

ABB BALDOR RELIANCE III

Customer information packet

HBEM3584T

1.5HP, 1770RPM, 3PH, 60HZ, 145T, 0524M, TEFC, F

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	1.500 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 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	4.600 A @ 230.0 V 4.640 A @ 208.0 V 2.300 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
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	C
Type	AC
Mech. spec.	05H396
Base	
Status	PRD/A
Elec. spec.	05WGX510
Layout	05LYH396
Eff. date	12-06-2024
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	02-23-2023

High Voltage Full Load Amps	2.3 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	M
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0524M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.54 IN
Power Factor	72
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	1.00
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1770 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

NP4312A01A01L																									
CAT #		HBEM3584T								SER						CC		010A		WGT		58		LBS	
SPEC		05H396X510G1								RATING		40C AMB-CONT													
HZ		VOLTS				AMPS				RPM				HP		SF		NEMA NOM. EFF							
60		230/460				4.6/2.3				1770				1.5		1.00		86.5							
PH	3	CL	H	CODE		M	DES	B	ENCL	TEFC		IP	54	PF	72	%									
DE BRG		6205						ODE BRG		6203				FRAME		145T									
INV TYPE:				VPWM		SL HZ		1		CHP		60		TO		90		1.5:1							
WK2		0.174		LB FT2		MAX RPM		2700		CT		O		TO		60		1000:1							
3/1.5								VT		O		TO		60		1000:1									
SFA 6.4/3.2																									
YR																									

AC Induction Motor Performance Data

Record # 92018

Typical performance - not guaranteed values

Winding: 05WGX504-R003			Type: 0526M		Enclosure: TEFC	
Nameplate Data			460 V, 60 Hz: High Voltage Connection			
Rated Output (HP)		1.5	Full Load Torque		4.49 LB-FT	
Volts		230/460	Start Configuration		direct on line	
Full Load Amps		4.4/2.2	Breakdown Torque		19.4 LB-FT	
R.P.M.		1760	Pull-up Torque		10.7 LB-FT	
Hz	60 Phase	3	Locked-rotor Torque		13.5 LB-FT	
NEMA Design Code		B KVA Code	Starting Current		19.4 A	
Service Factor (S.F.)		1.15	No-load Current		1.43 A	
NEMA Nom. Eff.		86.5 Power Factor	Line-line Res. @ 25°C		9.76 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		35°C	
S.F. Amps			Temp. Rise @ S.F. Load		41°C	
			Locked-rotor Power Factor		52.7	
			Rotor inertia		0.154 lb-ft²	

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	32	50	63	72	78	81	76
Efficiency	75.2	83.9	86.4	87	86.6	85.7	86.8
Speed	1790	1781	1772	1763	1752	1741	1756
Line amperes	1.51	1.69	1.94	2.25	2.62	3.02	2.47

ABB Motors and Mechanical Inc.

WINDING # 05WGX504

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 1760 RPM 460 V 0526M

TORQUES (LB-FT): PO=19.4 PU=10.7 LR=13.5 LRA=19.4





