

ABB BALDOR RELIANCE III

Customer information packet

HBAO3586T

2 AOHP, -RPM, 3PH, 60HZ, 145T, 0532M, TEAO, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEAO
Frame	145T
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	2.000 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	CSA CURUSEEV NEMA PREMIUM NEMA_PREMIUM UR 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	5.400 A @ 208.0 V 5.100 A @ 230.0 V 2.550 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	86.5 %
Electrically Isolated Bearing	Electrically Isolated Bearings

Part Detail

Revision	H
Type	AC
Mech. spec.	05H189
Base	
Status	PRD/A
Elec. spec.	05WGW115
Layout	05LYH189
Eff. date	10-09-2023
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	09-21-2021

Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0532M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	11.44 IN
Power Factor	85
Product Family	General Purpose
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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
NP4312A01M05L

CAT #	HBAO3586T					SER #						CC			WGT	64	LBS		
SPEC	05H189W115G2					RATING	40C AMB-CONT												
HP		VOLTS			AMPS			MAG CUR			CODE		RPM		DES		PF	NEMA NOM. EFF	
2 AO		230/460			5.1/2.55			2.2/1.1			N		3450		B		85	86.5	
2.5AO		230/460			6.0/3.0			2.2/1.1			L		3450		A		87	84	
PH	3	CL	H	HZ	60	ENCL		TEAO	IP	54	SF	1.15	AIR OVER						
DE BRG		6205			ODE BRG		6203			FRAME		145T							
INV TYPE:		VPWM		SL HZ		2.5		CHP		TO									
WK2	0.09		LB FT2			MAX RPM		5400	CT	TO									
								VT	3	TO		60	20:1						
SFA 5.8/2.9																			
YR:																			

AC Induction Motor Performance Data

Record # 95851

Typical performance - not guaranteed values

Winding: 05WGW115-R034			Type: 0532M		Enclosure: TEAO		
Nameplate Data			230 V, 60 Hz: Low Voltage Connection				
Rated Output (HP)		2 AIR OVER	Full Load Torque		3 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		5.1/2.55	Breakdown Torque		16 LB-FT		
R.P.M.		3450	Pull-up Torque		12.5 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		16 LB-FT	
NEMA Design Code		B	KVA Code	N	Starting Current		60 A
Service Factor (S.F.)		1.15		No-load Current		2.2 A	
NEMA Nom. Eff.		86.5	Power Factor	85	Line-line Res. @ 25°C		1.25 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		31°C	
S.F. Amps		5.8/2.9		Temp. Rise @ S.F. Load		36°C	
				Locked-rotor Power Factor		45.4	
				Rotor inertia		0.0885 lb-ft²	

Load Characteristics 230 V, 60 Hz, 2 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	50	69	78	85	87	89	86
Efficiency	75.2	83.8	86.2	86.5	86.4	85.5	86.4
Speed	3571	3548	3525	3501	3476	3448	3486
Line amperes	2.56	3.3	4.18	5.1	6.16	7.28	5.74

ABB Motors and Mechanical Inc.

WINDING # 05WGW115

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 3450 RPM 230 V 0532M

TORQUES (LB-FT): PO=16 PU=12.5 LR=16 LRA=60





