

HICO 3 PHASE INDUCTION MOTOR	PERFORMANCE DATASHEET	ISSUED	01/15/2026
		MODEL	40HP 4P

NAMEPLATE INFORMATION										
OUTPUT		RPM	VOLTS	Hz	FRAME SIZE	ENCLOSURE TYPE	S.F.	INS. CALSS	RATING	AMB. TEMP.
HP	KW									
40	30	1775	575	60	324TC	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.					
93.0	94.1	94.5	94.1	83.8	80	70.9

CURRENT					
FULL LOAD AMPS	3/4 LOAD AMPS	1/2 LOAD AMPS	NO LOAD AMPS	STARTING CURRENT AMPS	STARTING CURRENT % FLC
38.0	29.7	22.5	15.3	247	650

TORQUE				ALLOWABLE STARTS PER HOUR	
FULL LOAD (lb-ft)	LOCKED ROTOR % FLT	BREAK DOWN % FLT	PULL UP % FLT	COLD	HOT
118.4	185	235	164	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)			
8.128	189	339	72	55	563

BEARING		GREASE	MOUNTING	
DE	ODE		TYPE OF CONSTRUCTION	TERMINAL BOX DESIGN
6313ZC3	6212ZC3	GREASE(MOBIL Polyrex EM)	RIGID MOUNTING	NEMA

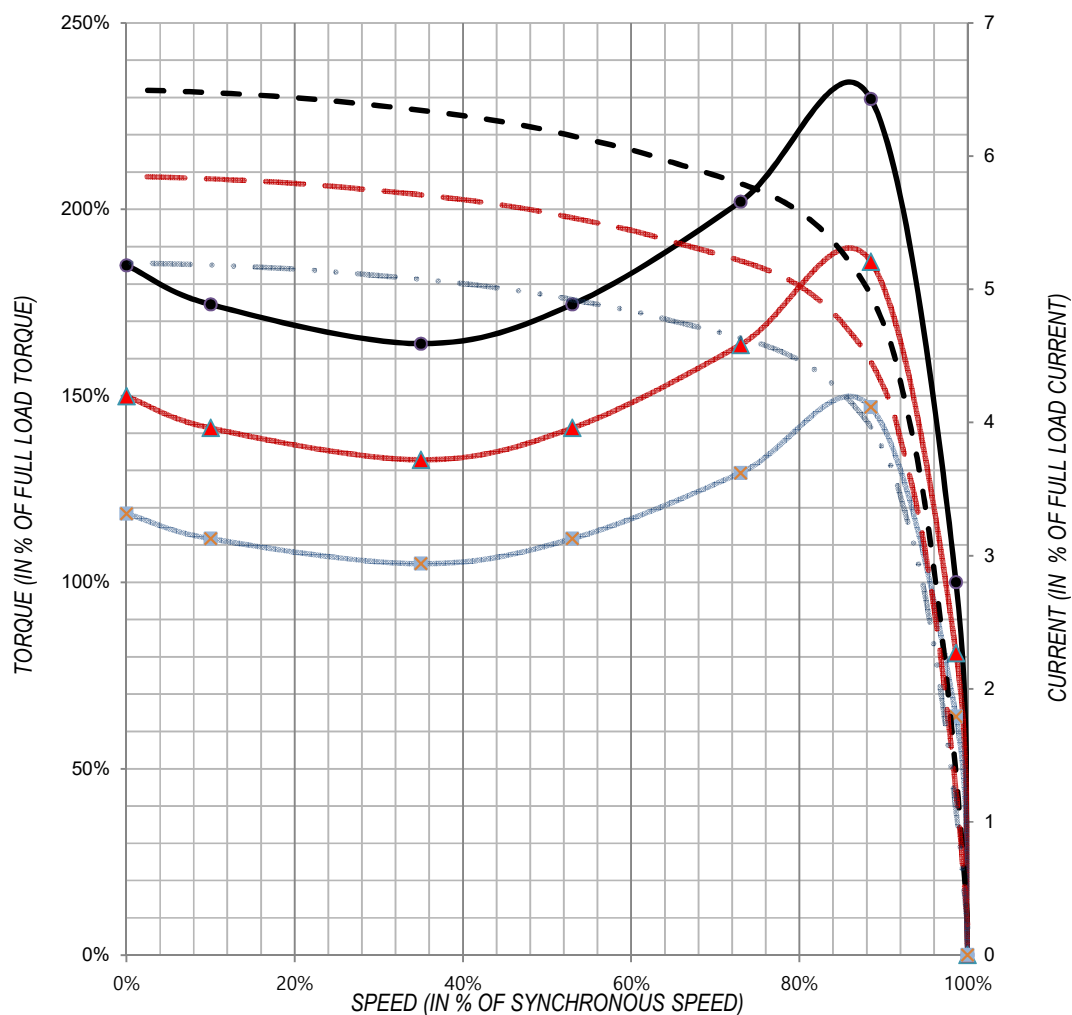
INVERTER DUTY DATA					
TYPE	HZ	HP	RPM	TORQUE(LB-FT)	NOTE
VARIABLE TORQUE	3~60	0.005~40	90~1800	0.296~118.4	WITH TEMP. RISE CLASS F & S.F. 1.0
CONSTANT TORQUE	6~60	4~40	180~1800	118.4	
CONSTANT HP	60~90	40	1800~2700	118.4~78.933	

DRAWING NO.	ES1AS180514	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	40	HP	POLES	4	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	118.4	lb-ft	FULL LOAD CURRENT	38.0	A
LOCKED ROTOR TORQUE	185	%	LOCKED-ROTOR CURRENT	650	%
BREAKDOWN TORQUE	235	%	SPEED (at FULL LOAD)	1775	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	8.128	lb-ft ²

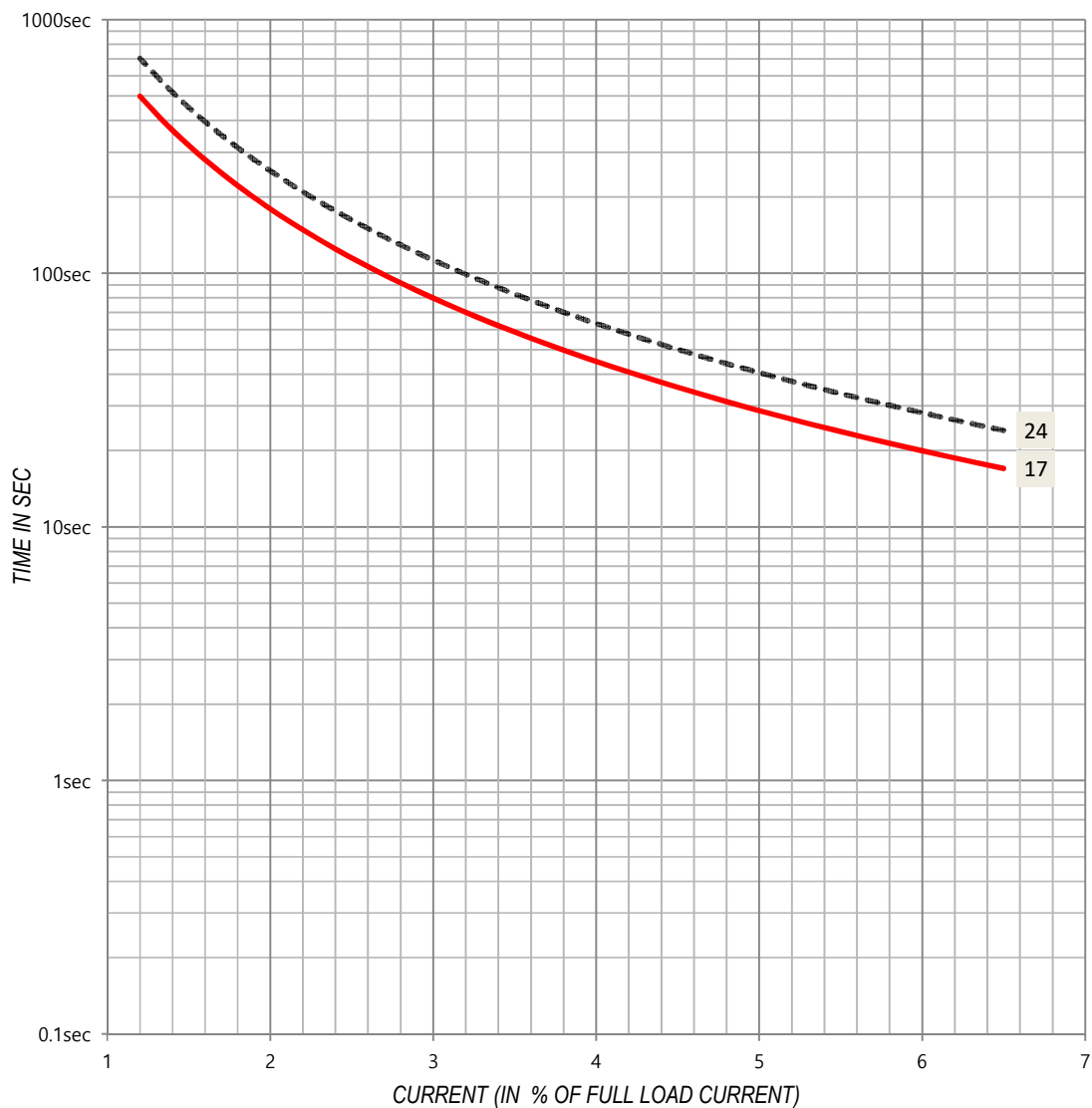


NOTE

- 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

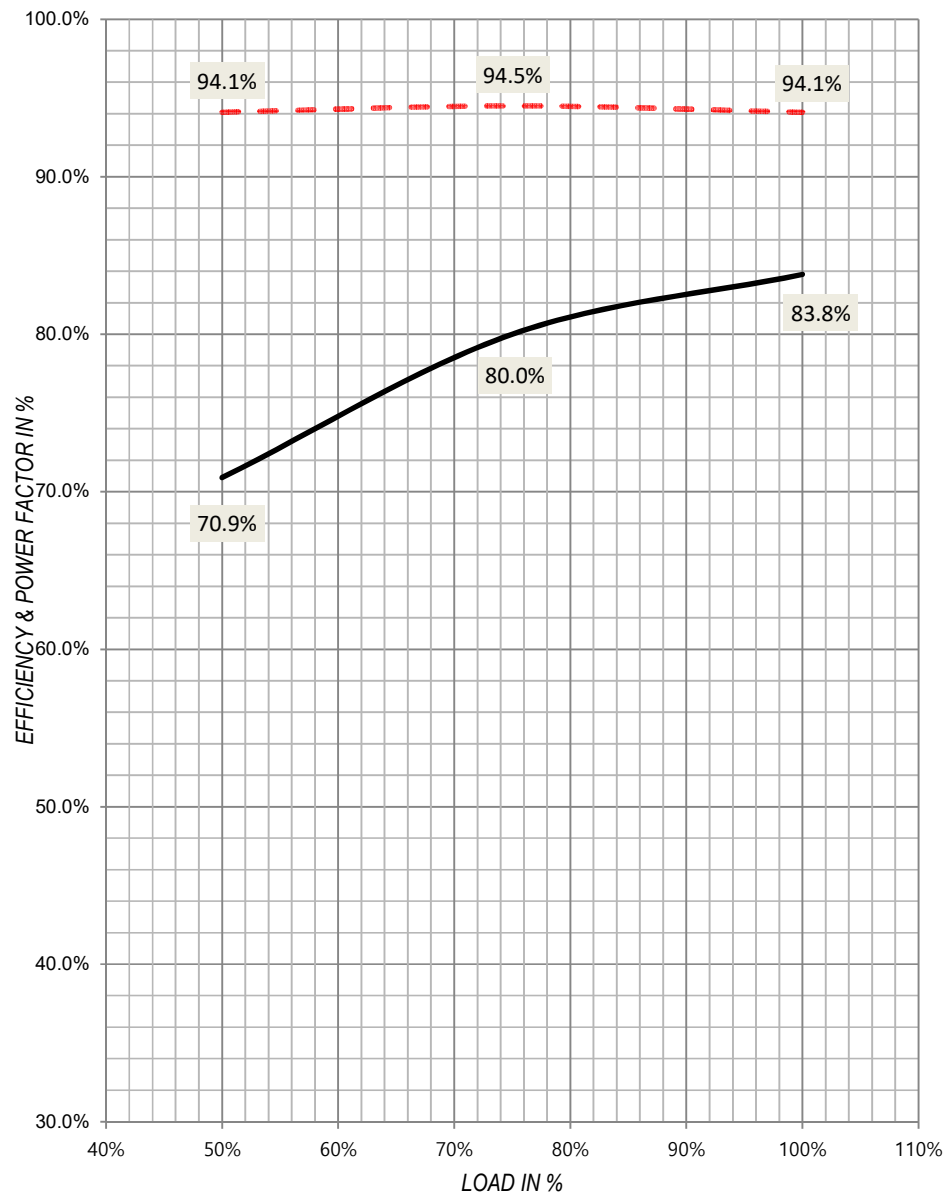
OUTPUT	40	HP	POLES	4	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	118.4	lb-ft	FULL LOAD CURRENT	38.0	A
LOCKED ROTOR TORQUE	185	%	LOCKED-ROTOR CURRENT	650	%
BREAKDOWN TORQUE	235	%	SPEED (at FULL LOAD)	1775	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	8.128	lb-ft ²



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	40	HP	POLES	4	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	118.4	lb-ft	FULL LOAD CURRENT	38.0	A
LOCKED ROTOR TORQUE	185	%	LOCKED-ROTOR CURRENT	650	%
BREAKDOWN TORQUE	235	%	SPEED (at FULL LOAD)	1775	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	8.128	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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