ABB BALDOR RELIANCE

Customer information packet

VSPM3545

1HP, 3450RPM, 3PH, 60HZ, 56C, 3516M, TEFC, F1, N
Class - None
Division - Not Applicable

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11/17/2026 6:00:44 AM

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	3600 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	WEEE
	NEMA PREMIUM 4
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
Current @ Voltage	1.300 A @ 460.0 V
	2.600 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
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

Part Detail

Revision	B
Type	AC
Mech. spec.	35E6403
Base	
Status	PRD/A
Elec. spec.	35WGR933
Layout	35LYE6403
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	01-10-2024

Inverter Code	Inverter Duty
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Max Speed	5400 rpm
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.23 IN
Power Factor	88
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3450 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

NP4423A01A01L												
CAT #	VSPM3545			**WGT**	35	**LBS**						
SPEC	35E6403R933			**ENCL**	TEFC							
SER #				**CC**	010A	**IP**	54					
HP	1			**MAG CUR**	1.3/.65							
VOLTS	230/460						**NEMA NOM. EFF**	82.5				
AMPS	2.6/1.3					**PF**	88					
RATING	40C AMB-CONT											
RPM	3450				**MAX RPM**	5400						
FRAME	56C	**HZ**	60	**CODE**	L	**CLASS**	F					
SER.F.	1.25	**SF AMP**	3.2/1.6			**PH**	3	**DES**	B			
DE	6205			**ODE**	6203							
LUBRICATION	POLYREX EM											
ID LOGO	**INVERTER TYPE**		**VPWM**		**CHP**	60	**TO**	90	1.5:1			
ID LOGO	**WK2**	0.05	**CT**	6	**TO**	60	10:1					
ID LOGO	**SL HZ**	2.5	**VT**	3	**TO**	60	20:1					
						QR						
YR												

AC Induction Motor Performance Data
Record # 100854
Typical performance - not guaranteed values

Winding: 35WGR933-R007	**Type:** 3516M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	1.5 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			2.6/1.3	**Breakdown Torque**	7.5 LB-FT
R.P.M.			3450	**Pull-up Torque**	4.2 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	5.6 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	12.4 A
Service Factor (S.F.)			1.25	**No-load Current**	0.63 A
NEMA Nom. Eff.	82.5	**Power Factor**	88	**Line-line Res. @ 25ºC**	15.2 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	32°C
S.F. Amps			3.2/1.6	**Temp. Rise @ S.F. Load**	40°C
				Locked-rotor Power Factor	56.1
				Rotor inertia	0.0443 lb-ft²

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	48	69	81	86	88	90	88
Efficiency	71.5	80.5	83.4	83.6	82.9	81.3	82.9
Speed	3560	3529	3494	3462	3423	3378	3423
Line amperes	0.7	0.85	1.04	1.28	1.58	1.86	1.58

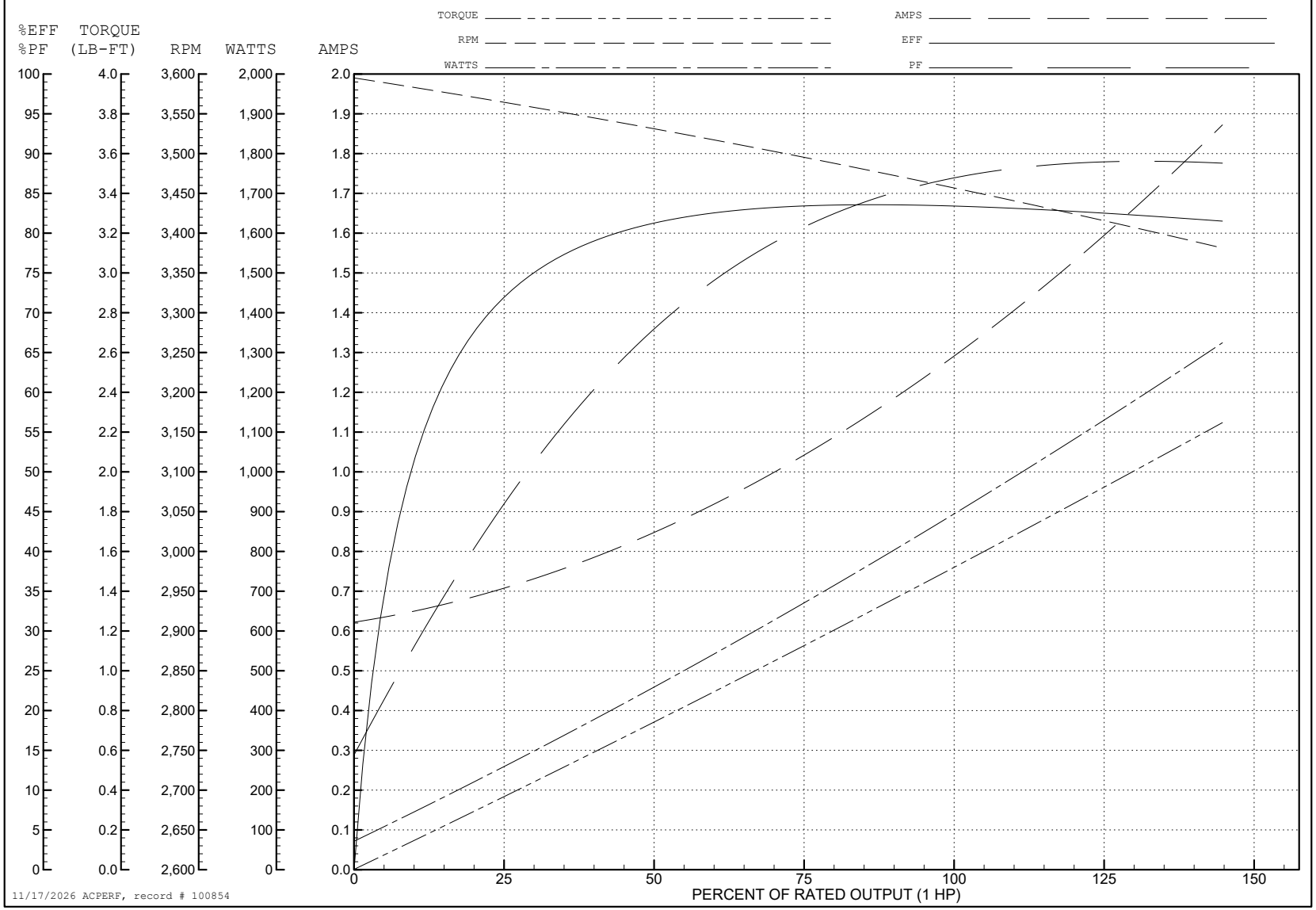
ABB Motors and Mechanical Inc.

WINDING # 35WGR933

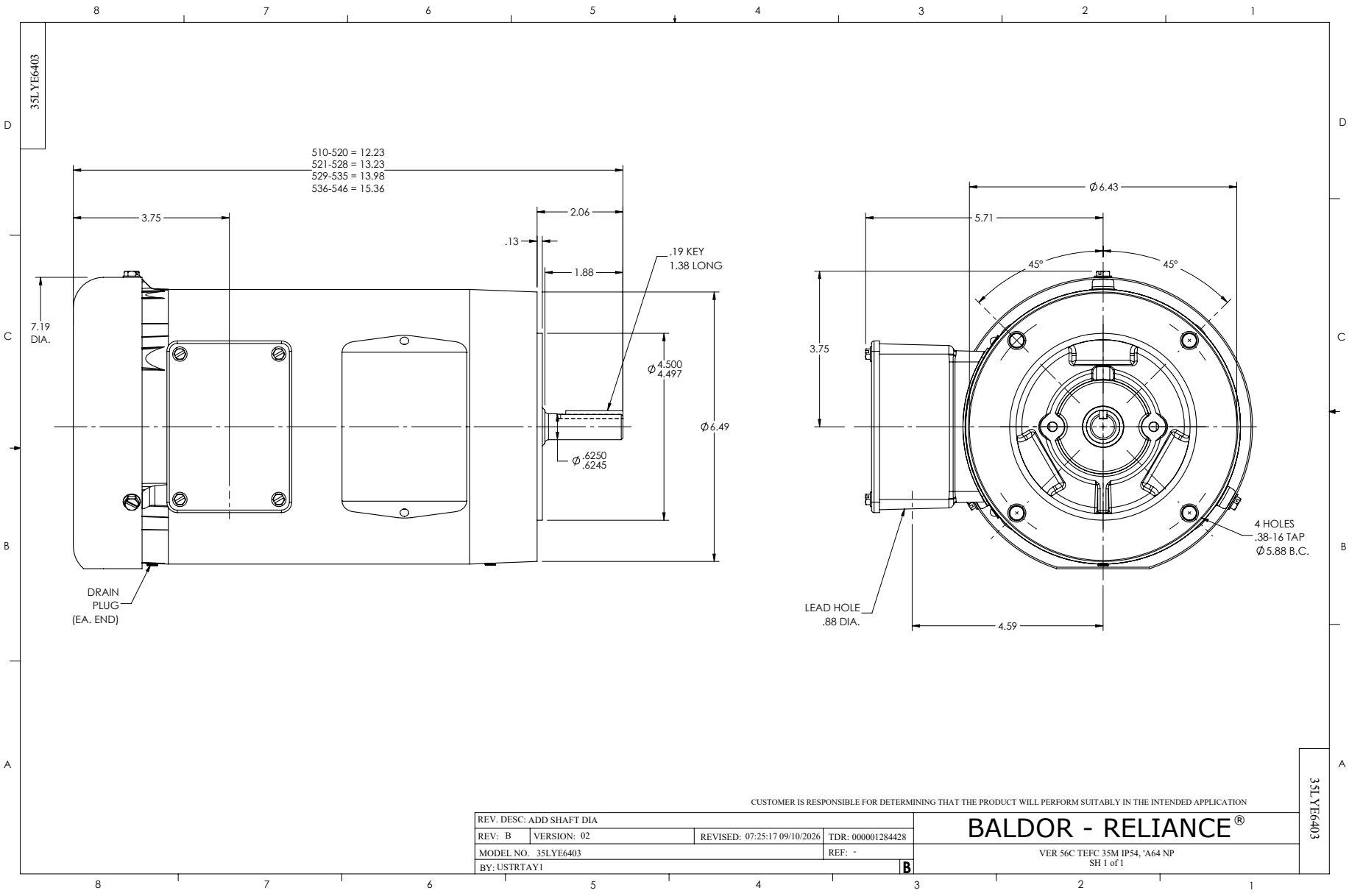
1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

Typical performance - not guaranteed values.

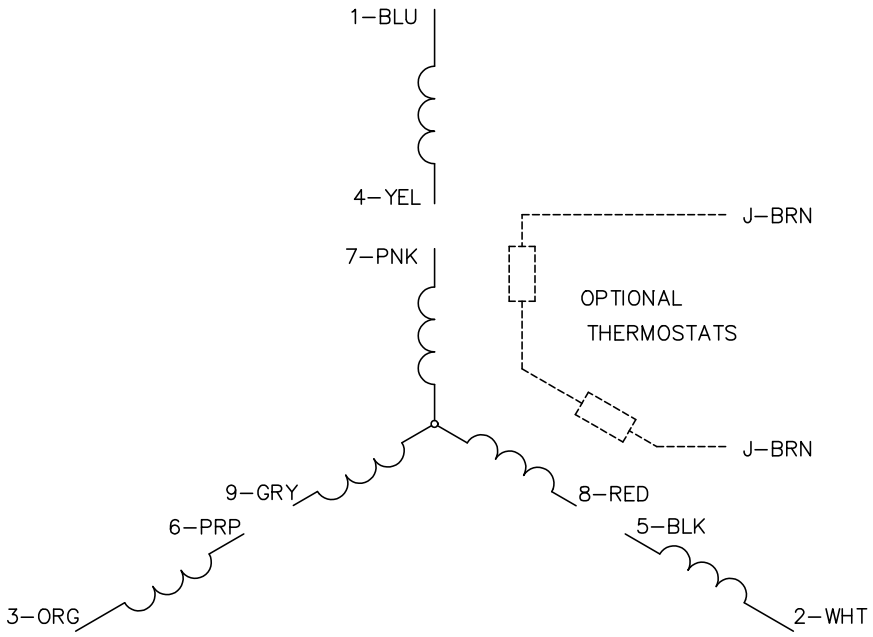
TORQUES(LB-FT): PO=7.5 PU=4.2 LR=5.6 LRA=12.4

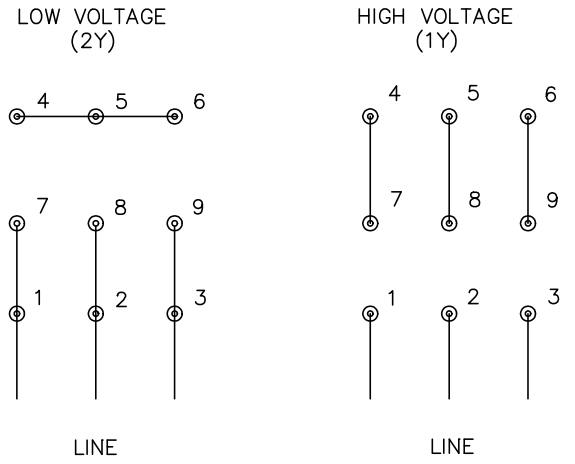


11/17/2026 ACPERF, record # 100854


35LYE6403
510-520 = 12.23
521-528 = 13.23
529-535 = 13.98
536-546 = 15.36
3.75
2.06
.13
1.88
.19 KEY
1.38 LONG
7.19
DIA.
Ø 4.500
4.497
Ø 6.49
Ø .6250
.6245
DRAIN
PLUG
(EA. END)
Ø 6.43
5.71
45°
45°
3.75
4 HOLES
.38-16 TAP
Ø 5.88 B.C.
LEAD HOLE
.88 DIA.
4.59
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: ADD SHAFT DIA
REV: B
VERSION: 02
REVISED: 07:25:17 09/10/2026
TDR: 000001284428
MODEL NO. 35LYE6403
REF: -
BY: USTRTAY1
B
BALDOR - RELIANCE®
VER 56C TEFC 35M IP54, 'A64 NP
SH 1 of 1
35LYE6403

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