ABB BALDOR RELIANCE

Customer information packet

VEDM3546

1HP, 1770RPM, 3PH, 60HZ, 56C, 3520M, TEFC, F1, N
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 3:00:20 PM

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
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	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
Agency Approvals	CCSA US
	CSA EEV
	NEMA PREMIUM
	NEMA_PREMIUM
	UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Constant Torque Speed Range	6
Current @ Voltage	3.200 A @ 230.0 V
	3.200 A @ 208.0 V
	1.600 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated

Part Detail

Revision	E
Type	AC
Mech. spec.	35E4312
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYE4312
Eff. date	10-29-2024
CD Diagram	CD0005
Poles	04
Leads	9#18 Y
Proprietary	False
Created date	01-10-2022

Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	2700 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.23 IN
Power Factor	69
Product Family	Dirty Duty Plus
Pulley End Bearing Type	Sealed Bearing
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.625 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

NP3504									
CAT NO	VEDM3546								
SPEC.	35E4312G004G1			**ENCL**	TEFC				
FRAME	56C	**HP**	1						
VOLTS	230/460								
FLA	3.2/1.6			**I.P.**	56				
RPM	1770	**RPM MAX**	2700						
HZ	60	**PH**	3	**CLASS**	F				
SER.F.	1.15	**DES**	B	**CC**	010A				
NEMA-NOM-EFF	85.5								
RATING	40C AMB-CONT								
DE BRG	6205	**ODE BRG**	6203						
GREASE	POLYREX EM								
INV.TYPE		**C HP FR**	60	**C HP TO**	90				
CT HZ FROM	6	**CT HZ TO**	60	**VT HZ FROM**	6	**VT HZ TO**	60		
SER.NO									
	SFA 3.4/1.7								

AC Induction Motor Performance Data
Record # 91625
Typical performance - not guaranteed values

Winding: 35WGG004-R001	**Type:** 3520M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	2.982 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			3.2/1.6	**Breakdown Torque**	14.6 LB-FT
R.P.M.			1770	**Pull-up Torque**	7.57 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	9.17 LB-FT
NEMA Design Code	B	**KVA Code**	N	**Starting Current**	14.6 A
Service Factor (S.F.)			1.15	**No-load Current**	1.2 A
NEMA Nom. Eff.	85.5	**Power Factor**	69	**Line-line Res. @ 25ºC**	16.049 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	36°C
S.F. Amps			3.4/1.7	**Temp. Rise @ S.F. Load**	41°C
				Locked-rotor Power Factor	61.549
				Rotor inertia	0.144 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	29	45	58	67	73	78	71
Efficiency	71.1	81.2	84.7	85.8	86	85.6	85.9
Speed	1794	1787.3	1781.1	1774.3	1767.4	1759.4	1770
Line amperes	1.22	1.31	1.46	1.64	1.86	2.11	1.77

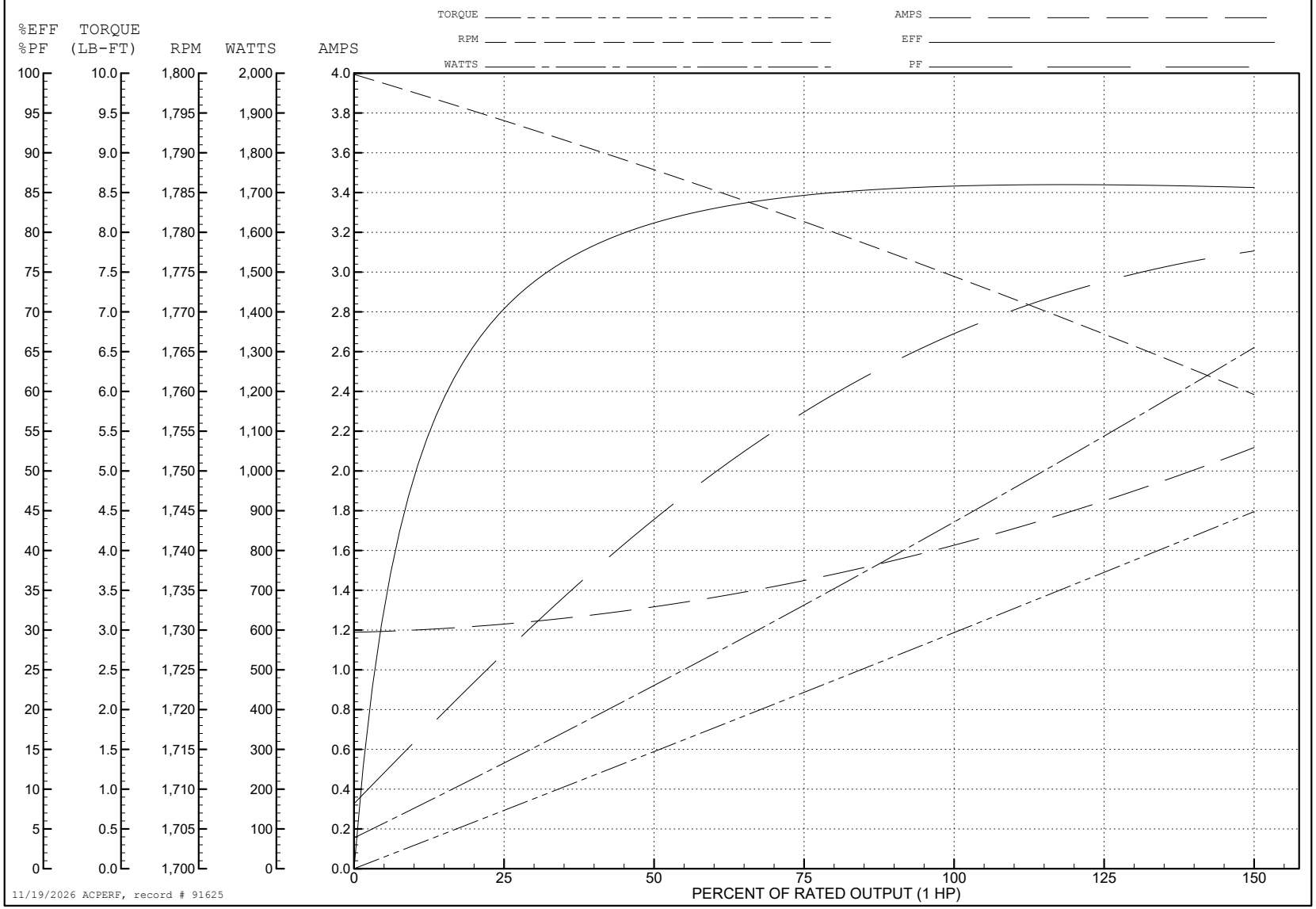
ABB Motors and Mechanical Inc.

WINDING # 35WGG004

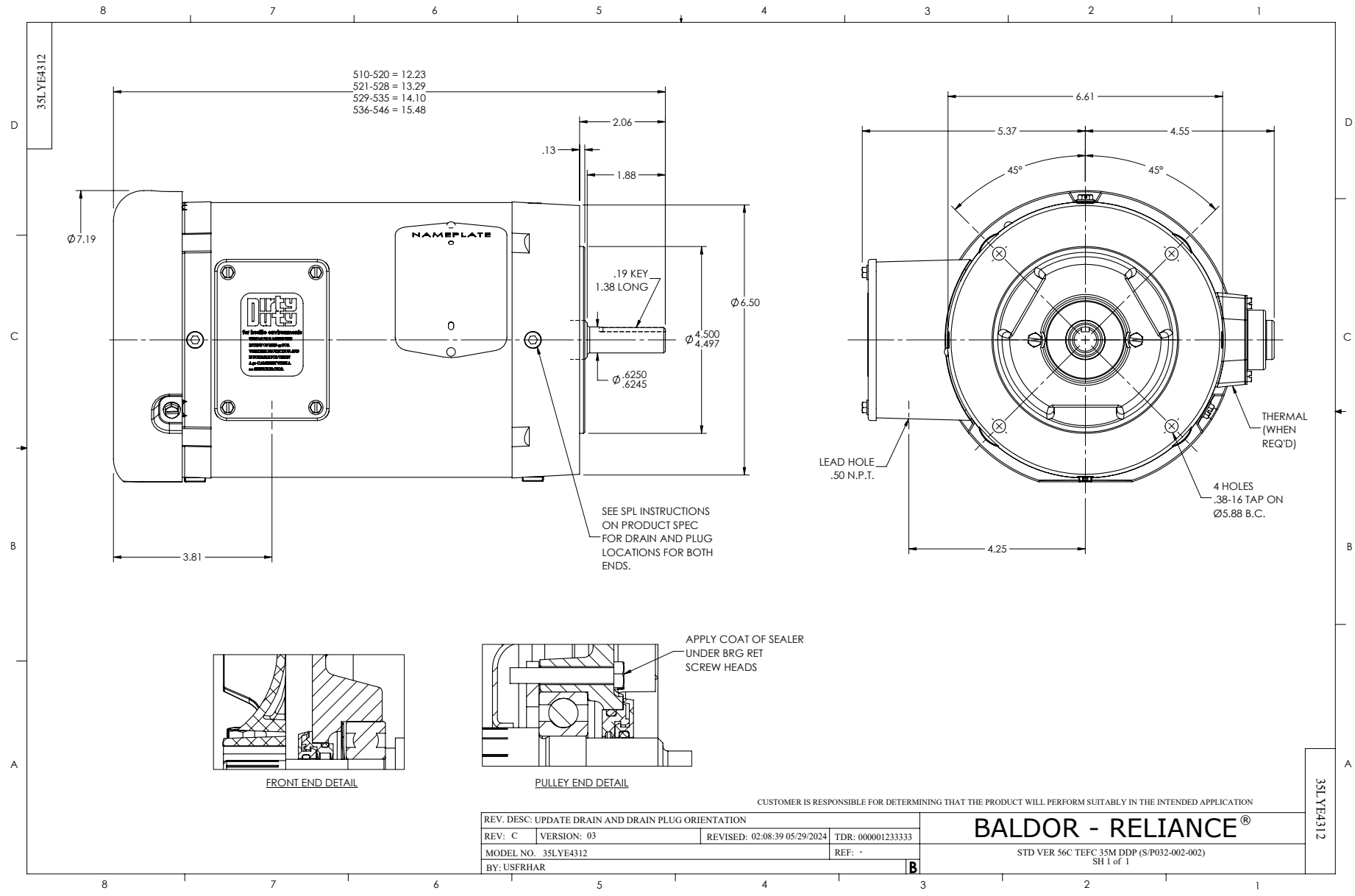
1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

Typical performance - not guaranteed values.

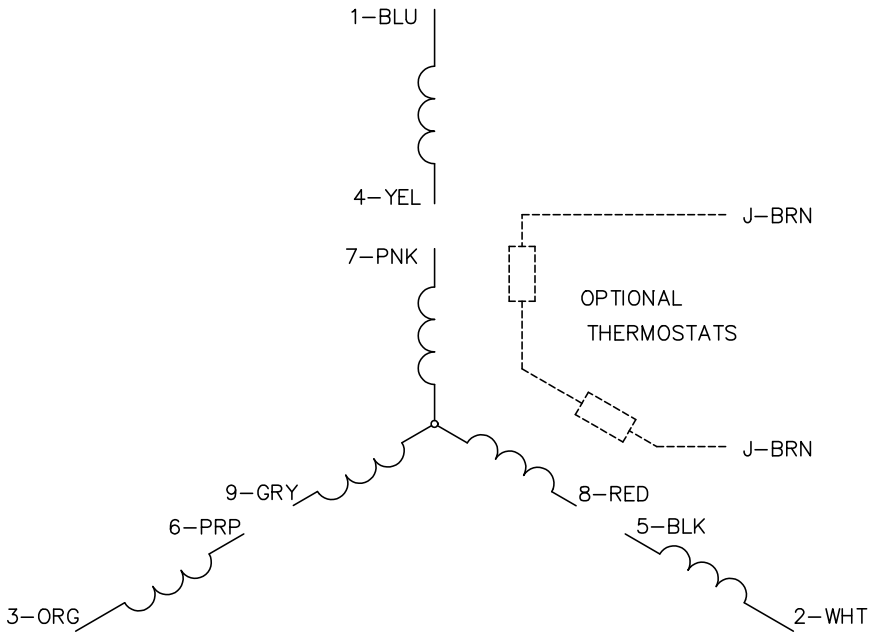
TORQUES(LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6

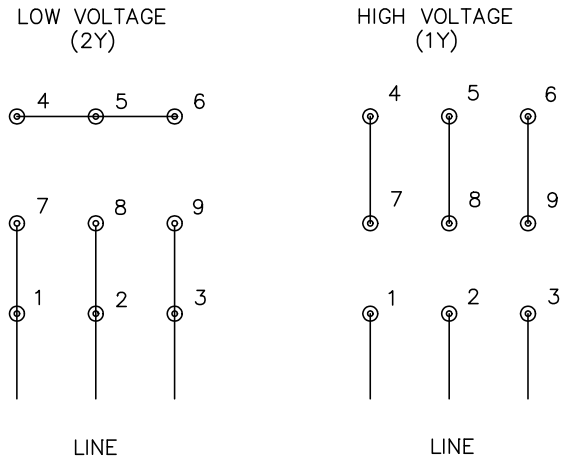


11/19/2026 ACPERF, record # 91625


35LYE4312
510-520 = 12.23
521-528 = 13.29
529-535 = 14.10
536-546 = 15.48
2.06
.13
1.88
Ø7.19
NAMEPLATE
.19 KEY
1.38 LONG
Ø6.50
Ø4.500
4.497
Ø.6250
.6245
3.81
SEE SPL INSTRUCTIONS ON PRODUCT SPEC FOR DRAIN AND PLUG LOCATIONS FOR BOTH ENDS.
6.61
5.37
4.55
45°
45°
THERMAL (WHEN REQ'D)
LEAD HOLE .50 N.P.T.
4 HOLES .38-16 TAP ON Ø5.88 B.C.
4.25
APPLY COAT OF SEALER UNDER BRG RET SCREW HEADS
FRONT END DETAIL
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE DRAIN AND DRAIN PLUG ORIENTATION
REV: C
VERSION: 03
REVISED: 02:08:39 05/29/2024
TDR: 000001233333
MODEL NO. 35LYE4312
REF: -
BY: USFRHAR
B
BALDOR - RELIANCE®
STD VER 56C TEFC 35M DDP (S/P032-002-002)
SH 1 of 1
35LYE4312

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