

BALDOR® • RELIANCE 

Product Information Packet

EM3116T-5G

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

Part Detail							
Revision:	M	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM849	CD Diagram:	CD0006	Mfg Plant:	
Mech. Spec:	35Z069	Layout:	35LYZ069	Poles:	04	Created Date:	09-10-2013
Base:	RG	Eff. Date:	06-10-2019	Leads:	3#18		

Specs			
Catalog Number:	EM3116T-5G	Inverter Code:	Inverter Ready
Enclosure:	OPSB	KVA Code:	L
Frame:	143T	Lifting Lugs:	No Lifting Lugs
Frame Material:	Steel	Locked Bearing Indicator:	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:	Shaft Grounding

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

Nameplate NP3553L									
CAT.NO.	EM3116T-5G								
SPEC	35Z069M849G1								
HP	1								
VOLTS	575								
AMPS	1.2								
RPM	1760								
FRAME	143T			HZ	60			PH	3
SF	1.15		CODE	L		DES	B	CLASS	H
NEMA NOM. EFF	85.5		PF	71					
RATING	40C AMB-CONT								
CC	010A					USABLE AT 208V			
ENCL	OPSB		SER						
DE	6205		ODE	6203					
VPWM INVERTER READY									
CT30-60(2:1) VT3-60(20:1)									

Parts List		
Part Number	Description	Quantity
SA269053	SA 35Z069M849G1	1.000 EA
RA255707	RA 35Z069M849G1	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
35EP3209G00	MASTER ODE,203 BRG	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3210C00	MASTER DE,205 BRG,1.000SH,LCK BRG	1.000 EA
51XN1032A18	10-32 X 1 1/8 HX WS SL SR (ESKAY)	2.000 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
LB1459	AEGIS SGR LABEL "AEGISLBL-100"	1.000 EA
MJ1000A02	GREASE, MOBIL POLYREX EM - 124047	0.050 LB
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
35AD2005A01	BAFFLE PLATE,MOD 35-SLTD BAND MTRS TDR	1.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
LB1119N	WARNING LABEL	1.000 EA
LC0006	CONNECTION LABEL	1.000 EA
NP3553L	ALUM SUPER-E VPWM INVERTER READY UL CSA-	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
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

AC Induction Motor Performance Data

Record # 50389

Typical performance - not guaranteed values

Winding: 35WGM849-R008		Type: 3520M		Enclosure: OPSB	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor		
Rated Output (HP)	1	Full Load Torque	2.99 LB-FT		
Volts	575	Start Configuration	direct on line		
Full Load Amps	1.2	Breakdown Torque	13.3 LB-FT		
R.P.M.	1760	Pull-up Torque	8.11 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque	8.38 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	9.77 A
Service Factor (S.F.)	1.15	No-load Current	0.84 A		
NEMA Nom. Eff.	85.5	Power Factor	71	Line-line Res. @ 25°C	23.9 Ω
Rating - Duty	40C AMB-CONT		Temp. Rise @ Rated Load	36°C	
S.F. Amps			Temp. Rise @ S.F. Load	42°C	
			Locked-rotor Power Factor	53.9	
			Rotor inertia	0.118 LB-FT ²	

Load Characteristics 575 V, 60 Hz, 1 HP

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

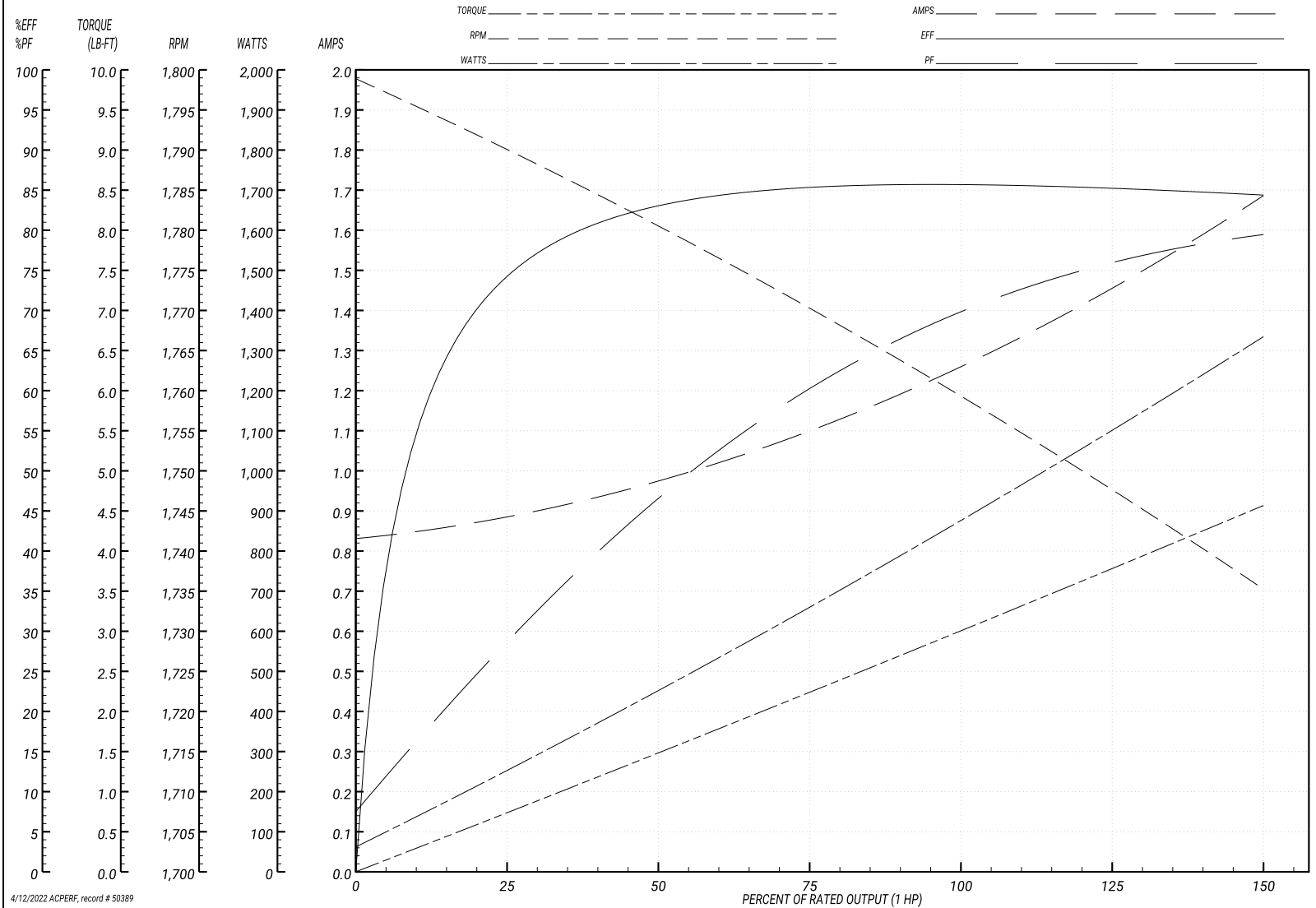
Performance Graph at 575V, 60Hz, 1.0HP Typical performance - Not guaranteed values

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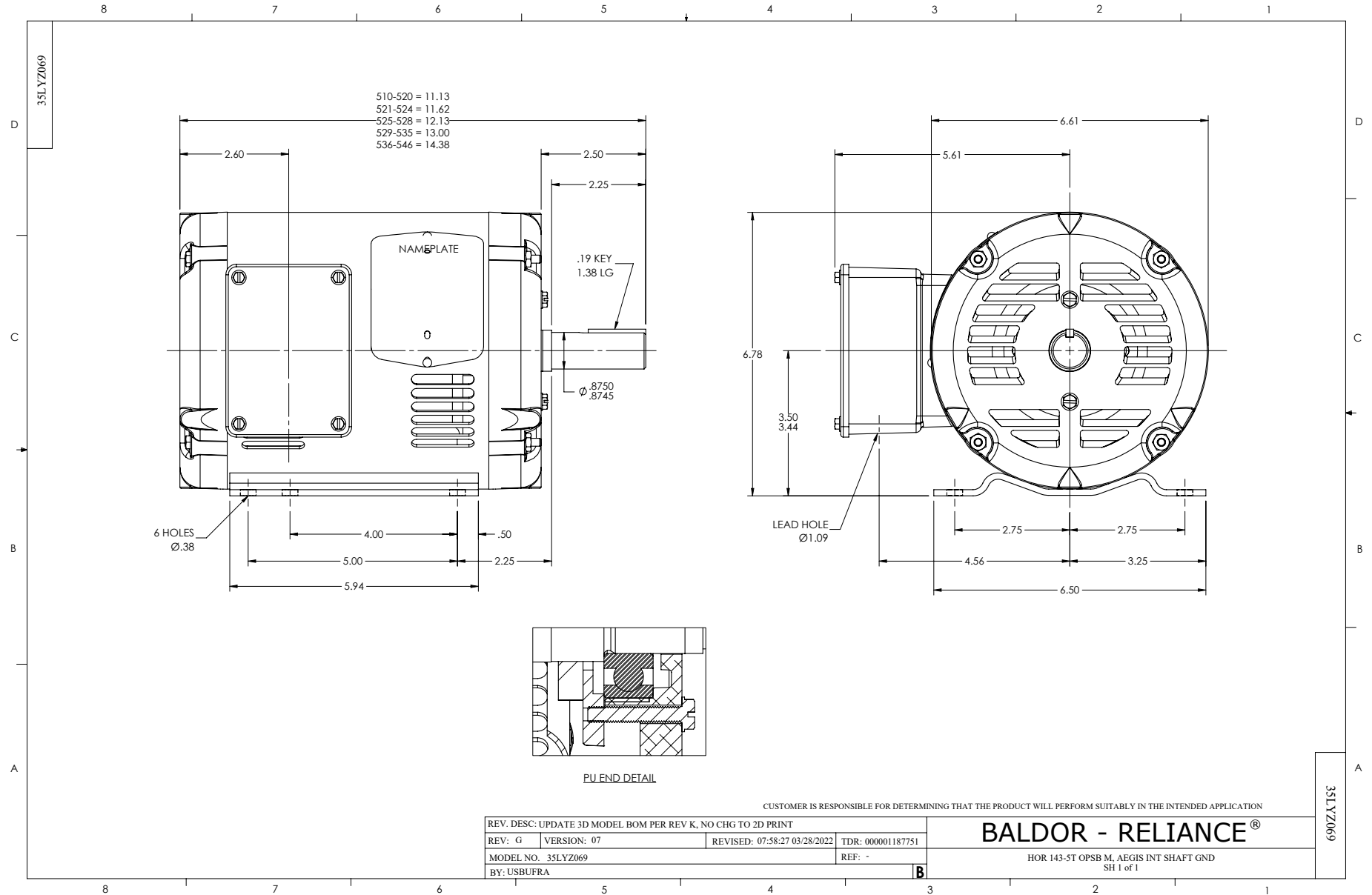
WINDING # 35WGM849

Typical performance - not guaranteed values.

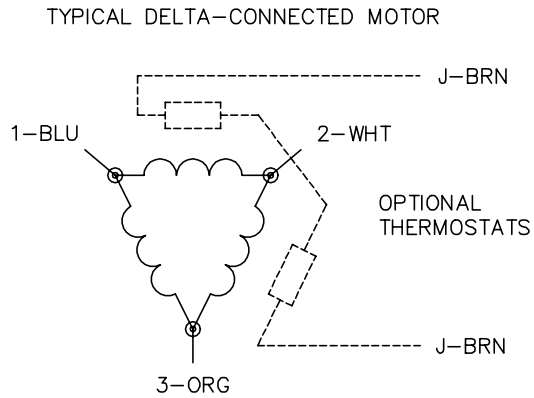
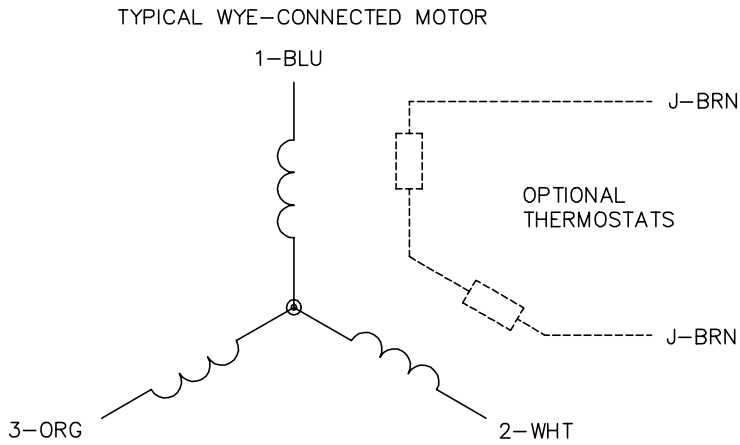
1 HP 3 PH 60 HZ 1760 RPM 575 V 3520M
 TORQUES(LB-FT): PO=13.3 PU=8.11 LR=8.38 LRA=9.77



4/12/2022 ACPERF, record # 50389



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		
REV. LTR: E	VERSION: 01	TDR: 000001099922
FILE: \AAA\00005\141	REVISED: 10:24:49 02/19/2019	BY: ENBRIRO
MTL: -		

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

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