

ABB BALDOR RELIANCE III

Customer information packet

HBEM2334T

60M 4P TEFC HOR 256T

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
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	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	48.000 A @ 230.0 V 52.000 A @ 208.0 V 24.000 A @ 460.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	93.0 %
Electrically Isolated Bearing	Electrically Isolated Bearings
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	G
Type	AC
Mech. spec.	09T116
Base	
Status	PRD/A
Elec. spec.	09WGT459
Layout	09LYT116
Eff. date	03-21-2025
CD Diagram	CD0180
Poles	04
Leads	9#10
Proprietary	False
Created date	01-05-2022

High Voltage Full Load Amps	24.0 a
Insulation Class	H
Inverter Code	Inverter Ready
KVA Code	J
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 10 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0960M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.36 IN
Power Factor	83
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	1.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft 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

NP4312A05A01L																						
CAT #		HBEM2334T							SER						CC		010A		WGT		322	LBS
SPEC		09T116T459G1							RATING			40C AMB-CONT										
HZ		VOLTS				AMPS			RPM		HP		SF		NEMA NOM EFF							
60		230/460				48/24							1770		20HP		1.15		93			
PH	3	CL	H	CODE	J	DES	A	ENCL	TEFC			IP		54	PF	83	%					
DE BRG		6309					ODE BRG			6208					FRAME		256T					
INV TYPE:			VPWM			SL HZ		1	CHP		60	TO		90	1.5:1							
WK2		2.62		LB FT2			MAX RPM		2700	CT	6	TO		60	10:1							
20.8/10.4								VT		3	TO		60	20:1								
SFA 54.4/27.2																						
YR																						

AC Induction Motor Performance Data

Record # 68093

Typical performance - not guaranteed values

Winding: 09WGT459-R013			Type: 0960M		Enclosure: TEFC		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		20	Full Load Torque		59.27 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		48/24	Breakdown Torque		232 LB-FT		
R.P.M.		1770	Pull-up Torque		126 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		141 LB-FT	
NEMA Design Code		A	KVA Code	J	Starting Current		198 A
Service Factor (S.F.)			1.15	No-load Current		10.4 A	
NEMA Nom. Eff.		93	Power Factor	83	Line-line Res. @ 25°C		0.33814 Ω
Rating - Duty		40C AMB-CONT		Temp. Rise @ Rated Load		58°C	
S.F. Amps				Temp. Rise @ S.F. Load		70°C	
				Locked-rotor Power Factor		26.5	

Load Characteristics 460 V, 60 Hz, 20 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	45	67	78	83	86	87	85
Efficiency	89.2	93	93.7	93.6	93.1	92.4	93.3
Speed	1793.2	1786.4	1779.1	1771.9	1763.7	1755.3	1767
Line amperes	11.8	15	19.2	24	29.3	34.9	27.2

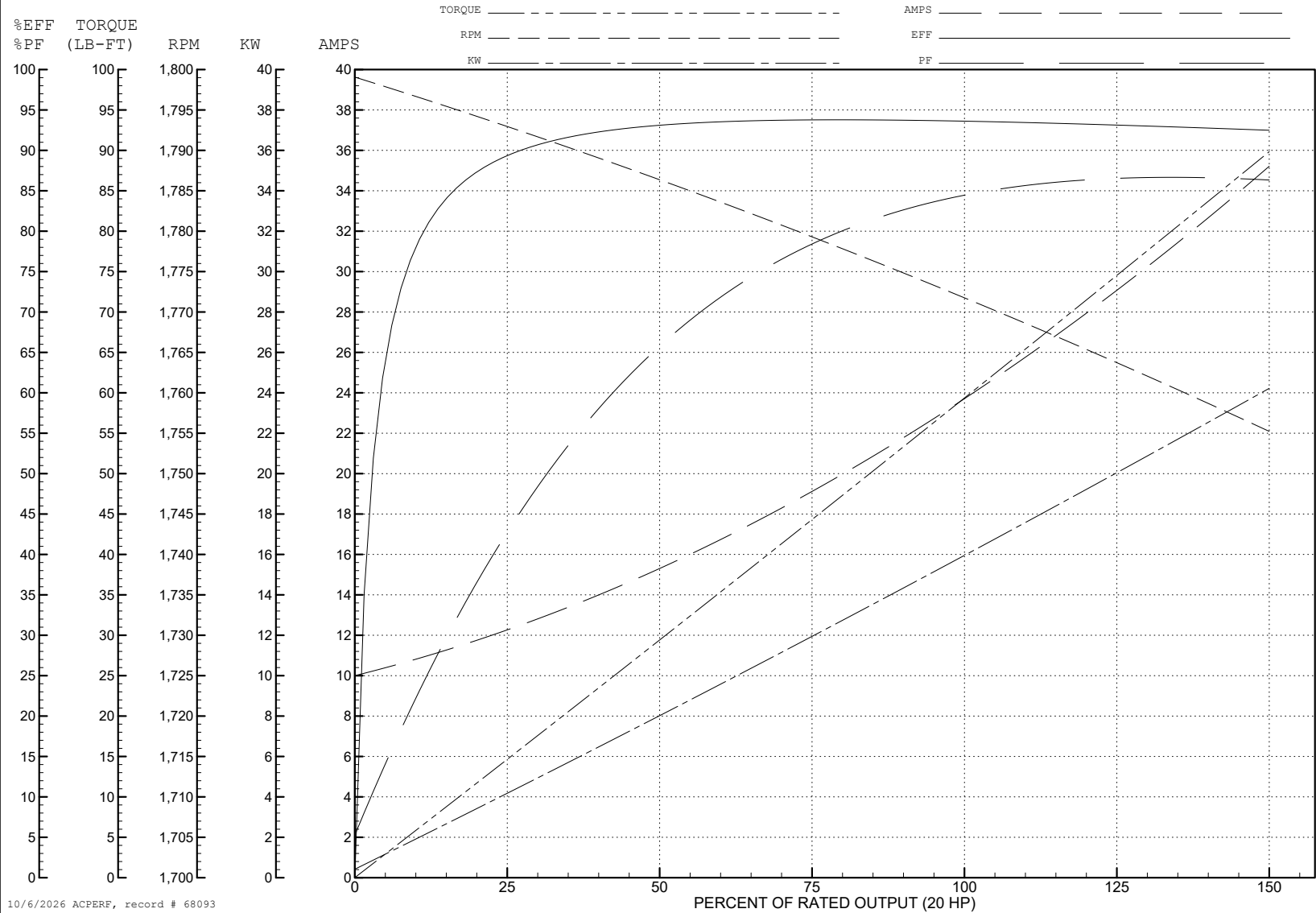
ABB Motors and Mechanical Inc.

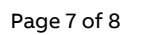
WINDING # 09WGT459

Typical performance - not guaranteed values.

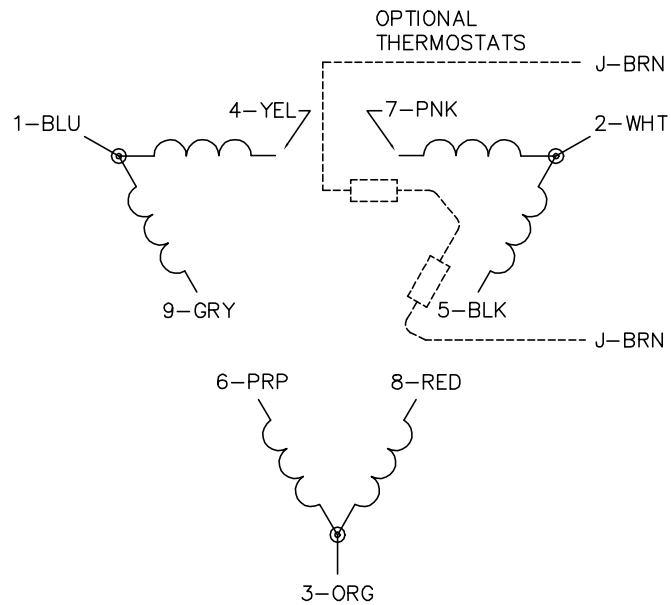
20 HP 3 PH 60 HZ 1770 RPM 460 V 0960M

TORQUES (LB-FT): PO=232 PU=126 LR=141 LRA=198

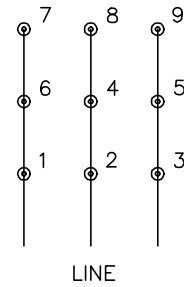




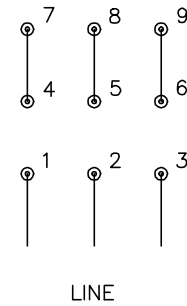
CD0180



LOW VOLTAGE
(2D)



HIGH VOLTAGE
(1D)



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.

CD0180

REV. DESC: ADD CLASS CONN00000007

REV. LTR: D

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\148

REVISED: 10: 25: 29 02/19/2019

BY: ENBRIRO

MTL: —



BALDOR - RELIANCE®

3PH, DV, 9 LEADS, DELTA CONNECTION

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