ABB BALDOR RELIANCE

Customer information packet

IDVSNM3581T-5

1HP, 1770RPM, 3PH, 60HZ, 143TC, 0522M, TENV, 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.
11/19/2026 3:22:39 PM

Specifications

Enclosure	TENV
Frame	143TC
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	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	575.0 V @ 60 HZ
Agency Approvals	CSA
	UR
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	1.300 A @ 575.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.3 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N

Part Detail

Revision	D
Type	AC
Mech. spec.	05E534
Base	
Status	PRD/A
Elec. spec.	05WGX569
Layout	05LYE534
Eff. date	08-19-2026
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Lifting Lugs	Standard Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	6000 rpm
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	0522M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	14.65 IN
Power Factor	67
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
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	Normally Closed Thermostat
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	None
Winding Thermal 2	None

Nameplate

NP4564L							
CAT.NO.	IDVSNM3581T-5						
SPEC.	05E534X569G1						
FRAME	143TC	**H.P.**	1				
VOLTS	575						
MAG. CUR.	0.97			**F.L. AMPS**	1.3		
R.P.M.	1770	**R.P.M. MAX**		6000			
HZ.	60	**PH.**	3	**CLASS**	F		
SER.F.	1.00	**SL HZ**	1.2				
NEMA NOM. EFF.	85.5	**WK2**	0.159				
RATING	40C AMB-CONT					**ENCL**	TENV
DE	6205	**ODE**	6203				
CC	010A	**SN**					
	1000:1 CT/VT						

AC Induction Motor Performance Data
Record # 90731
Preliminary Data Sheet

Winding: 05WGX569-R004	**Type:** 0522M	**Enclosure:** TENV

Nameplate Data				**575 V, 60 Hz: Single Voltage Motor**	
Rated Output (HP)			1	**Full Load Torque**	2.99 LB-FT
Volts			575	**Start Configuration**	direct on line
Full Load Amps			1.3	**Breakdown Torque**	16.37 LB-FT
R.P.M.			1765	**Pull-up Torque**	7.31 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	10.16 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	12.72 A
Service Factor (S.F.)			1	**No-load Current**	0.972 A
NEMA Nom. Eff.	85.5	**Power Factor**	70	**Line-line Res. @ 25ºC**	22.9 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	63°C
				Locked-rotor Power Factor	63.4
				Rotor inertia	0.159 lb-ft²

Load Characteristics 575 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**
Power Factor	28	44	56	67	73	78
Efficiency	71.2	81.2	84.4	86	85.7	85.1
Speed	1793	1786	1781	1773	1766	1757
Line amperes	0.988	1.06	1.18	1.32	1.49	1.69

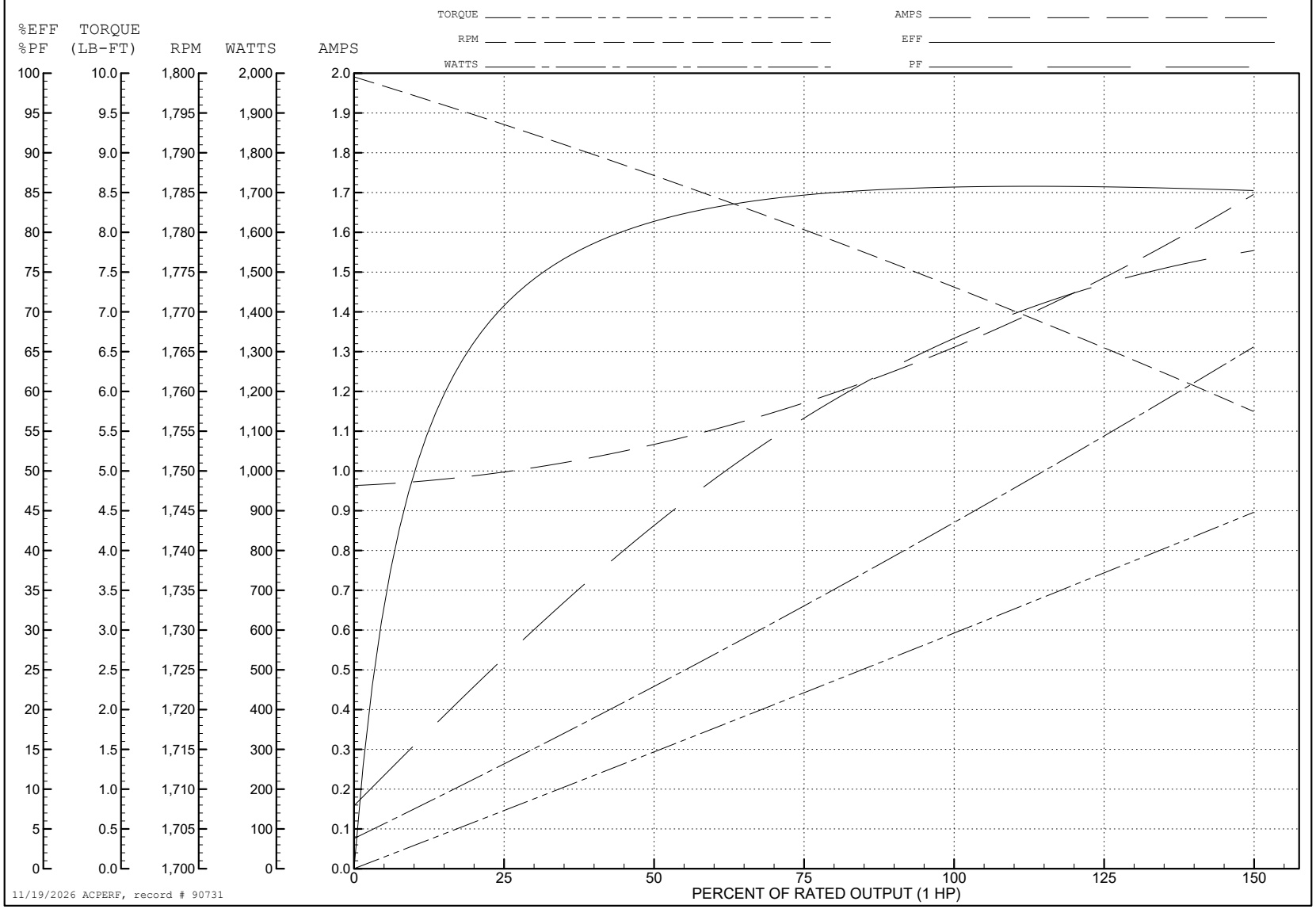
ABB Motors and Mechanical Inc.

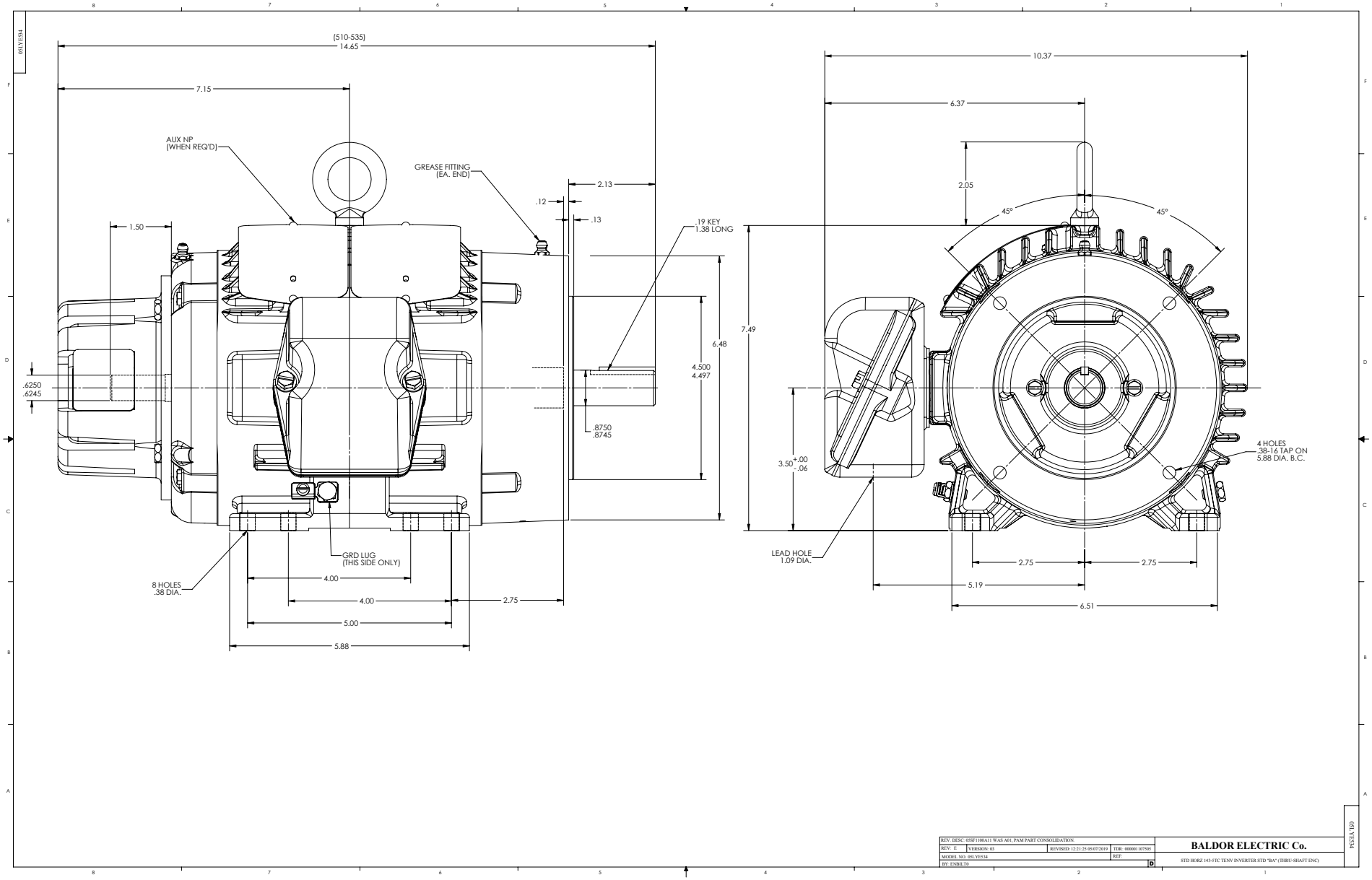
WINDING # 05WGX569

1 HP 3 PH 60 HZ 1765 RPM 575 V 0522M

Typical performance - not guaranteed values.

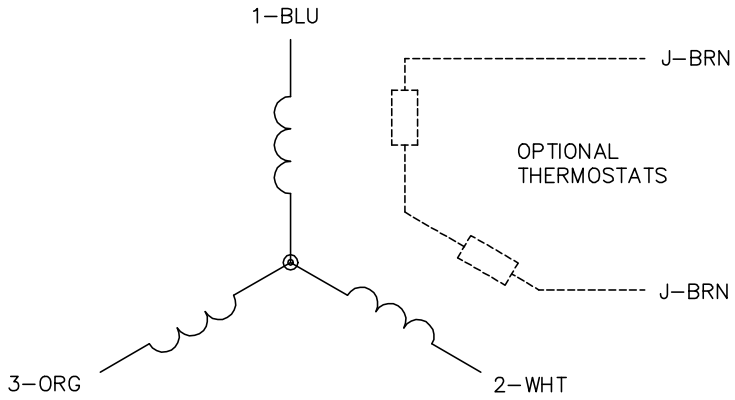
TORQUES(LB-FT): PO=16.37 PU=7.31 LR=10.16 LRA=12.72

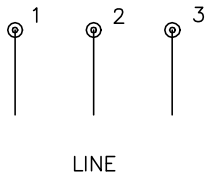



05LYE534
(510-535)
14.65
7.15
AUX NP
(WHEN REQ'D)
GREASE FITTING
(EA. END)
2.13
.12
.13
.19 KEY
1.38 LONG
1.50
6.48
4.500
4.497
.6250
.6245
.8750
.8745
GRD LUG
(THIS SIDE ONLY)
8 HOLES
.38 DIA.
4.00
4.00
2.75
5.00
5.88
10.37
6.37
2.05
45°
45°
7.49
3.50 +.00 -.06
4 HOLES
.38-16 TAP ON
5.88 DIA. B.C.
LEAD HOLE
1.09 DIA.
2.75
2.75
5.19
6.51
REV. DESC: 05SF1100A13 WAS A01, PAM PART CONSOLIDATION
REV: E
VERSION: 05
REVISED: 12:21:25 05/07/2019
TDR: 0000001107505
MODEL NO: 05LYE534
REF:
BY: ENBLTH
D
BALDOR ELECTRIC Co.
STD HORZ 143-5TC TENV INVERTER STD "BA" (THRU-SHAFT ENC)
05E YE534

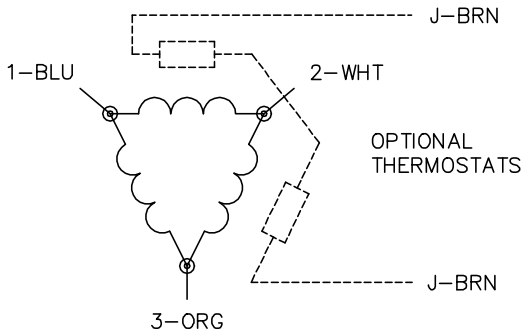
CD0006

TYPICAL WYE–CONNECTED MOTOR





TYPICAL DELTA–CONNECTED MOTOR



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIR0
MTL: –		

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1