

ABB BALDOR RELIANCE III

Customer information packet

EM31116A

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

Class - None

Division - Not Applicable

Specifications

Enclosure	OPEN
Frame	56
Frame Material	Steel
Frequency	60.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 60 HZ
Phase	3
Synchronous Speed @ Frequency	1800 RPM @ 60 HZ
Voltage @ Frequency	230.0 V @ 60 HZ 460.0 V @ 60 HZ
Agency Approvals	CURUSEEV
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	Rigid
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.600 A @ 460.0 V 3.200 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	85.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Inverter Ready

Part Detail

Revision	A
Type	AC
Mech. spec.	35B011
Base	
Status	PRD/A
Elec. spec.	35WGG278
Layout	35LYB011
Eff. date	01-02-2025
CD Diagram	CD0007
Poles	04
Leads	12#18
Proprietary	False
Created date	11-14-2024

KVA Code	N
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	12 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.07 IN
Power Factor	67
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1760 rpm
Speed Code	Single Speed
Starting Method	Direct on line
Thermal Device - Bearing	None
Thermal Device - Winding	None
Vibration Sensor Indicator	No Vibration Sensor
Winding Thermal 1	Automatic Thermal Overload
Winding Thermal 1 Location	SB
Winding Thermal 2	None

Nameplate

NP3273L												
CAT.NO.	EM31116A											
SPEC.	35B011G278G2											
HP	1											
VOLTS	230/460											
AMP	3.2/1.6											
RPM	1760											
FRAME	56		HZ	60				PH	3			
SER.F.	1.15		CODE	N	DES	B		CL	F			
F.L. AVG. EFF.	85.5		PF	67								
RATING	40C AMB-CONT											
CC												
DE	6205		ODE	6203								
ENCL	OPEN		SN									
	SFA 3.6/1.8											

Parts List

Part number	Description	Quantity
SA432593	SA 35B011G278G2	1.000 ea
RA424857	RA 35B011G278G2	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, POLYREX EM EXXON	0.050 lb
MG1050Y01	CELEROL BALDOR GOLD *5 GALLON BUCKET*	0.017 ga
HA3100A15	THRUBOLT 10-32 X 8.375	4.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
LB1118	LABEL,WARNING (ROLL LABEL)	1.000 ea
LC0007	CONNECTION LABEL	1.000 ea
NP3273L	ALUM SUPER-E THERMALLY PROTECTED, LASER	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	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 # 107018

Preliminary Data Sheet

Winding: 35WGG278-R008			Type: 3520M		Enclosure: OPEN		
Nameplate Data			460 V, 60 Hz: High Voltage Connection				
Rated Output (HP)		1	Full Load Torque		2.96 LB-FT		
Volts		230/460	Start Configuration		direct on line		
Full Load Amps		3.2/1.6	Breakdown Torque		13.7 LB-FT		
R.P.M.		1760	Pull-up Torque		8.1 LB-FT		
Hz	60	Phase	3	Locked-rotor Torque		9.4 LB-FT	
NEMA Design Code		B	KVA Code	N	Starting Current		14.7 A
Service Factor (S.F.)		1.15	No-load Current		1.17 A		
NEMA Nom. Eff.		85.5	Power Factor	67	Line-line Res. @ 25°C		16.9 Ω
Rating - Duty		40C	AMB-CONT		Temp. Rise @ Rated Load		22°C
S.F. Amps		3.6/1.8	Temp. Rise @ S.F. Load		25°C		
			Locked-rotor Power Factor		61.6		
			Rotor inertia		0.144 lb-ft²		

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	28	45	58	67	74	78	71
Efficiency	70.1	81.1	84.5	85.5	85.7	85.3	85.6
Speed	1793	1787	1780	1774	1767	1759	1770
Line amperes	1.2	1.3	1.44	1.63	1.85	2.1	1.76

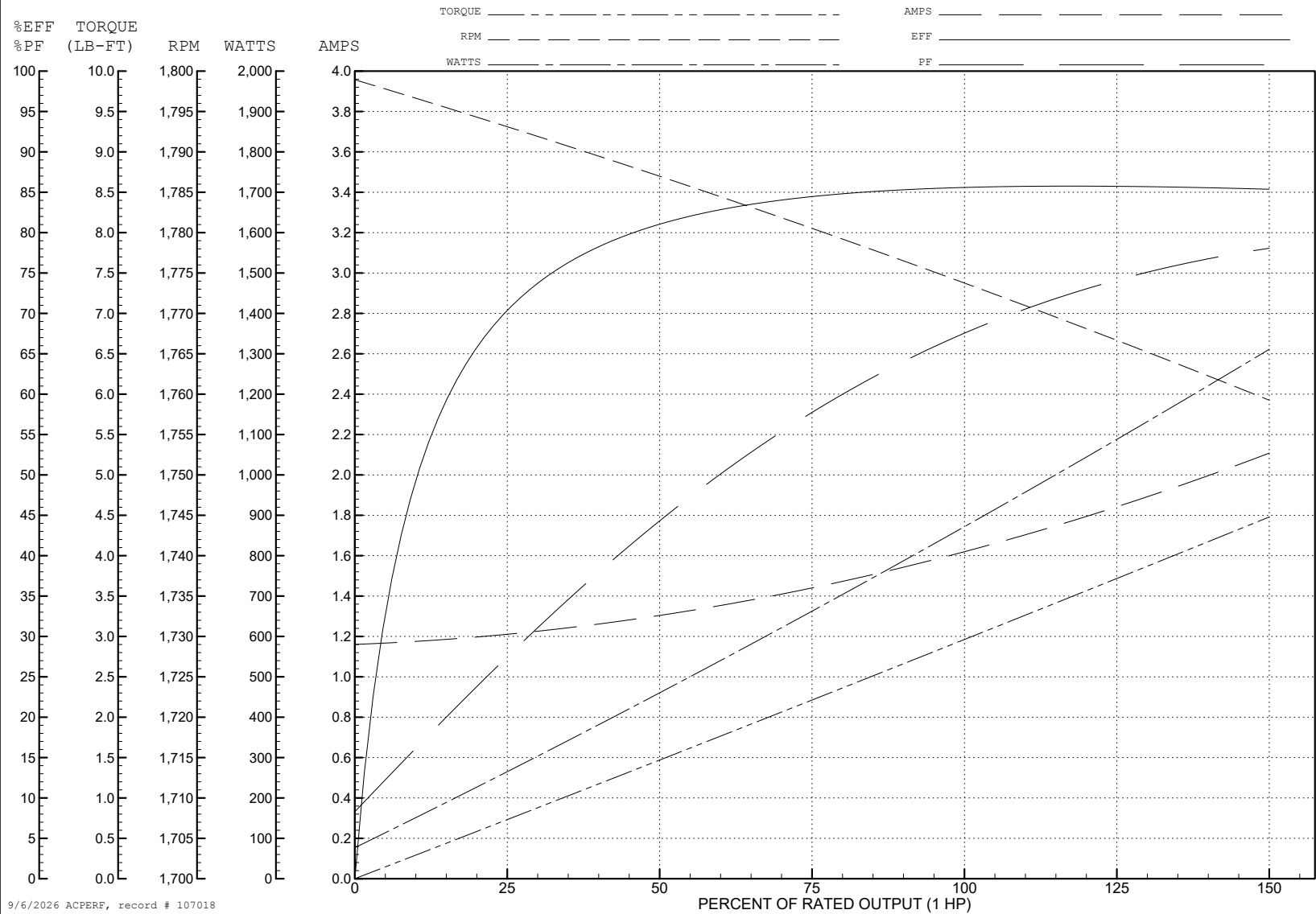
ABB Motors and Mechanical Inc.

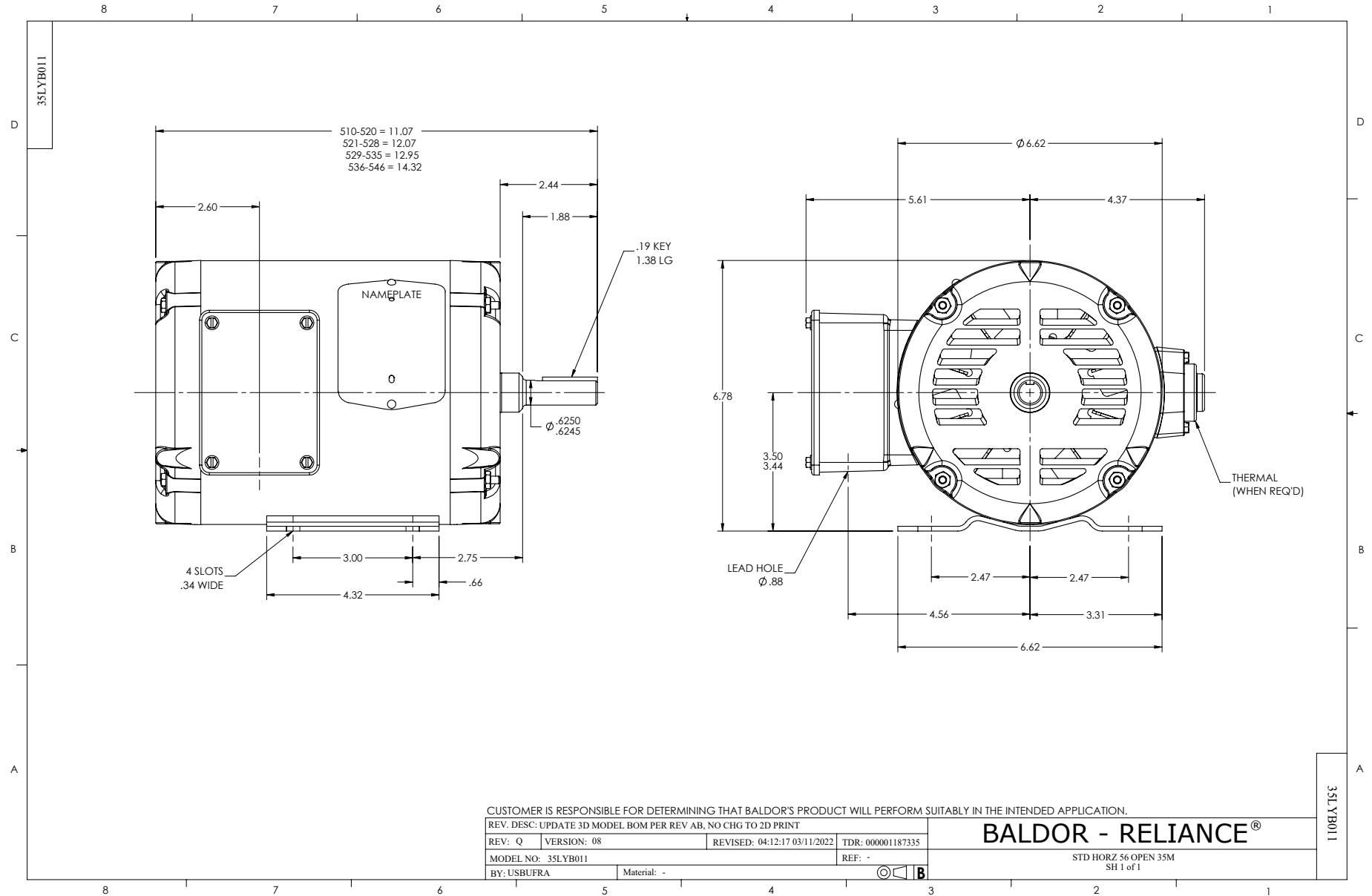
WINDING # 35WGG278

Typical performance - not guaranteed values.

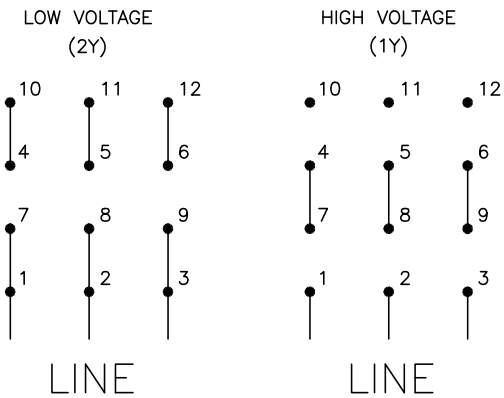
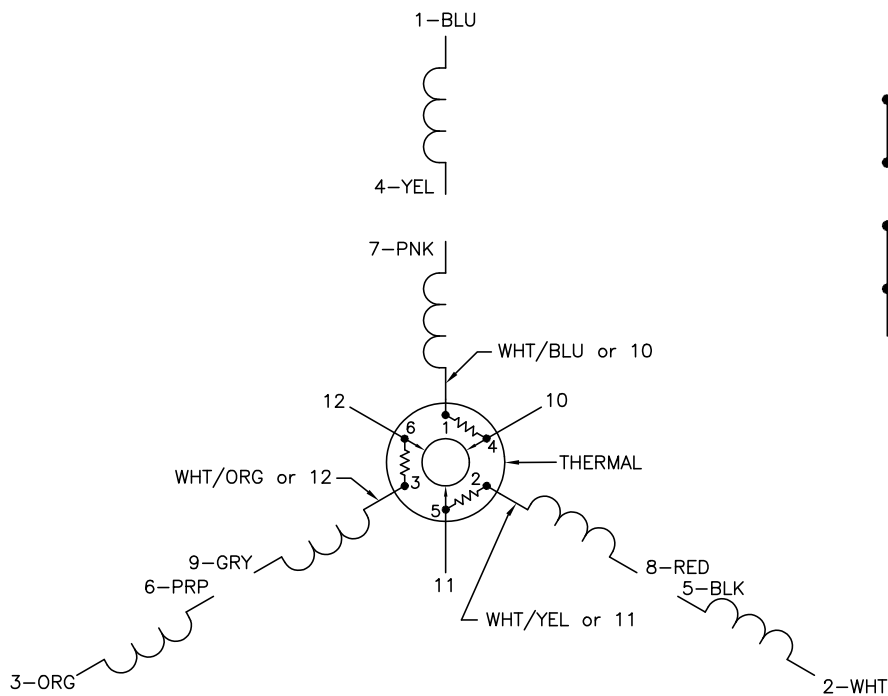
1 HP 3 PH 60 HZ 1760 RPM 460 V 3520M

TORQUES (LB-FT): PO=13.7 PU=8.1 LR=9.4 LRA=14.7





CD0007



- 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