

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM31116A**

**1HP,1760RPM,3PH,60HZ,56,3520M,OPEN,F1,N**

Part Detail							
Revision:	K	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGL242	CD Diagram:	CD0007	Mfg Plant:	
Mech. Spec:	35B011	Layout:	35LYB011	Poles:	04	Created Date:	02-12-2015
Base:	RG	Eff. Date:	09-05-2019	Leads:	12#18		

Specs			
Catalog Number:	EM31116A	Inverter Code:	Not Inverter
Enclosure:	OPEN	KVA Code:	L
Frame:	56	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:	12 @ 18 AWG
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Exit:	Ko Box
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
	230.0 V @ 60 HZ	Motor Type:	3520M
XP Class and Group:	None	Mounting Arrangement:	F1
XP Division:	Not Applicable	Power Factor:	71
Agency Approvals:	CSA	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:	1.500 A @ 460.0 V	Shaft Ground Indicator:	No Shaft Grounding

	3.000 A @ 230.0 V	<b>Shaft Rotation:</b>	Reversible
	3.100 A @ 208.0 V	<b>Shaft Slinger Indicator:</b>	No Slinger
<b>Design Code:</b>	B	<b>Speed Code:</b>	Single Speed
<b>Drip Cover:</b>	No Drip Cover	<b>Motor Standards:</b>	NEMA
<b>Duty Rating:</b>	CONT	<b>Starting Method:</b>	Direct on line
<b>Electrically Isolated Bearing:</b>	Not Electrically Isolated	<b>Thermal Device - Bearing:</b>	None
<b>Feedback Device:</b>	NO FEEDBACK	<b>Thermal Device - Winding:</b>	None
<b>Front Face Code:</b>	Standard	<b>Vibration Sensor Indicator:</b>	No Vibration Sensor
<b>Front Shaft Indicator:</b>	None	<b>Winding Thermal 1:</b>	Automatic Thermal Overload
<b>Heater Indicator:</b>	No Heater	<b>Winding Thermal 1 Location:</b>	SB
<b>Insulation Class:</b>	F	<b>Winding Thermal 2:</b>	None

Nameplate NP3273L													
CAT.NO.	EM31116A												
SPEC.	35B011L242G1												
HP	1												
VOLTS	230/460												
AMP	3/1.5												
RPM	1760												
FRAME	56					HZ	60			PH	3		
SER.F.	1.15					CODE	L		DES	B		CL	F
F.L. AVG. EFF.	85.5					PF	71						
RATING	40C AMB-CONT												
CC										USABLE AT 208V	3.1		
DE	6205					ODE	6203						
ENCL	OPEN					SN							

Parts List		
Part Number	Description	Quantity
SA293669	SA 35B011L242G1	1.000 EA
RA279761	RA 35B011L242G1	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	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
35EP3210B00	MASTER DE,205 BRG,1.000SH	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
HA7000A04	KEY RETAINER 0.625 DIA SHAFTS	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
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
LB1118	LABEL,WARNING (ROLL LABEL)	1.000 EA
LC0007	CONNECTION LABEL	1.000 EA
NP3273L	ALUM SUPER-E THERMALLY PROTECTED	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	1.000 EA
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
FE-0000001	ZRTG FE ASSEMBLY	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
PE-0000001	ZRTG PE ASSEMBLY	1.000 EA

**AC Induction Motor Performance Data**

Record # 62948 - Typical performance - not guaranteed values

<b>Winding:</b> 35WGL242-R001	<b>Type:</b> 3520M	<b>Enclosure:</b> OPEN
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1			Full Load Torque	3.01 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	3/1.5			Breakdown Torque	12.18 LB-FT
R.P.M.	1760			Pull-up Torque	5.77 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	8.31 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	11.94 A
Service Factor (S.F.)	1.15			No-load Current	0.993 A
NEMA Nom. Eff.	85.5	Power Factor	71	Line-line Res. @ 25°C	15.2 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	26°C
S.F. Amps				Temp. Rise @ S.F. Load	31°C
				Locked-rotor Power Factor	53.3
				Rotor inertia	0.118 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	49	63	72	76	81	74
Efficiency	72.5	82.7	85.2	85.7	85.3	84.7	85.5
Speed	1791	1782	1772	1761	1750	1738	1754
Line amperes	1.04	1.16	1.32	1.54	1.8	2.07	1.7

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

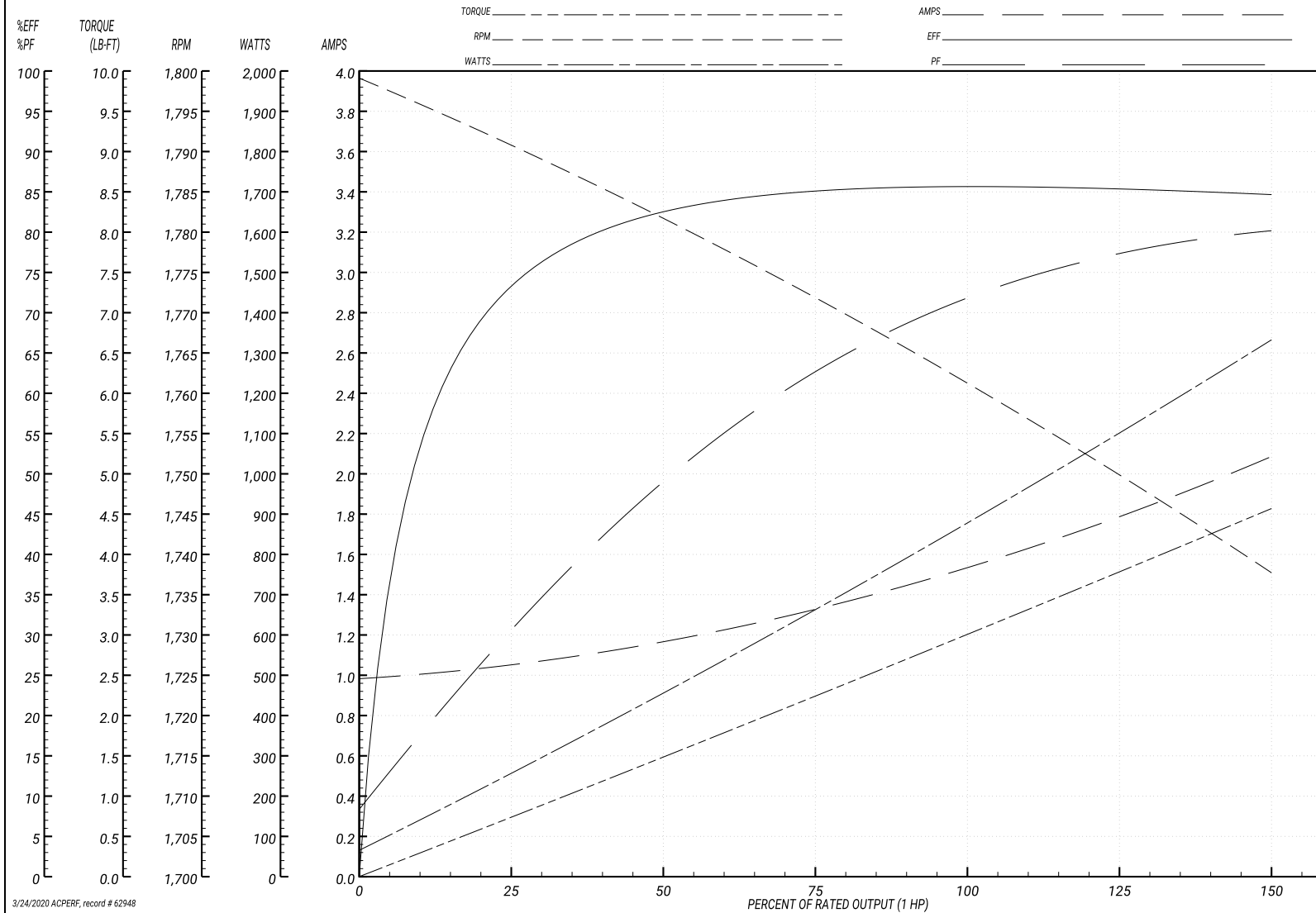
ABB Motors and Mechanical Inc.

WINDING # 35WGL242

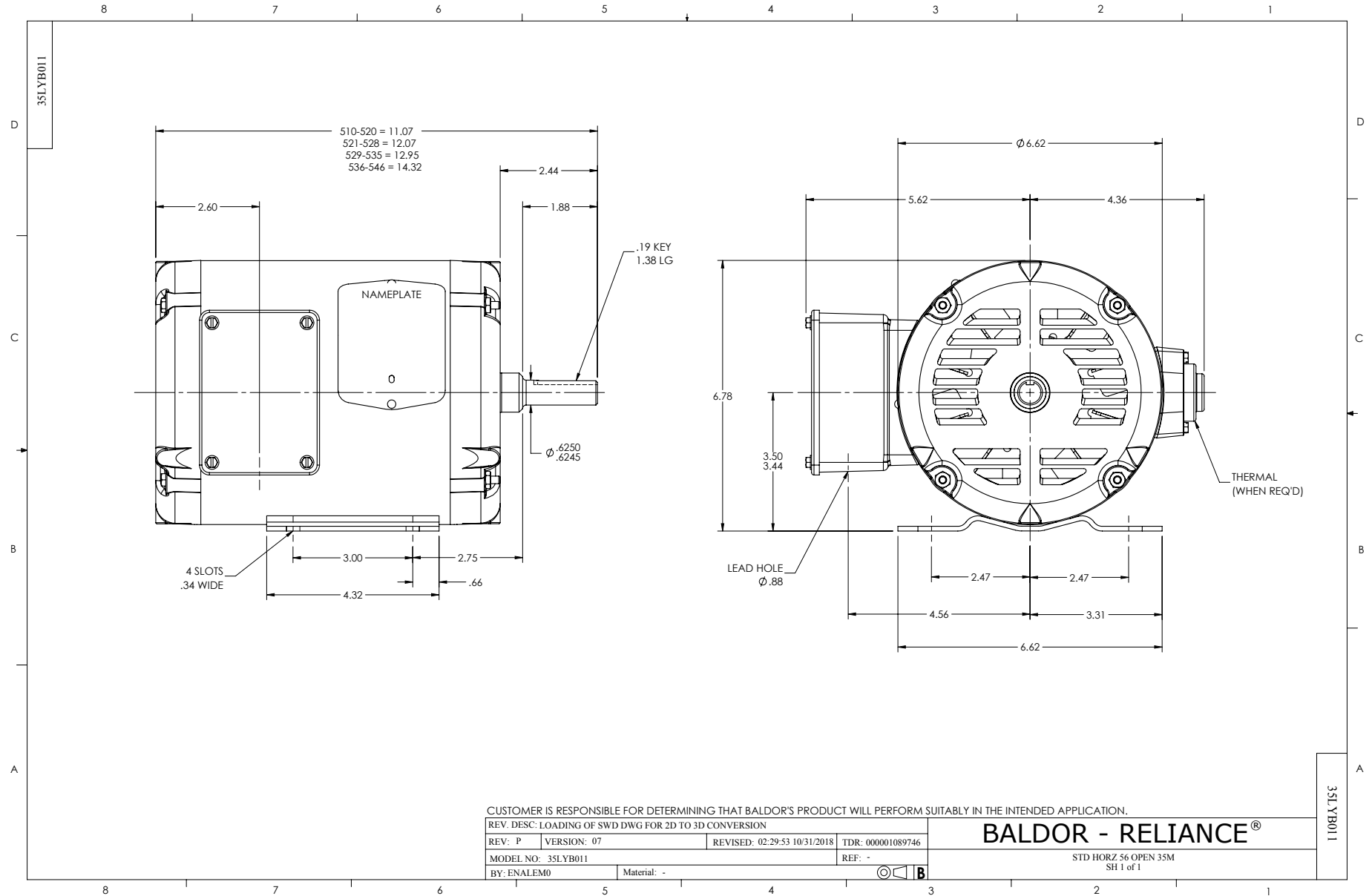
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1760 RPM 460 V 3520M

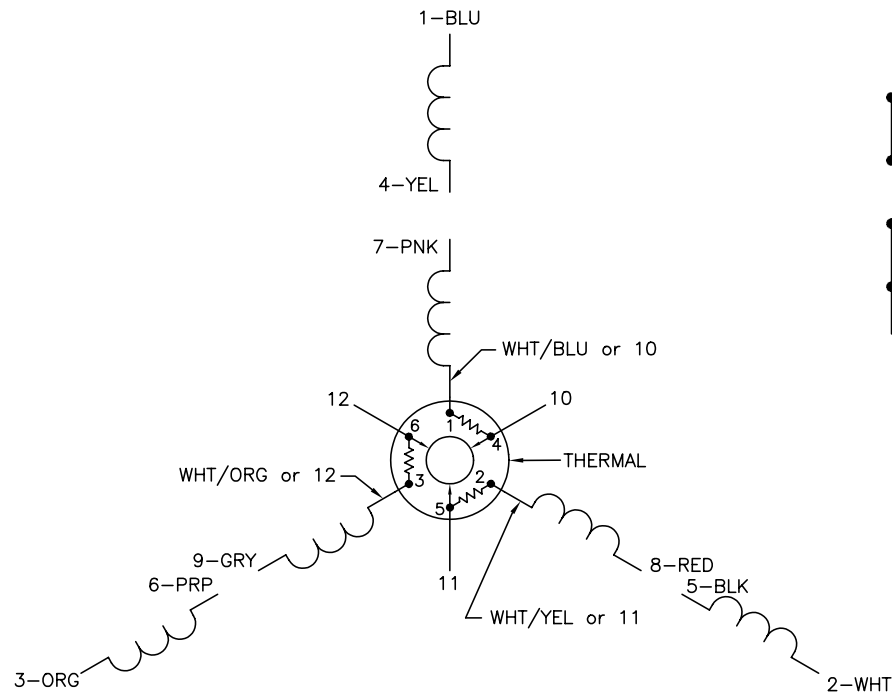
TORQUES(LB-FT): PO=12.18 PU=5.77 LR=8.31 LRA=11.94



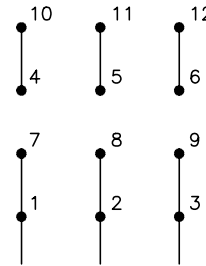
3/24/2020 ACPERF, record # 62948



CD0007

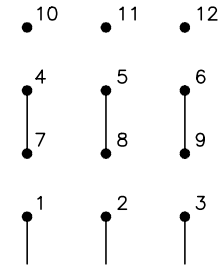


LOW VOLTAGE  
(2Y)



LINE

HIGH VOLTAGE  
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
3. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: ADDED "CK" PLANT CODE			
REV. LTR: E	BY: EAH	REVISED: 05/06/99 17:1	TDR: 0181040
L00000		FILE: AAA00008370	MDL: -
		MTL: -	

**BALDOR ELECTRIC Co.**

3PH, DV, THERMAL, 12 LEADS

CD0007