

HICO 3 PHASE INDUCTION MOTOR	PERFORMANCE DATASHEET	ISSUED	01/15/2026
		MODEL	75HP 2P

NAMEPLATE INFORMATION										
OUTPUT		RPM	VOLTS	Hz	FRAME SIZE	ENCLOSURE TYPE	S.F.	INS. CALSS	RATING	AMB. TEMP.
HP	KW									
75	55	3555	575	60	365TSC	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.					
92.4	93.6	94.2	94.3	90.4	89.7	86.2

CURRENT					
FULL LOAD AMPS	3/4 LOAD AMPS	1/2 LOAD AMPS	NO LOAD AMPS	STARTING CURRENT AMPS	STARTING CURRENT % FLC
66.4	49.9	34.6	15.2	464.8	700

TORQUE				ALLOWABLE STARTS PER HOUR	
FULL LOAD (lb-ft)	LOCKED ROTOR % FLT	BREAK DOWN % FLT	PULL UP % FLT	COLD	HOT
110.9	130	230	117	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)			
8.745	71	126	78	55	841

BEARING		GREASE	MOUNTING	
DE	ODE		TYPE OF CONSTRUCTION	TERMINAL BOX DESIGN
6312C3	6312C3	GREASE(MOBIL Polyrex EM)	RIGID MOUNTING	NEMA

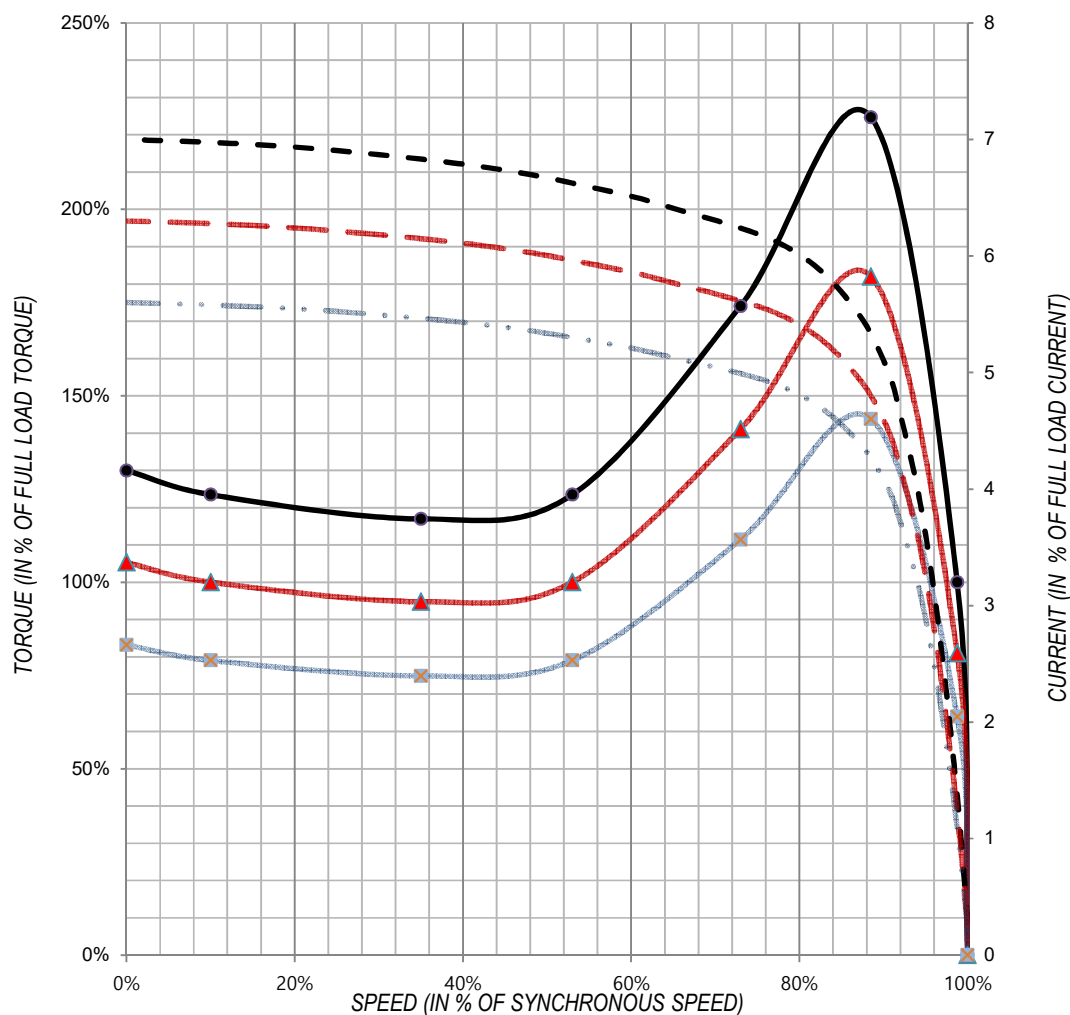
INVERTER DUTY DATA					
TYPE	HZ	HP	RPM	TORQUE(LB-FT)	NOTE
VARIABLE TORQUE	3~60	0.0094~75	180~3600	0.277~110.9	WITH TEMP. RISE CLASS F & S.F. 1.0
CONSTANT TORQUE	6~60	7.5~75	360~3600	110.9	
CONSTANT HP	60~90	75	3600~5400	110.9~73.933	

DRAWING NO.	ES1AS180519	REVISION	0.1
-------------	-------------	----------	-----

ALL DATA ABOVE ARE SUBJECTED TO CHANGE WITHOUT NOTICE.

HICO 3 PHASE INDUCTION MOTOR	SPEED - TORQUE & CURRENT CURVE				Curve No.
					1ST

OUTPUT	75	HP	POLES	2	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	110.9	lb-ft	FULL LOAD CURRENT	66.4	A
LOCKED ROTOR TORQUE	130	%	LOCKED-ROTOR CURRENT	700	%
BREAKDOWN TORQUE	230	%	SPEED (at FULL LOAD)	3555	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	8.745	lb-ft ²

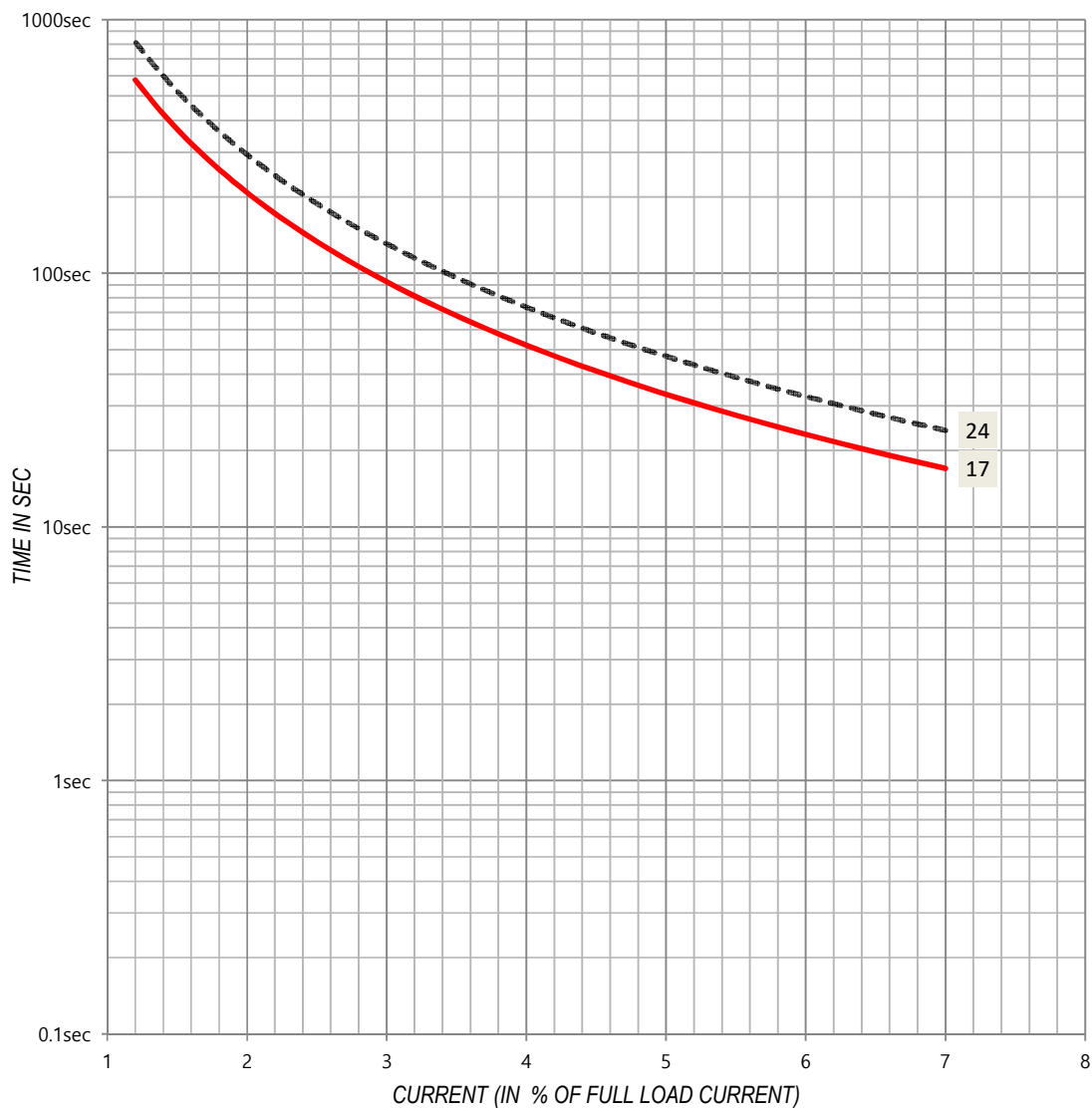


NOTE

	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

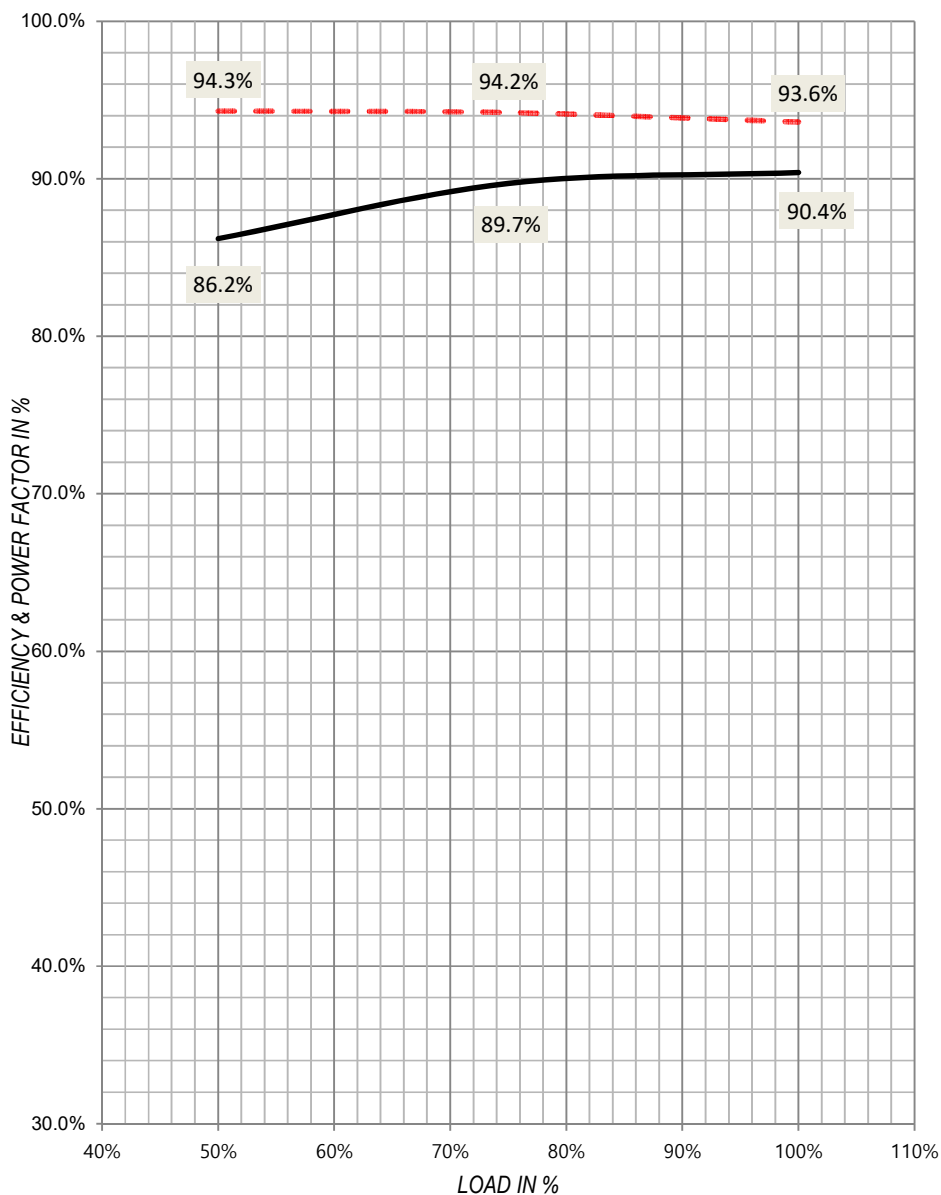
OUTPUT	75	HP	POLES	2	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	110.9	lb-ft	FULL LOAD CURRENT	66.4	A
LOCKED ROTOR TORQUE	130	%	LOCKED-ROTOR CURRENT	700	%
BREAKDOWN TORQUE	230	%	SPEED (at FULL LOAD)	3555	RPM
GD ² of LOAD :	-	lb·ft ²	GD ² of MOTOR	8.745	lb·ft ²



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	75	HP	POLES	2	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	110.9	lb-ft	FULL LOAD CURRENT	66.4	A
LOCKED ROTOR TORQUE	130	%	LOCKED-ROTOR CURRENT	700	%
BREAKDOWN TORQUE	230	%	SPEED (at FULL LOAD)	3555	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	8.745	lb-ft ²



NOTE

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

HICO

3 PHASE INDUCTION MOTOR

CONNECTION DIAGRAM

ISSUED

12/01/2024



ALL DATA ABOVE ARE SUBJECTED TO CHANGE WITHOUT NOTICE.