ABB BALDOR RELIANCE

Customer information packet

VM3546T

1HP, 1750RPM, 3PH, 60HZ, 143TC, 3516M, TEFC, F1
Class - None
Division - Not Applicable

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Specifications

Enclosure	TEFC
Frame	143TC
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	460.0 V @ 60 HZ
	230.0 V @ 60 HZ
	208.0 V @ 60 HZ
Agency Approvals	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	3.380 A @ 208.0 V
	3.120 A @ 230.0 V
	1.560 A @ 460.0 V
Design Code	B
Drip Cover	No Drip Cover
Duty Rating	CONT
Efficiency @ 100% Load	82.5 %
Electrically Isolated Bearing	Not Electrically Isolated
Feedback Device	NO FEEDBACK
Front Face Code	Standard
Front Shaft Indicator	None

Part Detail

Revision	K
Type	AC
Mech. spec.	35A003
Base	
Status	NLA/A
Elec. spec.	35WGP674
Layout	35LYA003
Eff. date	03-08-2016
CD Diagram	CD0005
Poles	04
Leads	9#18
Proprietary	False
Created date	05-26-2010

Heater Indicator	No Heater
High Voltage Full Load Amps	1.6 a
Insulation Class	F
Inverter Code	Not Inverter
KVA Code	M
Lifting Lugs	No Lifting Lugs
Locked Bearing Indicator	Locked Bearing
Motor Lead Exit	Ko Box
Motor Lead Quantity/Wire Size	9 @ 18 AWG
Motor Lead Termination	Flying Leads
Motor Standards	NEMA
Motor Type	3516M
Mounting Arrangement	F1
Number of Poles	4
Overall Length	12.29 IN
Power Factor	73
Product Family	General Purpose
Pulley End Bearing Type	Ball
Pulley Face Code	C-Face
Pulley Shaft Indicator	Standard
Rodent Screen	None
Service Factor	1.15
Shaft Diameter	0.875 IN
Shaft Extension Location	Pulley End
Shaft Ground Indicator	No Shaft Grounding
Shaft Rotation	Reversible
Shaft Slinger Indicator	No Slinger
Speed	1750 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

NP1256L									
CAT.NO.	VM3546T								
SPEC.	35A003P674H4								
HP	1								
VOLTS	208-230/460								
AMP	3.38-3.12/1.56								
RPM	1750								
FRAME	143TC	**HZ**	60			**PH**	3		
SER.F.	1.15	**CODE**	M	**DES**	B	**CLASS**	F		
NEMA-NOM-EFF	82.5	**PF**	73						
RATING	40C AMB-CONT								
CC	010A								
DE	6205	**ODE**	6203						
ENCL	TEFC	**SN**							

AC Induction Motor Performance Data
Record # 25215
Typical performance - not guaranteed values

Winding: 35WGP674-R001	**Type:** 3516M	**Enclosure:** TEFC

Nameplate Data				**460 V, 60 Hz: High Voltage Connection**	
Rated Output (HP)			1	**Full Load Torque**	2.99 LB-FT
Volts			208-230/460	**Start Configuration**	direct on line
Full Load Amps			3.38-3.12/1.56	**Breakdown Torque**	17.8 LB-FT
R.P.M.			1750	**Pull-up Torque**	8.32 LB-FT
Hz	60	**Phase**	3	**Locked-rotor Torque**	10.4 LB-FT
NEMA Design Code	B	**KVA Code**	M	**Starting Current**	13.2 A
Service Factor (S.F.)			1.15	**No-load Current**	1.04 A
NEMA Nom. Eff.	82.5	**Power Factor**	73	**Line-line Res. @ 25ºC**	16.3 Ω
Rating - Duty			40C AMB-CONT	**Temp. Rise @ Rated Load**	41°C
S.F. Amps				**Temp. Rise @ S.F. Load**	50°C
				Locked-rotor Power Factor	63
				Rotor inertia	0.0946 LB-FT2

Load Characteristics 460 V, 60 Hz, 1 HP

% of Rated Load	**25**	**50**	**75**	**100**	**125**	**150**	**S.F.**
Power Factor	32	50	63	73	79	83	77
Efficiency	66.7	77.9	81.3	82.6	82.6	81.6	82.6
Speed	1788	1776	1764	1750	1735	1719	1741
Line amperes	1.11	1.2	1.36	1.56	1.77	2.06	1.69

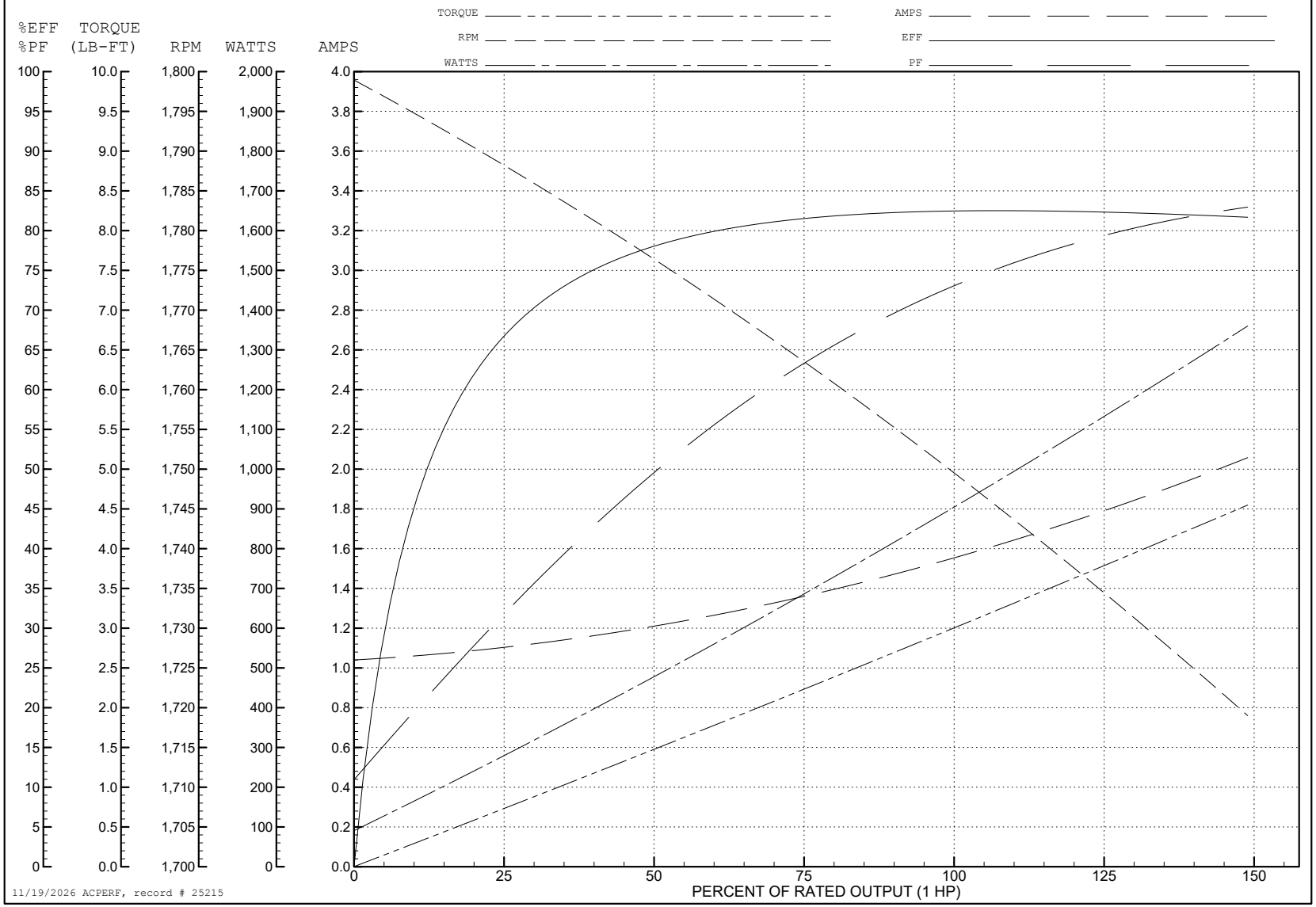
ABB Motors and Mechanical Inc.

WINDING # 35WGP674

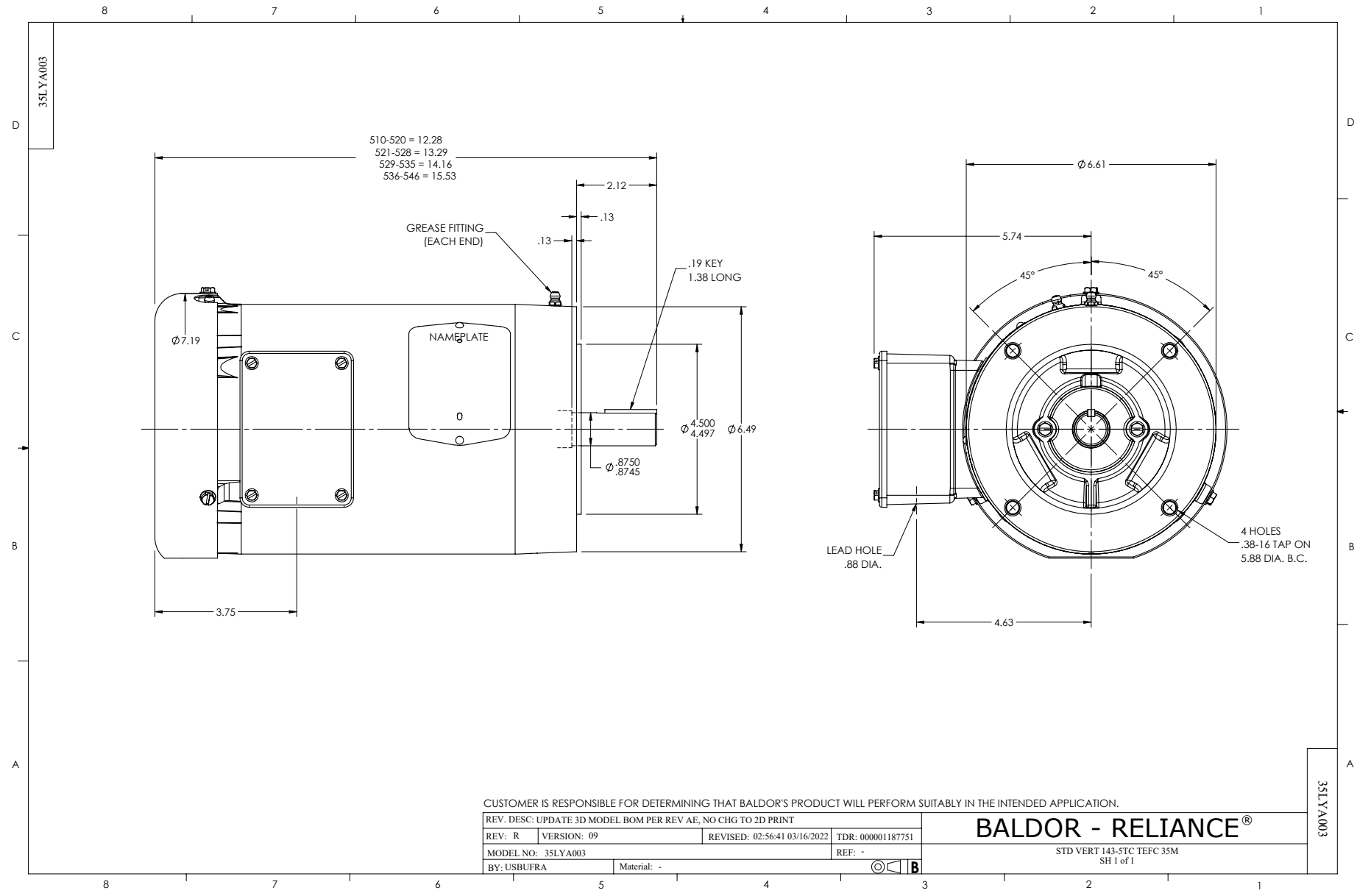
1 HP 3 PH 60 HZ 1750 RPM 460 V 3516M

Typical performance - not guaranteed values.

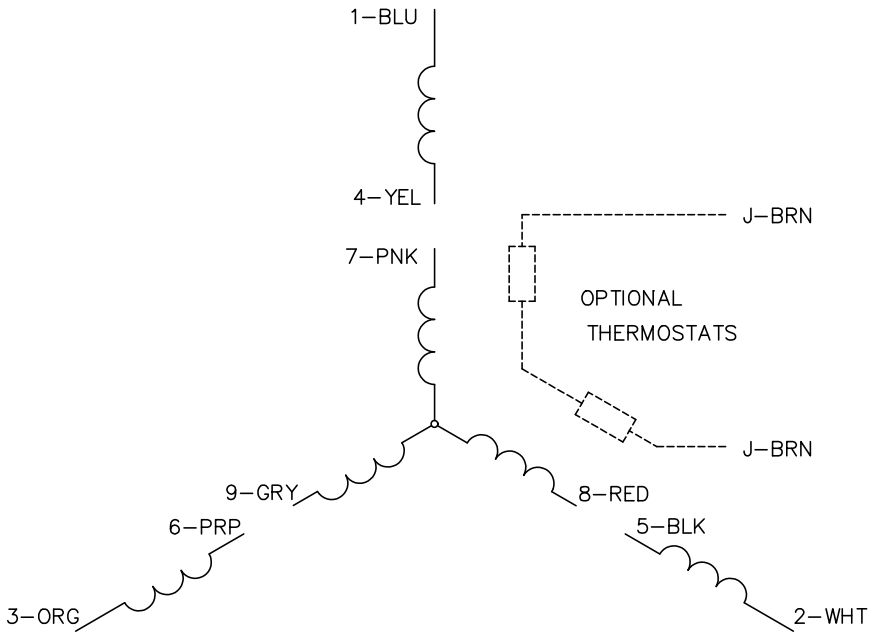
TORQUES(LB-FT): PO=17.8 PU=8.32 LR=10.4 LRA=13.2

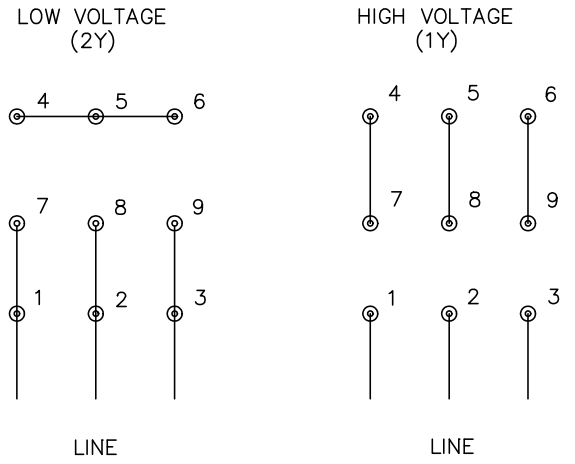


11/19/2026 ACPERF, record # 25215


35LYA003
510-520 = 12.28
521-528 = 13.29
529-535 = 14.16
536-546 = 15.53
2.12
.13
.13
GREASE FITTING
(EACH END)
.19 KEY
1.38 LONG
Ø7.19
NAMEPLATE
Ø 4.500
4.497
Ø6.49
Ø .8750
.8745
3.75
Ø6.61
5.74
45°
45°
LEAD HOLE
.88 DIA.
4 HOLES
.38-16 TAP ON
5.88 DIA. B.C.
4.63
CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.
REV. DESC: UPDATE 3D MODEL BOM PER REV AE, NO CHG TO 2D PRINT
REV: R
VERSION: 09
REVISED: 02:56:41 03/16/2022
TDR: 000001187751
MODEL NO: 35LYA003
REF: -
BY: USBUFRA
Material: -
B
BALDOR - RELIANCE®
STD VERT 143-5TC TEFC 35M
SH 1 of 1
35LYA003

CD0005





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.

CD0005

REV. DESC: REVISE TO SHOW OPTIONAL COLORS			BALDOR ELECTRIC Co.
REV. LTR: E	BY: JLP	REVISED: 01/19/99 10:15	TDR: 0171435
CD0005		FILE: AAA00005140	MDL: –
		MTL: –	3PH, DV, 9 LEADS