

ABB BALDOR RELIANCE III

Customer information packet

VEJMM3546T-5

1HP, 1760RPM, 3PH, 60HZ, 143JM, 3520M, TEFC, F1

Class - None

Division - Not Applicable

Specifications

Enclosure	TEFC
Frame	143JM
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	575.0 V @ 60 HZ
Agency Approvals	CSA EEV CSA UR
Ambient Temperature	40 °C
Auxiliary Box	NO AUXILLARY BOX
Auxiliary Box Lead Termination	None
Base Indicator	No Mounting
Bearing Grease Type	Polyrex EM (-20F +300F)
Blower	None
Current @ Voltage	1.200 A @ 575.0 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 Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater
High Voltage Full Load Amps	1.2 a
Insulation Class	F

Part Detail

Revision	F
Type	AC
Mech. spec.	35M317
Base	
Status	NLA/A
Elec. spec.	35WGM849
Layout	35LYM317
Eff. date	01-18-2023
CD Diagram	CD0006
Poles	04
Leads	3#18
Proprietary	False
Created date	08-14-2015

Inverter Code	Inverter Ready
KVA Code	L
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
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	14.43 IN
Power Factor	71
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Tapped & Key
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	1.000 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	Shaft 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	None
Winding Thermal 2	None

Nameplate

NP3441L											
CAT.NO.	VEJMM3546T-5										
SPEC.	35M317M849G1										
HP	1										
VOLTS	575										
AMP	1.2										
RPM	1760										
FRAME	143JM		HZ		60		PH		3		
SER.F.	1.15	CODE		L	DES	B	CL	F			
NEMA-NOM-EFF	85.5	PF		71							
RATING	40C AMB-CONT										
CC	010A										
DE	6206		ODE		6203						
ENCL	TEFC	SN									
VPWM INVERTER READY											
CT6-60H(10:1)VT3-60H(20:1											

Parts List

Part number	Description	Quantity
SA305735	SA 35M317M849G1	1.000 ea
RA292964	RA 35M317M849G1	1.000 ea
34FN3002B01	EXTERNAL FAN, PLASTIC, .637/.639 HUB W/	1.000 ea
NS2512A01	INSULATOR, CONDUIT BOX X	1.000 ea
35CB3000SP	CONDUIT BOX, CAST, 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
HW3001B01	BRASS CUP WASHER, FOR #10 SCREW	1.000 ea
35EP3122G00	MASTER ODE,203 BRG,.683SH,#26 DRN,GRSR,R	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
HW5100A03	WAVY WASHER (W1543-017)	1.000 ea
35EP3401T05	FACE ENCL 206 BRG W/GRS, RELIEF & TGHSLV	1.000 ea
HW4500A01	1641B(ALEMITE)400 UNIV, GREASE FITT	1.000 ea
HW4500A17	317400 ALEMITE GREASE RELIEF	1.000 ea
51XN1032A20	10-32 X 1 1/4 HX WS SL SR	2.000 ea
51XB1214A16	12-14X1.00 HXWSSLD SERTYB	1.000 ea
35FH4005A86	IEC FH W/GRSR, NO DIMPLES W/PRIMER	1.000 ea
51XW1032A06	10-32 X .38, TAPTITE II, HEX WSHR SLTD S	3.000 ea
HA1005A02	SLINGER, OD 2.00, ID 1.14, 206 BRG,	1.000 ea
35CB4514GX	CONDUIT BOX LID KIT	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
HA7000A01	KEY RETAINER 7/8" DIA SHAFT	1.000 ea
85XU0407S04	4X1/4 U DRIVE PIN STAINLESS	2.000 ea
MJ1000A02	GREASE, POLYREX EM EXXON	0.050 lb
MG1000Y03	MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,GOLD	0.017 ga
HA3100A12	THRUBOLT 10-32 X 7.375	4.000 ea
LB1624	WARNING LABEL	1.000 ea
LC0006	CONNECTION LABEL	1.000 ea

NP3441L	ALUM SUPER-E VPWM INVERTER READY UL EEV	1.000 ea
36PA1000	PKG GRP, PRINT PK1016A08	1.000 ea
PK3082	STYROFOAM CRADLE	1.000 ea
MN416A01	TAG-INSTAL-MAINT no wire (2500 bx)11/25	1.000 ea
FE-0000001	ZRTG FE ASSEMBLY	1.000 ea

AC Induction Motor Performance Data

Record # 32073

Typical performance - not guaranteed values

Winding: 35WGM849-R001			Type: 3520M		Enclosure: TEFC	
Nameplate Data			575 V, 60 Hz: Single Voltage Motor			
Rated Output (HP)		1	Full Load Torque		2.99 LB-FT	
Volts		575	Start Configuration		direct on line	
Full Load Amps		1.2	Breakdown Torque		13.3 LB-FT	
R.P.M.		1760	Pull-up Torque		8.11 LB-FT	
Hz	60	Phase	3	Locked-rotor Torque	8.38 LB-FT	
NEMA Design Code	B	KVA Code	L	Starting Current	9.77 A	
Service Factor (S.F.)		1.15	No-load Current		0.84 A	
NEMA Nom. Eff.	85.5	Power Factor	71	Line-line Res. @ 25°C	23.9 Ω	
Rating - Duty		40C AMB-CONT	Temp. Rise @ Rated Load		36°C	
S.F. Amps			Temp. Rise @ S.F. Load		42°C	
			Locked-rotor Power Factor		53.9	
			Rotor inertia		0.118 LB-FT2	

Load Characteristics 575 V, 60 Hz, 1 HP

% of Rated Load	25	50	75	100	125	150	S.F.
Power Factor	29	47	60	69	76	80	75
Efficiency	74.4	83.2	85.2	85.9	85.3	84.4	85.5
Speed	1790	1780	1770	1760	1748	1735	1754
Line amperes	0.872	0.977	1.1	1.26	1.46	1.68	1.35

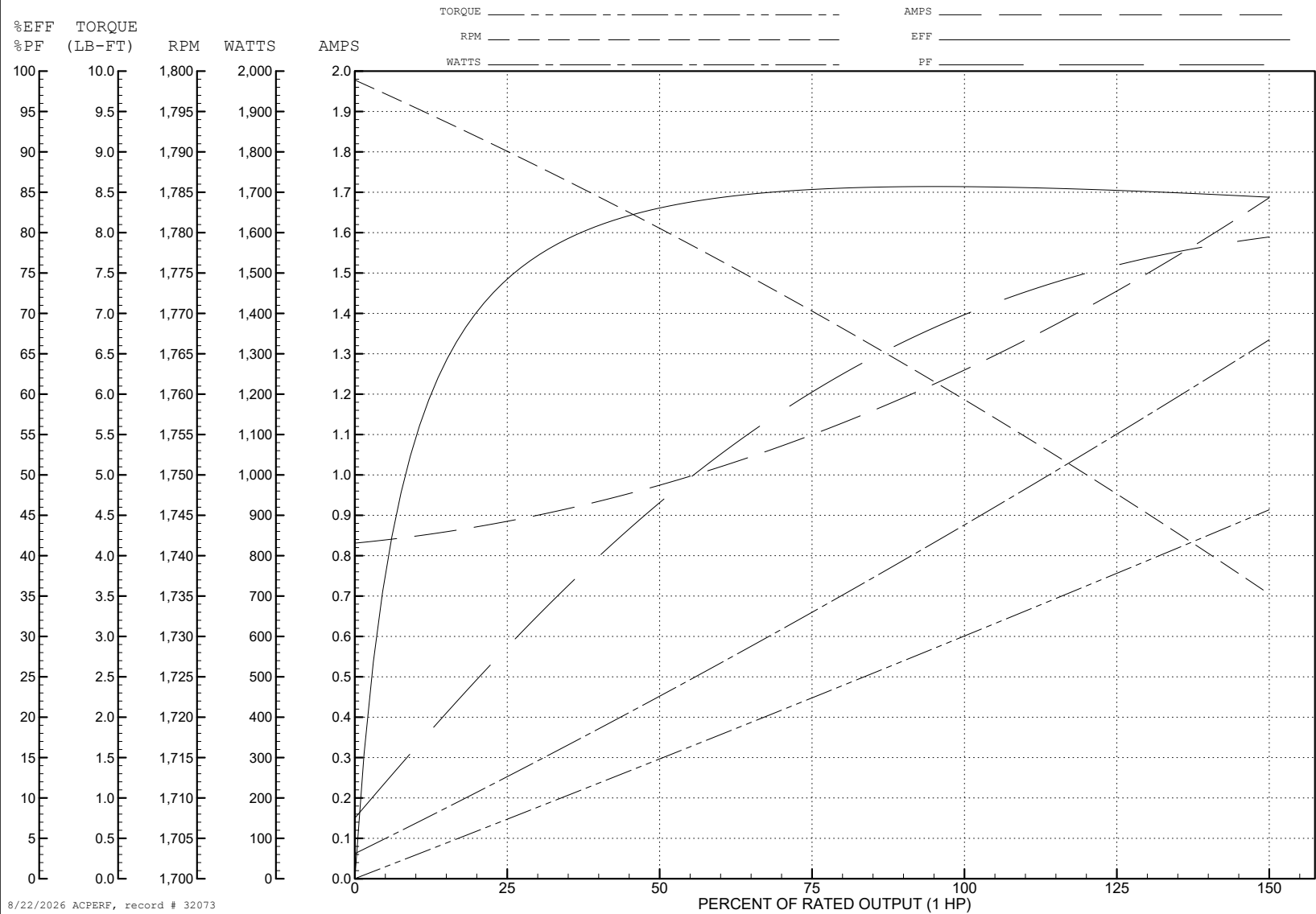
ABB Motors and Mechanical Inc.

WINDING # 35WGM849

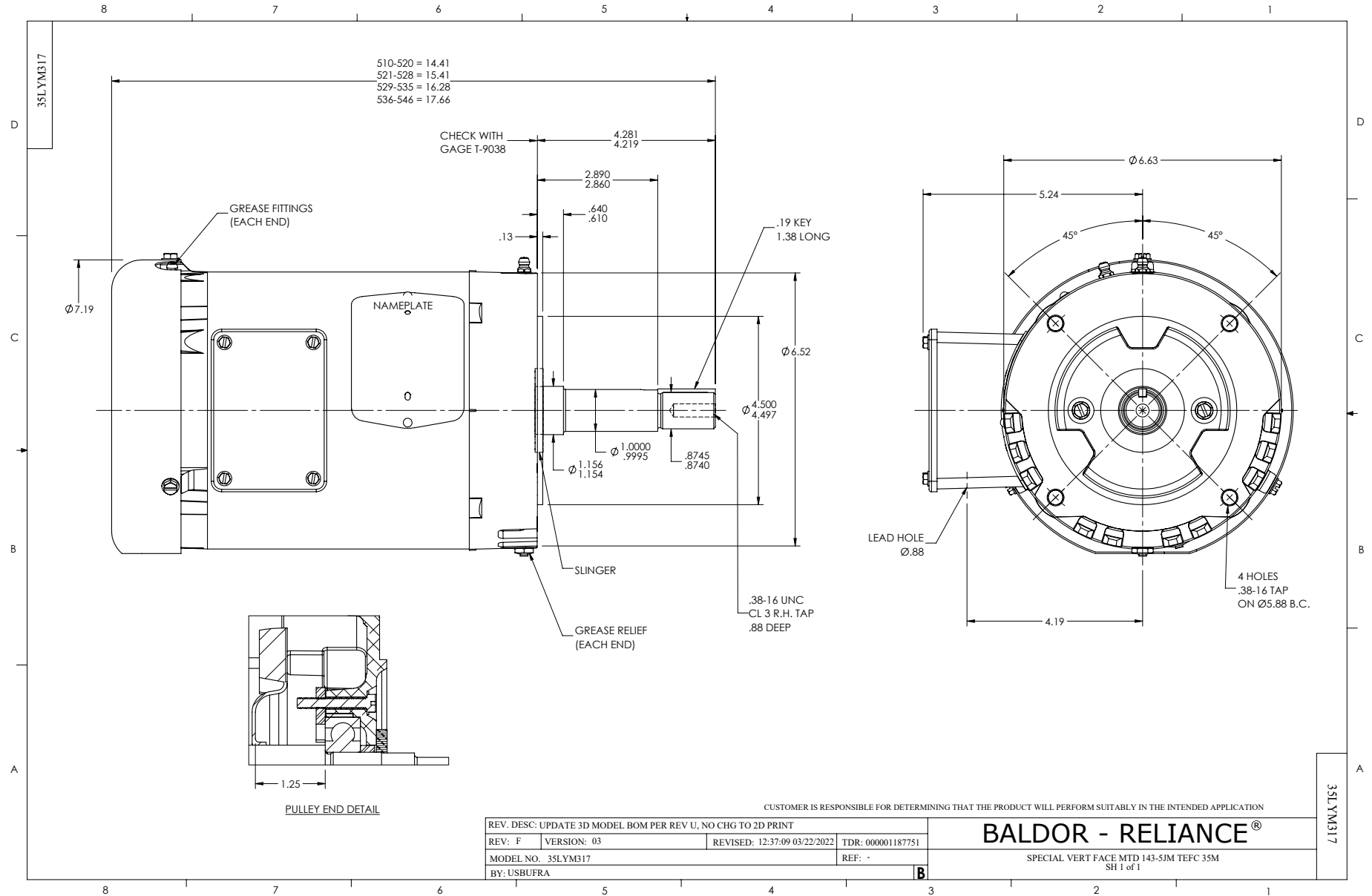
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1760 RPM 575 V 3520M

TORQUES (LB-FT) : PO=13.3 PU=8.11 LR=8.38 LRA=9.77



8/22/2026 ACPERF, record # 32073



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

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