

**BALDOR® • RELIANCE** 

**Product Information Packet**

**EM31120**

**1.5HP,3490RPM,3PH,60HZ,56,3518M,ODP,F1,N**

Part Detail							
Revision:	J	Status:	PRD/A	Change #:		Proprietary:	No
Type:	AC	Elec. Spec:	35WGM761	CD Diagram:	CD0005	Mfg Plant:	
Mech. Spec:	35B011	Layout:	35LYB011	Poles:	02	Created Date:	03-28-2014
Base:	RG	Eff. Date:	09-05-2019	Leads:	9#18		

Specs			
Catalog Number:	EM31120	Insulation Class:	F
Enclosure:	OPEN	Inverter Code:	Inverter Ready
Frame:	56	KVA Code:	L
Frame Material:	Steel	Lifting Lugs:	No Lifting Lugs
Output @ Frequency:	1.500 HP @ 60 HZ	Locked Bearing Indicator:	No Locked Bearing
Synchronous Speed @ Frequency:	3600 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:	3518M
XP Division:	Not Applicable	Mounting Arrangement:	F1
Agency Approvals:	CSA	Power Factor:	83
	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:	2.000 A @ 460.0 V	Shaft Extension Location:	Pulley End

	4.000 A @ 230.0 V	<b>Shaft Ground Indicator:</b>	No Shaft Grounding
	4.200 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>Winding Thermal 2:</b>	None

Nameplate NP3155LUA										
CAT.NO.	EM31120									
SPEC.	35B011M761G1									
HP	1.5									
VOLTS	230/460									
AMPS	4/2									
RPM	3490									
FRAME	56				HZ	60			PH	3
SF	1.15		CODE	L	DES	B		CLASS	F	
F.L. AVG. EFF.	84		PF	83						
RATING	40C AMB-CONT									
CC									USABLE AT 208V	4.2
DE	6205				ODE	6203				
ENCL	OPEN		SN							
USABLE AT	50HZ 1.5HP 190/380V 4.6/2.3A									
									SF1.0	

Parts List		
Part Number	Description	Quantity
SA278621	SA 35B011M761G1	1.000 EA
RA265152	RA 35B011M761G1	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
MN416A01	TAG-INSTAL-MAINT no wire (1200/bx) 3/19	1.000 EA
LC0005E01	CONN.DIA./WARNING LABEL (LC0005/LB1119N)	1.000 EA
NP3155LUA	ALUM SUPER-E UL CSA CC "SEMS" "USABLE AT	1.000 EA
36PA1000	PKG GRP, PRINT PK1016A06	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 # 44884 - Typical performance - not guaranteed values

<b>Winding:</b> 35WGM761-R004	<b>Type:</b> 3518M	<b>Enclosure:</b> OPEN
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Nameplate Data				460 V, 60 Hz: High Voltage Connection	
Rated Output (HP)	1.5			Full Load Torque	2.26 LB-FT
Volts	230/460			Start Configuration	direct on line
Full Load Amps	4-2			Breakdown Torque	9.32 LB-FT
R.P.M.	3490			Pull-up Torque	4.18 LB-FT
Hz	60	Phase	3	Locked-rotor Torque	6.79 LB-FT
NEMA Design Code	B	KVA Code	L	Starting Current	17.2 A
Service Factor (S.F.)	1.15			No-load Current	1.05 A
NEMA Nom. Eff.	84	Power Factor	83	Line-line Res. @ 25°C	12.897 Ω
Rating - Duty	40C AMB-CONT			Temp. Rise @ Rated Load	24°C
S.F. Amps				Temp. Rise @ S.F. Load	29°C
				Locked-rotor Power Factor	64
				Rotor inertia	0.0493 LB-FT <sup>2</sup>

Load Characteristics 460 V, 60 Hz, 1.5 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	43	64	76	83	87	90	85
Efficiency	73.6	82.2	84.7	85	84.3	83	84.6
Speed	3574.4	3550.4	3524.4	3496.4	3465.2	3430	3478
Line amperes	1.14	1.35	1.63	1.99	2.41	2.84	2.24

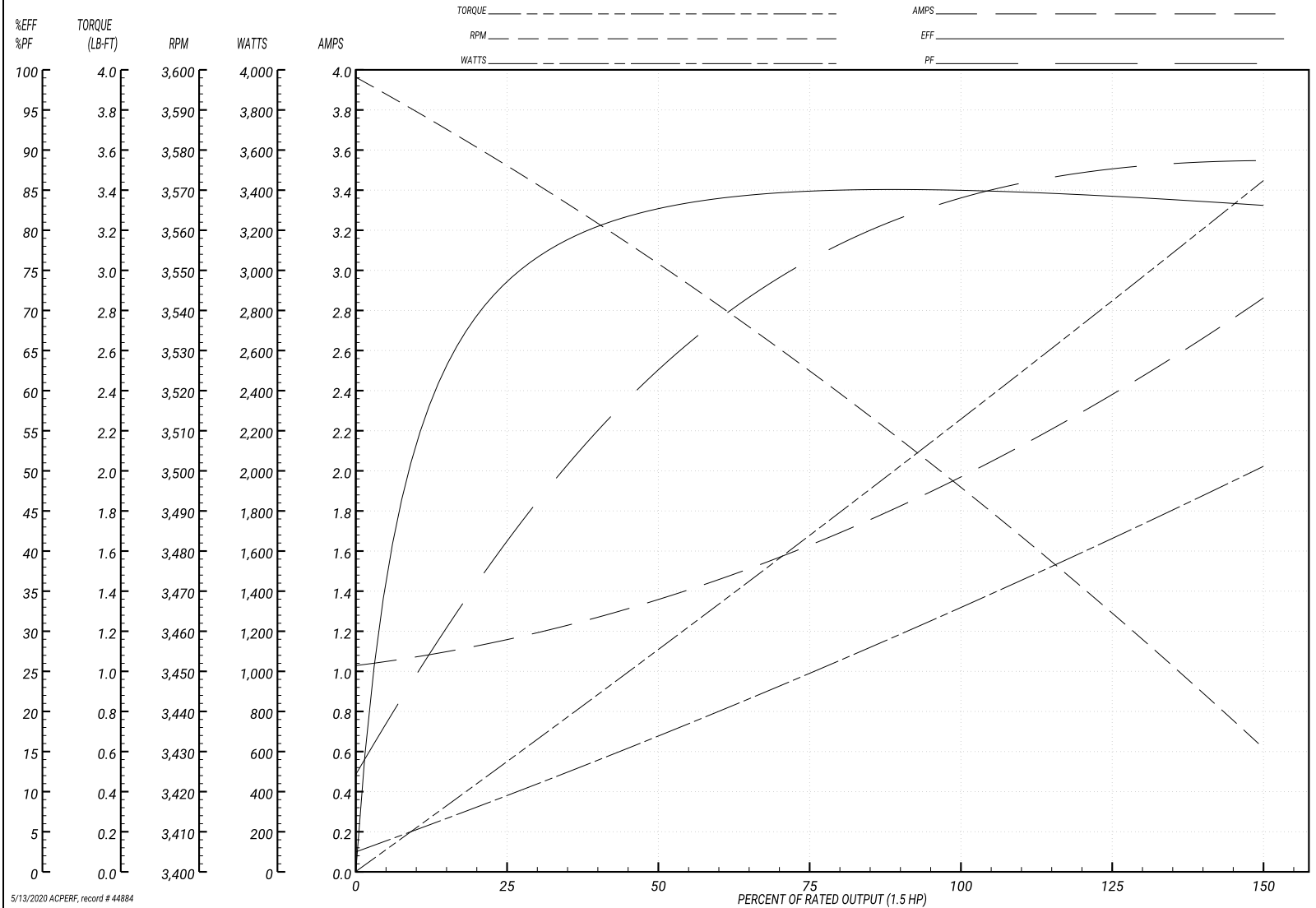
Performance Graph at 460V, 60Hz, 1.5HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

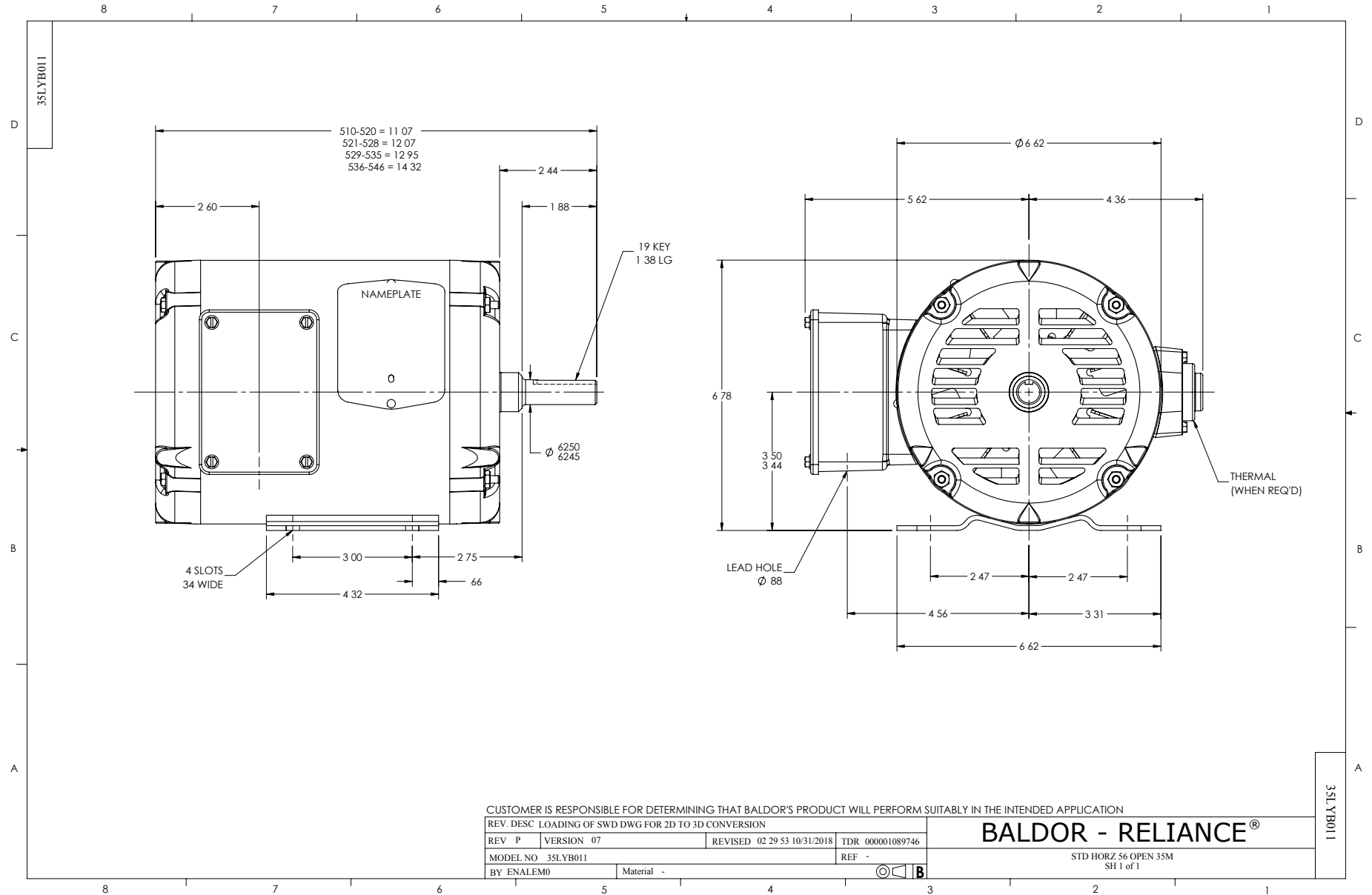
WINDING # 35WGM761

Typical performance - not guaranteed values.

1.5 HP 3 PH 60 HZ 3490 RPM 460 V 3518M  
 TORQUES(LB-FT): PO=9.32 PU=4.18 LR=6.79 LRA=17.2



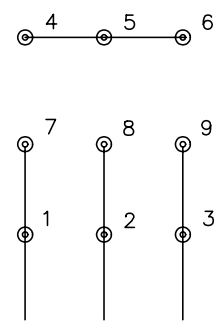
5/13/2020 ACPERF\_record # 44884



CD0005

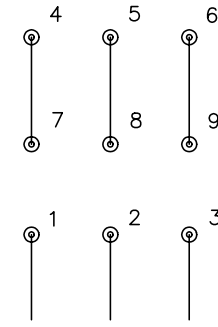


LOW VOLTAGE  
(2Y)



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