ABB BALDOR RELIANCE

Customer information packet

VM3546-57

1HP, 1440RPM, 3PH, 50HZ, 56C, 3517M, TEFC, F1, N
Class - None
Division - Not Applicable

Copyright © All product information within this document is subject to ABB Motors and Mechanical Inc. copyright © protection, unless otherwise noted.
11/19/2026 3:41:43 AM

Specifications

Enclosure	TEFC
Frame	56C
Frame Material	Steel
Frequency	50.00 Hz
Haz Area Class and Group	None
Haz Area Division	Not Applicable
Motor Letter Type	Three Phase
Output @ Frequency	1.000 HP @ 50 HZ
Phase	3
Synchronous Speed @ Frequency	1500 RPM @ 50 HZ
Voltage @ Frequency	230.0 V @ 50 HZ
	400.0 V @ 50 HZ
Agency Approvals	CSA
	CE
	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	1.800 A @ 400.0 V
	3.100 A @ 230.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	80.0 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None
Heater Indicator	No Heater

Part Detail

Revision	M
Type	AC
Mech. spec.	35A013
Base	
Status	NLA/A
Elec. spec.	35WGM807
Layout	35LYA013
Eff. date	10-28-2016
CD Diagram	CD0022
Poles	04
Leads	6#18
Proprietary	False
Created date	09-21-2011

High Voltage Full Load Amps	1.8 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	K
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	6 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3517M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.23 IN
Power Factor	76
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
RoHS Status	ROHS COMPLIANT
Service Factor	1.15
Shaft Diameter	0.625 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1440 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

NP2717L								
CAT NO	VM3546-57							
SPEC.	35A013M807H1							
HP	1				**PH**	3		
VOLTS	230/400							
AMP	3.1/1.8							
FRAME	56C	**HZ**	50			**I.P.**	54	
SER.F.	1.15	**CODE**	K	**DES**	B	**CL**	F	
NEMA-NOM-EFF	80						**% (100%)**	
PF	76							
RATING	40C AMB-CONT			**CC**				
DE BRG	6205	**ODE**	6203					
ENCL	TEFC	**SN**						
BLANK	IE2-78.5(75%)75.0(50%)							

AC Induction Motor Performance Data
Record # 35159
Typical performance - not guaranteed values

Winding: 35WGM807-R002	**Type:** 3518M	**Enclosure:** TEFC

Nameplate Data				**400 V, 50 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	3.62 LB-FT
Volts			230/400	**Start Configuration**	direct on line
Full Load Amps			3.1/1.8	**Breakdown Torque**	14.1 LB-FT
R.P.M.			1440	**Pull-up Torque**	8.95 LB-FT
Hz	50	**Phase**	3	**Locked-rotor Torque**	10.64 LB-FT
NEMA Design Code	B	**KVA Code**	K	**Starting Current**	12.98 A
Service Factor (S.F.)			1.15	**No-load Current**	1.14 A
NEMA Nom. Eff.	80	**Power Factor**	76	**Line-line Res. @ 25ºC**	14.4 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	52°C
S.F. Amps				**Temp. Rise @ S.F. Load**	60°C
				Locked-rotor Power Factor	70.3
				Rotor inertia	0.106 LB-FT2

Load Characteristics 400 V, 50 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	35	52	66	74	80	83	80
Efficiency	67	76.7	80	80.6	78.9	76.5	79.5
Speed	1487	1474	1459	1443	1424	1401	1431
Line amperes	1.17	1.31	1.52	1.79	2.11	2.52	1.95

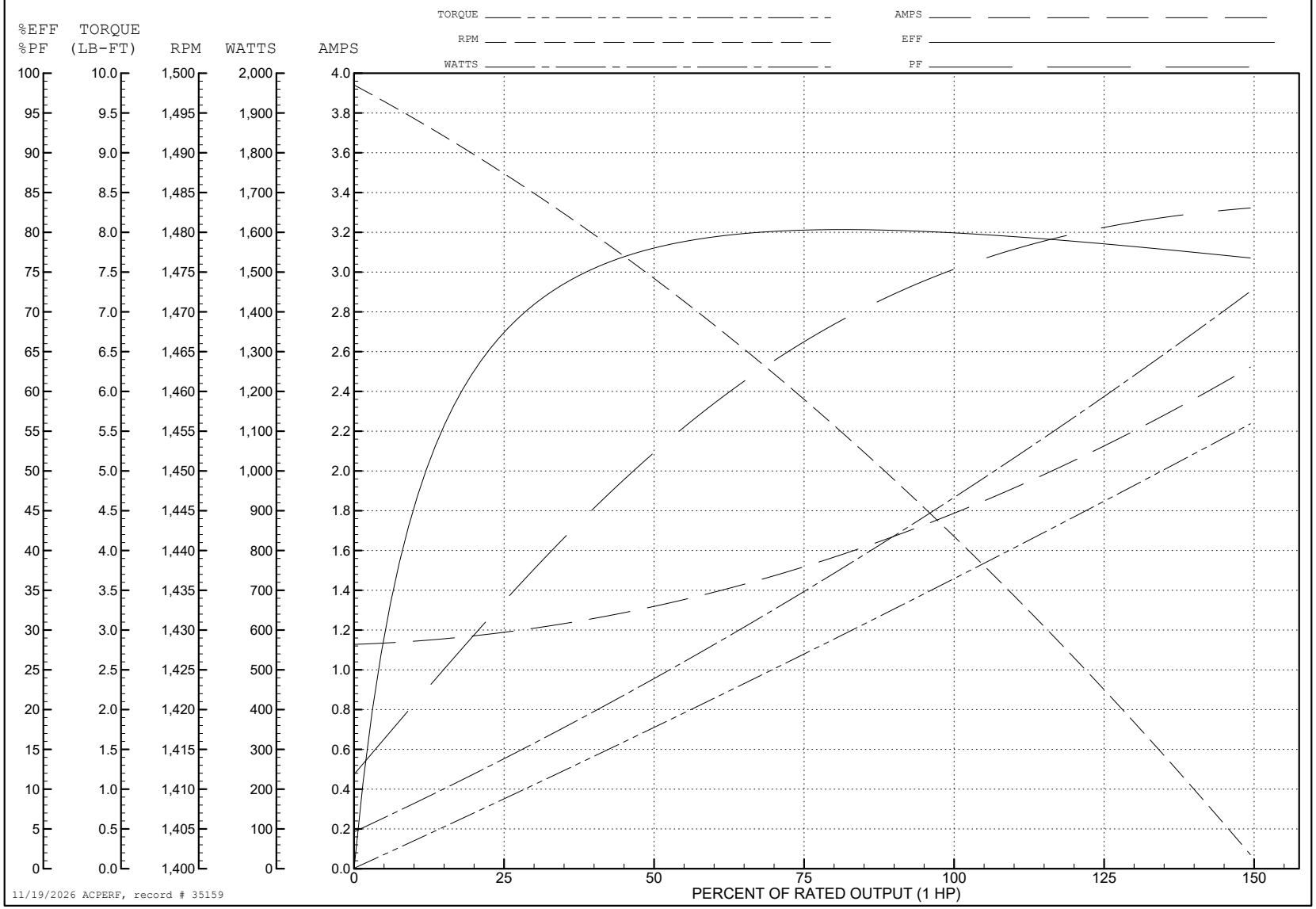
ABB Motors and Mechanical Inc.

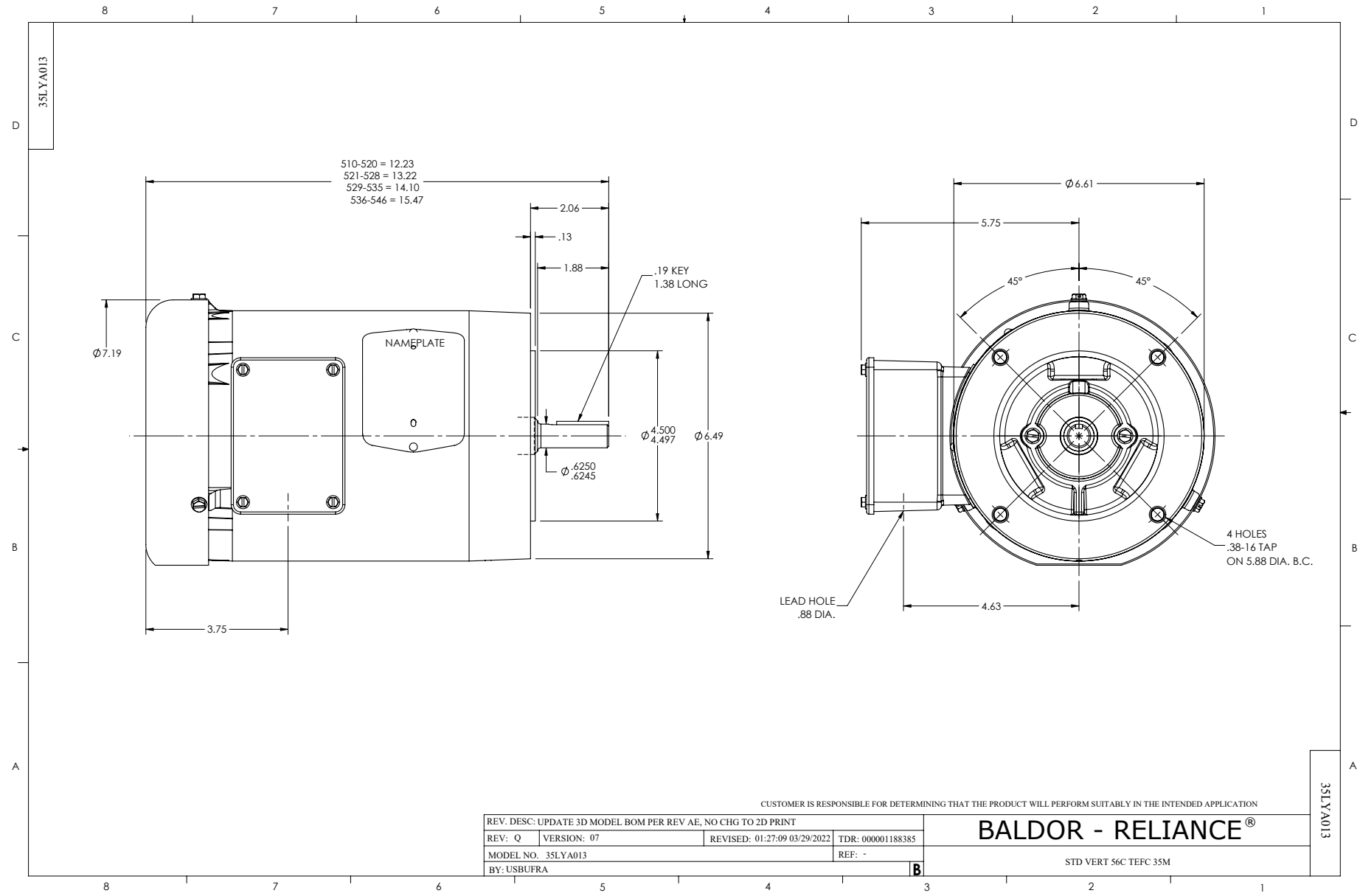
WINDING # 35WGM807

1 HP 3 PH 50 HZ 1440 RPM 400 V 3518M

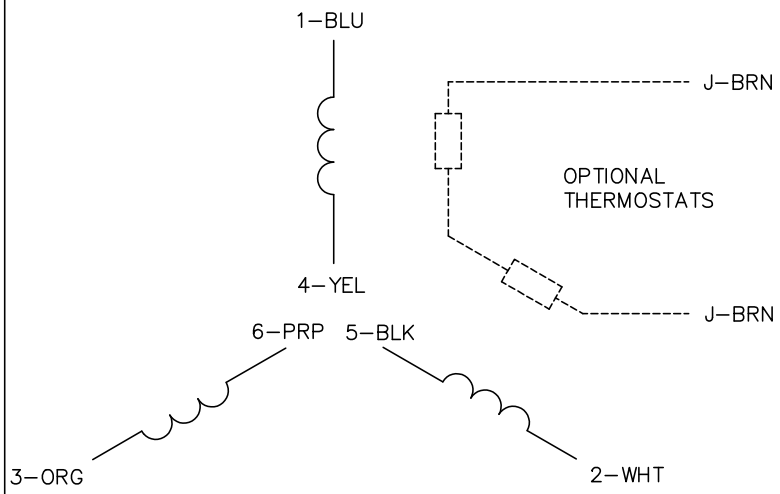
Typical performance - not guaranteed values.

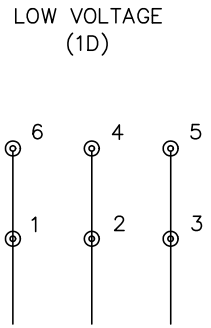
TORQUES(LB-FT): PO=14.1 PU=8.95 LR=10.64 LRA=12.98

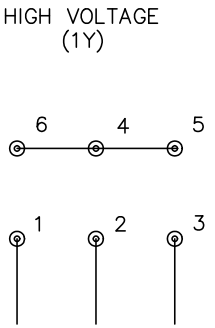



35LYA013
510-520 = 12.23
521-528 = 13.22
529-535 = 14.10
536-546 = 15.47
2.06
.13
1.88
.19 KEY
1.38 LONG
NAMEPLATE
Ø7.19
Ø4.500
4.497
Ø6.49
Ø .6250
.6245
3.75
Ø6.61
5.75
45°
45°
4 HOLES
.38-16 TAP
ON 5.88 DIA. B.C.
LEAD HOLE
.88 DIA.
4.63
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION
REV. DESC: UPDATE 3D MODEL BOM PER REV AE, NO CHG TO 2D PRINT
REV: Q
VERSION: 07
REVISED: 01:27:09 03/29/2022
TDR: 000001188385
MODEL NO. 35LYA013
REF: -
BY: USBUFRA
B
BALDOR - RELIANCE®
STD VERT 56C TEFC 35M
35LYA013

CD0022







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			BALDOR ELECTRIC Co.
REV. LTR: F	BY: JLP	REVISED: 01/21/99 3:54	TDR: 0171435
CD0022		FILE: AAA00005144	MDL: –
		MTL: –	3PH, DV, 6 LEADS, DELTA/WYE CONNECTION

CD0022