

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3116T-5**

**1HP,1760RPM,3PH,60HZ,143T,3520M,OPSB,F1**

Part Detail							
Revision:	P	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM849	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	35BB101	Layout:	35LYBB101	Poles:	04	Created Date:	11-29-2010
Base:	RG	Eff. Date:	06-14-2021	Leads:	3#18		

Specs			
Catalog Number:	EM3116T-5	Inverter Code:	Inverter Ready
Enclosure:	OPSB	KVA Code:	L
Frame:	143T	Lifting Lugs:	No Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	No Locked Bearing
Output @ Frequency:	1.000 HP @ 60 HZ	Motor Lead Quantity/Wire Size:	3 @ 18 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	575.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3520M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	71
	CSA EEV	Product Family:	General Purpose
	UR	Pulley End Bearing Type:	Ball
Auxillary Box:	No Auxillary Box	Pulley Face Code:	Standard
Auxillary Box Lead Termination:	None	Pulley Shaft Indicator:	Standard
Base Indicator:	Rigid	Rodent Screen:	None
Bearing Grease Type:	Polyrex EM (-20F +300F)	RoHS Status:	ROHS COMPLIANT
Blower:	None	Shaft Extension Location:	Pulley End
Current @ Voltage:	1.200 A @ 575.0 V	Shaft Ground Indicator:	No Shaft Grounding

<b>Design Code:</b>	B	<b>Shaft Rotation:</b>	Reversible
<b>Drip Cover:</b>	No Drip Cover	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Duty Rating:</b>	CONT	<b>Speed Code:</b>	Single Speed
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Motor Standards:</b>	NEMA
<b>Feedback Device:</b>	NO FEEDBACK	<b>Starting Method:</b>	Direct on line
<b>Front Face Code:</b>	Standard	<b>Thermal Device - Bearing:</b>	None
<b>Front Shaft Indicator:</b>	None	<b>Thermal Device - Winding:</b>	None
<b>Heater Indicator:</b>	No Heater	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Insulation Class:</b>	F	<b>Winding Thermal 1:</b>	None
		<b>Winding Thermal 2:</b>	None

<b>Nameplate NP3553L</b>									
<b>CAT.NO.</b>	EM3116T-5								
<b>SPEC</b>	35BB101M849G1								
<b>HP</b>	1								
<b>VOLTS</b>	575								
<b>AMPS</b>	1.2								
<b>RPM</b>	1760								
<b>FRAME</b>	143T			<b>HZ</b>	60			<b>PH</b>	3
<b>SF</b>	1.15		<b>CODE</b>	L		<b>DES</b>	B	<b>CLASS</b>	F
<b>NEMA NOM. EFF</b>	85.5		<b>PF</b>	71					
<b>RATING</b>	40C AMB-CONT								
<b>CC</b>	010A					<b>USABLE AT 208V</b>			
<b>ENCL</b>	OPSB		<b>SER</b>						
<b>DE</b>	6205		<b>ODE</b>	6203					
<b>VPWM INVERTER READY</b>									
<b>CT30-60(2:1) VT3-60(20:1)</b>									

Parts List		
Part Number	Description	Quantity
SA212580	SA 35BB101M849G1	1.000 EA
RA199809	RA 35BB101M849G1	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, MOBIL POLYREX EM - 124047	0.050 LB
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR	2.000 EA
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3553L	ALUM SUPER-E VPWM INVERTER READY UL CSA-	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
35PA1066	PKG GRP, PRINT PK1008A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (2100/bx) 4/22	1.000 EA
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA

<b>Accessories</b>		
<b>Part Number</b>	<b>Description</b>	<b>Multiplier</b>
35-8764	C FACE KIT	A8
35EP1604A01SP	D-FLANGE KIT	

**AC Induction Motor Performance Data**

Record # 35604

Typical performance - not guaranteed values

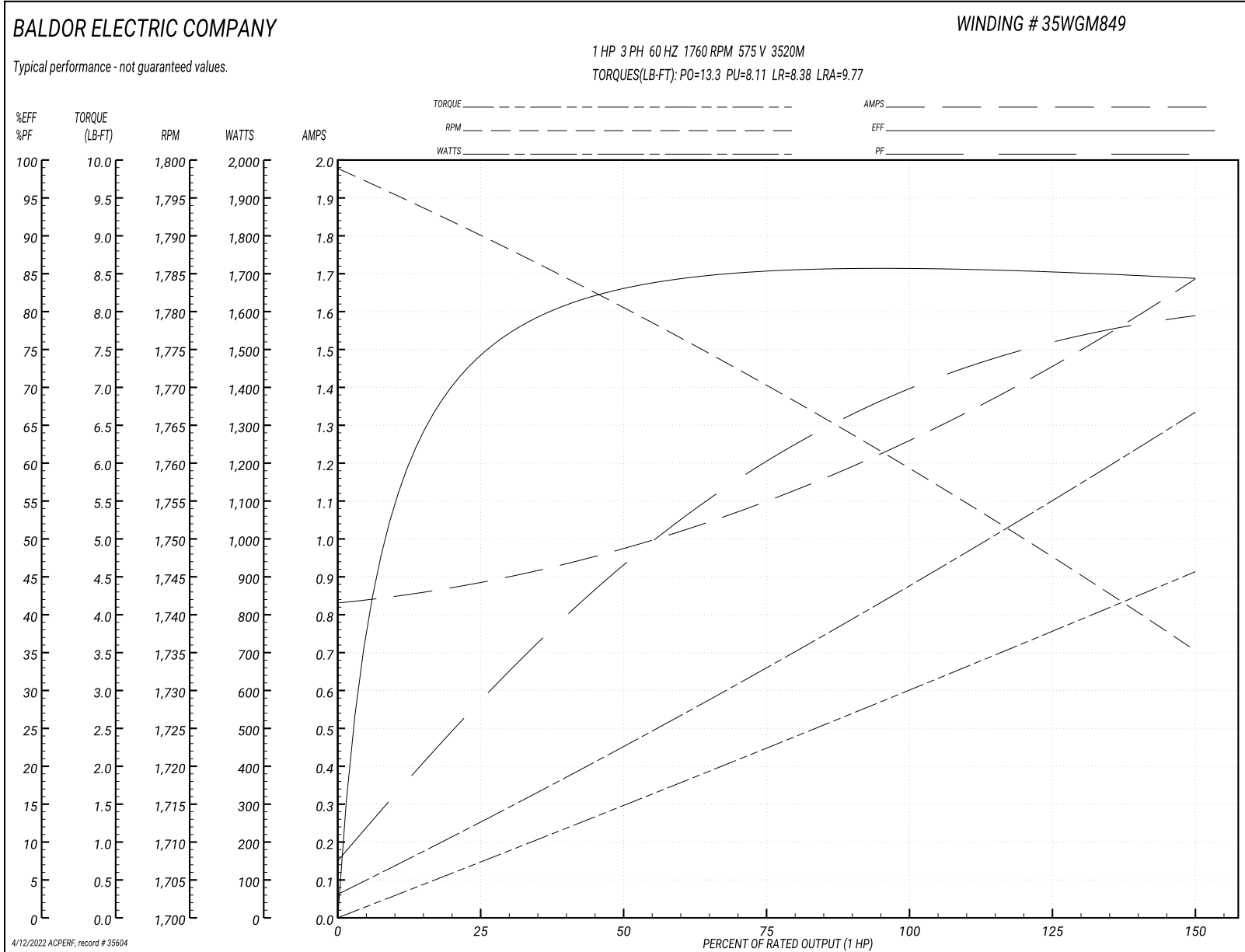
<b>Winding: 35WGM849-R004</b>		<b>Type: 3520M</b>		<b>Enclosure: OPSB</b>	
<b>Nameplate Data</b>			<b>575 V, 60 Hz: Single Voltage Motor</b>		
<b>Rated Output (HP)</b>	1	<b>Full Load Torque</b>	2.99 LB-FT		
<b>Volts</b>	575	<b>Start Configuration</b>	direct on line		
<b>Full Load Amps</b>	1.2	<b>Breakdown Torque</b>	13.3 LB-FT		
<b>R.P.M.</b>	1760	<b>Pull-up Torque</b>	8.11 LB-FT		
<b>Hz</b>	60	<b>Phase</b>	3	<b>Locked-rotor Torque</b>	8.38 LB-FT
<b>NEMA Design Code</b>	B	<b>KVA Code</b>	L	<b>Starting Current</b>	9.77 A
<b>Service Factor (S.F.)</b>	1.15	<b>No-load Current</b>	0.84 A		
<b>NEMA Nom. Eff.</b>	85.5	<b>Power Factor</b>	71	<b>Line-line Res. @ 25°C</b>	23.9 Ω
<b>Rating - Duty</b>	40C AMB-CONT		<b>Temp. Rise @ Rated Load</b>	36°C	
<b>S.F. Amps</b>			<b>Temp. Rise @ S.F. Load</b>	42°C	
			<b>Locked-rotor Power Factor</b>	53.9	
			<b>Rotor inertia</b>	0.118 LB-FT <sup>2</sup>	

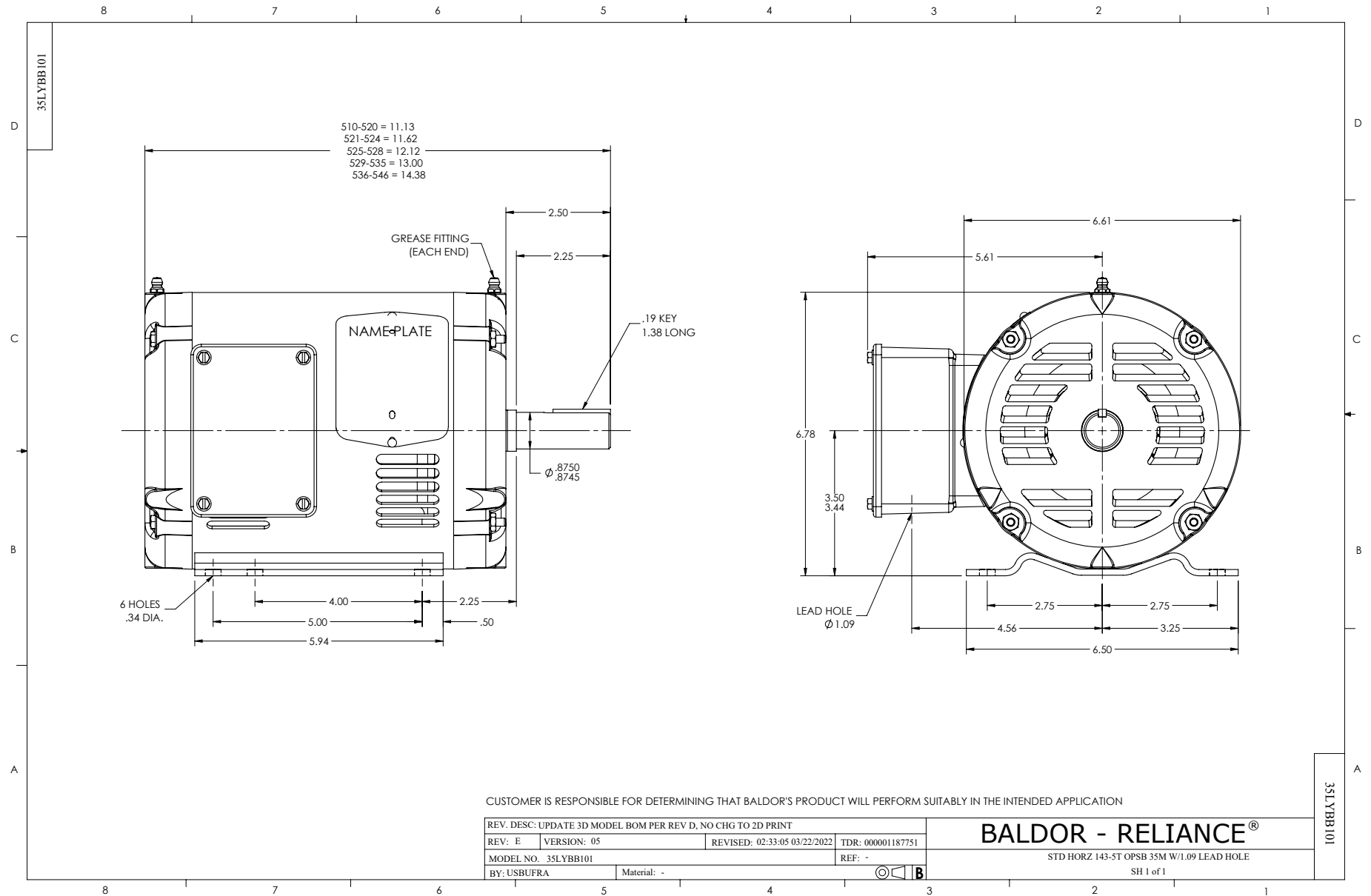
**Load Characteristics 575 V, 60 Hz, 1 HP**

<b>% of Rated Load</b>	<b>25</b>	<b>50</b>	<b>75</b>	<b>100</b>	<b>125</b>	<b>150</b>	<b>S.F.</b>
<b>Power Factor</b>	29	47	60	69	76	80	75
<b>Efficiency</b>	74.4	83.2	85.2	85.9	85.3	84.4	85.5
<b>Speed</b>	1790	1780	1770	1760	1748	1735	1754
<b>Line amperes</b>	0.872	0.977	1.1	1.26	1.46	1.68	1.35



Performance Graph at 575V, 60Hz, 1.0HP Typical performance - Not guaranteed values





CD0006



NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007		
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MTL: -	© □	

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3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

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