BALDOR • RELIANCE

Customer information packet

SPJMM3546T

1HP, 1770RPM, 3PH, 60HZ, 143JM, 3520M, TEFC, F1
Class - None
Division - Not Applicable

12/22/2025 6:48:40 PM

Specifications

Enclosure	TEFC
Frame	143JM
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	230.0 V @ 60 HZ
	460.0 V @ 60 HZ
Agency Approvals	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	1.600 A @ 460.0 V
	3.200 A @ 208.0 V
	3.200 A @ 230.0 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	1.6 a
Insulation Class	F

Part detail

Revision	A
Type	AC
Mech. spec.	35EE454
Base	
Status	PRD/A
Elec. spec.	35WGG004
Layout	35LYEE454
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	07-29-2025

Inverter Code	Inverter Duty
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	15.41 IN
Power Factor	69
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.25
Shaft Diameter	0.875 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

NP4423A01A01L											
CAT #	SPJMM3546T			**WGT**	37	**LBS**					
SPEC	35EE454G004			**ENCL**	TEFC						
SER #				**CC**	010A	**IP**	54				
HP	1		**MAG CUR**	2.2/1.1							
VOLTS	230/460					**NEMA NOM. EFF**	85.5				
AMPS	3.2/1.6				**PF**	69					
RATING	40C AMB-CONT										
RPM	1770			**MAX RPM**	2700						
FRAME	143JM	**HZ**	60	**CODE**	N	**CLASS**	F				
SER.F.	1.25	**SF AMP**	4/2		**PH**	3	**DES**	B			
DE	6206		**ODE**	6203							
LUBRICATION	POLYREX EM										
ID LOGO	**INVERTER TYPE**		**VPWM**		**CHP**	60	**TO**	90	1.5:1		
ID LOGO	**WK2**	0.144	**CT**	6	**TO**	60	10:1				
ID LOGO	**SL HZ**	1.07	**VT**	3	**TO**	60	20:1				
					QR						
YR											

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

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

Nameplate Data			
Rated Output (HP)			1
Volts			230/460
Full Load Amps			3.2/1.6
R.P.M.			1770
Hz	60	**Phase**	3
NEMA Design Code	B	**KVA Code**	N
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	85.5	**Power Factor**	69
Rating - Duty			40C AMB-CONT
S.F. Amps			3.4/1.7

460 V, 60 Hz: High Voltage Connection	
Full Load Torque	2.982 LB-FT
Start Configuration	direct on line
Breakdown Torque	14.6 LB-FT
Pull-up Torque	7.57 LB-FT
Locked-rotor Torque	9.17 LB-FT
Starting Current	14.6 A
No-load Current	1.2 A
Line-line Res. @ 25ºC	16.049 Ω
Temp. Rise @ Rated Load	36°C
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

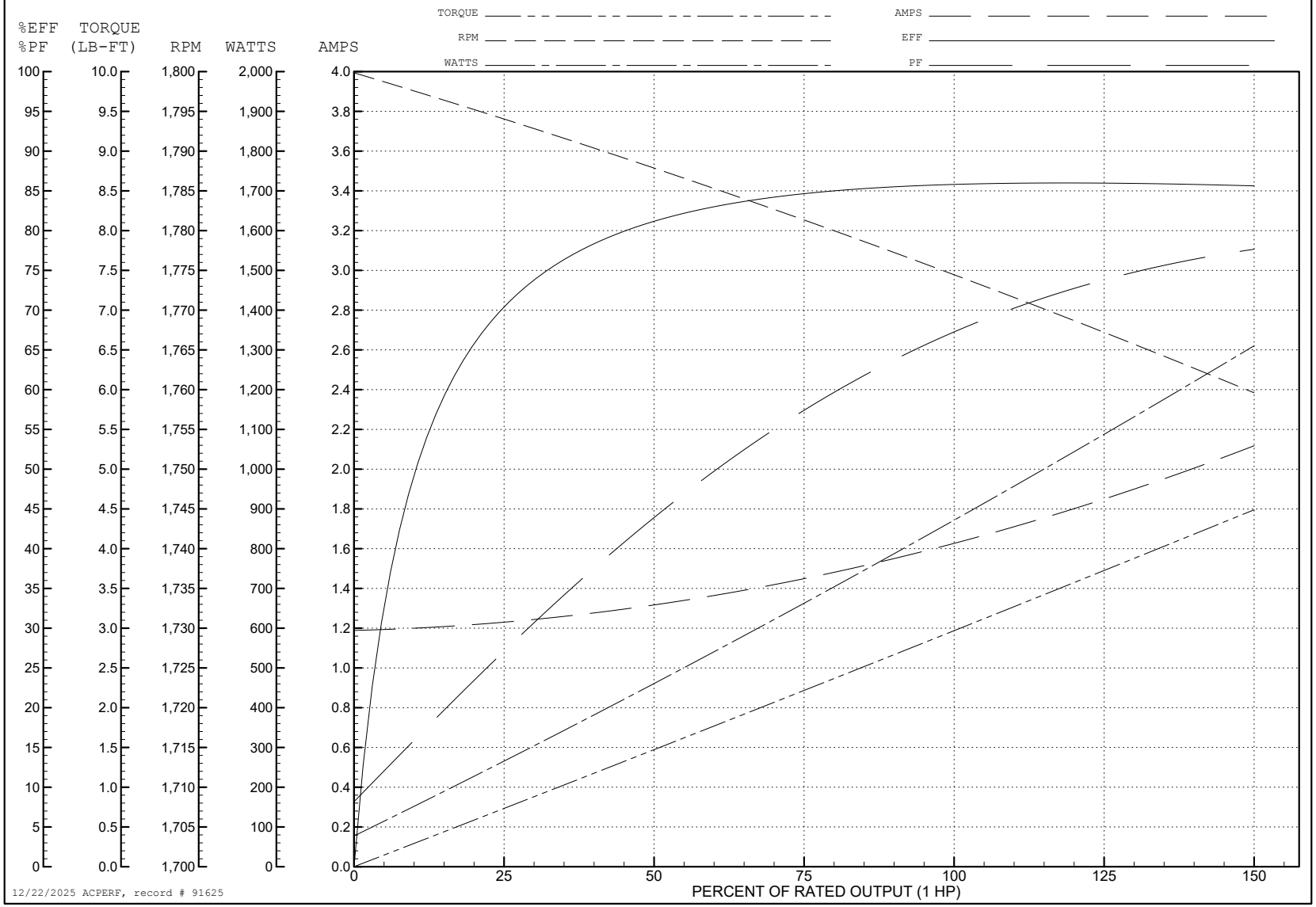
ABB Motors and Mechanical Inc.

WINDING # 35WGG004

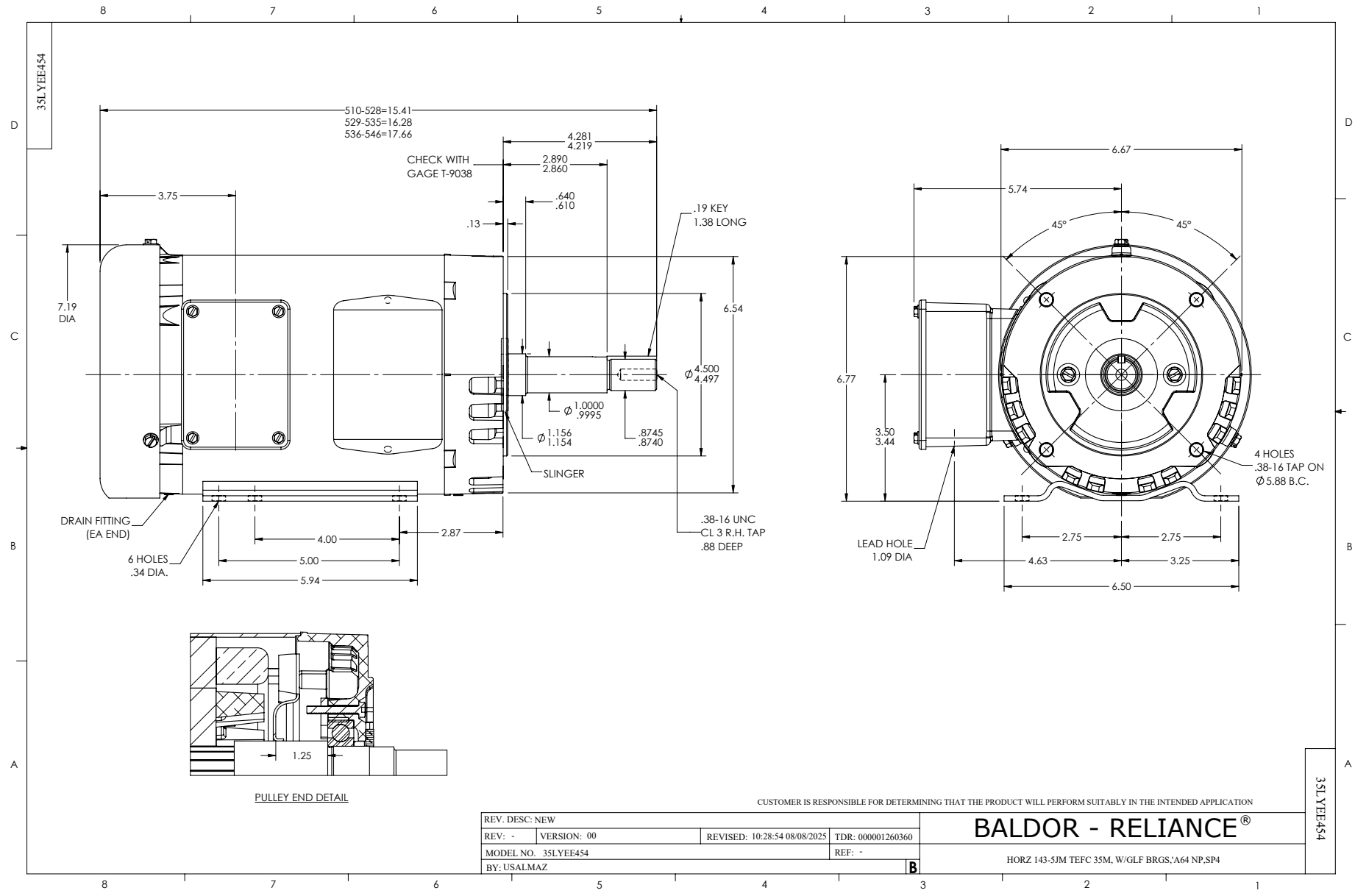
1 HP 3 PH 60 HZ 1770 RPM 460 V 3520M

Typical performance - not guaranteed values.

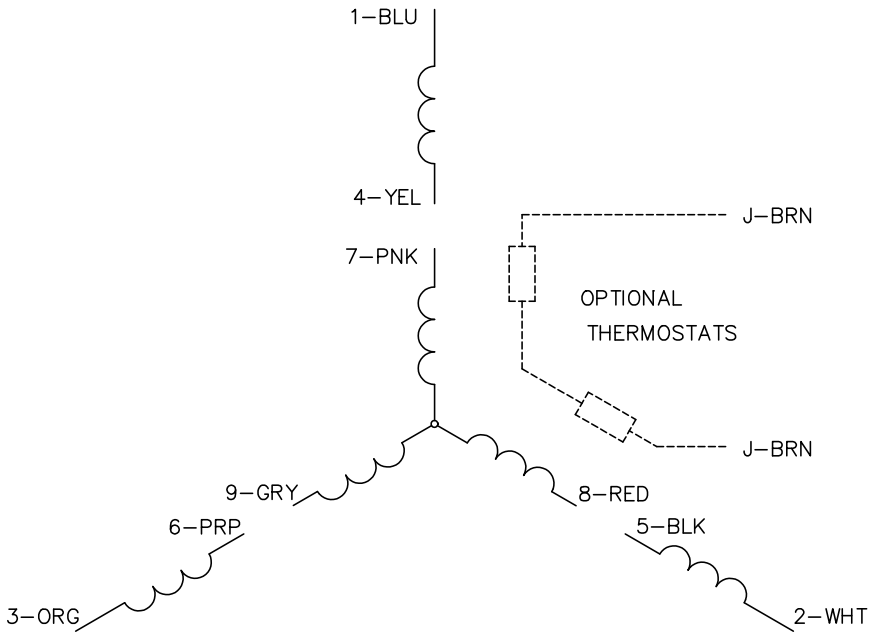
TORQUES(LB-FT): PO=14.6 PU=7.57 LR=9.17 LRA=14.6

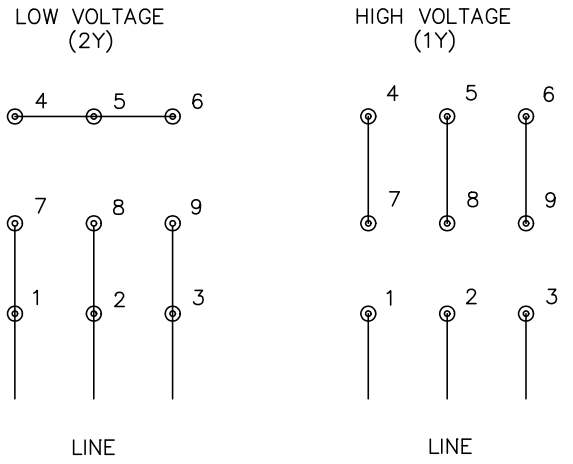


12/22/2025 ACPERF, record # 91625


35LYEE454
510-528=15.41
529-535=16.28
536-546=17.66
4.281
4.219
CHECK WITH
GAGE T-9038
2.890
2.860
.640
.610
.13
3.75
.19 KEY
1.38 LONG
7.19
DIA
6.54
Ø 4.500
4.497
Ø 1.0000
.9995
Ø 1.156
1.154
.8745
.8740
SLINGER
DRAIN FITTING
(EA END)
6 HOLES
.34 DIA.
4.00
5.00
5.94
2.87
.38-16 UNC
CL 3 R.H. TAP
.88 DEEP
6.67
5.74
45°
45°
6.77
3.50
3.44
4 HOLES
.38-16 TAP ON
Ø 5.88 B.C.
LEAD HOLE
1.09 DIA
2.75
2.75
4.63
3.25
6.50
1.25
PULLEY END DETAIL
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: NEW
REV: -
VERSION: 00
REVISED: 10:28:54 08/08/2025
TDR: 000001260360
MODEL NO. 35LYEE454
REF: -
BY: USALMAZ
B
BALDOR - RELIANCE®
HORZ 143-5JM TEFC 35M, W/GLF BRGS,'A64 NP,SP4
35LYEE454

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