ABB BALDOR RELIANCE

Customer information packet

VSPM3550T

1.5HP, 3500RPM, 3PH, 60HZ, 143TC, 3520M, TEFC
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	143TC
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	1.500 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	2.050 A @ 460.0 V
	4.100 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	2.1 a
Insulation Class	F

Part Detail

Revision	E
Type	AC
Mech. spec.	35E6391
Base	
Status	PRD/A
Elec. spec.	35WGM747
Layout	35LYE6391
Eff. date	11-19-2025
CD Diagram	CD0005
Poles	02
Leads	9#18
Proprietary	False
Created date	01-08-2024

Inverter Code	Inverter Duty
KVA Code	N
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	3520M
Mounting Arrangement	F1
Number of Poles	2
Overall Length	12.29 IN
Power Factor	81
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	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	3500 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 #	VSPM3550T			**WGT**	38	**LBS**						
SPEC	35E6391M747			**ENCL**	TEFC							
SER #				**CC**	010A	**IP**	54					
HP	1.5			**MAG CUR**	2.22/1.11							
VOLTS	230/460					**NEMA NOM. EFF**	85.5					
AMPS	4.1/2.05					**PF**	81					
RATING	40C AMB-CONT											
RPM	3500					**MAX RPM**	5400					
FRAME	143TC	**HZ**	60			**CODE**	N	**CLASS**	F			
SER.F.	1.15	**SF AMP**	5.5/2.25			**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**	0.06	**CT**	6	**TO**	60		10:1				
ID LOGO	**SL HZ**	1.7	**VT**	3	**TO**	60		20:1				
							QR					
YR												

AC Induction Motor Performance Data
Record # 100785
Preliminary Data Sheet

Winding: 35WGM747-R001	**Type:** 3520M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	2.26 LB-FT
Volts			230/460	**Start Configuration**	direct on line
Full Load Amps			2.22/1.11	**Breakdown Torque**	12.5 LB-FT
R.P.M.			3500	**Pull-up Torque**	7.8 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	11.1 LB-FT
NEMA Design Code	B	**KVA Code**	N	**Starting Current**	22.6 A
Service Factor (S.F.)			1.15	**No-load Current**	1.11 A
NEMA Nom. Eff.	85.5	**Power Factor**	81	**Line-line Res. @ 25ºC**	7.34 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	38°C
S.F. Amps			5.5/2.25	**Temp. Rise @ S.F. Load**	43°C
				Locked-rotor Power Factor	51.9
				Rotor inertia	0.0553 lb-ft²

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	41	61	73	81	85	88	83
Efficiency	71.3	81.6	84.7	85.7	85.6	84.8	85.6
Speed	3573	3549	3527	3500	3473	3445	3484
Line amperes	1.2	1.42	1.69	2.04	2.42	2.84	2.27

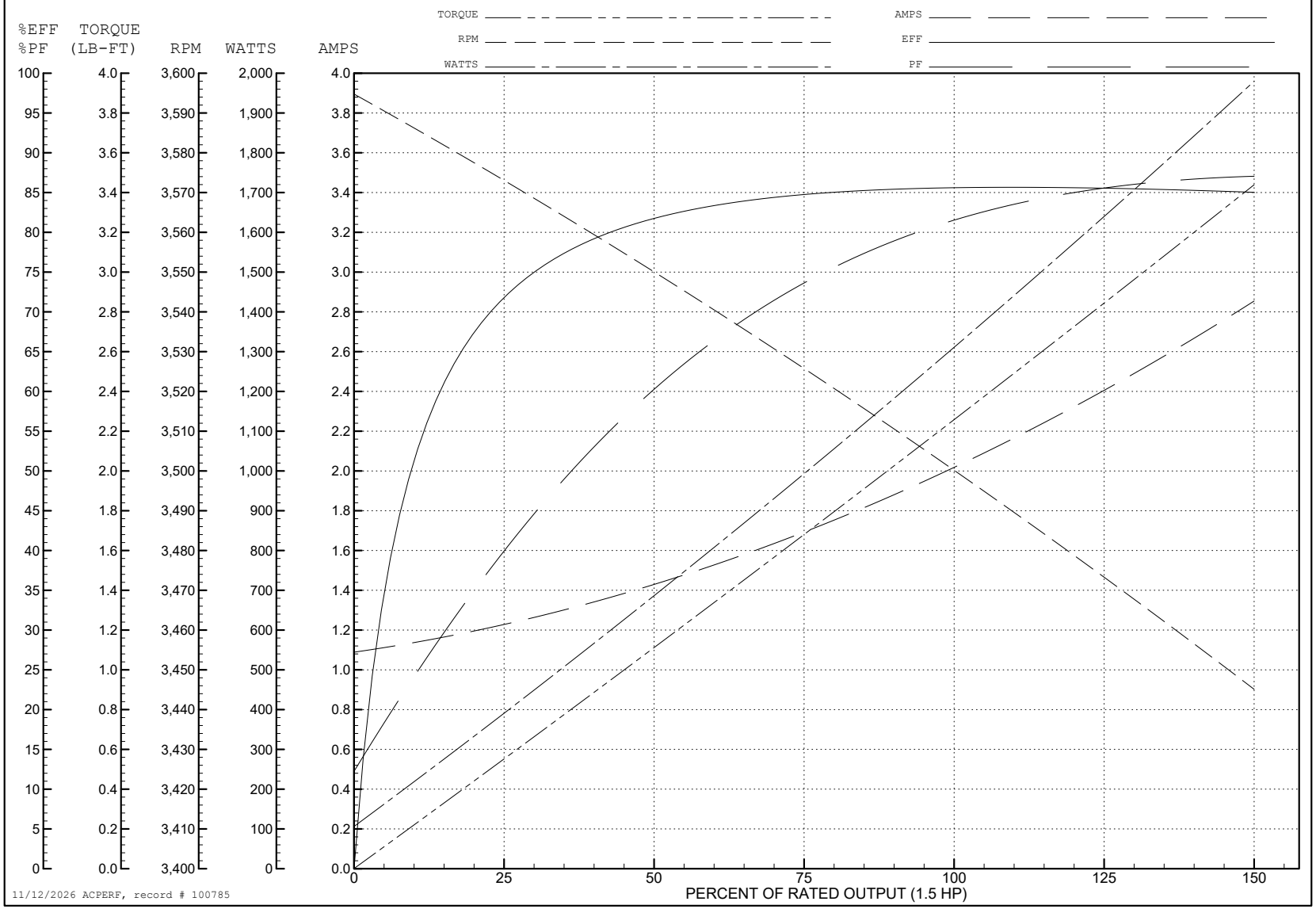
ABB Motors and Mechanical Inc.

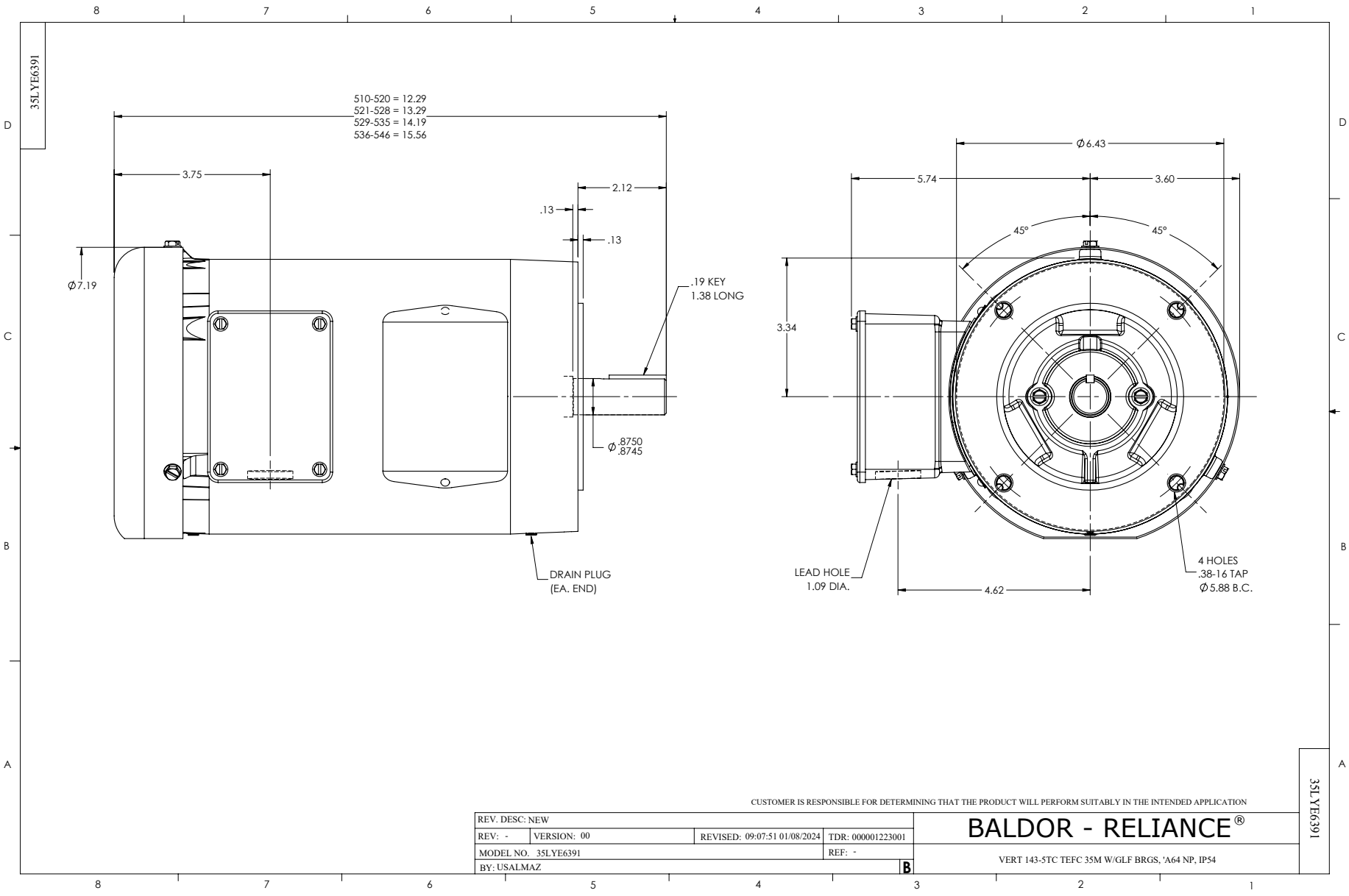
WINDING # 35WGM747

1.5 HP 3 PH 60 HZ 3500 RPM 460 V 3520M

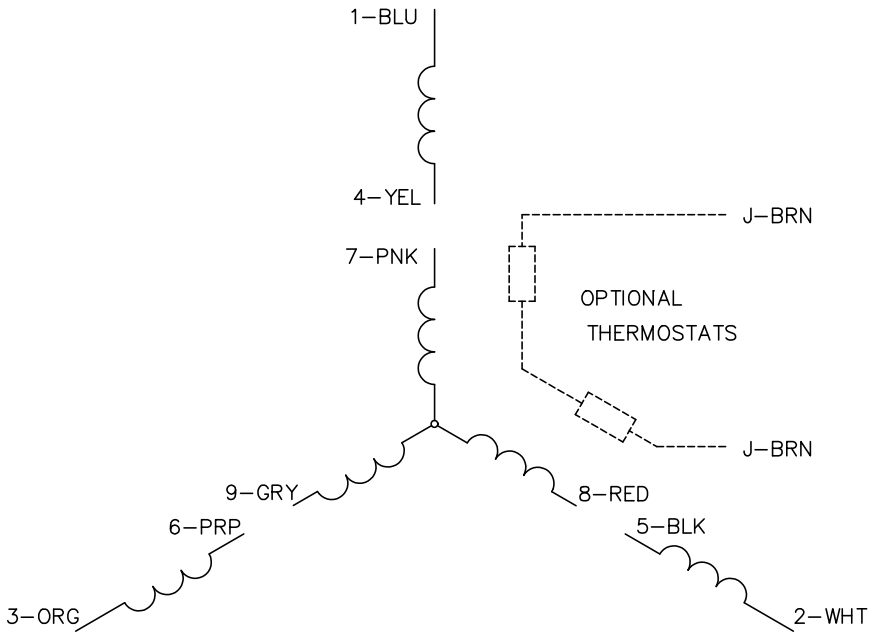
Typical performance - not guaranteed values.

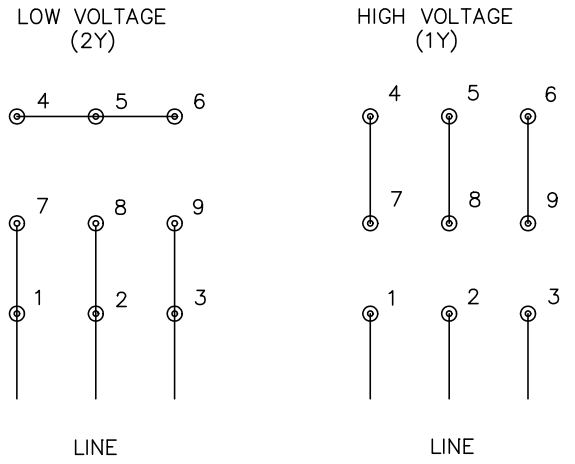
TORQUES(LB-FT): PO=12.5 PU=7.8 LR=11.1 LRA=22.6




35LYE6391
510-520 = 12.29
521-528 = 13.29
529-535 = 14.19
536-546 = 15.56
3.75
2.12
.13
.13
Ø7.19
.19 KEY
1.38 LONG
Ø .8750
.8745
DRAIN PLUG
(EA. END)
Ø6.43
5.74
3.60
45°
45°
3.34
LEAD HOLE
1.09 DIA.
4.62
4 HOLES
.38-16 TAP
Ø5.88 B.C.
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: NEW
REV: - VERSION: 00 REVISED: 09:07:51 01/08/2024 TDR: 000001223001
MODEL NO. 35LYE6391 REF: -
BY: USALMAZ B
BALDOR - RELIANCE®
VERT 143-5TC TEFC 35M W/GLF BRGS, 'A64 NP, IP54
35LYE6391

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