

ABB BALDOR RELIANCE III

Customer information packet

HBAO4106T

20 AOHP, 3520RPM, 3PH, 60HZ, 256T, 0936M, TEAO

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	256T
Frame Material	Iron
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	3600 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ 230.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM WEEE
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	46.000 A @ 230.0 V 50.000 A @ 208.0 V 23.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	91.0 %
Electrically Isolated Bearing	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	J
Type	AC
Mech. spec.	09T117
Base	
Status	PRD/A
Elec. spec.	09WGZ601
Layout	09LYT117
Eff. date	11-14-2023
CD Diagram	CD0005
Poles	02
Leads	9#12
Proprietary	False
Created date	01-05-2022

High Voltage Full Load Amps	23.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0936M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	20.75 IN
Power Factor	89
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	3520 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None



Nameplate

NP4312AO1M01L																					
CAT #		HBAO4106T								SER #				CC				WGT		229	LBS
SPEC		09T117Z601G1								RATING				40C AMB-CONT							
HZ		VOLTS				AMPS				RPM		HP		SF		NEMA NOM. EFF					
60		230/460				46/23								3520		20AO		1.15		91	
PH	3	CL	H	CODE	H	DES	A	ENCL	TEAO			IP	54	PF	89	%	AIR OVER				
DE BRG		6309				ODE BRG				6208				FRAME		256T					
INV TYPE:		VPWM				SL HZ		1.33	CHP	60	TO	90	1.5:1								
WK2	0.92	LB FT2				MAX RPM			5400	CT	6	TO	60	10:1							
14.2/7.1								VT		3	TO	60	20:1								
SFA 43/26.5																					
YR:																					

AC Induction Motor Performance Data

Record # 36290

Typical performance - not guaranteed values

Winding: 09WGZ601-R024			Type: 0936M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		20	Full Load Torque		29.6 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		46/23	Breakdown Torque		111 LB-FT		
R.P.M.		3520	Pull-up Torque		39.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		49.6 LB-FT	
NEMA Design Code		B	KVA Code	H	Starting Current		161 A
Service Factor (S.F.)		1.15		No-load Current		7.17 A	
NEMA Nom. Eff.		91	Power Factor	89	Line-line Res. @ 25°C		0.47592 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		76°C	
S.F. Amps				Temp. Rise @ S.F. Load		95°C	
				Locked-rotor Power Factor		29	
				Rotor inertia		0.92 LB-FT2	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	58	78	86	89	90	90	90
Efficiency	88.9	92.2	92.4	91.7	90.7	89.2	91.1
Speed	3579.6	3561.5	3541.3	3519.5	3495.4	3467.8	3505
Line amperes	9	13	17.7	22.9	28.6	35	26.3

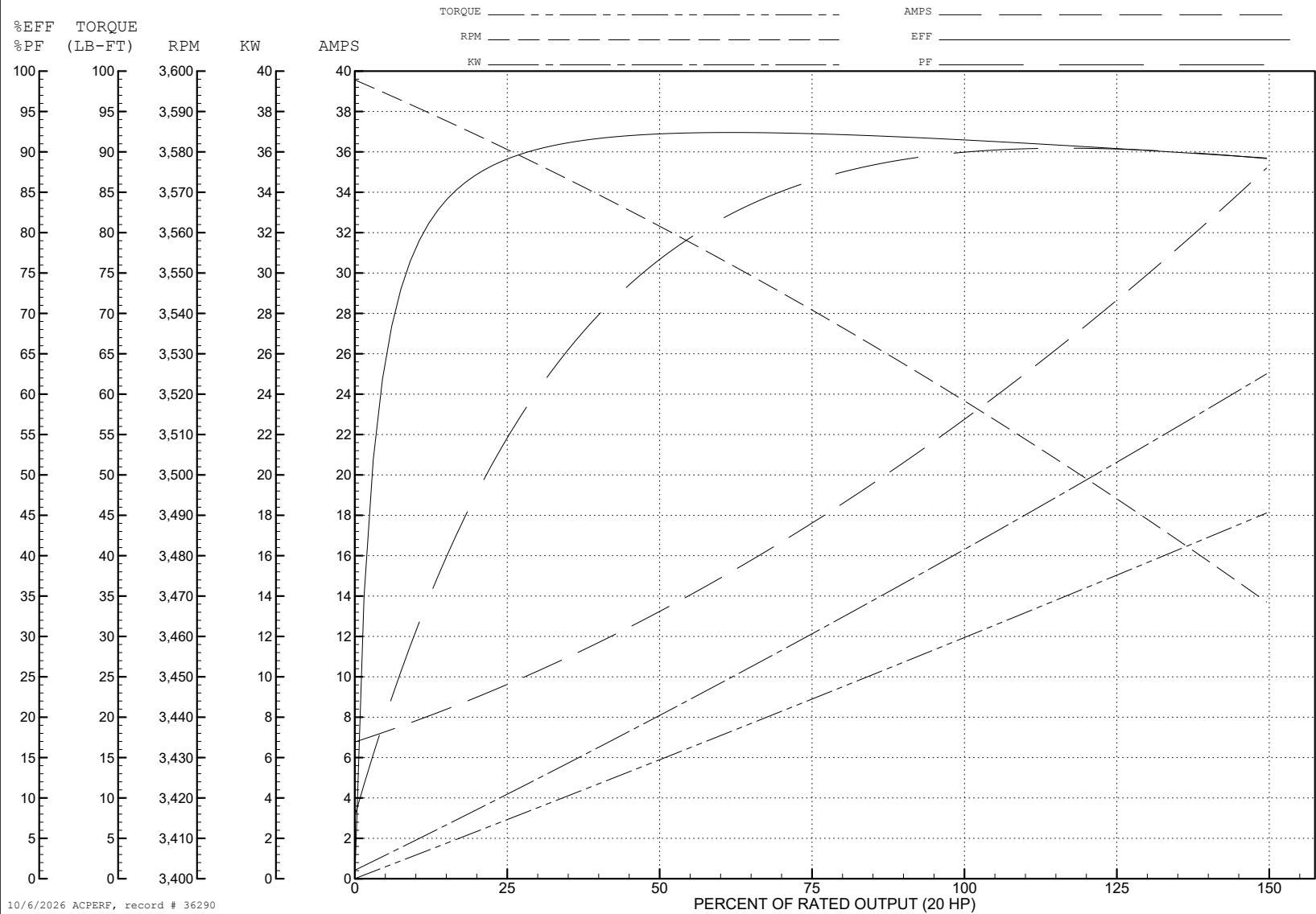
ABB Motors and Mechanical Inc.

WINDING # 09WGZ601

Typical performance - not guaranteed values.

20 HP 3 PH 60 HZ 3520 RPM 460 V 0936M

TORQUES (LB-FT): PO=111 PU=39.1 LR=49.6 LRA=161



10/6/2026 ACPERF, record # 36290



