ABB BALDOR RELIANCE

Customer information packet

SPJMM3157T

2HP, 1770RPM, 3PH, 60HZ, 145JM, 3538M, OPSB, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPSB
Frame	145JM
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	2.000 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	5.800 A @ 208.0 V
	5.400 A @ 230.0 V
	2.700 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	88.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.7 a
Insulation Class	F

Part Detail

Revision	A
Type	AC
Mech. spec.	35EE453
Base	
Status	PRD/A
Elec. spec.	35WGZ966
Layout	35LYEE453
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	08-07-2025

Inverter Code	Inverter Duty
KVA Code	L
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	3538M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	16.50 IN
Power Factor	75
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	Included
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 #	SPJMM3157T			**WGT**	56	**LBS**						
SPEC	35EE453Z966			**ENCL**	OPSB							
SER #				**CC**	010A	**IP**	23					
HP	2		**MAG CUR**	3/1.5								
VOLTS	230/460					**NEMA NOM. EFF**	88.5					
AMPS	5.4/2.7				**PF**	75						
RATING	40C AMB-CONT											
RPM	1770			**MAX RPM**	2700							
FRAME	145JM	**HZ**	60	**CODE**	L	**CLASS**	F					
SER.F.	1.25	**SF AMP**	6.6/3.3		**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**	0.188	**CT**	6	**TO**	60	10:1					
ID LOGO	**SL HZ**	1.1	**VT**	3	**TO**	60	20:1					
						QR						
YR												

AC Induction Motor Performance Data
Record # 109554
Preliminary Data Sheet

Winding: 35WGZ966-R010	**Type:** 3538M	**Enclosure:** OPSB

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			2	**Full Load Torque**	5.96 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			5.4/2.7	**Breakdown Torque**	26.9 LB-FT
R.P.M.			1770	**Pull-up Torque**	12.6 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	15.8 LB-FT
NEMA Design Code	B	**KVA Code**	L	**Starting Current**	27.1 A
Service Factor (S.F.)			1.25	**No-load Current**	1.54 A
NEMA Nom. Eff.	88.5	**Power Factor**	75	**Line-line Res. @ 25ºC**	7.41 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	31°C
S.F. Amps			6.6/3.3	**Temp. Rise @ S.F. Load**	41°C
				Locked-rotor Power Factor	51.8
				Rotor inertia	0.274 lb-ft²

Load Characteristics 460 V, 60 Hz, 2 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	36	57	69	77	81	84	81
Efficiency	81.5	87.9	89.3	89.3	88.7	87.6	88.7
Speed	1792	1785	1778	1771	1763	1754	1763
Line amperes	1.65	1.93	2.31	2.75	3.26	3.82	3.26

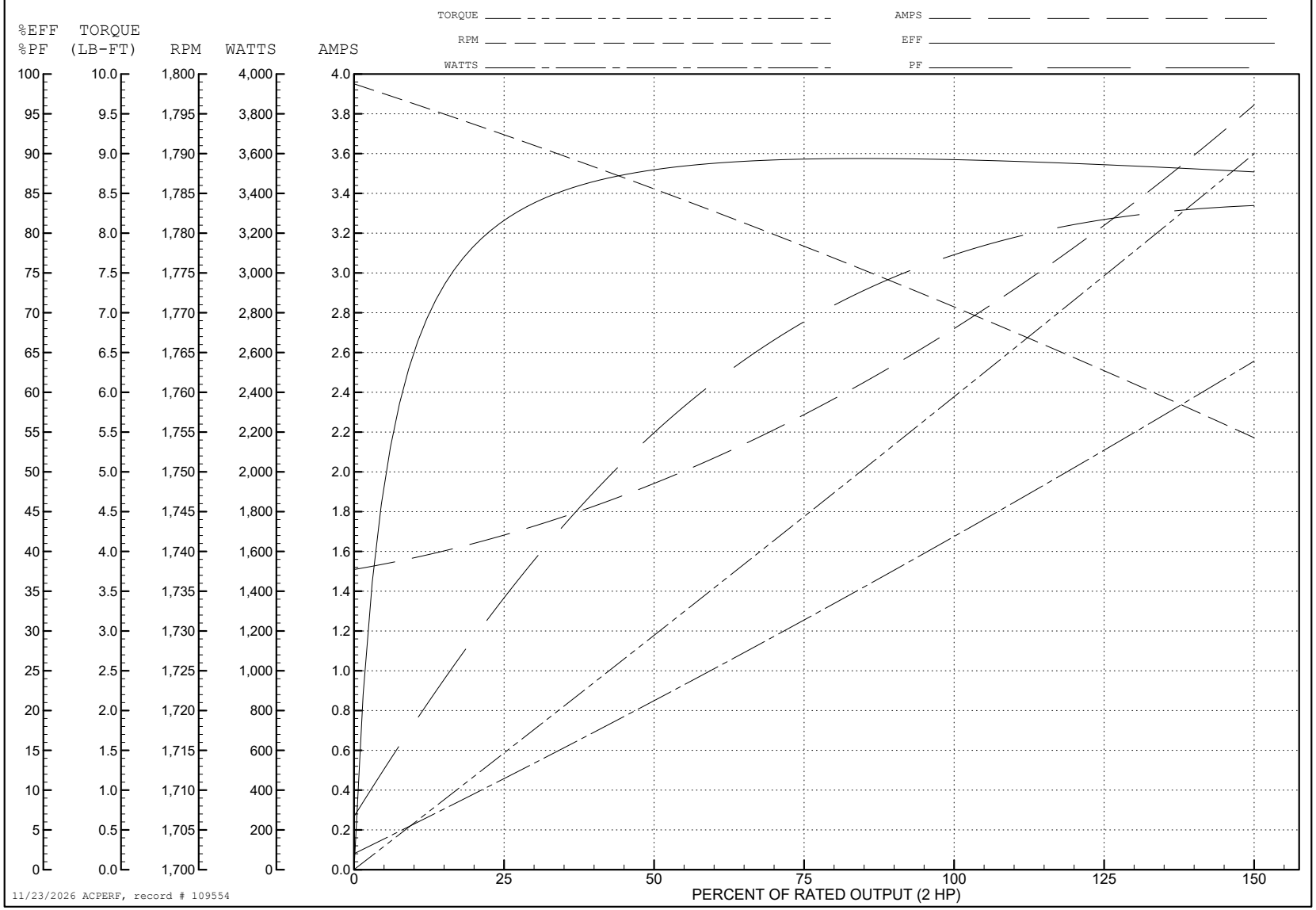
ABB Motors and Mechanical Inc.

WINDING # 35WGZ966

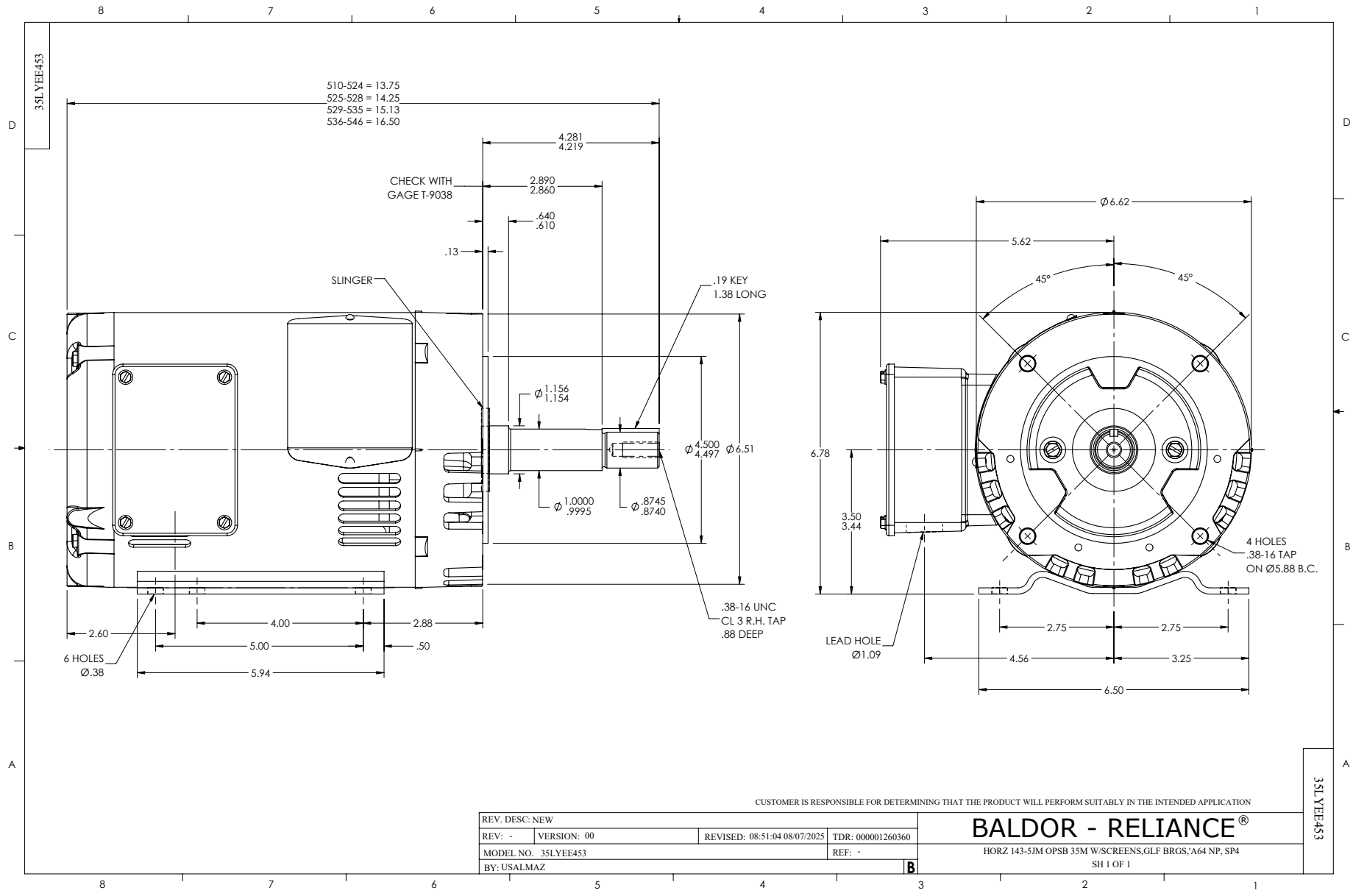
2 HP 3 PH 60 HZ 1770 RPM 460 V 3538M

Typical performance - not guaranteed values.

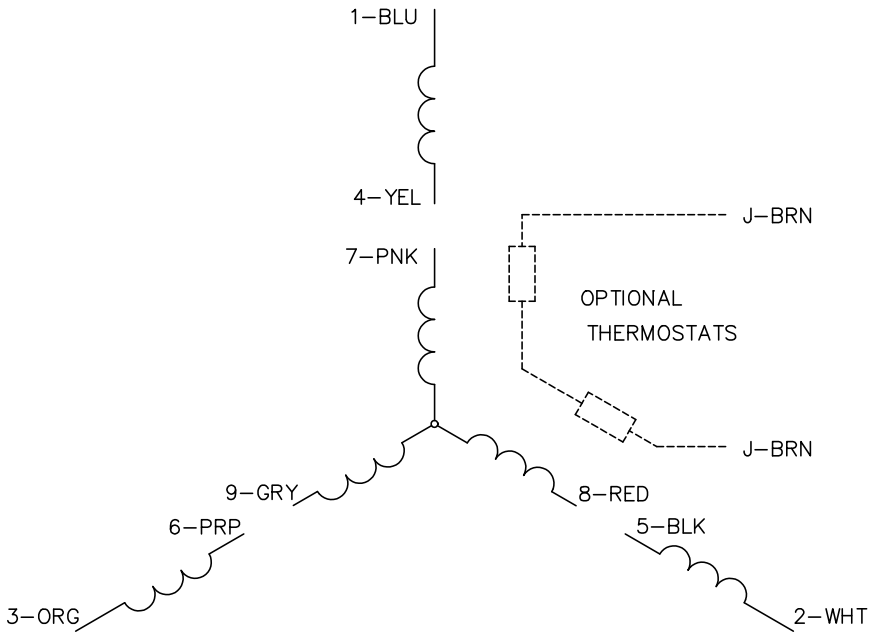
TORQUES(LB-FT): PO=26.9 PU=12.6 LR=15.8 LRA=27.1

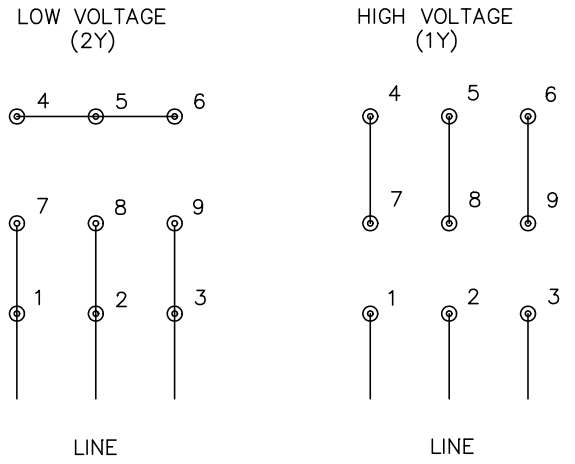


11/23/2026 ACPERF, record # 109554


35LYEE453
510-524 = 13.75
525-528 = 14.25
529-535 = 15.13
536-546 = 16.50
4.281
4.219
CHECK WITH
GAGE T-9038
2.890
2.860
.640
.610
.13
SLINGER
.19 KEY
1.38 LONG
Ø 1.156
1.154
Ø 4.500
4.497
Ø 6.51
Ø 1.0000
.9995
Ø .8745
.8740
.38-16 UNC
CL 3 R.H. TAP
.88 DEEP
2.60
4.00
2.88
5.00
.50
6 HOLES
Ø.38
5.94
Ø 6.62
5.62
45°
45°
6.78
3.50
3.44
4 HOLES
.38-16 TAP
ON Ø5.88 B.C.
LEAD HOLE
Ø1.09
2.75
2.75
4.56
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: NEW
REV: - VERSION: 00 REVISED: 08:51:04 08/07/2025 TDR: 000001260360
MODEL NO. 35LYEE453 REF: -
BY: USALMAZ B
BALDOR - RELIANCE®
HORZ 143-5JM OPSB 35M W/SCREENS,GLF BRGS,'A64 NP, SP4
SH 1 OF 1
35LYEE453

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