

**BALDOR • RELIANCE**

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# Customer information packet

## EM3116T-57

1/.75KWHP, 1470RPM, 3PH, 50HZ, 143T, 3520M, OP

Class - None

Division - Not Applicable

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6/9/2025 3:56:47 AM

## 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
Auxillary Box	No Auxillary Box
Auxillary 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**

<b>NP2716L</b>									
<b>CAT NO</b>	EM3116T-57								
<b>SPEC.</b>	35BB101Z921G1								
<b>HP</b>	1/.75KW				<b>PH</b>	3			
<b>VOLTS</b>	230/400								
<b>AMP</b>	3.45/2								
<b>R.P.M. (1/MIN)</b>	1470								
<b>FRAME</b>	143T		<b>HZ</b>	50		<b>I.P.</b>	23		
<b>SER.F.</b>	1.15	<b>CODE</b>	N	<b>DES</b>	B	<b>CL</b>	F		
<b>NOM.EFF.</b>	82.5		<b>% (100%)</b>						
<b>PF</b>	65								
<b>RATING</b>	40C AMB-CONT				<b>CC</b>				
<b>DE BRG</b>	6205		<b>ODE</b>	6203					
<b>ENCL</b>	OPSB	<b>SN</b>							
<b>BLANK</b>	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	
<b>Nameplate Data</b>			<b>400 V, 50 Hz: High Voltage Connection</b>	
Rated Output (HP)	1	Full Load Torque	3.56 LB-FT	
Volts	230/400	Start Configuration	direct on line	
Full Load Amps	3.45/2	Breakdown Torque	17.3 LB-FT	
R.P.M.	1470	Pull-up Torque	11 LB-FT	
Hz	50 Phase	Locked-rotor Torque	12.7 LB-FT	
NEMA Design Code	B KVA Code	Starting Current	18.2 A	
Service Factor (S.F.)	1.15	No-load Current	1.65 A	
NEMA Nom. Eff.	82.5 Power Factor	Line-line Res. @ 25°C	13.5 Ω	
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	32°C	
S.F. Amps	3.7/2.15	Temp. Rise @ S.F. Load	36°C	
		Locked-rotor Power Factor	68	
		Rotor inertia	0.144 lb-ft <sup>2</sup>	

**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

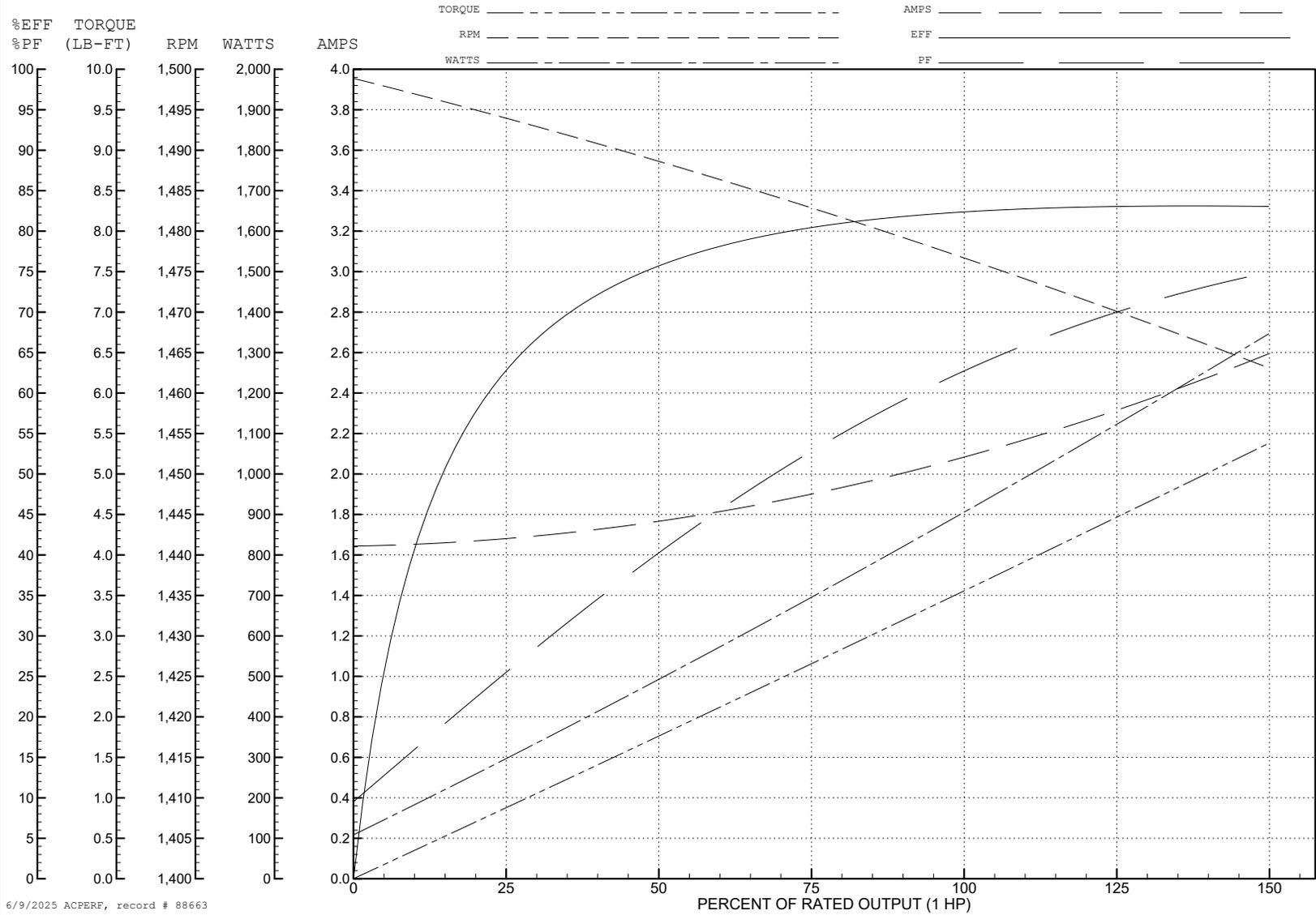
ABB Motors and Mechanical Inc.

WINDING # 35WGZ921

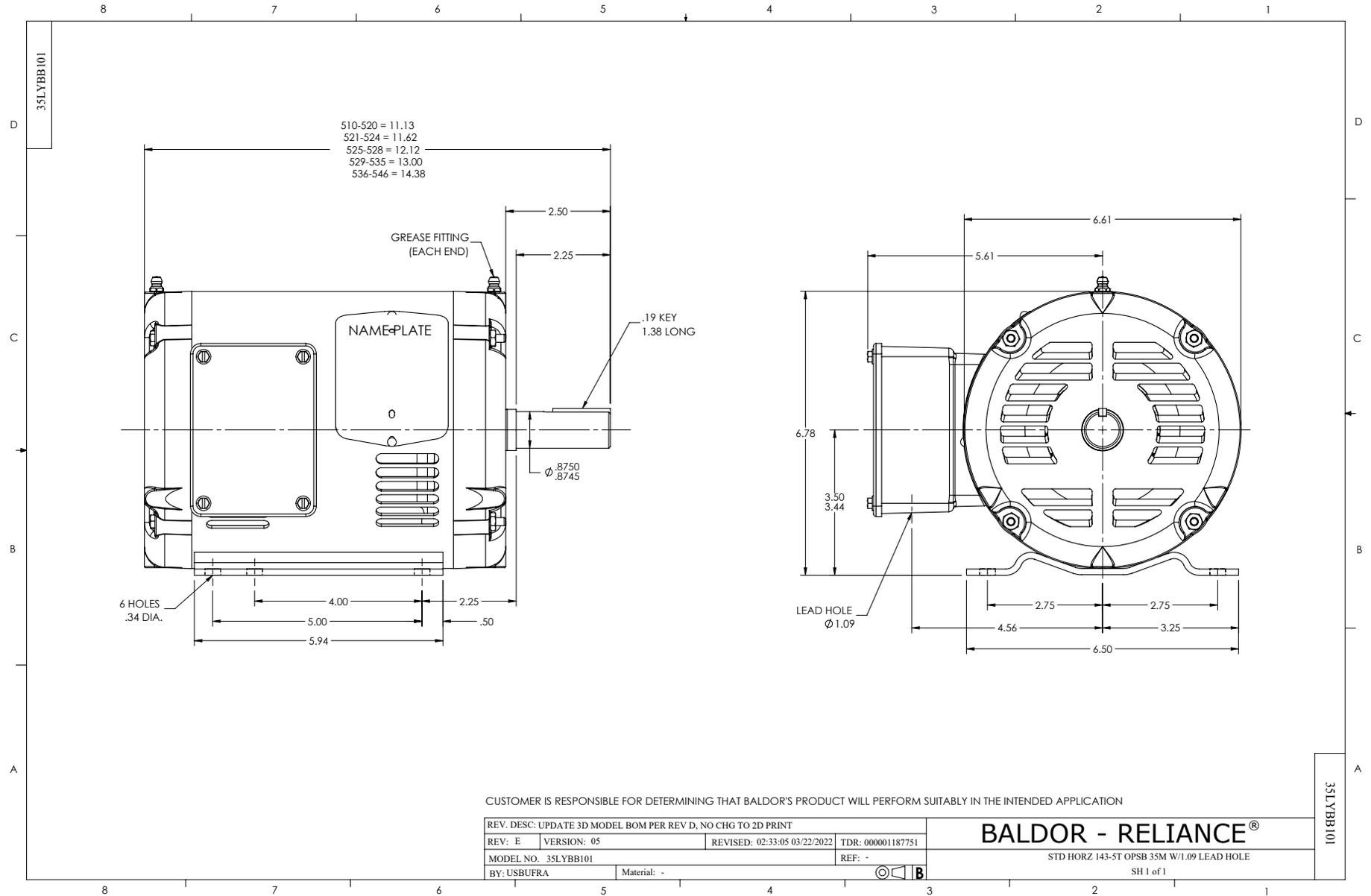
Typical performance - not guaranteed values.

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

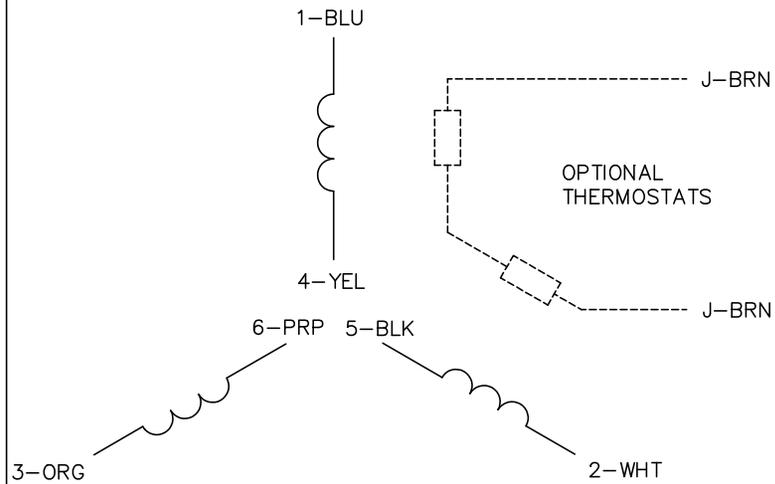
TORQUES (LB-FT): PO=17.3 PU=11 LR=12.7 LRA=18.2



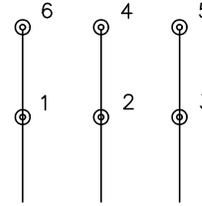
6/9/2025 ACPERF, record # 88663



CD0022

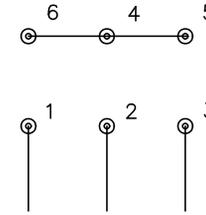


LOW VOLTAGE  
(1D)



LINE

HIGH VOLTAGE  
(1Y)



LINE

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			
REV. LTR: F	BY: JLP	REVISED: 01/21/99 3:54	TDR: 0171435
CD0022		FILE: AAA00005144	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022