ABB BALDOR RELIANCE

Customer information packet

EM2334T-58

20HP, 1465RPM, 3PH, 50HZ, 256T, 0956M, TEFC, F1
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
9/9/2026 2:11:42 PM

Specifications

Enclosure	TEFC
Frame	256T
Frame Material	Iron
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	20.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	400.0 V @ 50 HZ
Agency Approvals	CE
	CSA
	CURUS
	IE3
	UKCA
	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	28.000 A @ 400.0 V
Design Code	A
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	92.1 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard

Part Detail

Revision	Y
Type	AC
Mech. spec.	09F103
Base	
Status	PRD/A
Elec. spec.	09WGZ534
Layout	09LYF103
Eff. date	08-05-2025
CD Diagram	CD0382
Poles	04
Leads	6#12
Proprietary	False
Created date	12-05-2014

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	28.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	H
Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 12 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0956M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	23.55 IN
Power Factor	84
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 Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft Slinger
Speed	1465 rpm
Speed Code	Single Speed
Starting Method	Wye Start - Delta Run
Thermal Device - Bearing	None
Thermal Device - Winding	None

Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP3444L									
CAT NO	EM2334T-58								
SPEC.	09F103Z534G1								
HP	20/15KW				**PH**	3			
VOLTS	400								
AMP	28								
RPM	1465 1/MIN IC411 138KG								
FRAME	256T	**HZ**	50			**I.P.**	54		
SER.F.	1.15	**CODE**	H	**DES**	A	**CL**	F		
NOM.EFF.	92.1								
PF	84			**USABLE AT 208V**		N/A			
RATING	40C AMB-S1 CONT				**CC**				
DE BRG	6309		**ODE**	6208					
ENCL	TEFC	**SN**							
VPWM INVERTER READY									
CT5-50(10:1)VT2.5-50(20:1									
BLANK	IE3-92.3(75%)91.5(50%)								

AC Induction Motor Performance Data
Record # 48443
Typical performance - not guaranteed values

Winding: 09WGZ534-R009	**Type:** 0956M	**Enclosure:** TEFC

Nameplate Data				**400 V, 50 Hz: Single Voltage Motor**	
Rated Output (HP)			20	**Full Load Torque**	71.9 LB-FT
Volts			400	**Start Configuration**	direct on line
Full Load Amps			28	**Breakdown Torque**	369 LB-FT
R.P.M.			1465	**Pull-up Torque**	111 LB-FT
Hz	50	**Phase**	3	**Locked-rotor Torque**	168 LB-FT
NEMA Design Code	A	**KVA Code**	H	**Starting Current**	203 A
Service Factor (S.F.)			1.15	**No-load Current**	12.8 A
NEMA Nom. Eff.	92.1	**Power Factor**	84	**Line-line Res. @ 25ºC**	0.324 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	78°C
S.F. Amps				**Temp. Rise @ S.F. Load**	96°C
				Locked-rotor Power Factor	36.6
				Rotor inertia	2.44 LB-FT2

Load Characteristics 400 V, 50 Hz, 20 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	43	66	77	84	86	87	85
Efficiency	87.2	91.5	92.3	92.2	91.3	89.8	91.7
Speed	1493	1485	1476	1468	1458	1445	1462
Line amperes	14.2	17.8	22.9	28.1	34.4	42.7	31.9

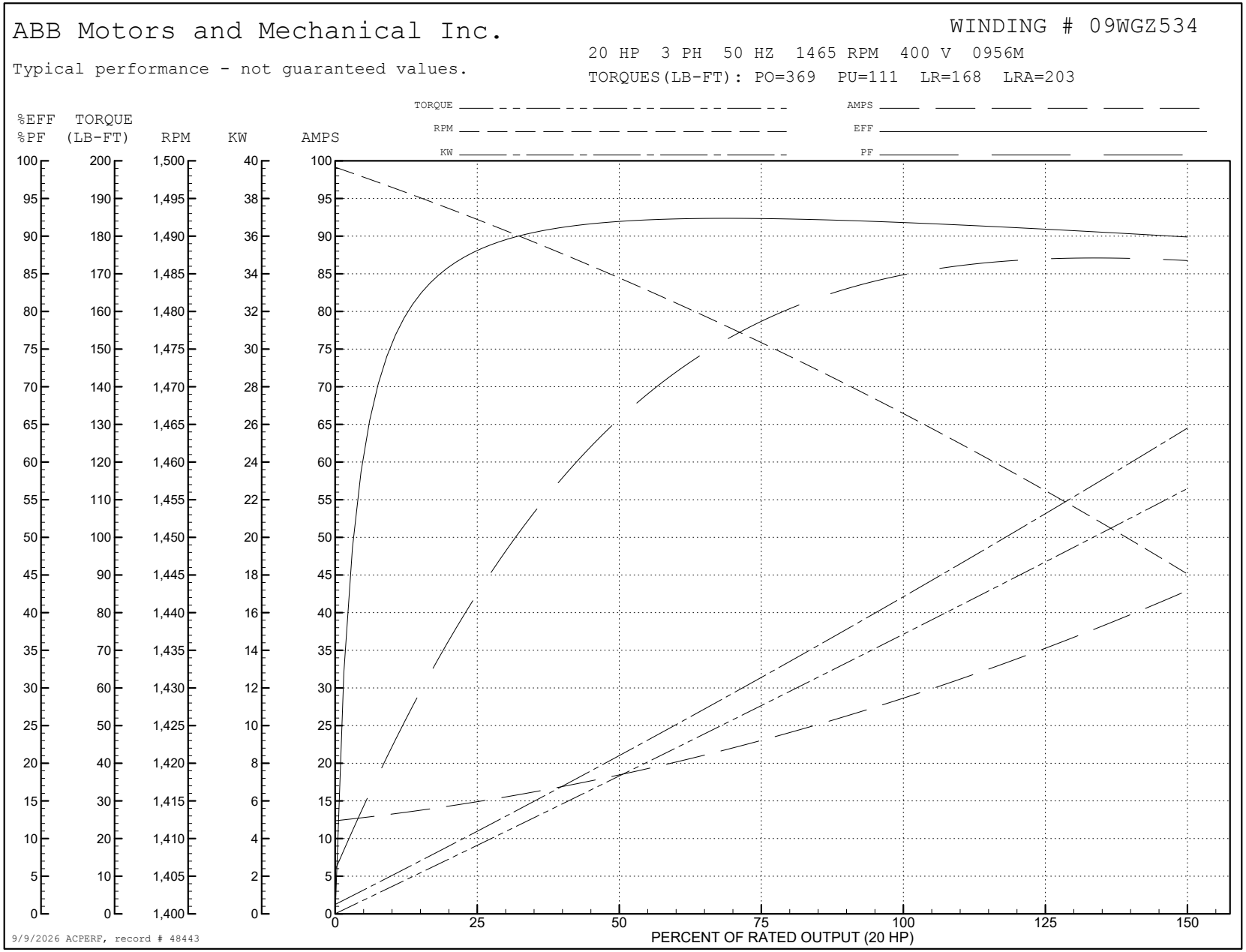
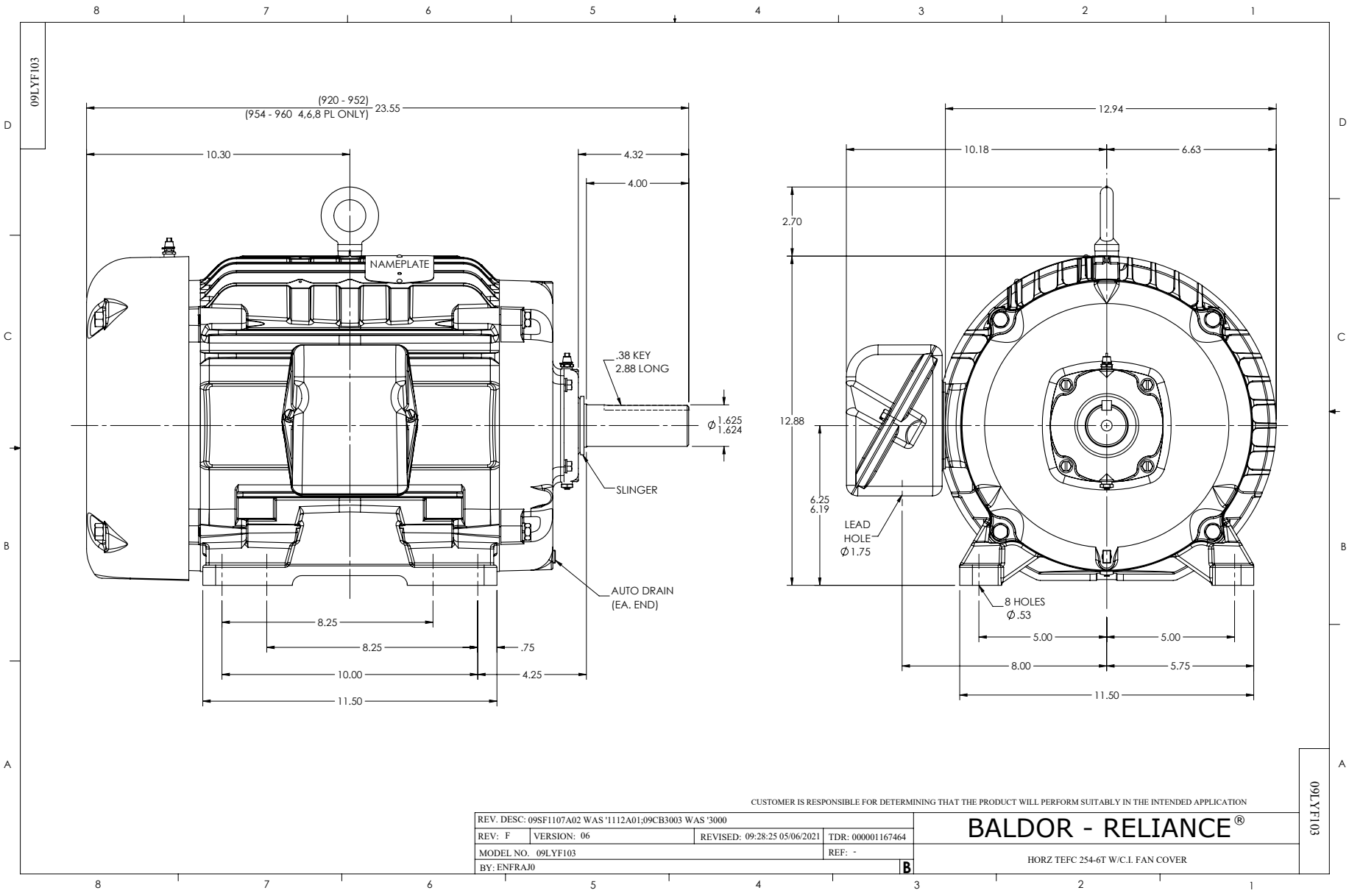
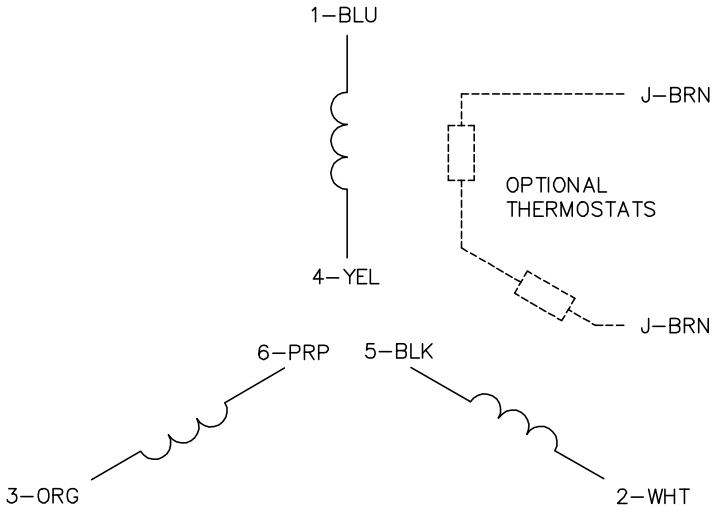
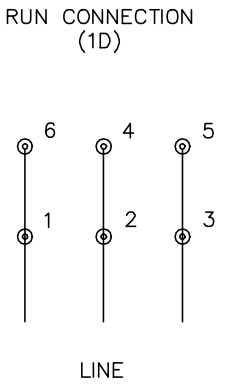


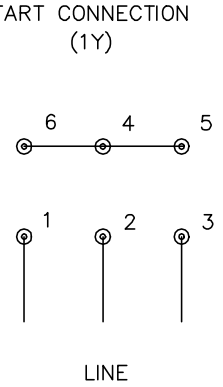
ABB Motors and Mechanical Inc.
WINDING # 09WGZ534
Typical performance - not guaranteed values.
20 HP 3 PH 50 HZ 1465 RPM 400 V 0956M
TORQUES(LB-FT): PO=369 PU=111 LR=168 LRA=203
TORQUE
RPM
KW
AMPS
EFF
PF
%EFF
%PF
TORQUE (LB-FT)
RPM
KW
AMPS
PERCENT OF RATED OUTPUT (20 HP)
9/9/2026 ACPERF, record # 48443


09LYF103
(920 - 952)
(954 - 960 4,6,8 PL ONLY)
23.55
10.30
4.32
4.00
NAMEPLATE
.38 KEY
2.88 LONG
Ø 1.625
1.624
SLINGER
AUTO DRAIN
(EA. END)
8.25
8.25
.75
10.00
4.25
11.50
12.94
10.18
6.63
2.70
12.88
6.25
6.19
LEAD
HOLE
Ø 1.75
8 HOLES
Ø .53
5.00
5.00
8.00
5.75
11.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: 09SF1107A02 WAS '1112A01;09CB3003 WAS '3000
REV: F
VERSION: 06
REVISED: 09:28:25 05/06/2021
TDR: 000001167464
MODEL NO. 09LYF103
REF: -
BY: ENFRAJ0
B
BALDOR - RELIANCE®
HORZ TEFC 254-6T W/C.I. FAN COVER
09LYF103

CD0382







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.
5. FOR ACROSS–THE–LINE STARTING, USE 'RUN' CONNECTION.

CD0382

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: F	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\243	REVISED: 09:05:32 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 6 LEADS, Y START/D RUN

SH 1 of 1