

BALDOR® • RELIANCE 

Product Information Packet

EM31115-G

1HP,3500RPM,3PH,60HZ,56,3512M,OPEN,F1,N

Part Detail							
Revision:	E	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGP987	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35E2520	Layout:	35LYE2520	Poles:	02	Created Date:	08-16-2016
Base:	RG	Eff. Date:	01-21-2019	Leads:	9#18		

Specs			
Catalog Number:	EM31115-G	Heater Indicator:	No Heater
Enclosure:	OPEN	Insulation Class:	H
Frame:	56	Inverter Code:	Not Inverter
Frame Material:	Steel	KVA Code:	K
Output @ Frequency:	1.000 HP @ 60 HZ	Lifting Lugs:	No Lifting Lugs
Synchronous Speed @ Frequency:	3600 RPM @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3512M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	UR	Power Factor:	80
	CSA EEV	Product Family:	General Purpose
	CSA	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 Ground Indicator:	Shaft Grounding

Current @ Voltage:	1.450 A @ 460.0 V	Shaft Rotation:	Reversible
	2.900 A @ 230.0 V	Shaft Slinger Indicator:	No Slinger
	3.000 A @ 208.0 V	Speed Code:	Single Speed
Design Code:	B	Motor Standards:	NEMA
Drip Cover:	No Drip Cover	Starting Method:	Direct on line
Duty Rating:	CONT	Thermal Device - Bearing:	None
Electrically Isolated Bearing:	Not Electrically Isolated	Thermal Device - Winding:	None
Feedback Device:	NO FEEDBACK	Vibration Sensor Indicator:	No Vibration Sensor
Front Shaft Indicator:	None	Winding Thermal 1:	None
		Winding Thermal 2:	None

Nameplate NP3553LUA										
CAT.NO.	EM31115-G									
SPEC.	35E2520P987G1									
HP	1									
VOLTS	230/460									
AMPS	2.9/1.45									
RPM	3500									
FRAME	56				HZ	60			PH	3
SF	1.25		CODE	K	DES	B		CLASS	H	
NEMA NOM. EFF	80		PF	80						
RATING	40C AMB-CONT									
CC	USABLE AT 208V 3									
DE	6205				ODE	6203				
ENCL	OPEN		SN							
VPWM INVERTER READY										
CT30-60(2:1) VT3-60(20:1)										
USABLE AT	50HZ 1HP 190/380V 3.4/1.9A								SF1.0	

Parts List		
Part Number	Description	Quantity
SA329027	SA 35E2520P987G1	1.000 EA
RA316957	RA 35E2520P987G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
51XB1016A07	10-16 X 7/16 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
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	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
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
LB1417	LABEL CARTON 6X4 PERFORATED BLANK ROLLS	1.000 EA
NP3553LUA	ALUM SUPER-E VPWM INVERTER READY UL	1.000 EA
35PA1000	PKG GRP, PRINT PK1008A06	1.000 EA

Parts List (continued)		
Part Number	Description	Quantity
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
LB1350	BAR CODE LABEL FOR YORK	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 # 58816

Typical performance - not guaranteed values

Winding: 35WGP987-R007		Type: 3512M		Enclosure: OPEN	
Nameplate Data			460 V, 60 Hz: High Voltage Connection		
Rated Output (HP)	1	Full Load Torque	1.47 LB-FT		
Volts	230/460	Start Configuration	direct on line		
Full Load Amps	2.9/1.45	Breakdown Torque	5.93 LB-FT		
R.P.M.	3500	Pull-up Torque	2.27 LB-FT		
Hz	60 Phase	Locked-rotor Torque	3.82 LB-FT		
NEMA Design Code	B	Starting Current	10.5 A		
Service Factor (S.F.)	1.25	No-load Current	0.924 A		
NEMA Nom. Eff.	80	Line-line Res. @ 25°C	19.3 Ω		
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	32°C		
S.F. Amps	3.4/1.7	Temp. Rise @ S.F. Load	39°C		
		Locked-rotor Power Factor	66		
		Rotor inertia	0.0332 LB-FT ²		

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	38	57	71	79	84	88	86
Efficiency	61.6	73.9	77.9	78.6	78.8	77.6	79.6
Speed	3573	3548	3522	3492	3456	3418	3464
Line amperes	0.969	1.07	1.25	1.47	1.75	2.06	1.72

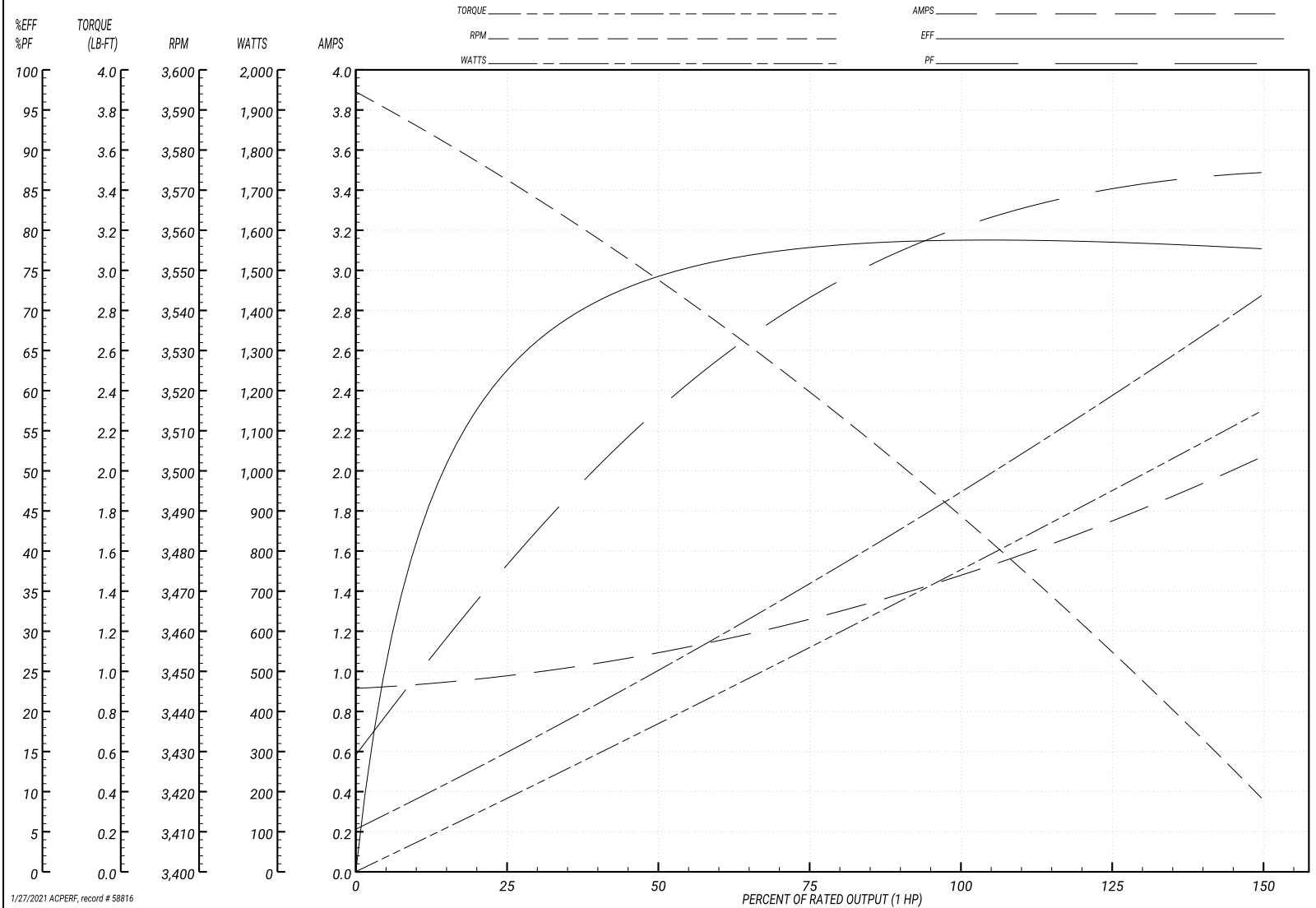
Performance Graph at 460V, 60Hz, 1.0HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

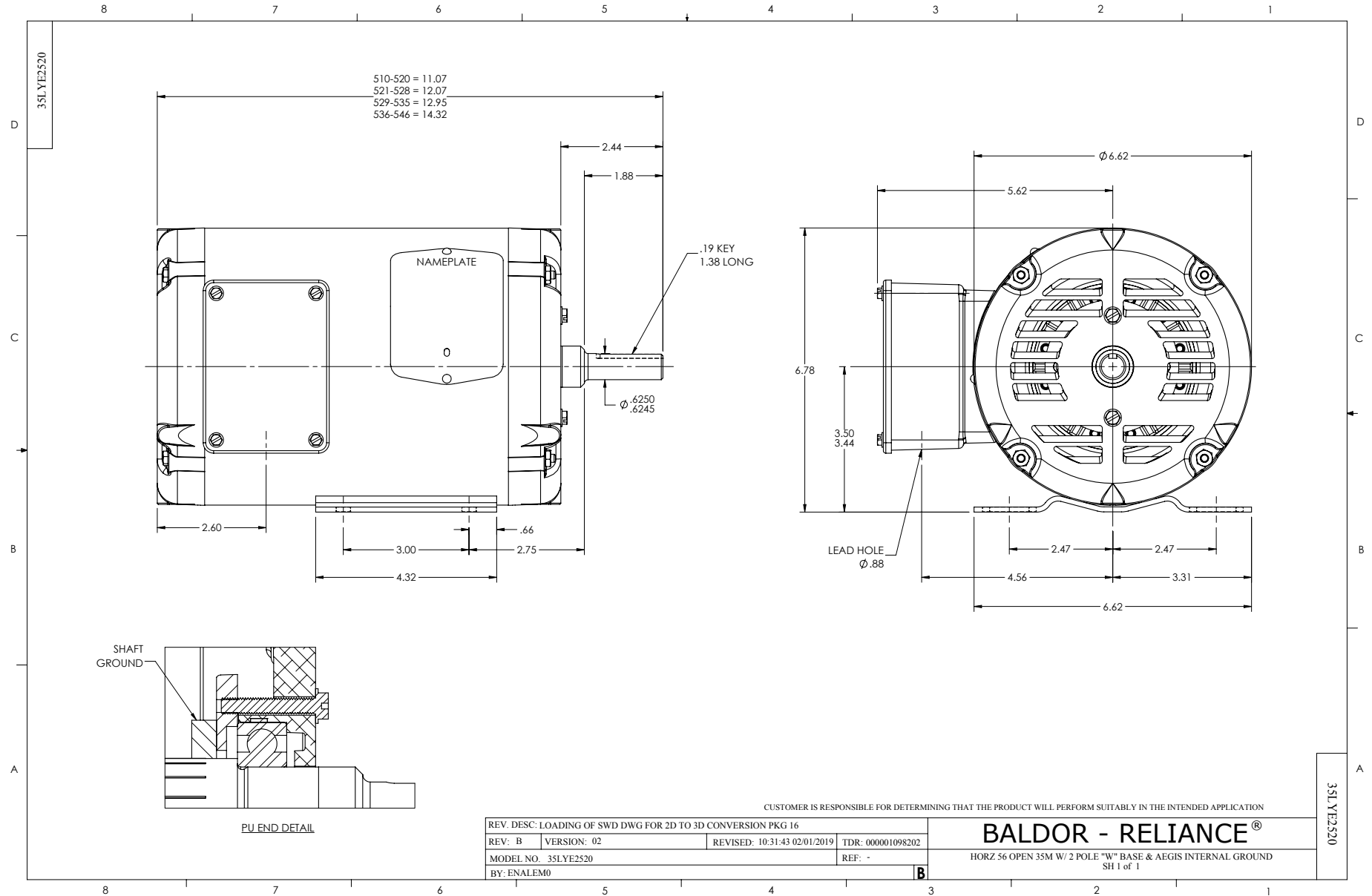
WINDING # 35WGP987

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3500 RPM 460 V 3512M
 TORQUES(LB-FT): PO=5.93 PU=2.27 LR=3.82 LRA=10.5



1/27/2021 ACPERF, record # 58816



CD0005

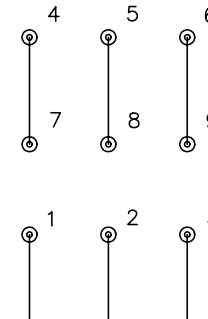


LOW VOLTAGE
(2Y)



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: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
900000		FILE: AAA00005140	MDL: -
		MTL: -	

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005