

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	182TD	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	97

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

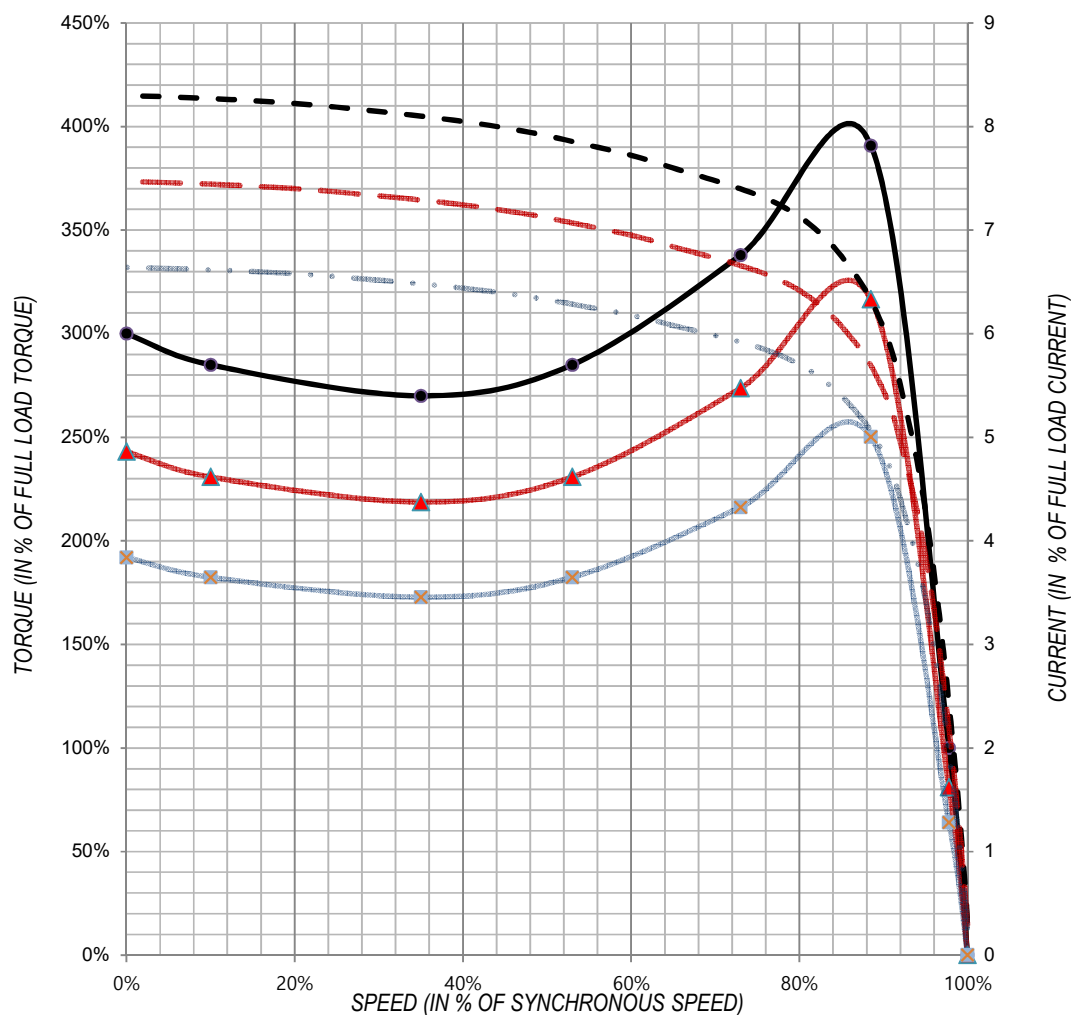
INVERTER DUTY DATA					
TYPE	HZ	HP	RPM	TORQUE(LB-FT)	NOTE
VARIABLE TORQUE	3~60	0.0004~3	180~3600	0.011~4.5	WITH TEMP. RISE CLASS F & S.F. 1.0
CONSTANT TORQUE	6~60	0.3~3	360~3600	4.5	
CONSTANT HP	60~90	3	3600~5400	4.5~3	

DRAWING NO.	ES1AS185703	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

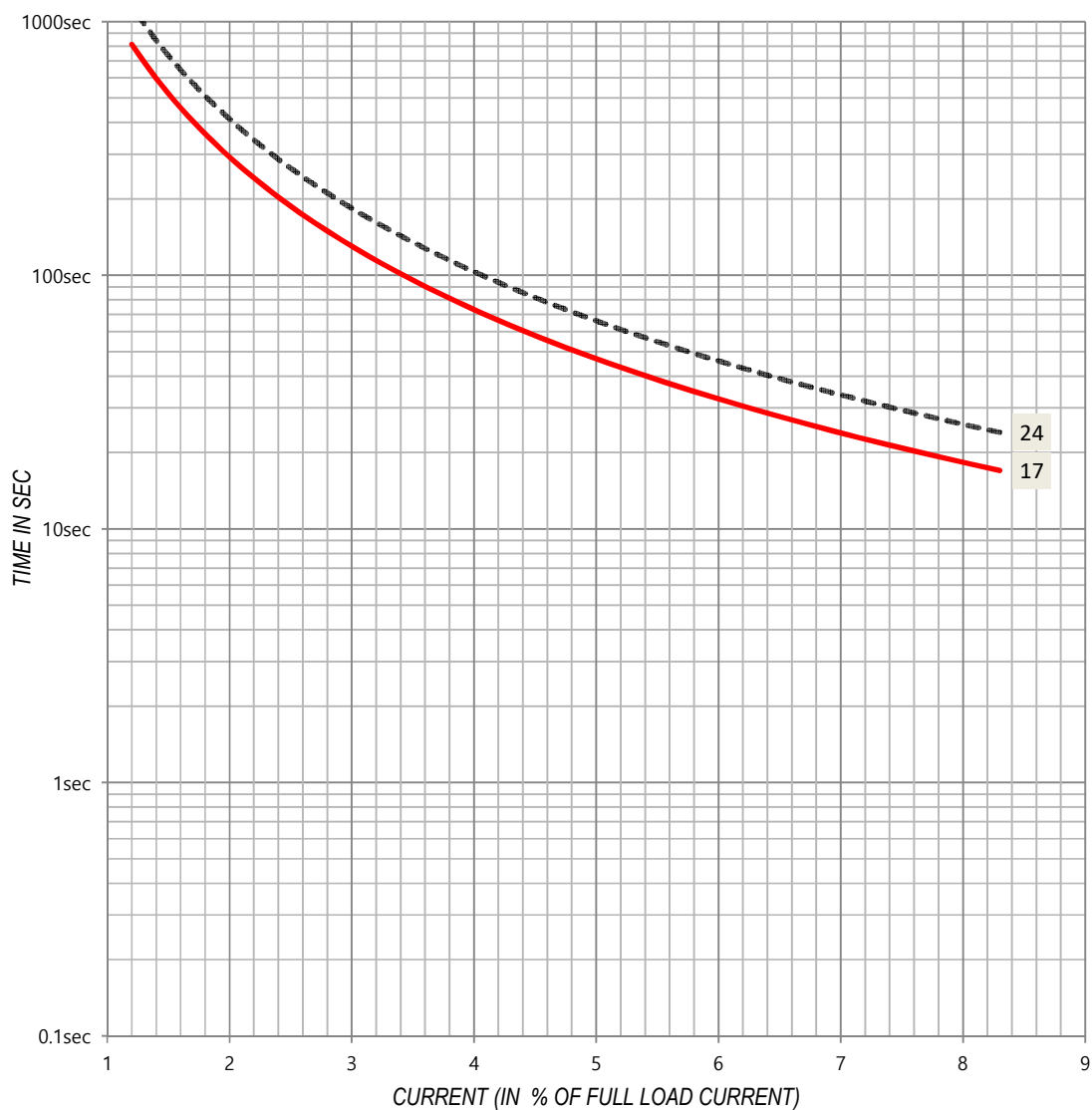


NOTE

- 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

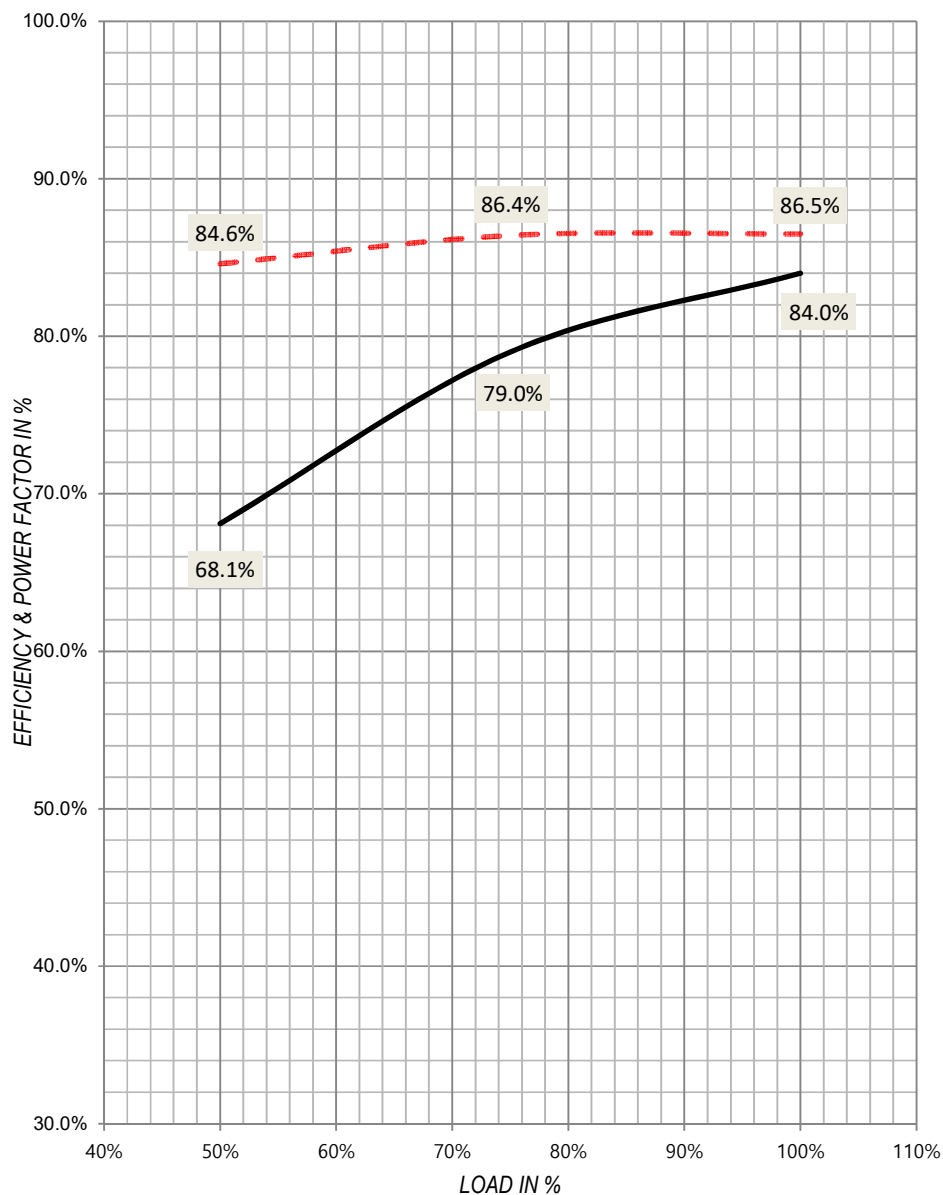


NOTE

- 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

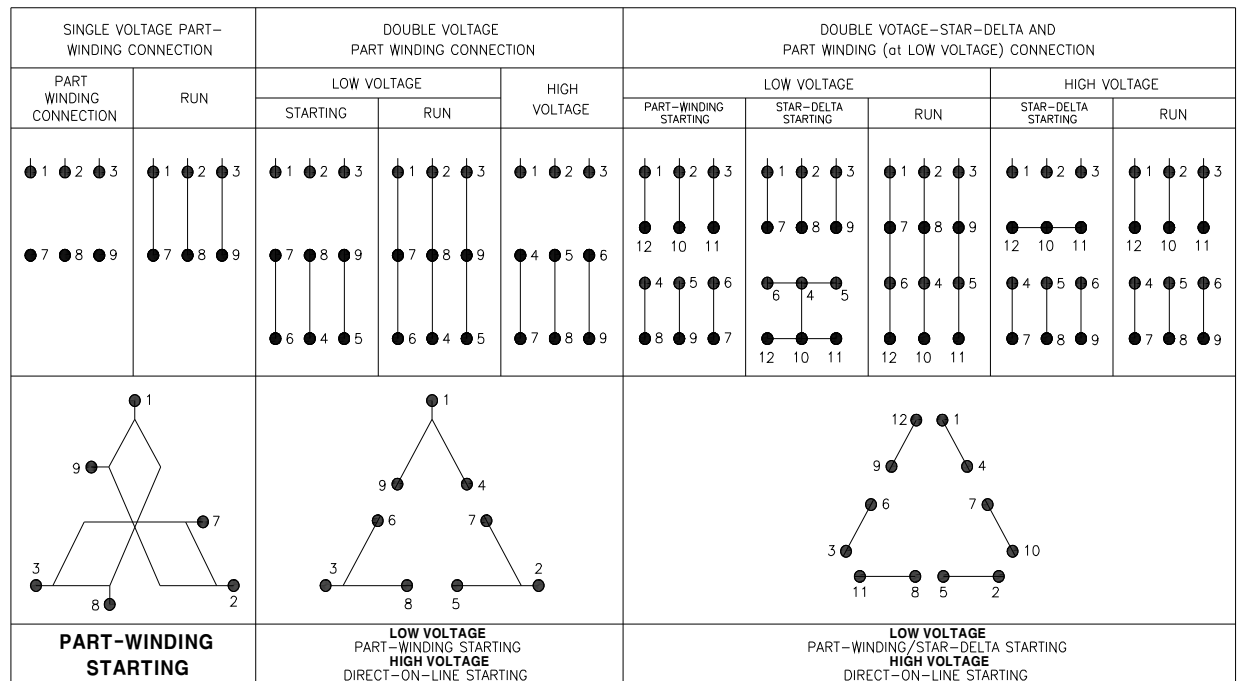
HICO

3 PHASE INDUCTION MOTOR

CONNECTION DIAGRAM

ISSUED

12/01/2024



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