

ABB BALDOR RELIANCE III

Customer information packet

EM3116T-8

1HP, 1775RPM, 3PH, 60HZ, 143T, 3520M, OPSB, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	OPSB
Frame	143T
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	200.0 V @ 60 HZ
Agency Approvals	CURUSEEV NEMA PREMIUM
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	3.600 A @ 200.0 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	3.6 a
Insulation Class	F
Inverter Code	Inverter Ready
KVA Code	N

Part Detail

Revision	C
Type	AC
Mech. spec.	35BB101
Base	
Status	PRD/A
Elec. spec.	35WGG118
Layout	35LYBB101
Eff. date	06-11-2024
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	03-11-2022

Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	No Locked Bearing
Motor Lead Quantity/Wire Size	3 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3520M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	11.12 IN
Power Factor	67
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	Standard
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1775 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	None
Winding Thermal 2	None

Nameplate

NP3553L									
CAT.NO.	EM3116T-8								
SPEC	35BB101G118G1								
HP	1								
VOLTS	200								
AMPS	3.6								
RPM	1775								
FRAME	143T		HZ	60			PH	3	
SF	1.15	CODE	N	DES	B	CLASS	F		
NEMA NOM. EFF	85.5	PF	67						
RATING	40C AMB-CONT								
CC	010A								
ENCL	OPSB	SER							
DE	6205		ODE	6203					
VPWM INVERTER READY		SFA 3.9							
CT30-60(2:1) VT3-60(20:1)									

Accessories

Part number	Description	Multiplier
35-8764	C FACE KIT	A8
35EP1604A01SP	D-FLANGE KIT	

AC Induction Motor Performance Data

Record # 90991

Typical performance - not guaranteed values

Winding: 35WGG118-R002			Type: 3520M		Enclosure: OPEN	
Nameplate Data			200 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		1	Full Load Torque		2.96 LB-FT	
Volts		200	Start Configuration		direct on line	
Full Load Amps		3.6	Breakdown Torque		12.86 LB-FT	
R.P.M.		1775	Pull-up Torque		7.55 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	8.76 LB-FT	
NEMA Design Code	B	KVA Code	N	Starting Current	31.78 A	
Service Factor (S.F.)		1.15	No-load Current		2.43 A	
NEMA Nom. Eff.	85.5	Power Factor	67	Line-line Res. @ 25°C	3.43 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		21°C	
S.F. Amps			Temp. Rise @ S.F. Load		25°C	
			Locked-rotor Power Factor		60.7991	
			Rotor inertia		0.144 lb-ft²	

Load Characteristics 200 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	30	48	61	70	76	80	74
Efficiency	71.5	81.9	84.9	85.8	85.8	85.2	85.8
Speed	1792	1786	1780	1773	1765	1757	1768
Line amperes	2.51	2.76	3.12	3.58	4.11	4.71	3.9

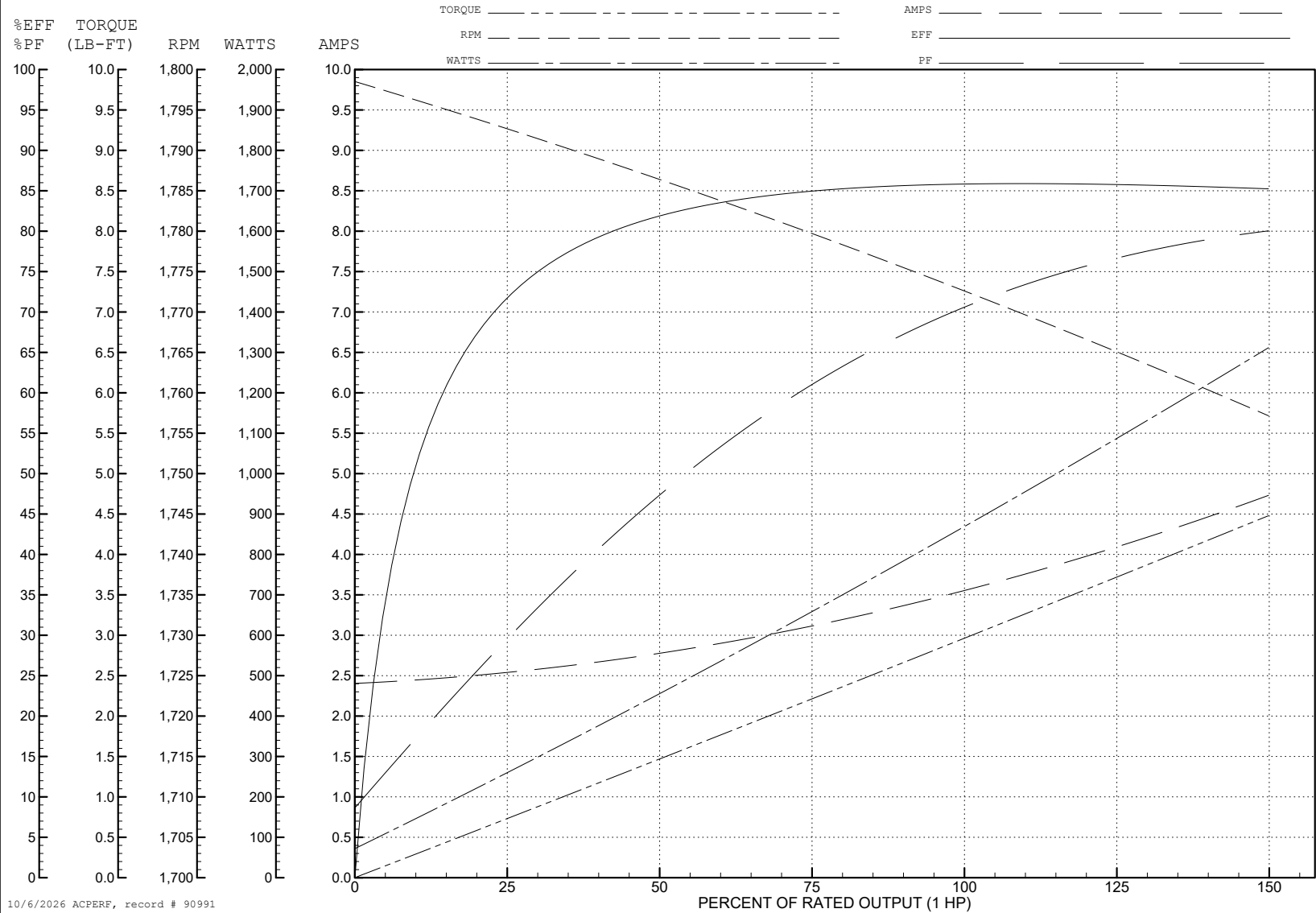
ABB Motors and Mechanical Inc.

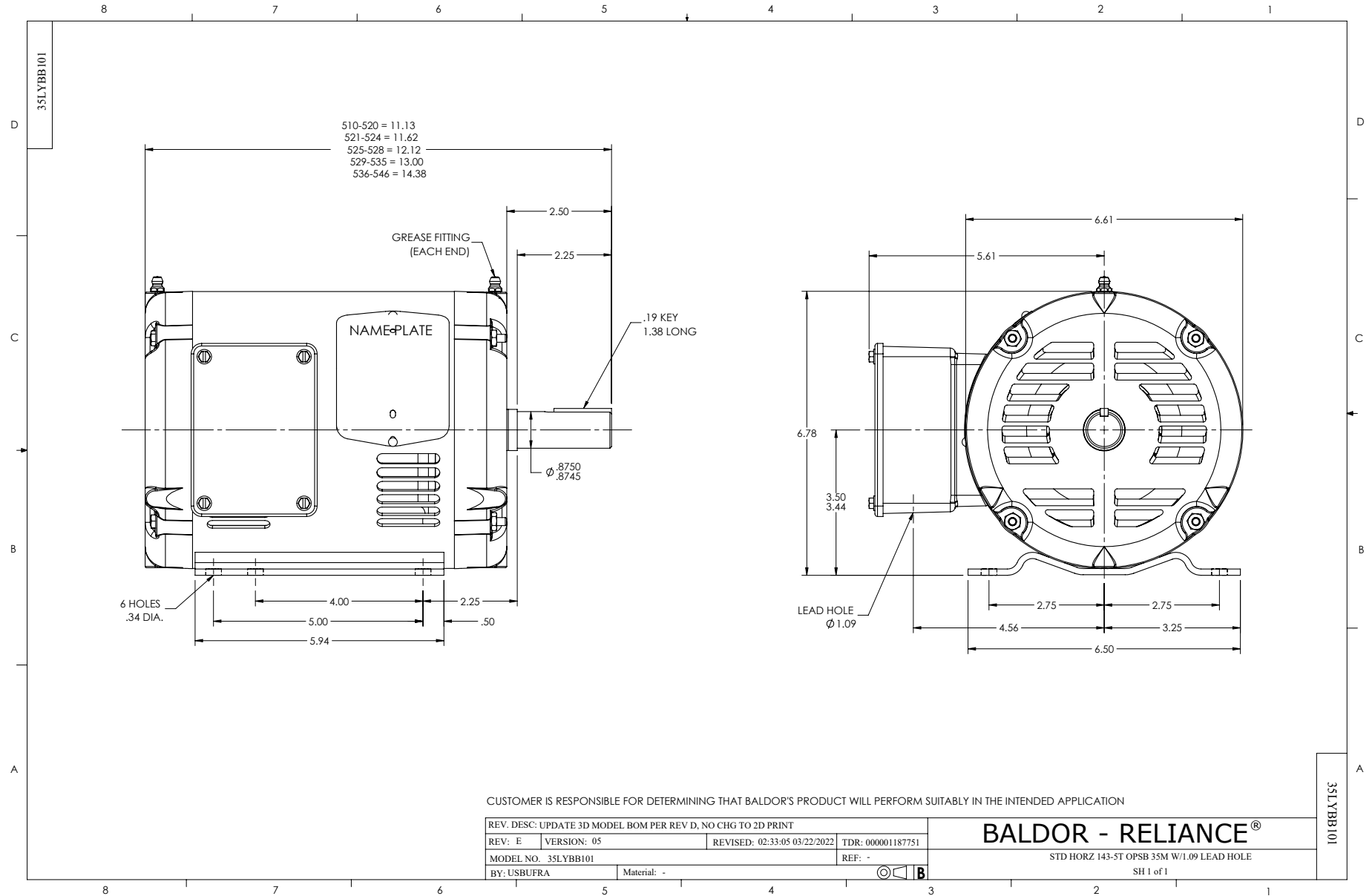
WINDING # 35WGG118

Typical performance - not guaranteed values.

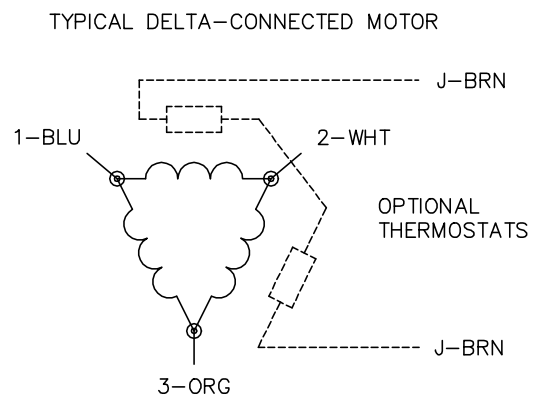
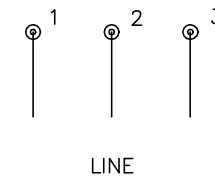
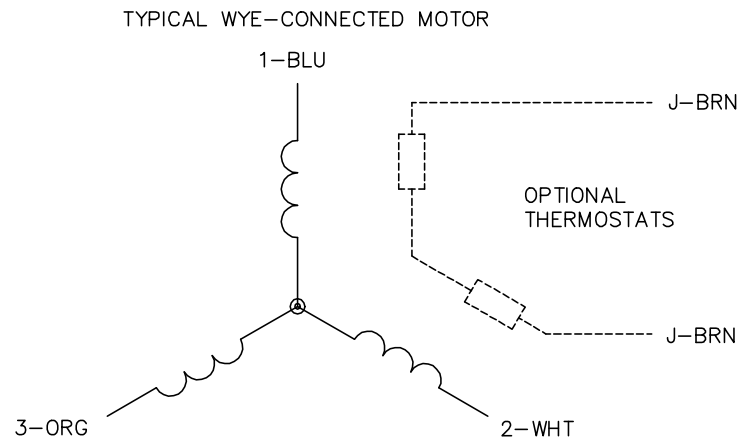
1 HP 3 PH 60 HZ 1775 RPM 200 V 3520M

TORQUES (LB-FT): PO=12.86 PU=7.55 LR=8.76 LRA=31.78





CD0006


NOTES:

1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

REV. DESC: ADD CLASS CONN00000007

REV. LTR: E

VERSION: 01

TDR: 000001099922

FILE: \AAA\00005\141

REVISED: 10:24:49 02/19/2019

BY: ENBRIRO

MTL: -


BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1