

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
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

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								

Parts list

Part number	Description	Quantity
SA411421	SA 35BB101Z921G1	1.000 ea
RA403063	RA 35BB101Z921G1	1.000 ea
35FN3002A05SP	EXFN, PLASTIC, 6.376 OD, .638 ID	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3009	35 CB W/1.09 DIA. LEAD HOLE @ 6:	1.000 ea
51XB1016A06	10-16X3/8 HXWSSLD SERTYB	2.000 ea
11XW1032G06	10-32 X .38, TAPTITE II, HEX WSHR SLTD U	1.000 ea
35EP3209A00	MASTER ODE,203 BRG,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3210A00	MASTER DE,205 BRG,1.000SH,GRSR	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 ea
35CB4521	35 LIPPED CB LID (GALV & PHOSPH)	1.000 ea
51XW0832A07	8-32 X .44, TAPTITE II, HEX WSHR SLTD SE	4.000 ea
HW2501D13	KEY, 3/16 SQ X 1.375	1.000 ea
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1050G01	CELEROL MEDIUM CHARCOAL METALLIC GRAY	0.017 ga
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR	1.000 ea
LB1624	COMBINED WARNING LABEL, ISO/ANSI PICTOGR	1.000 ea
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR	1.000 ea
LC0034	CONNECTION LABEL	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500bx)4/22	1.000 ea
NP2716L	ALUM SUPER-E NEMA IE3 UL CC CE UKCA WEEE	1.000 ea
35PA1066	PKG GRP, PRINT PK1008A06	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea
PE-0000001	ZRTG PE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 88663

Typical performance - not guaranteed values

Winding: 35WGZ921-R002		Type: 3520M		Enclosure: OPEN	
Nameplate Data			400 V, 50 Hz: High Voltage Connection		
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	3	Locked-rotor Torque	12.7 LB-FT	
NEMA Design Code	B KVA Code	N	Starting Current	18.2 A	
Service Factor (S.F.)	1.15	No-load Current	1.65 A		
NEMA Nom. Eff.	82.5 Power Factor	65	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 ²		

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

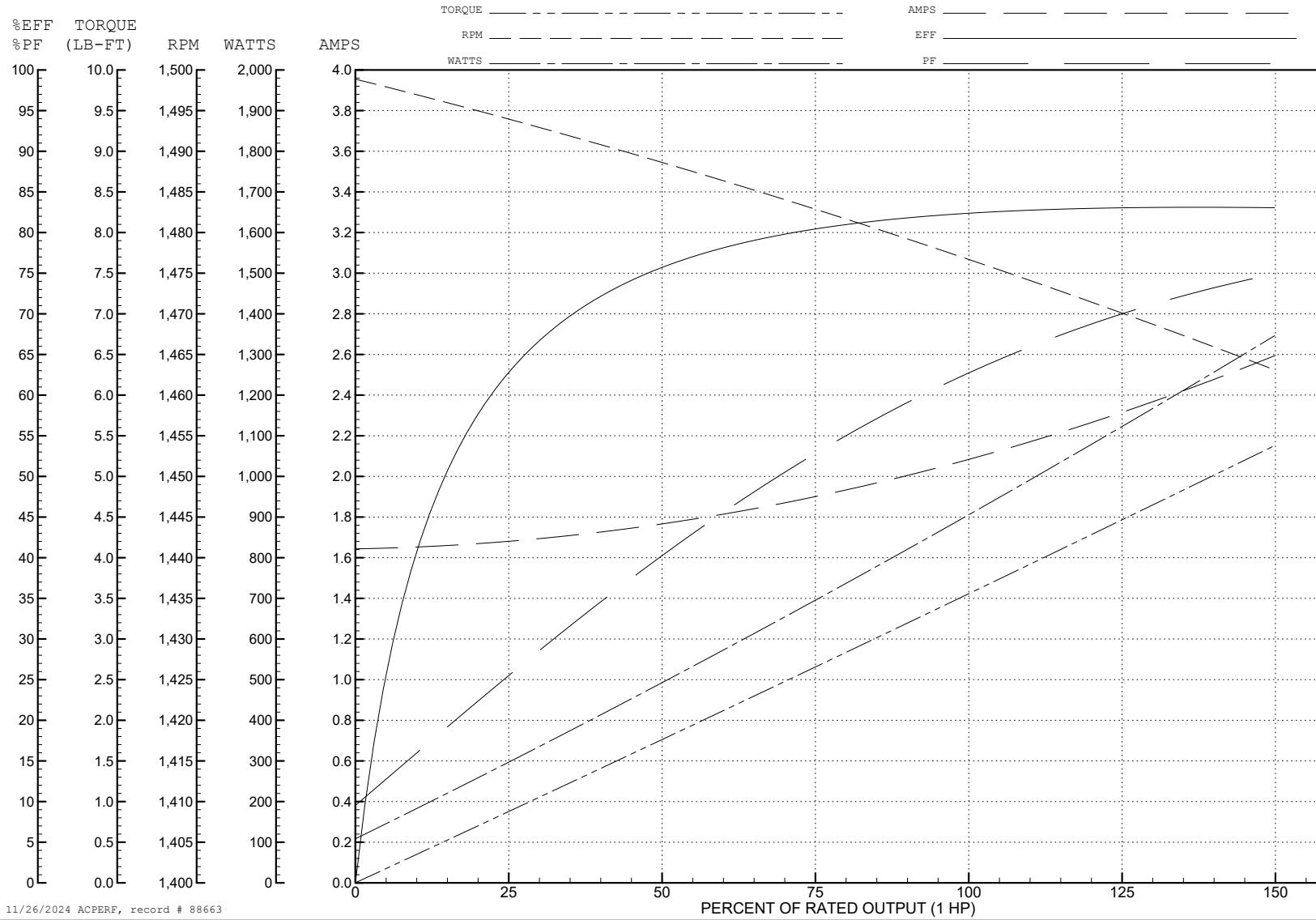
ABB Motors and Mechanical Inc.

WINDING # 35WGZ921

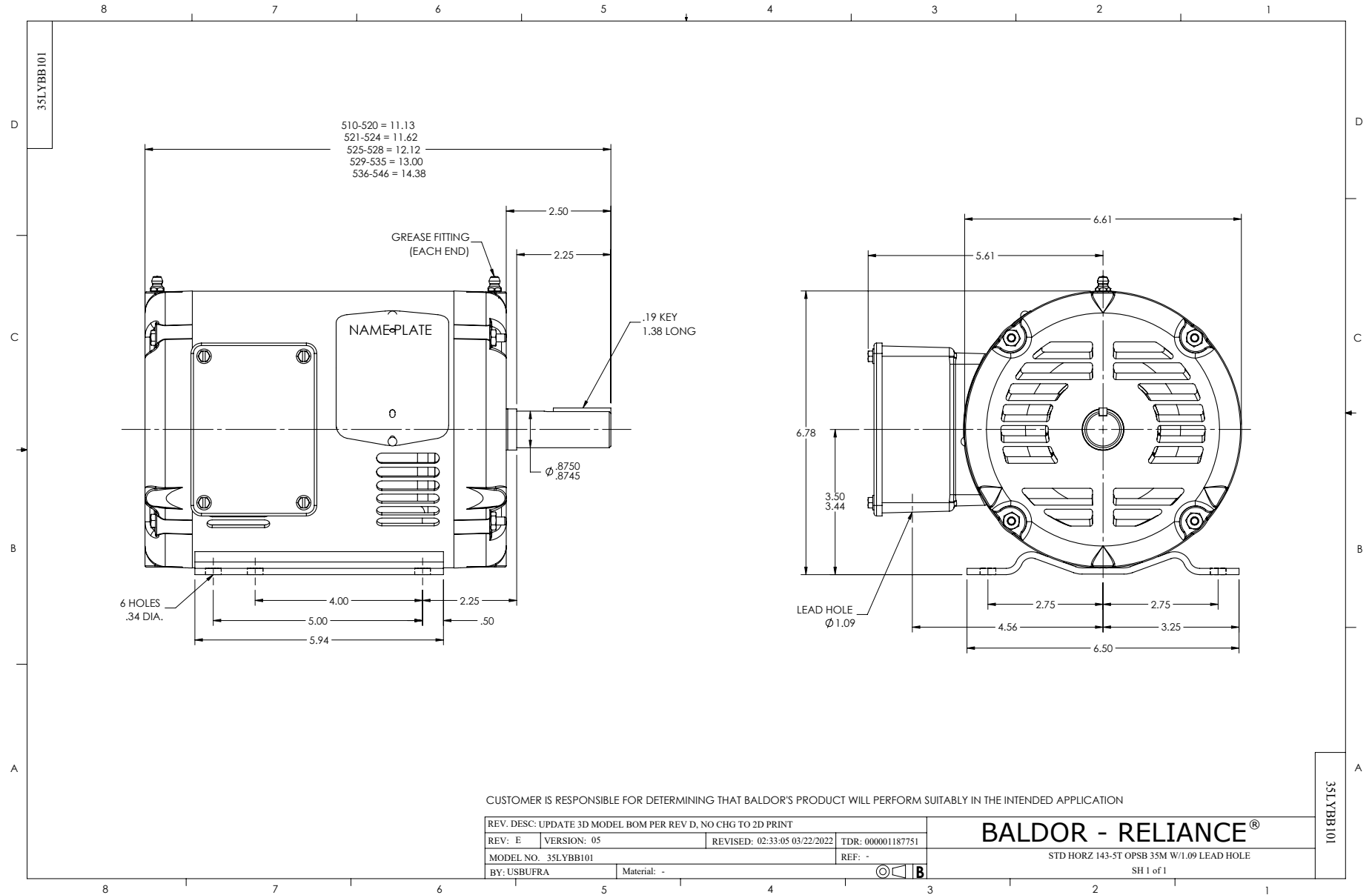
Typical performance - not guaranteed values.

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

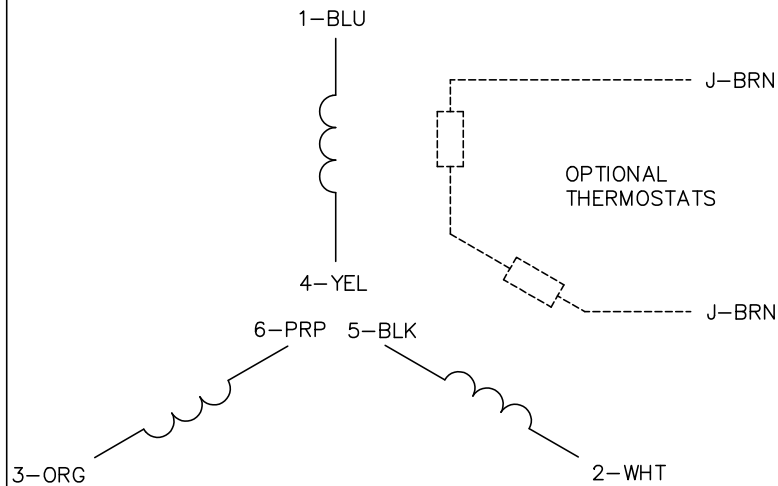
TORQUES (LB-FT): PO=17.3 PU=11 LR=12.7 LRA=18.2



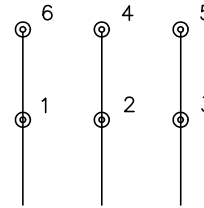
11/26/2024 ACPERF, record # 88663



CD0022

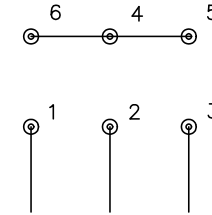


LOW VOLTAGE
(1D)



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