

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM3538**

**.5HP, 1750RPM, 3PH, 60HZ, 56, 3516M, TEFC, F1, N**

Part Detail							
Revision:	T	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGP862	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35A011	Layout:	35LYA011	Poles:	04	Created Date:	11-24-2010
Base:	RG	Eff. Date:	01-26-2022	Leads:	9#18		Y

Specs			
Catalog Number:	EM3538	Inverter Code:	Inverter Ready
Enclosure:	TEFC	IP Rating:	NONE
Frame:	56	KVA Code:	K
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	.500 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	1800 RPM @ 60 HZ	Motor Lead Quantity/Wire Size:	9 @ 18 AWG
Voltage @ Frequency:	460.0 V @ 60 HZ	Motor Lead Exit:	Ko Box
	230.0 V @ 60 HZ	Motor Lead Termination:	Flying Leads
XP Class and Group:	None	Motor Type:	3514M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	74
	UR	Product Family:	General Purpose
Auxillary Box:	No Auxillary Box	Pulley End Bearing Type:	Ball
Auxillary Box Lead Termination:	None	Pulley Face Code:	Standard
Base Indicator:	Rigid	Pulley Shaft Indicator:	Standard
Bearing Grease Type:	Polyrex EM (-20F +300F)	Rodent Screen:	None
Blower:	None	RoHS Status:	ROHS COMPLIANT
Current @ Voltage:	.770 A @ 460.0 V	Shaft Extension Location:	Pulley End

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

<b>Nameplate NP2116L</b>												
<b>CAT.NO.</b>	EM3538											
<b>SPEC.</b>	35A011P862G1											
<b>HP</b>	.5											
<b>VOLTS</b>	230/460											
<b>AMP</b>	1.54/.77											
<b>RPM</b>	1735											
<b>FRAME</b>	56					<b>HZ</b>	60			<b>PH</b>	3	
<b>SER.F.</b>	1.15			<b>CODE</b>	K			<b>DES</b>	B		<b>CL</b>	F
<b>NEMA-NOM-EFF</b>	82.5			<b>PF</b>	74							
<b>RATING</b>	40C AMB-CONT											
<b>CC</b>								<b>USABLE AT 208V</b>	1.68			
<b>DE</b>	6205			<b>ODE</b>	6203							
<b>ENCL</b>	TEFC			<b>SN</b>								

Parts List		
Part Number	Description	Quantity
SA212878	SA 35A011P862G1	1.000 EA
RA200107	RA 35A011P862G1	1.000 EA
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 EA
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 EA
35CB3007	35 CB CASTING W/.88 DIA. LEAD HOLE	1.000 EA
36GS1000SP	GASKET-CONDUIT BOX, .06 THICK #SV-330 LE	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
35EP3122K00	MASTER ODE,203 BRG,.683SH,#26 DRN,FH MTG	1.000 EA
HW5100A03	WAVY WASHER (W1543-017)	1.000 EA
35EP3123A00	MASTER DE,205 BRG,.998SH,#26 DRN	1.000 EA
XY1032A02	10-32 HEX NUT DIRECTIONAL SERRATION	4.000 EA
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 EA
35FH4005A32SP	IEC FH NO GRSR W/3 HOLES - PRIMED	1.000 EA
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 EA
35CB4521GX	CONDUIT BOX LID KIT **ORDER INDIV PARTS	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
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 EA
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,	0.017 GA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA

<b>Parts List (continued)</b>		
<b>Part Number</b>	<b>Description</b>	<b>Quantity</b>
NP2116L	ALUM SUPER-E UL CSA CC	1.000 EA
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 # 26882

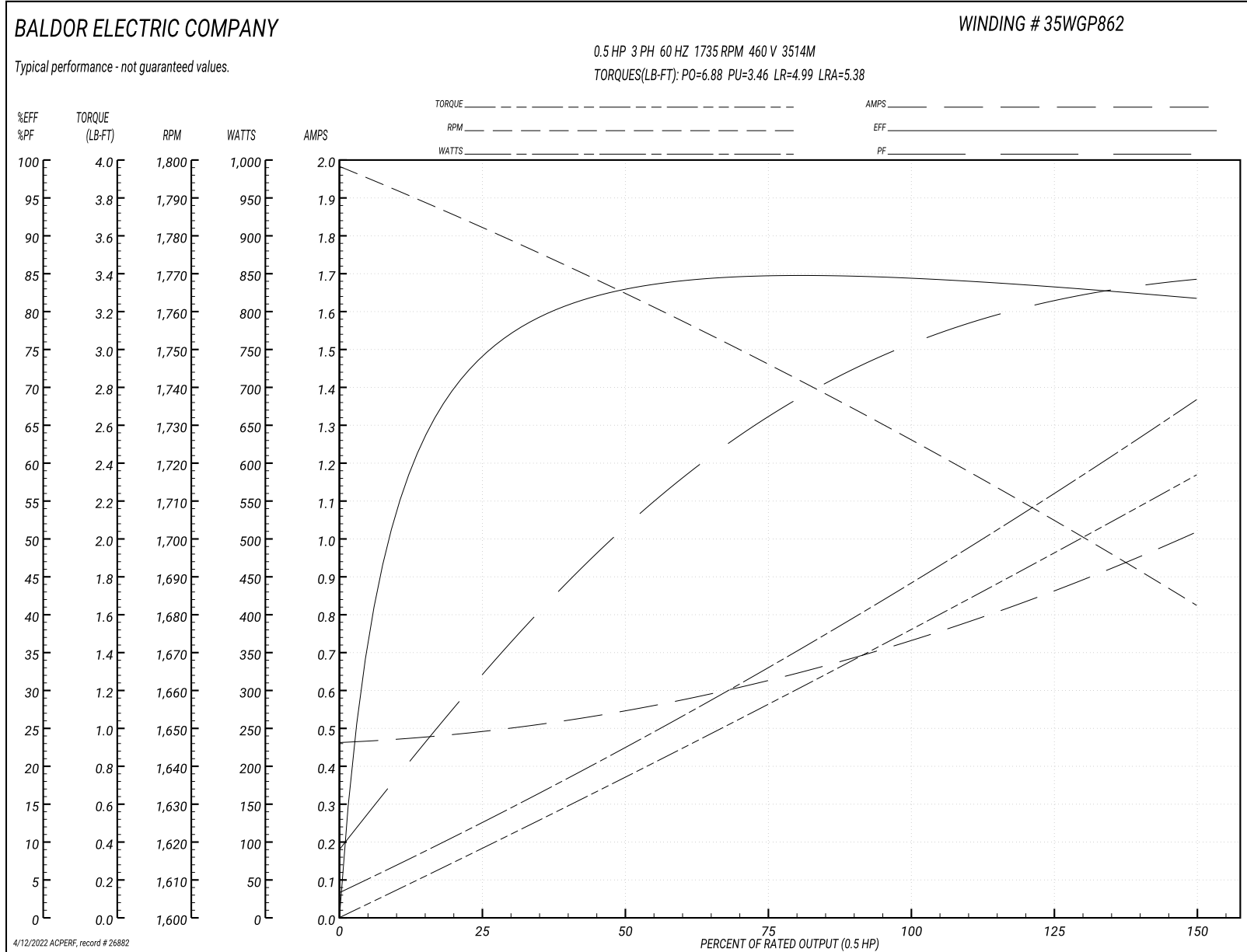
Typical performance - not guaranteed values

Winding: 35WGP862-R001		Type: 3514M	Enclosure: TEFC
<b>Nameplate Data</b>		<b>460 V, 60 Hz: High Voltage Connection</b>	
Rated Output (HP)	.5	Full Load Torque	1.53 LB-FT
Volts	230/460	Start Configuration	direct on line
Full Load Amps	1.54/.77	Breakdown Torque	6.88 LB-FT
R.P.M.	1735	Pull-up Torque	3.46 LB-FT
Hz	60 Phase	Locked-rotor Torque	4.99 LB-FT
NEMA Design Code	B KVA Code	Starting Current	5.38 A
Service Factor (S.F.)	1.25	No-load Current	0.465 A
NEMA Nom. Eff.	82.5 Power Factor	Line-line Res. @ 25°C	35.3 Ω
Rating - Duty	40C AMB-CONT	Temp. Rise @ Rated Load	52°C
S.F. Amps	1.80/.90	Temp. Rise @ S.F. Load	68°C
		Locked-rotor Power Factor	67.6
		Rotor inertia	0.0827 LB-FT <sup>2</sup>

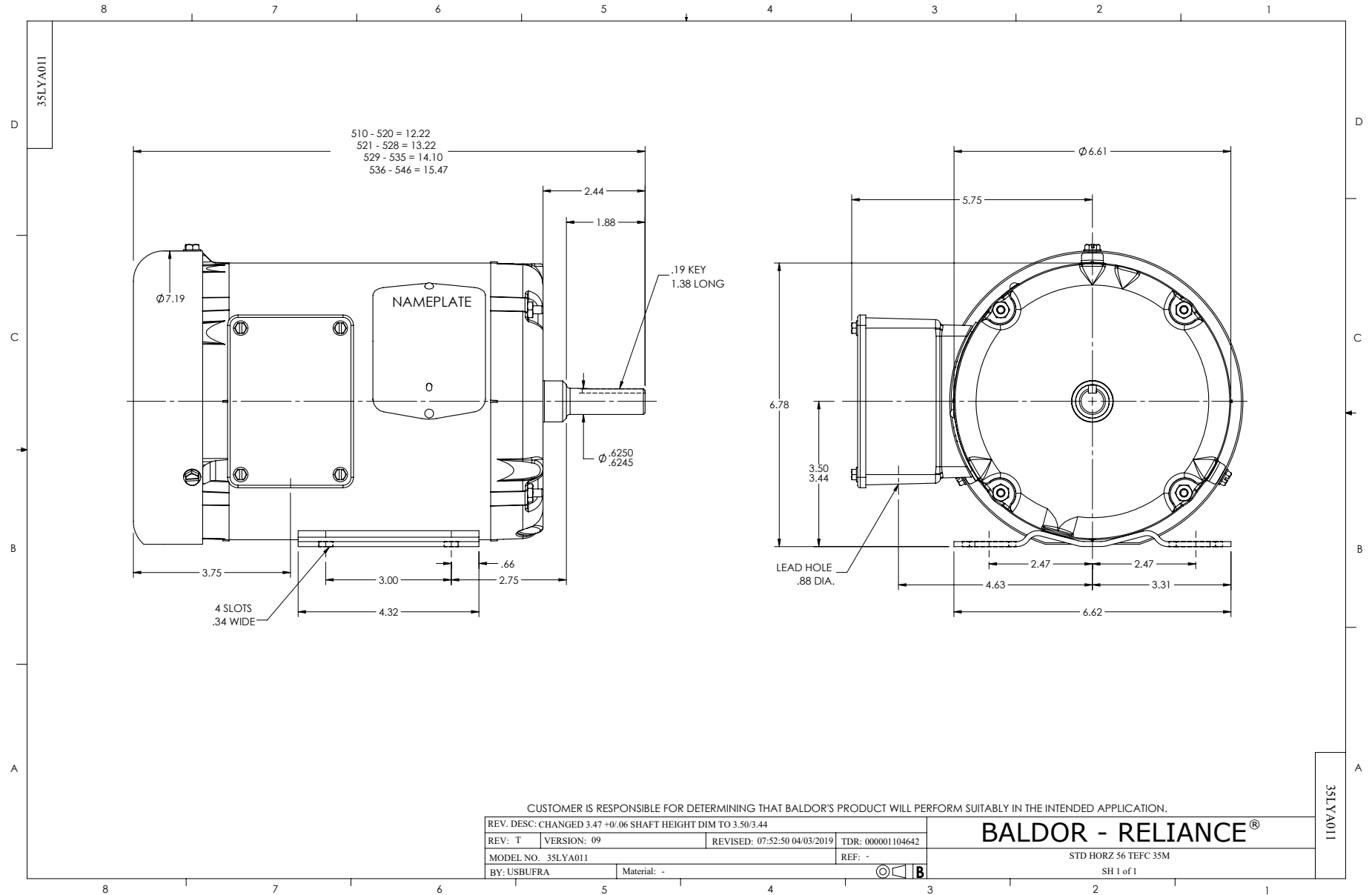
**Load Characteristics 460 V, 60 Hz, 0.5 HP**

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	33	52	66	76	82	84	80
Efficiency	74.3	82.7	84.7	84.5	83.5	81.6	81.5
Speed	1781	1764	1746	1726	1705	1682	1718
Line amperes	0.489	0.545	0.634	0.737	0.86	1.02	0.899

Performance Graph at 460V, 60Hz, 0.5HP Typical performance - Not guaranteed values







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