

HICO 3 PHASE INDUCTION MOTOR	PERFORMANCE DATASHEET	ISSUED	01/15/2026
		MODEL	20HP 4P

NAMEPLATE INFORMATION										
OUTPUT		RPM	VOLTS	Hz	FRAME SIZE	ENCLOSURE TYPE	S.F.	INS. CALSS	RATING	AMB. TEMP.
HP	kW									
20	15	1770	575	60	256TD	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.					
91.7	93	93.4	93	80.2	76.1	66.5

CURRENT					
FULL LOAD AMPS	3/4 LOAD AMPS	1/2 LOAD AMPS	NO LOAD AMPS	STARTING CURRENT AMPS	STARTING CURRENT % FLC
20.1	15.8	12.1	8.2	124.6	620

TORQUE				ALLOWABLE STARTS PER HOUR	
FULL LOAD (lb-ft)	LOCKED ROTOR % FLT	BREAK DOWN % FLT	PULL UP % FLT	COLD	HOT
59.4	200	237	167	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)			
3.204	99	235	69	55	355

BEARING		GREASE	MOUNTING	
DE	ODE		TYPE OF CONSTRUCTION	TERMINAL BOX DESIGN
6309ZZ	6309ZZ	N/A	RIGID MOUNTING	NEMA

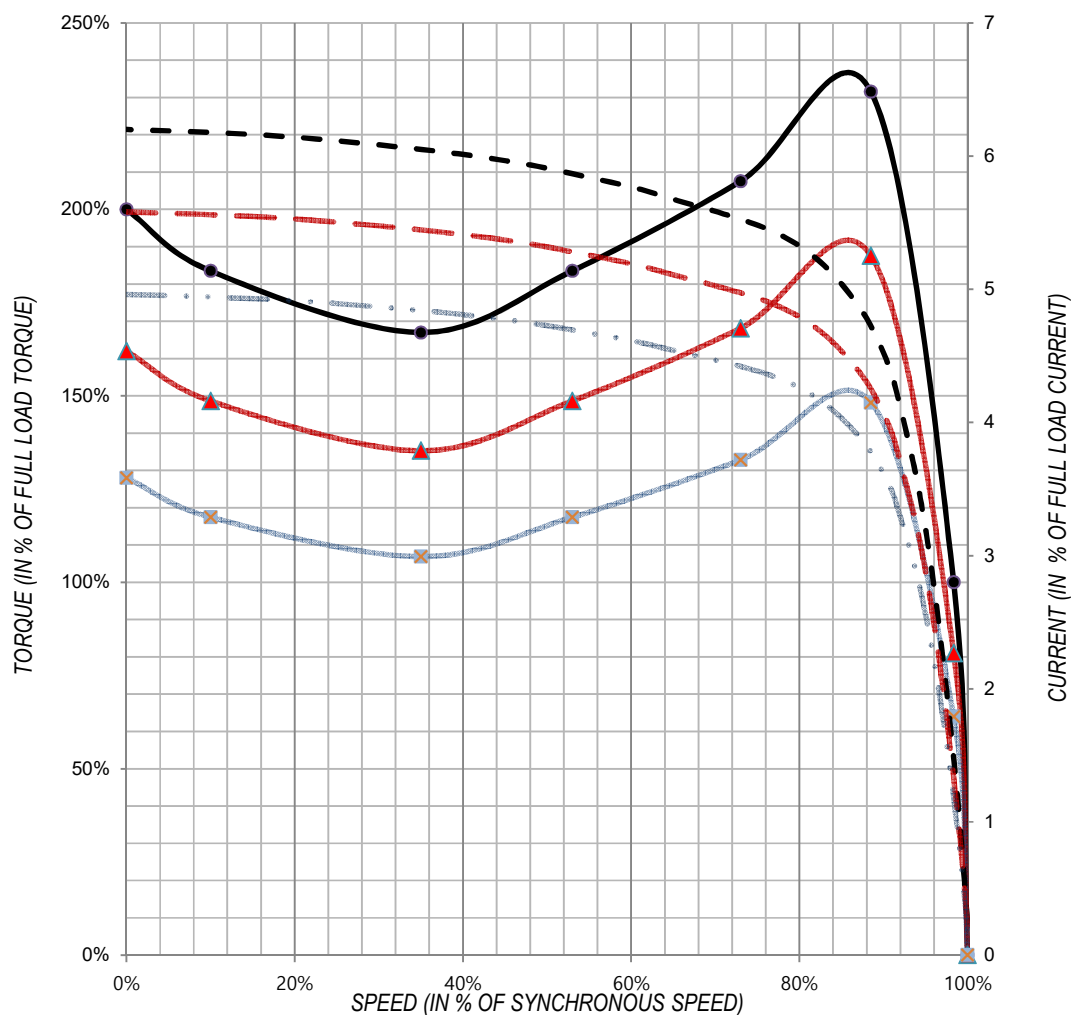
INVERTER DUTY DATA					
TYPE	HZ	HP	RPM	TORQUE(LB-FT)	NOTE
VARIABLE TORQUE	3~60	0.0025~20	90~1800	0.149~59.4	WITH TEMP. RISE CLASS F & S.F. 1.0
CONSTANT TORQUE	6~60	2~20	180~1800	59.4	
CONSTANT HP	60~90	20	1800~2700	59.4~39.6	

DRAWING NO.	ES1AS185708	REVISION	0.1
-------------	-------------	----------	-----

ALL DATA ABOVE ARE SUBJECTED TO CHANGE WITHOUT NOTICE.

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

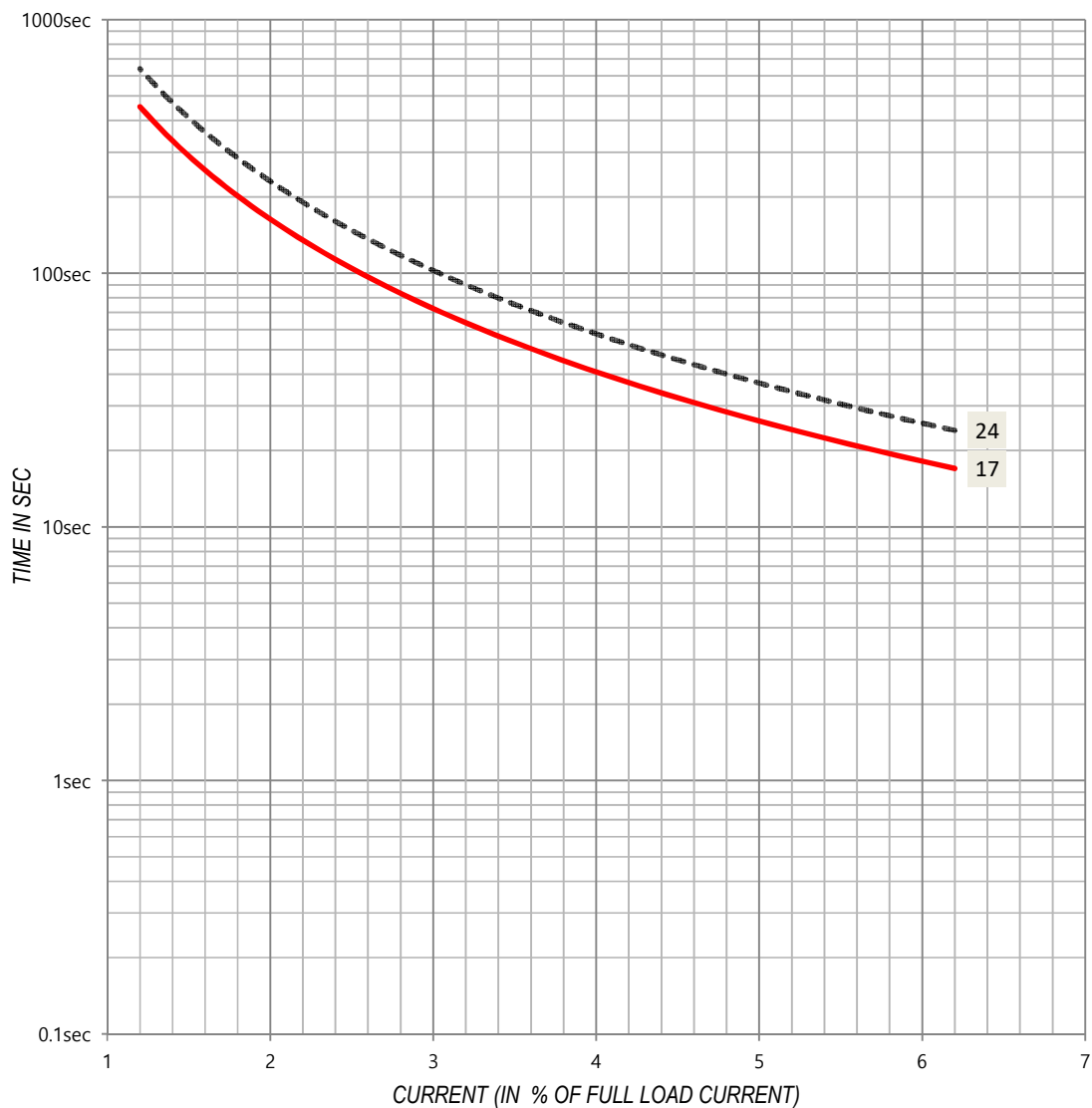
OUTPUT	20	HP	POLES	4	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	59.4	lb-ft	FULL LOAD CURRENT	20.1	A
LOCKED ROTOR TORQUE	200	%	LOCKED-ROTOR CURRENT	620	%
BREAKDOWN TORQUE	237	%	SPEED (at FULL LOAD)	1770	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	3.204	lb-ft ²



NOTE

HICO 3 PHASE INDUCTION MOTOR	THERMAL LIMIT & TIME - CURRENT CURVE				Curve No.
					1TL

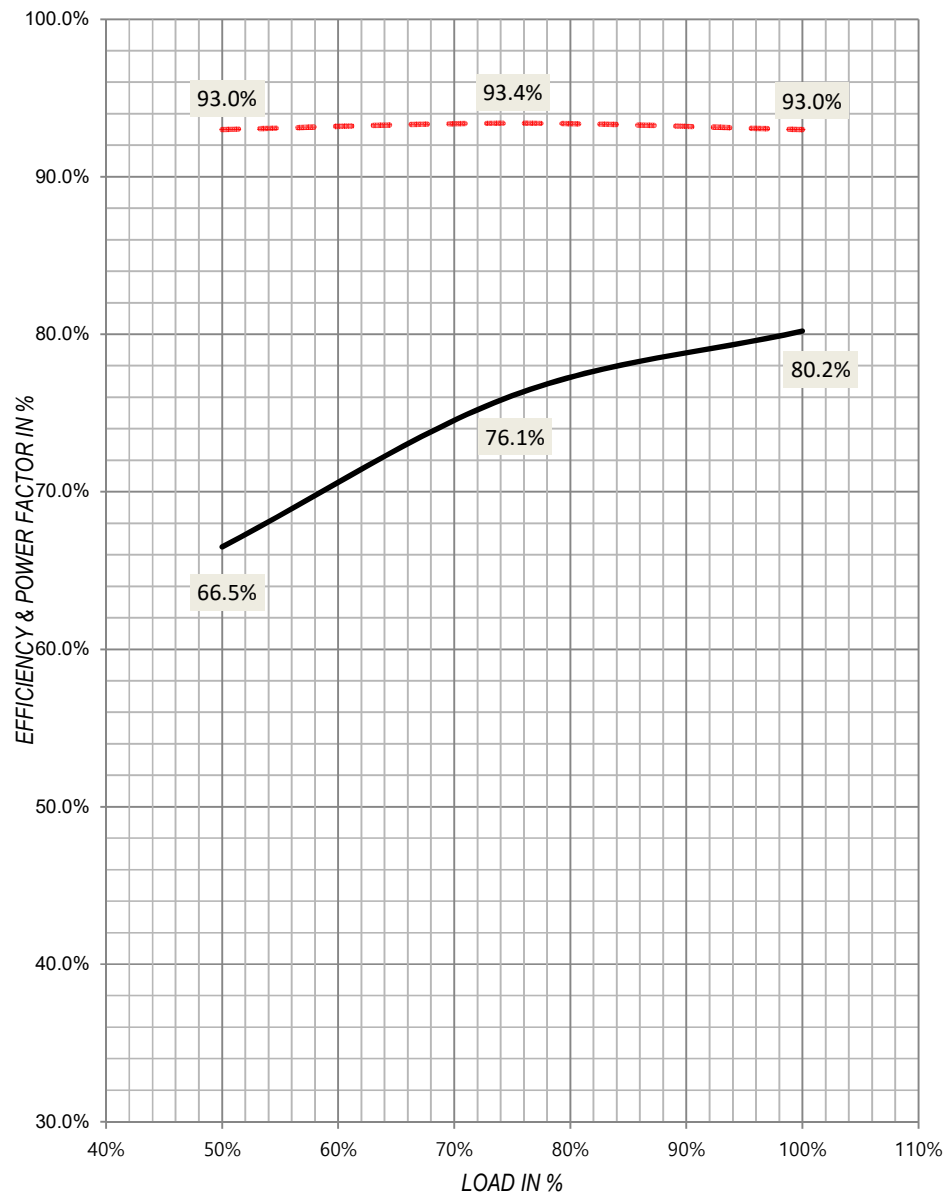
OUTPUT	20	HP	POLES	4	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	59.4	lb-ft	FULL LOAD CURRENT	20.1	A
LOCKED ROTOR TORQUE	200	%	LOCKED-ROTOR CURRENT	620	%
BREAKDOWN TORQUE	237	%	SPEED (at FULL LOAD)	1770	RPM
GD ² of LOAD :	-	lb·ft ²	GD ² of MOTOR	3.204	lb·ft ²



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	20	HP	POLES	4	P
VOLTAGE	575	V	FREQUENCY	60	Hz
FULL LOAD TORQUE	59.4	lb-ft	FULL LOAD CURRENT	20.1	A
LOCKED ROTOR TORQUE	200	%	LOCKED-ROTOR CURRENT	620	%
BREAKDOWN TORQUE	237	%	SPEED (at FULL LOAD)	1770	RPM
GD ² of LOAD :	-	lb-ft ²	GD ² of MOTOR	3.204	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.