ABB BALDOR RELIANCE

Customer information packet

EM3116T-57

1/.75KWHP, 1470RPM, 3PH, 50HZ, 143T, 3520M, OP
Class - None
Division - Not Applicable

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Specifications

Enclosure	OPSB
Frame	143T
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	400.0 V @ 50 HZ
	230.0 V @ 50 HZ
Agency Approvals	C UR US
	CE
	CURUS
	IE3
	UKCA
	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	3.450 A @ 230.0 V
	2.000 A @ 400.0 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

Part Detail

Revision	B
Type	AC
Mech. spec.	35BB101
Base	
Status	PRD/A
Elec. spec.	35WGZ921
Layout	35LYBB101
Eff. date	05-07-2024
CD Diagram	CD0022
Poles	04
Leads	6#18
Proprietary	False
Created date	03-11-2022

Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	2.0 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.12 IN
Power Factor	65
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 Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1470 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

NP2716L									
CAT NO	EM3116T-57								
SPEC.	35BB101Z921G1								
HP	1/.75KW					**PH**	3		
VOLTS	230/400								
AMP	3.45/2								
R.P.M. (1/MIN)	1470								
FRAME	143T		**HZ**	50			**I.P.**	23	
SER.F.	1.15	**CODE**	N	**DES**	B		**CL**	F	
NOM.EFF.	82.5			**% (100%)**					
PF	65								
RATING	40C AMB-CONT				**CC**				
DE BRG	6205		**ODE**	6203					
ENCL	OPSB	**SN**							
BLANK	SFA 3.7/2.15								
	15KG IC01								

AC Induction Motor Performance Data
Record # 88663
Typical performance - not guaranteed values

Winding: 35WGZ921-R002	**Type:** 3520M	**Enclosure:** OPEN

Nameplate Data			
Rated Output (HP)			1
Volts			230/400
Full Load Amps			3.45/2
R.P.M.			1470
Hz	50	**Phase**	3
NEMA Design Code	B	**KVA Code**	N
Service Factor (S.F.)			1.15
NEMA Nom. Eff.	82.5	**Power Factor**	65
Rating - Duty			40C AMB-CONT
S.F. Amps			3.7/2.15

400 V, 50 Hz: High Voltage Connection	
Full Load Torque	3.56 LB-FT
Start Configuration	direct on line
Breakdown Torque	17.3 LB-FT
Pull-up Torque	11 LB-FT
Locked-rotor Torque	12.7 LB-FT
Starting Current	18.2 A
No-load Current	1.65 A
Line-line Res. @ 25ºC	13.5 Ω
Temp. Rise @ Rated Load	32°C
Temp. Rise @ S.F. Load	36°C
Locked-rotor Power Factor	68
Rotor inertia	0.144 lb-ft²

Load Characteristics 400 V, 50 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	26	40	53	62	70	75	68
Efficiency	62.7	75.6	80.6	82.5	83.1	82.9	82.6
Speed	1494	1488	1483	1477	1470	1463	1467
Line amperes	1.67	1.77	1.9	2.09	2.32	2.59	2.18

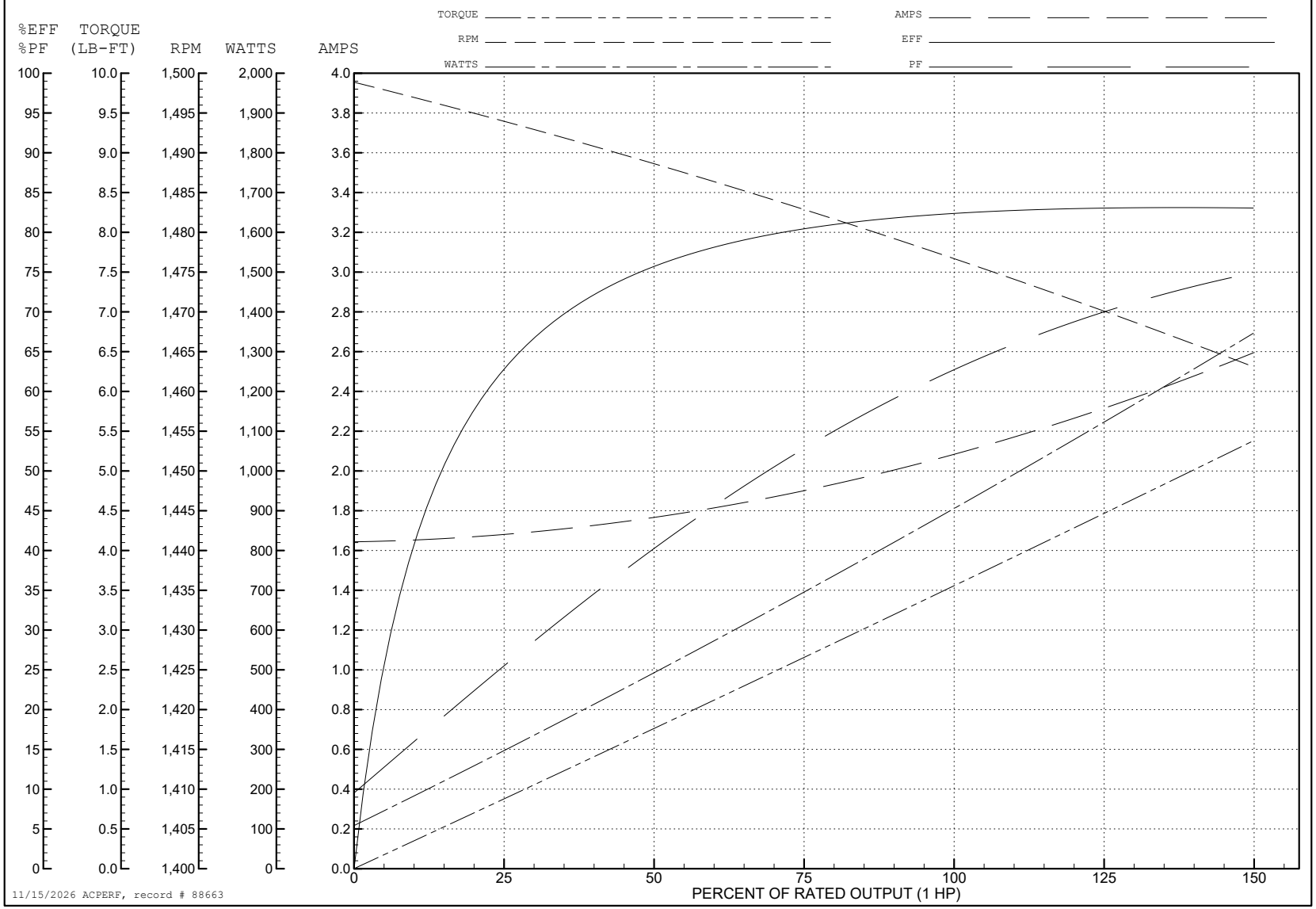
ABB Motors and Mechanical Inc.

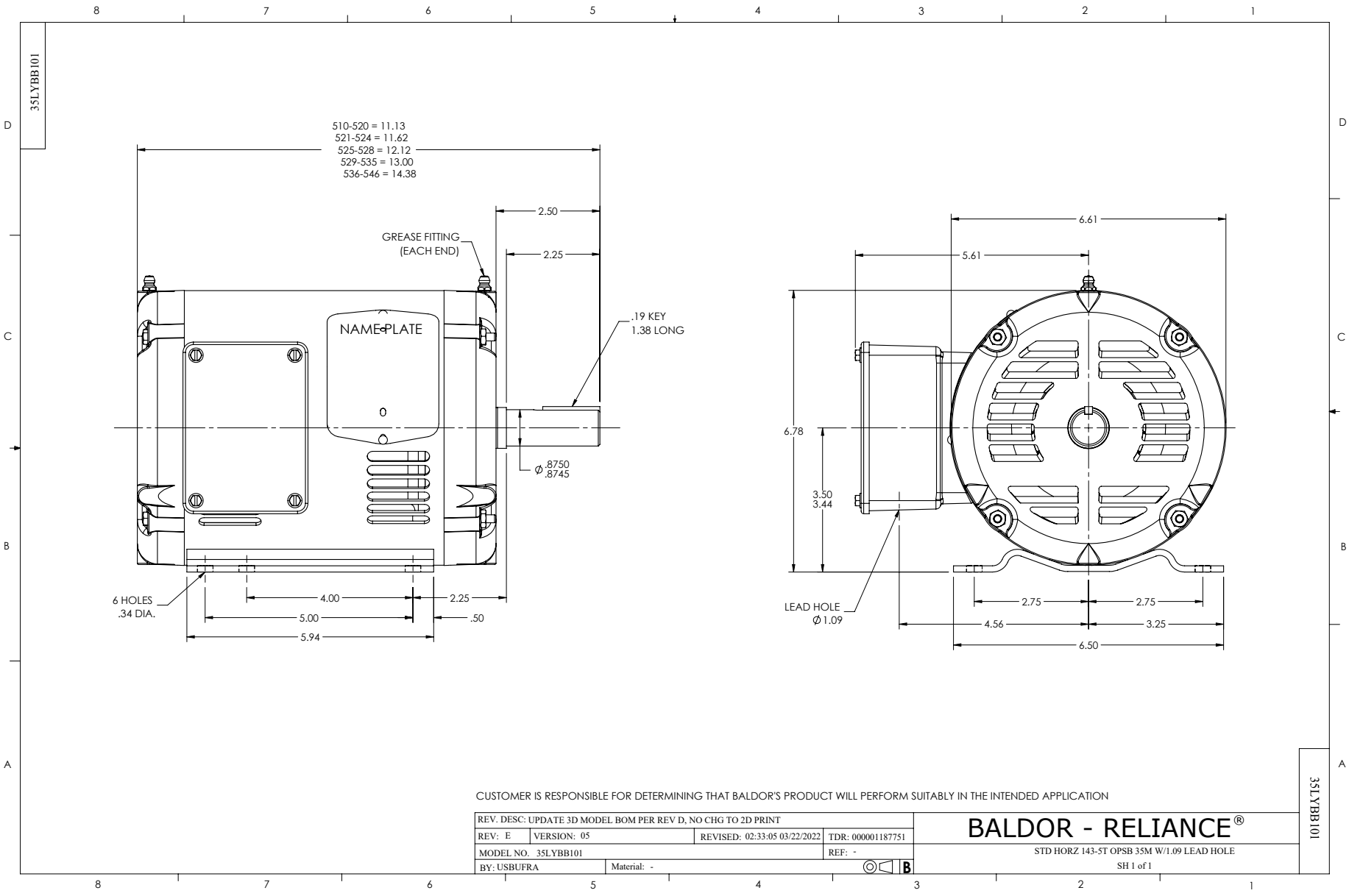
WINDING # 35WGZ921

1 HP 3 PH 50 HZ 1470 RPM 400 V 3520M

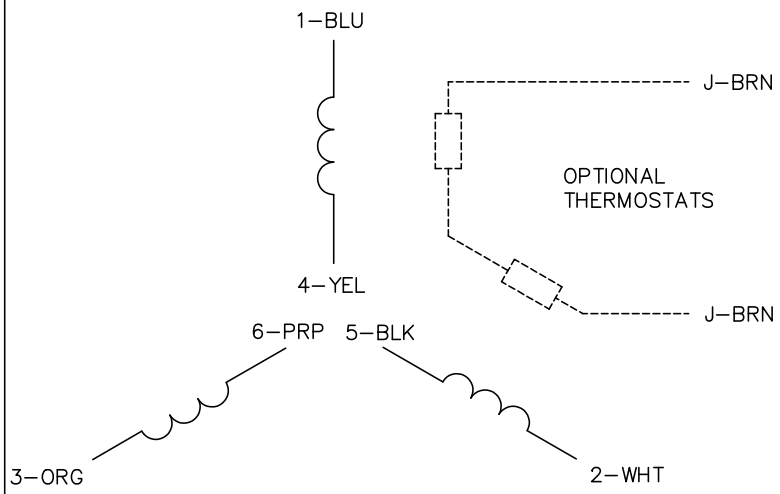
Typical performance - not guaranteed values.

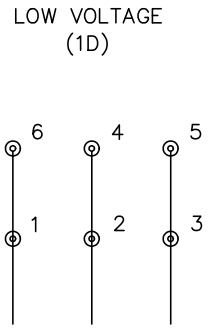
TORQUES(LB-FT): PO=17.3 PU=11 LR=12.7 LRA=18.2

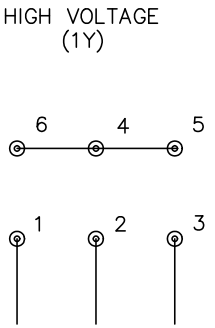



35LYBB101
510-520 = 11.13
521-524 = 11.62
525-528 = 12.12
529-535 = 13.00
536-546 = 14.38
2.50
2.25
GREASE FITTING
(EACH END)
NAMEPLATE
.19 KEY
1.38 LONG
Ø.8750
.8745
6 HOLES
.34 DIA.
4.00
2.25
5.00
.50
5.94
6.61
5.61
6.78
3.50
3.44
LEAD HOLE
Ø1.09
2.75
2.75
4.56
3.25
6.50
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV D, NO CHG TO 2D PRINT
REV: E
VERSION: 05
REVISED: 02:33:05 03/22/2022
TDR: 000001187751
MODEL NO. 35LYBB101
REF: -
BY: USBUFRA
Material: -
B
BALDOR - RELIANCE®
STD HORZ 143-5T OPSB 35M W/1.09 LEAD HOLE
SH 1 of 1
35LYBB101

CD0022







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.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: F	BY: JLP	REVISED: 01/21/99 3:54	TDR: 0171435
CD0022		FILE: AAA00005144	MDL: –
		MTL: –	3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022