BALDOR • RELIANCE

Customer information packet

HBEM3584T

1.5HP, 1770RPM, 3PH, 60HZ, 145T, 0524M, TEFC, F
Class - None
Division - Not Applicable

5/29/2024 9:49:26 PM

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
Auxillary Box	No Auxillary Box
Auxillary 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	B
Type	AC
Mech. spec.	05H396
Base	
Status	PRD/A
Elec. spec.	05WGX510
Layout	05LYH396
Eff. date	08-02-2023
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**	M	**Starting Current**	19.4 A
Service Factor (S.F.)			1.15	**No-load Current**	1.43 A
NEMA Nom. Eff.	86.5	**Power Factor**	72	**Line-line Res. @ 25ºC**	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

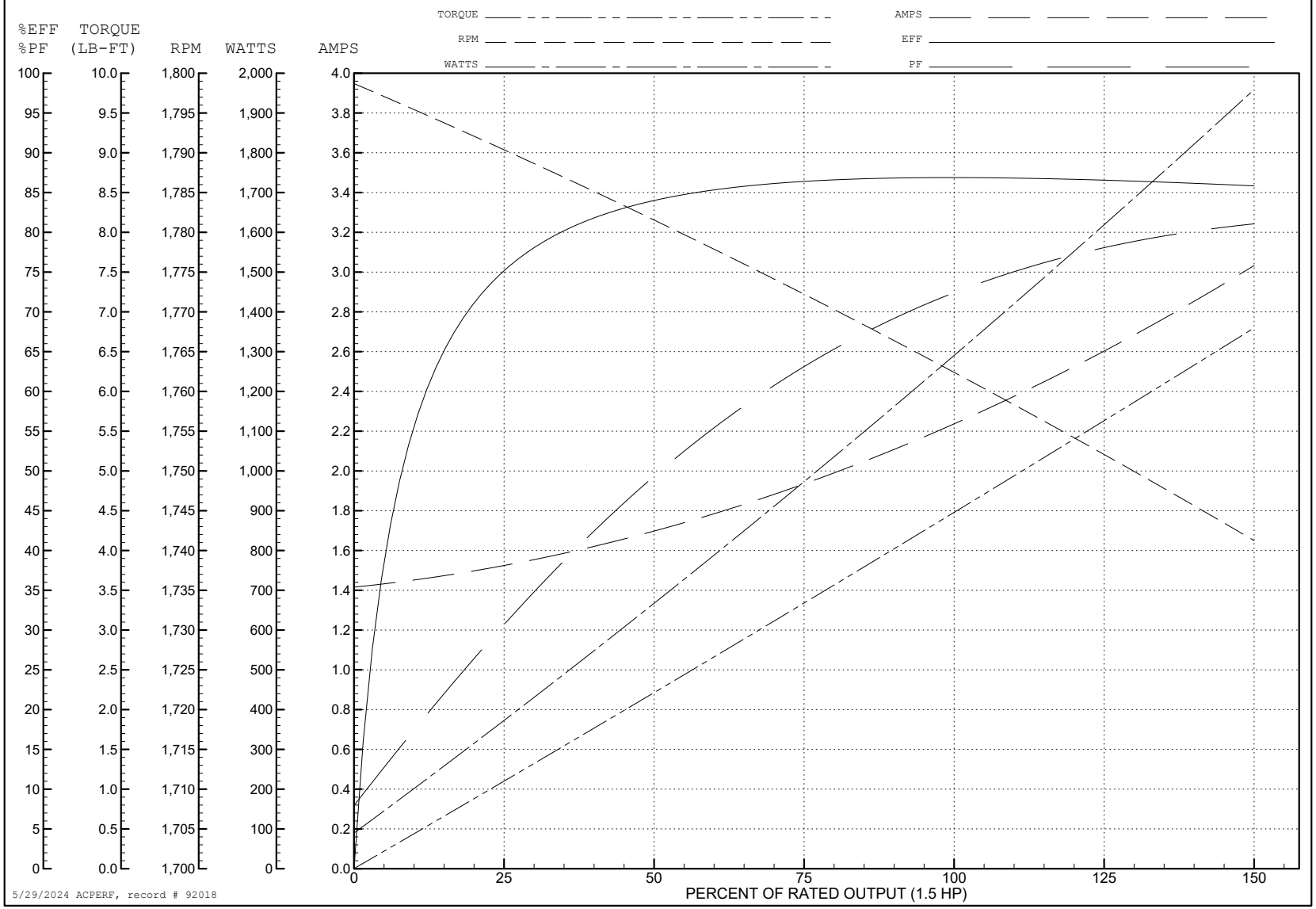
ABB Motors and Mechanical Inc.

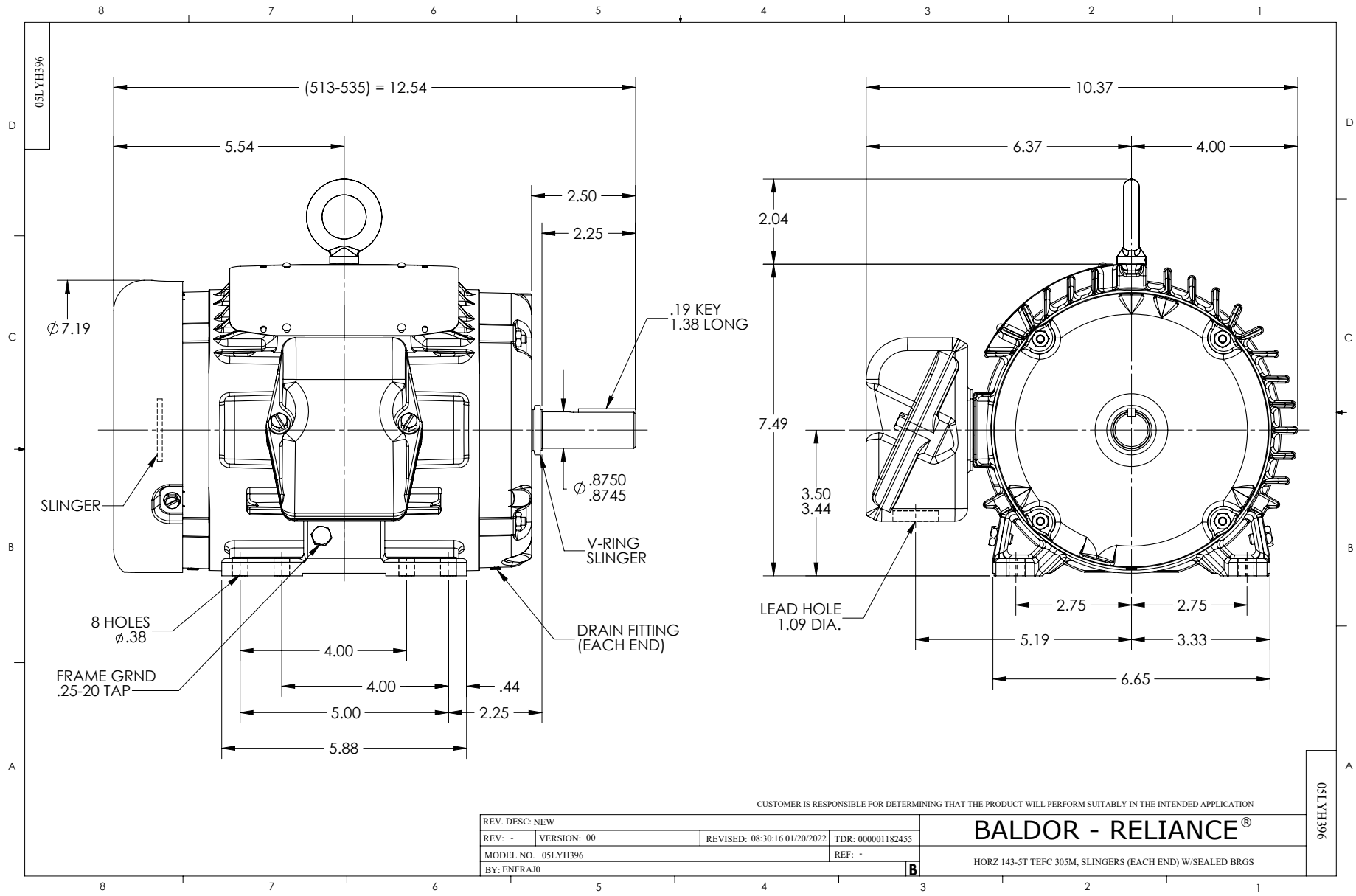
WINDING # 05WGX504

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

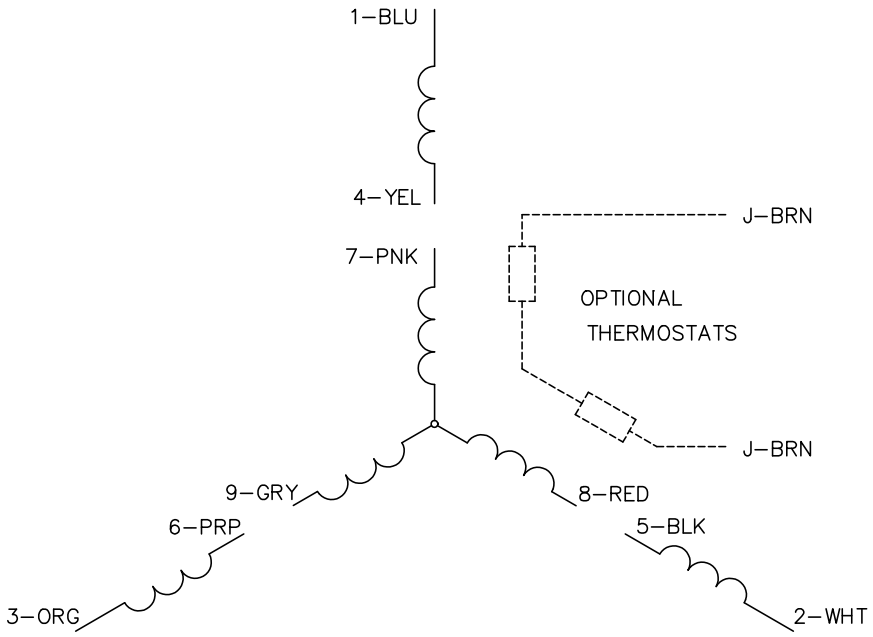
Typical performance - not guaranteed values.

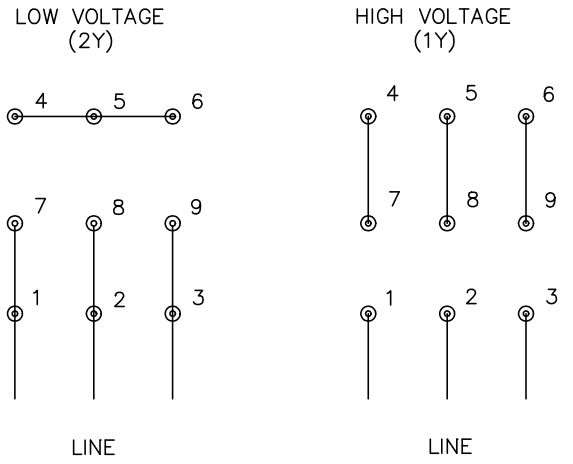
TORQUES(LB-FT): PO=19.4 PU=10.7 LR=13.5 LRA=19.4




05LYH396
(513-535) = 12.54
5.54
2.50
2.25
∅7.19
.19 KEY
1.38 LONG
∅.8750
.8745
SLINGER
V-RING
SLINGER
8 HOLES
∅.38
FRAME GRND
.25-20 TAP
4.00
4.00
.44
5.00
2.25
5.88
DRAIN FITTING
(EACH END)
10.37
6.37
4.00
2.04
7.49
3.50
3.44
LEAD HOLE
1.09 DIA.
2.75
2.75
5.19
3.33
6.65
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: NEW
REV: - VERSION: 00 REVISED: 08:30:16 01/20/2022 TDR: 000001182455
MODEL NO. 05LYH396 REF: -
BY: ENFRAJ0 B
BALDOR - RELIANCE®
HORZ 143-5T TEFC 305M, SLINGERS (EACH END) W/SEALED BRGS
05LYH396

CD0005





NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS