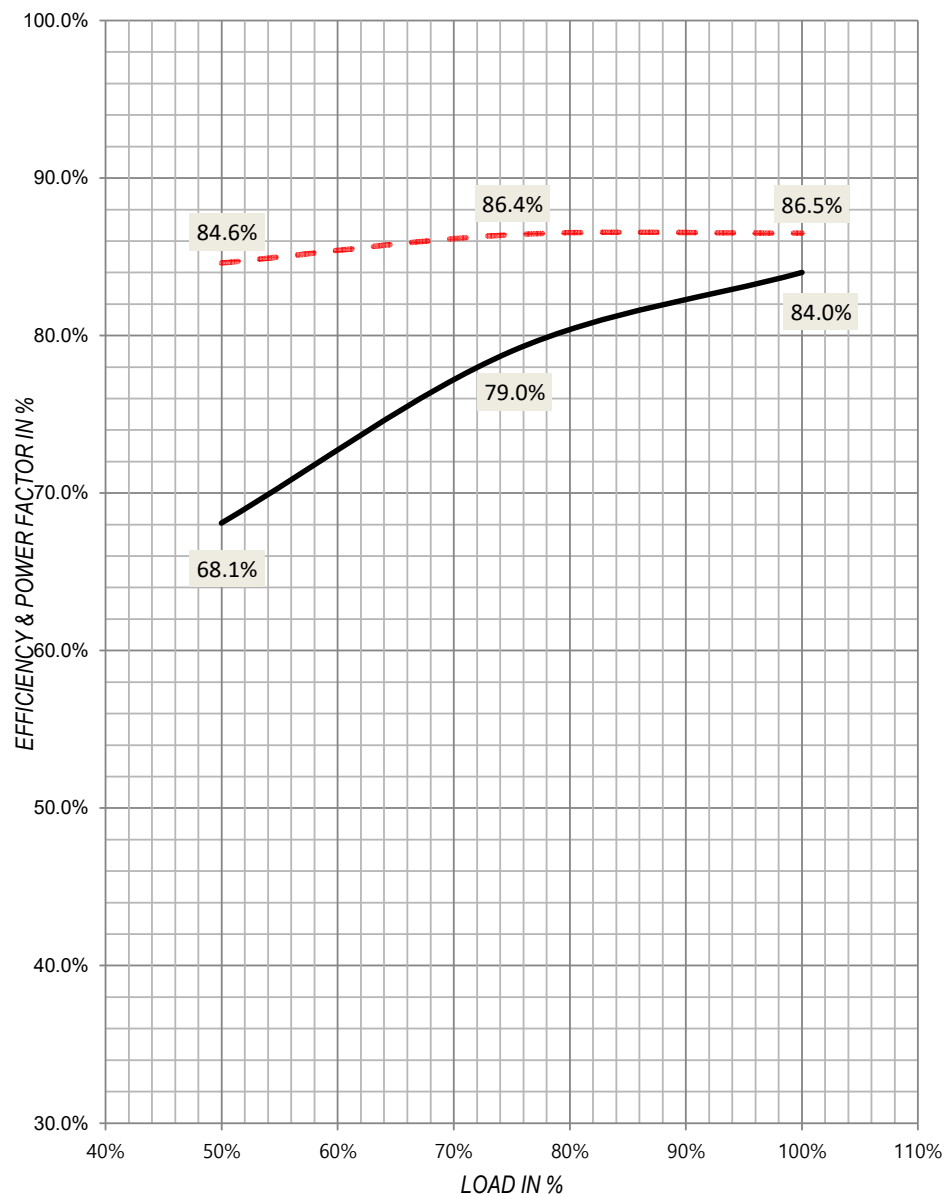
NOTE		A : SPEED-TORQUE CURVE AT	100% RATED VOLTAGE
		B : SPEED-TORQUE CURVE AT	90% RATED VOLTAGE
		C : SPEED-TORQUE CURVE AT	80% RATED VOLTAGE
		D : SPEED-CURRENT CURVE AT	100% RATED VOLTAGE
		E : SPEED-CURRENT CURVE AT	90% RATED VOLTAGE
		F : SPEED-CURRENT CURVE AT	80% RATED VOLTAGE

HICO 3 PHASE INDUCTION MOTOR			THERMAL LIMIT & TIME - CURRENT CURVE		Curve No.	
					1TL	
OUTPUT	3	HP	POLES	2	P	
VOLTAGE	230/460	V	FREQUENCY	60	Hz	
FULL LOAD TORQUE	4.5	lb-ft	FULL LOAD CURRENT	7.7/3.9	A	
LOCKED ROTOR TORQUE	300	%	LOCKED-ROTOR CURRENT	830	%	
BREAKDOWN TORQUE	400	%	SPEED (at FULL LOAD)	3520	RPM	
GD ² of LOAD :	-	lb·ft ²	GD ² of MOTOR	0.19	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	3	HP	POLES	2	P
VOLTAGE	230/460	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	4.5	lb-ft	FULL LOAD CURRENT	7.7/3.9	A
LOCKED ROTOR TORQUE	300	%	LOCKED-ROTOR CURRENT	830	%
BREAKDOWN TORQUE	400	%	SPEED (at FULL LOAD)	3520	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	0.19	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		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	RUN
PART-WINDING STARTING		LOW VOLTAGE PART-WINDING STARTING HIGH VOLTAGE DIRECT-ON-LINE STARTING			LOW VOLTAGE PART-WINDING/STAR-DELTA STARTING HIGH VOLTAGE DIRECT-ON-LINE STARTING					

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