ABB BALDOR RELIANCE

Customer information packet

BM3554T

1.5HP, 1755RPM, 3PH, 60HZ, 145T, 3521M, TEFC, F
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	145T
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	1800 RPM @ 60 HZ
Voltage @ Frequency	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
	208.0 V @ 60 HZ
Agency Approvals	CSA
	UR
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
Brake Torque	10.0 lb-ft
Current @ Voltage	5.100 A @ 208.0 V
	4.800 A @ 230.0 V
	2.400 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	84.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Brake Mounting

Part Detail

Revision	M
Type	AC
Mech. spec.	35A021
Base	
Status	NLA/A
Elec. spec.	35WGZ541
Layout	35LYA021
Eff. date	03-08-2016
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	01-14-2008

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.4 a
Insulation Class	B
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3521M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	17.49 IN
Power Factor	70
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1755 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

NP1256L											
CAT.NO.	BM3554T										
SPEC.	35A021Z541G1										
HP	1.5										
VOLTS	208-230/460										
AMP	5.1-4.8/2.4										
RPM	1755										
FRAME	145T		**HZ**	60			**PH**	3			
SER.F.	1.15	**CODE**	M	**DES**	B	**CLASS**		B			
NEMA-NOM-EFF	84	**PF**	70								
RATING	40C AMB-CONT										
CC											
DE	6205		**ODE**	6203							
ENCL	TEFC	**SN**									

AC Induction Motor Performance Data
Record # 32002
Typical performance - not guaranteed values

Winding: 35WGZ541-R012	**Type:** 3522M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1.5	**Full Load Torque**	4.42 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			5.1-4.8/2.4	**Breakdown Torque**	19.8 LB-FT
R.P.M.			1755	**Pull-up Torque**	10.65 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	14 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	19.38 A
Service Factor (S.F.)			1.15	**No-load Current**	1.59 A
NEMA Nom. Eff.	84	**Power Factor**	70	**Line-line Res. @ 25ºC**	9.72 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	55°C
S.F. Amps				**Temp. Rise @ S.F. Load**	63°C
				Locked-rotor Power Factor	53.6
				Rotor inertia	0.13 LB-FT2

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	30	48	62	70	77	80	74
Efficiency	68.5	79.3	83.4	84.3	84.2	83.1	83.9
Speed	1792	1783	1773	1762	1751	1737	1754
Line amperes	1.64	1.8	2.04	2.35	2.7	3.11	2.57

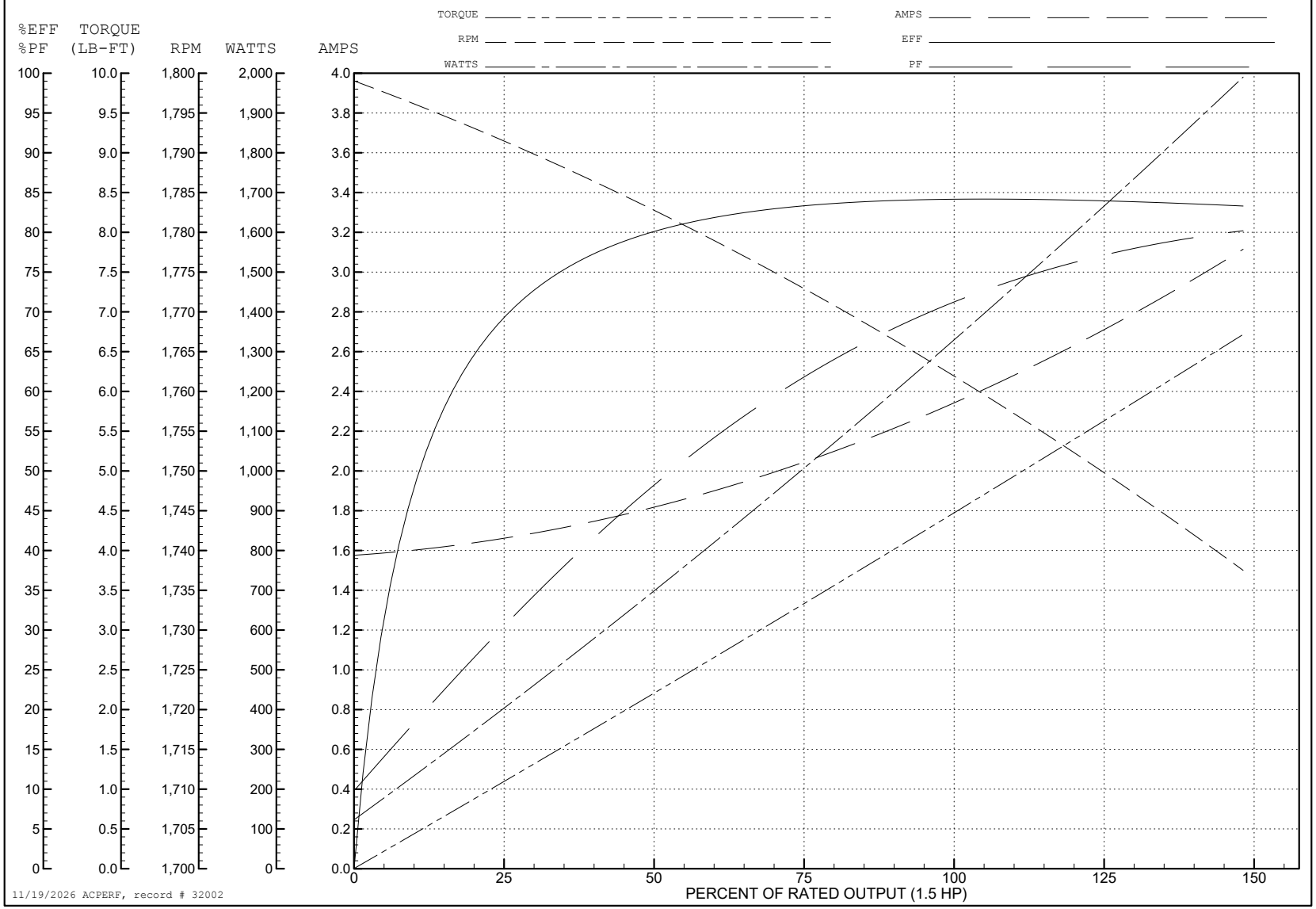
ABB Motors and Mechanical Inc.

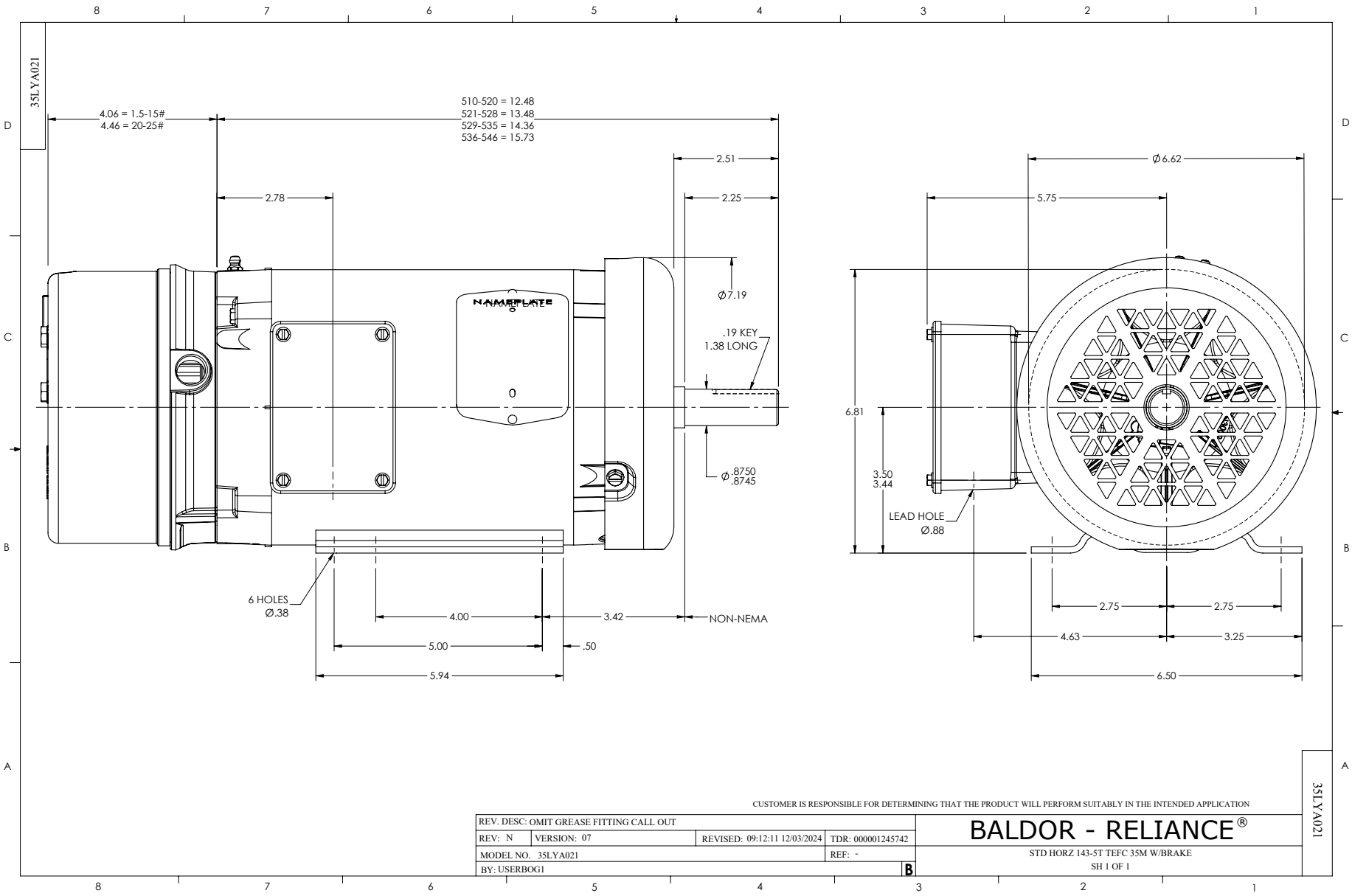
WINDING # 35WGZ541

1.5 HP 3 PH 60 HZ 1755 RPM 460 V 3522M

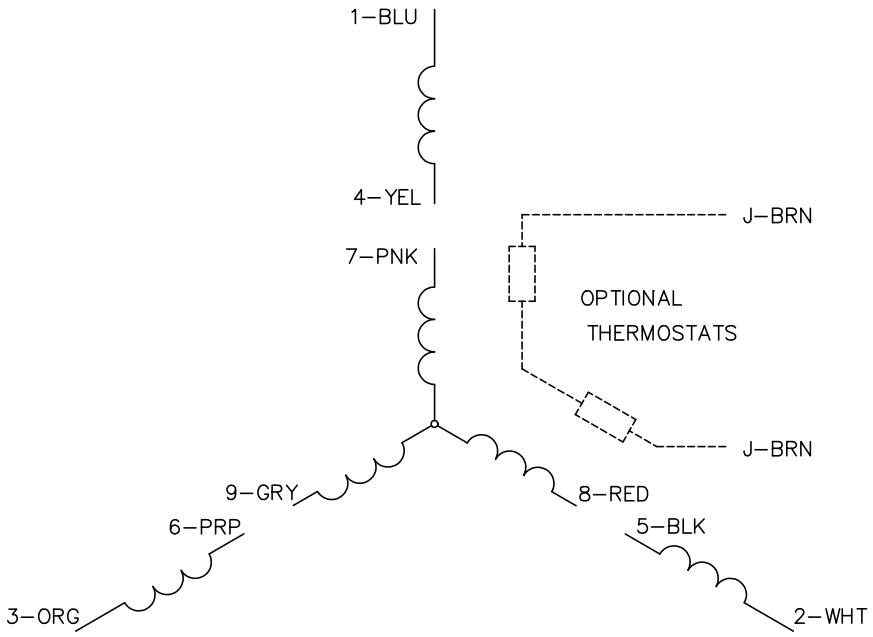
Typical performance - not guaranteed values.

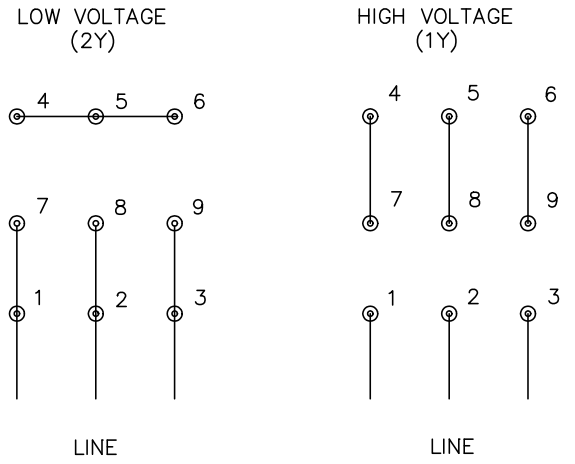
TORQUES(LB-FT): PO=19.8 PU=10.65 LR=14 LRA=19.38




35LYA021
4.06 = 1.5-15#
4.46 = 20-25#
510-520 = 12.48
521-528 = 13.48
529-535 = 14.36
536-546 = 15.73
2.51
2.78
2.25
Ø7.19
.19 KEY
1.38 LONG
NAMEPLATE
Ø.8750
Ø.8745
6 HOLES
Ø.38
4.00
3.42
NON-NEMA
5.00
.50
5.94
Ø6.62
5.75
6.81
3.50
3.44
LEAD HOLE
Ø.88
2.75
2.75
4.63
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: OMIT GREASE FITTING CALL OUT
REV: N
VERSION: 07
REVISED: 09:12:11 12/03/2024
TDR: 000001245742
MODEL NO. 35LYA021
REF: -
BY: USERBOG1
B
BALDOR - RELIANCE®
STD HORZ 143-5T TEFC 35M W/BRAKE
SH 1 OF 1
35LYA021

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